



Light Output Ratio:	42.7%	
Luminaire Power:	12.16 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

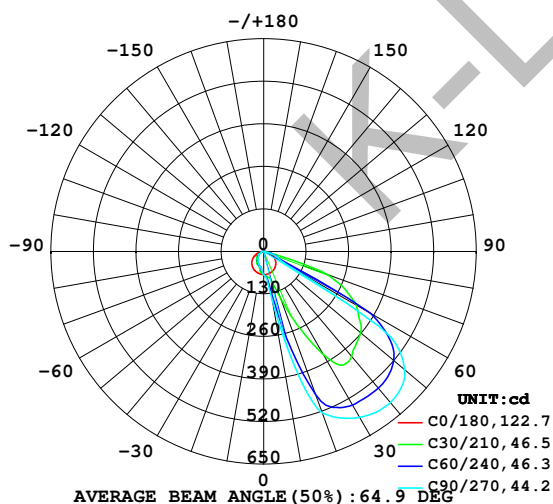
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

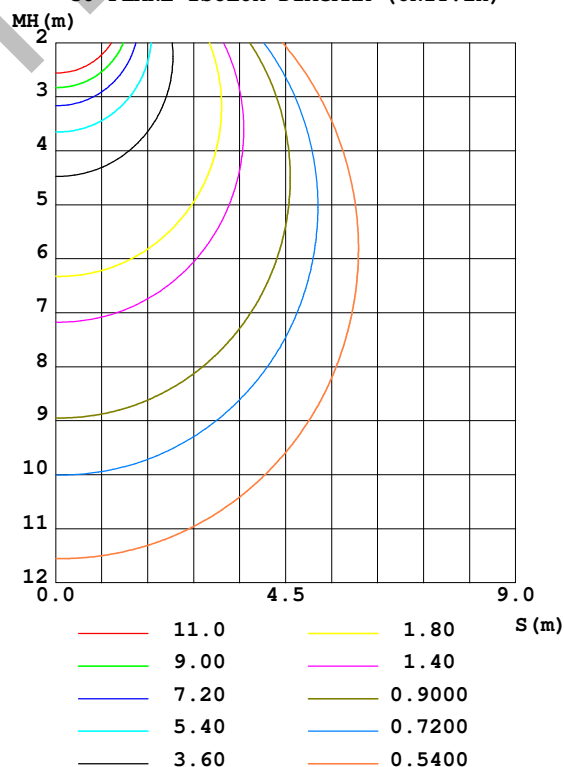
Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 61.15 lm/W
MODEL	KL-2743	I _{max} (cd)	602.9	S/MH (C0/180)	1.30	
NOMINAL POWER (W)	12	LOR (%)	42.7	S/MH (C90/270)	0.74	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	743.36	η UP, DN (C0-180)	0.0, 38.8	
NOMINAL FLUX (lm)	1742.04	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 3.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	42.7	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

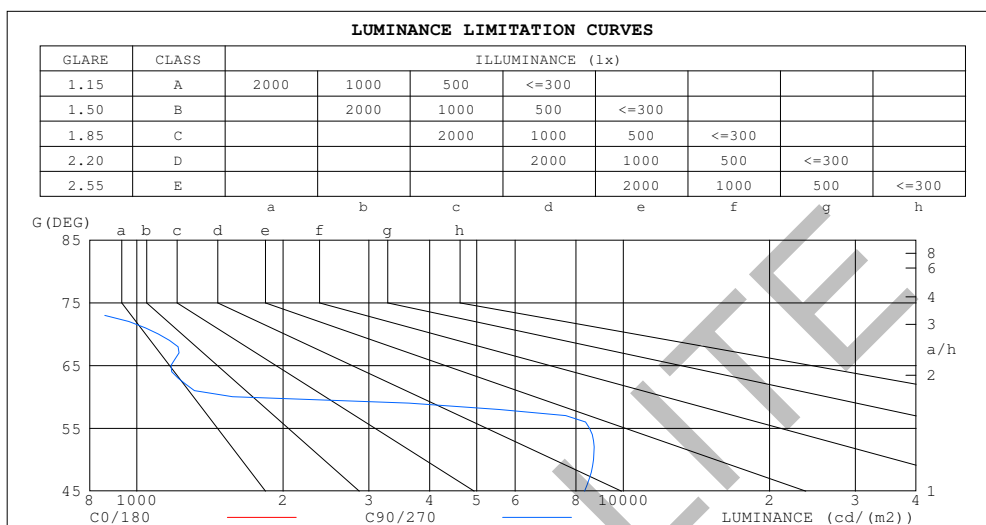
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	70.79	88.81	144.9	87.31	69.95	54.57	49.15	54.57	0- 10	6.928	6.928	0.93, 0.40
20	68.29	326.2	524.6	320.7	66.88	45.92	43.66	46.87	10- 20	37.03	43.96	5.91, 2.52
30	63.72	486.1	585.6	490.8	62.30	38.78	37.03	39.66	20- 30	94.69	138.7	18.7, 7.96
40	57.05	495.7	602.7	501.2	55.83	31.78	29.10	32.55	30- 40	143.7	282.4	38, 16.2
50	48.47	460.8	562.1	472.1	47.31	24.60	21.47	25.36	40- 50	176.1	458.5	61.7, 26.3
60	37.84	378.1	79.21	379.3	36.71	17.06	14.83	17.68	50- 60	172.5	631.0	84.9, 36.2
70	25.31	52.38	38.11	46.73	24.30	10.34	9.316	10.71	60- 70	82.05	713.0	95.9, 40.9
80	11.73	7.829	4.470	7.484	11.00	4.244	3.388	4.447	70- 80	26.91	739.9	99.5, 42.5
90	0	0.0005	0	0.0004	0	0	0	0	80- 90	3.426	743.4	100, 42.7
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	593	182
80	683	256
75	723	584
70	748	1108
65	761	1176
60	765	1575
55	765	8527
50	762	8692
45	758	8333

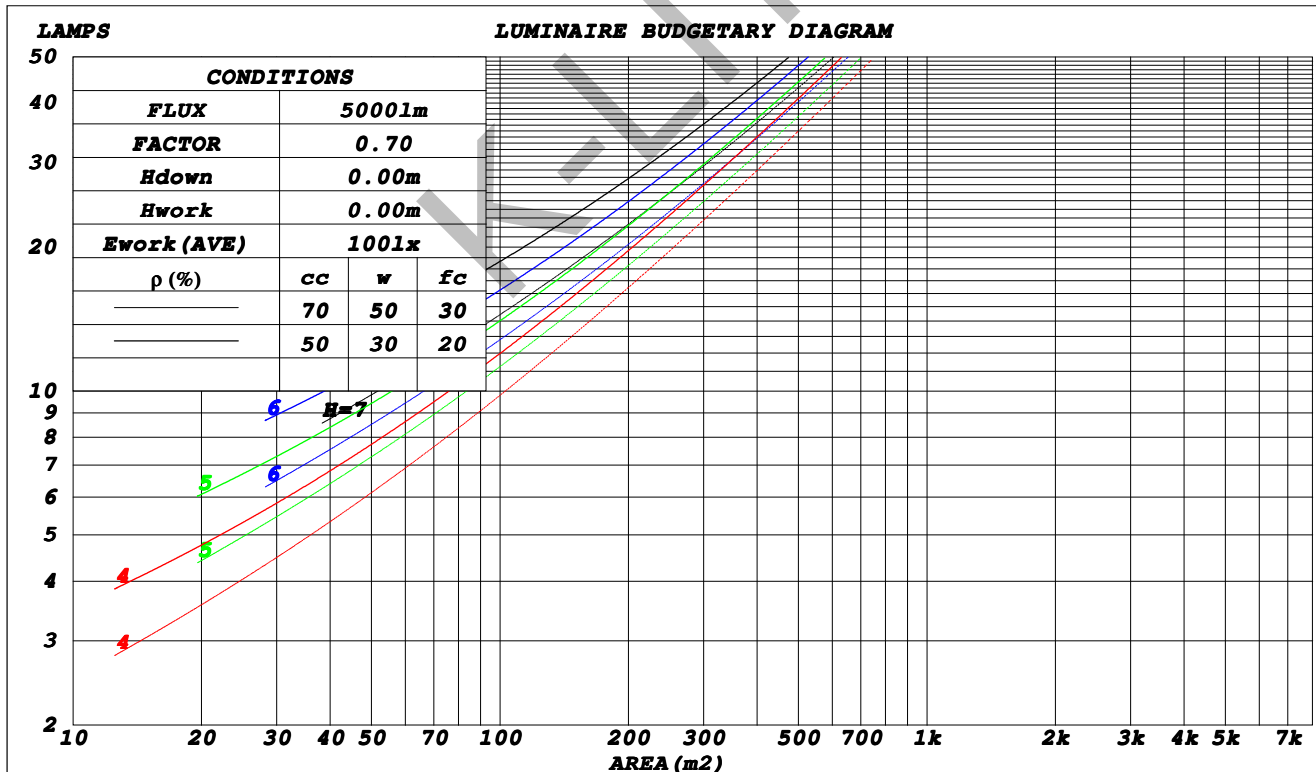
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γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.51	.51	.51	.50	.50	.50	.47	.47	.47	.45	.45	.45	.44	.44	.44	.43
1.0	.45	.43	.41	.44	.42	.41	.42	.41	.39	.40	.39	.38	.39	.38	.37	.36
2.0	.39	.36	.34	.38	.35	.33	.37	.34	.32	.35	.33	.32	.34	.32	.31	.30
3.0	.34	.30	.27	.33	.30	.27	.32	.29	.27	.31	.28	.26	.30	.28	.26	.25
4.0	.30	.26	.23	.29	.25	.23	.28	.25	.22	.27	.24	.22	.26	.24	.22	.21
5.0	.26	.22	.19	.26	.22	.19	.25	.21	.19	.24	.21	.19	.23	.20	.18	.17
6.0	.23	.19	.16	.23	.19	.16	.22	.18	.16	.21	.18	.16	.20	.18	.16	.15
7.0	.21	.17	.14	.20	.16	.14	.20	.16	.14	.19	.16	.14	.18	.16	.13	.13
8.0	.18	.15	.12	.18	.15	.12	.18	.14	.12	.17	.14	.12	.17	.14	.12	.11
9.0	.17	.13	.11	.16	.13	.10	.16	.13	.10	.15	.12	.10	.15	.12	.10	.09
10.0	.15	.12	.09	.15	.12	.09	.14	.11	.09	.14	.11	.09	.14	.11	.09	.08



C Range: 0 - 360DEG
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 Operators: K-LITE
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.124	.071	.022	.121	.069	.022	.116	.066	.021	.111	.064	.020	.106	.061	.020		
2.0	.122	.067	.021	.119	.066	.020	.114	.064	.020	.110	.062	.019	.106	.060	.019		
3.0	.116	.062	.018	.113	.061	.018	.109	.059	.018	.105	.057	.018	.101	.056	.017		
4.0	.108	.056	.017	.106	.056	.016	.102	.054	.016	.099	.053	.016	.095	.052	.016		
5.0	.101	.052	.015	.099	.051	.015	.096	.050	.015	.093	.049	.015	.090	.048	.014		
6.0	.095	.047	.014	.093	.047	.014	.090	.046	.013	.087	.045	.013	.084	.044	.013		
7.0	.088	.044	.012	.087	.043	.012	.084	.043	.012	.081	.042	.012	.079	.041	.012		
8.0	.083	.040	.011	.081	.040	.011	.079	.039	.011	.077	.039	.011	.074	.038	.011		
9.0	.078	.038	.010	.077	.037	.010	.074	.037	.010	.072	.036	.010	.070	.036	.010		
10.0	.073	.035	.010	.072	.035	.010	.070	.034	.010	.068	.034	.010	.066	.033	.010		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.081	.081	.081	.069	.069	.069	.047	.047	.047	.027	.027	.027	.009	.009	.009		
1.0	.076	.067	.058	.065	.057	.050	.045	.039	.034	.026	.023	.020	.008	.007	.006		
2.0	.073	.056	.042	.063	.048	.036	.043	.034	.025	.025	.020	.015	.008	.006	.005		
3.0	.070	.049	.032	.060	.042	.027	.041	.029	.019	.024	.017	.011	.008	.006	.004		
4.0	.067	.043	.025	.058	.037	.021	.040	.026	.015	.023	.015	.009	.007	.005	.003		
5.0	.065	.039	.020	.056	.034	.017	.038	.023	.012	.022	.014	.007	.007	.004	.002		
6.0	.062	.035	.016	.053	.031	.014	.037	.021	.010	.021	.013	.006	.007	.004	.002		
7.0	.059	.032	.014	.051	.028	.012	.035	.020	.008	.020	.012	.005	.007	.004	.002		
8.0	.056	.030	.012	.049	.026	.010	.034	.018	.007	.020	.011	.004	.006	.004	.001		
9.0	.054	.028	.010	.046	.024	.009	.032	.017	.006	.019	.010	.004	.006	.003	.001		
10.0	.052	.026	.009	.044	.023	.008	.031	.016	.006	.018	.009	.003	.006	.003	.001		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm										
NAME: SUDO - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:WW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:4765		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						18.7	20.3	19.0	20.5	20.7
4H						20.8	22.4	21.1	22.6	22.9
6H						20.7	22.2	21.0	22.4	22.6
8H						20.6	22.0	20.9	22.3	22.5
12H						20.5	21.8	20.9	22.1	22.4
2H						20.2	21.5	20.5	21.7	22.0
3H						20.5	21.7	22.0	20.5	21.8
4H						20.2	21.4	20.5	21.7	22.0
6H						20.5	21.7	20.8	22.0	22.3
8H						20.4	21.6	20.8	21.9	22.2
12H						20.1	21.3	20.5	21.6	21.9
2H						20.0	21.4	20.3	21.6	21.9
3H						21.3	22.5	21.7	22.8	23.1
4H						21.7	22.8	22.1	23.1	23.4
6H						21.9	22.8	22.3	23.2	23.5
8H						21.0	22.0	21.4	22.3	22.7
12H						21.9	22.8	22.3	23.1	23.5
2H						21.0	21.9	21.4	22.2	22.6
3H						20.9	21.7	21.4	22.1	22.5
4H						21.6	22.5	22.0	22.9	23.2
6H						21.8	22.5	22.2	22.9	23.4
8H						21.0	21.8	21.5	22.2	22.6
12H						21.8	22.5	22.3	22.9	23.3
2H						21.0	21.6	21.5	22.1	22.5
3H						21.8	22.4	22.3	22.8	23.3
4H						21.0	21.5	21.4	22.0	22.4
6H						21.6	22.4	22.0	22.8	23.2
8H						21.8	22.4	22.2	22.8	23.3
12H						21.0	21.5	21.5	22.0	22.4
Variations with the observer position at spacings:										
S = 1.0H		+ 0.7 / - 0.4				+ 1.5 / - 2.6				
1.5H		+ 1.0 / - 1.4				+ 1.5 / - 2.6				
2.0H		+ 2.2 / - 9.0				+ 1.9 / - 9.6				

CIE Pub.117, 1742 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.9$)
 Area: 0.1 m²

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
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 Operators:K-LITE
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

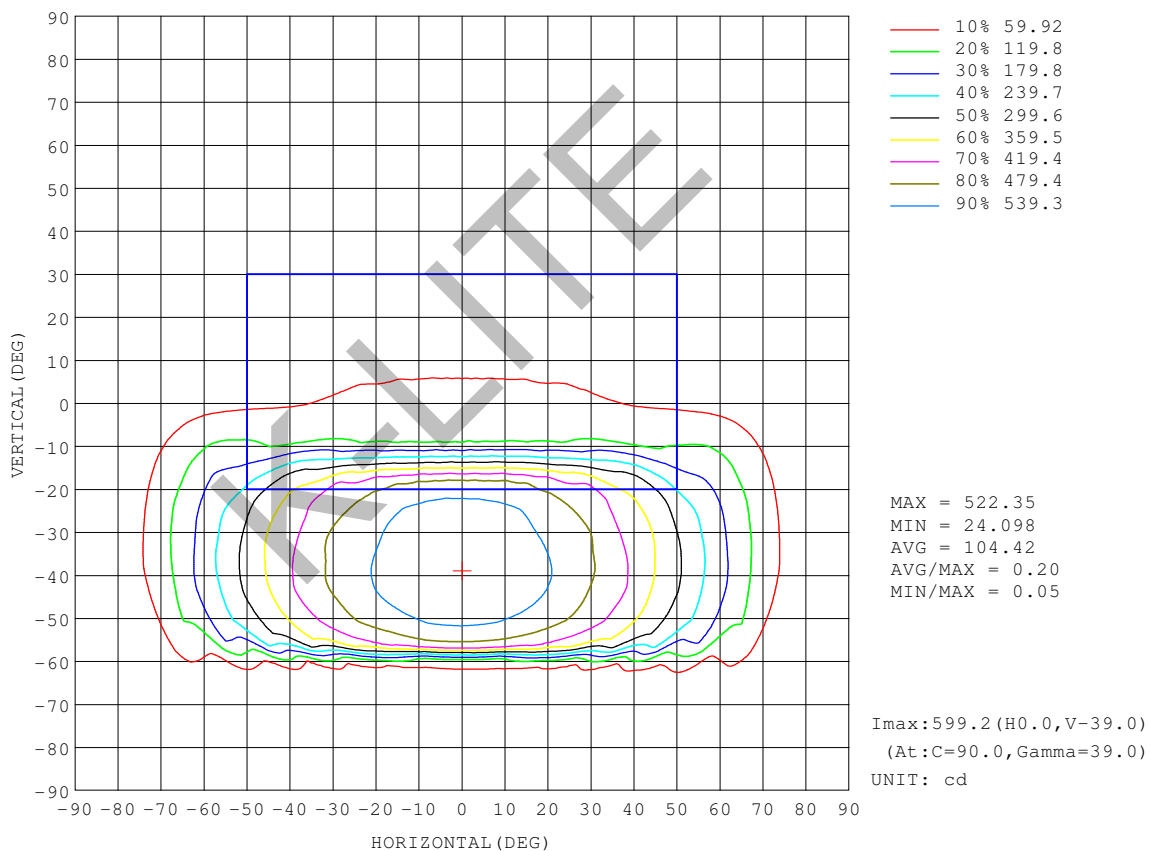
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	22	17	14	22	17	14	21	17	13	11
0.80	27	22	19	27	22	18	26	21	18	15
1.00	32	27	23	31	26	23	30	27	23	20
1.25	35	30	27	34	30	27	33	30	27	24
1.50	37	33	30	37	33	30	35	32	29	26
2.00	41	37	34	40	37	34	38	36	33	30
2.50	42	39	37	41	38	36	40	37	35	32
3.00	44	41	39	43	40	38	41	39	37	34
4.00	45	43	41	44	42	41	43	41	39	36
5.00	46	44	43	45	44	42	43	42	41	37
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
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Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
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Remarks:

ISOCANDELA DIAGRAM

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

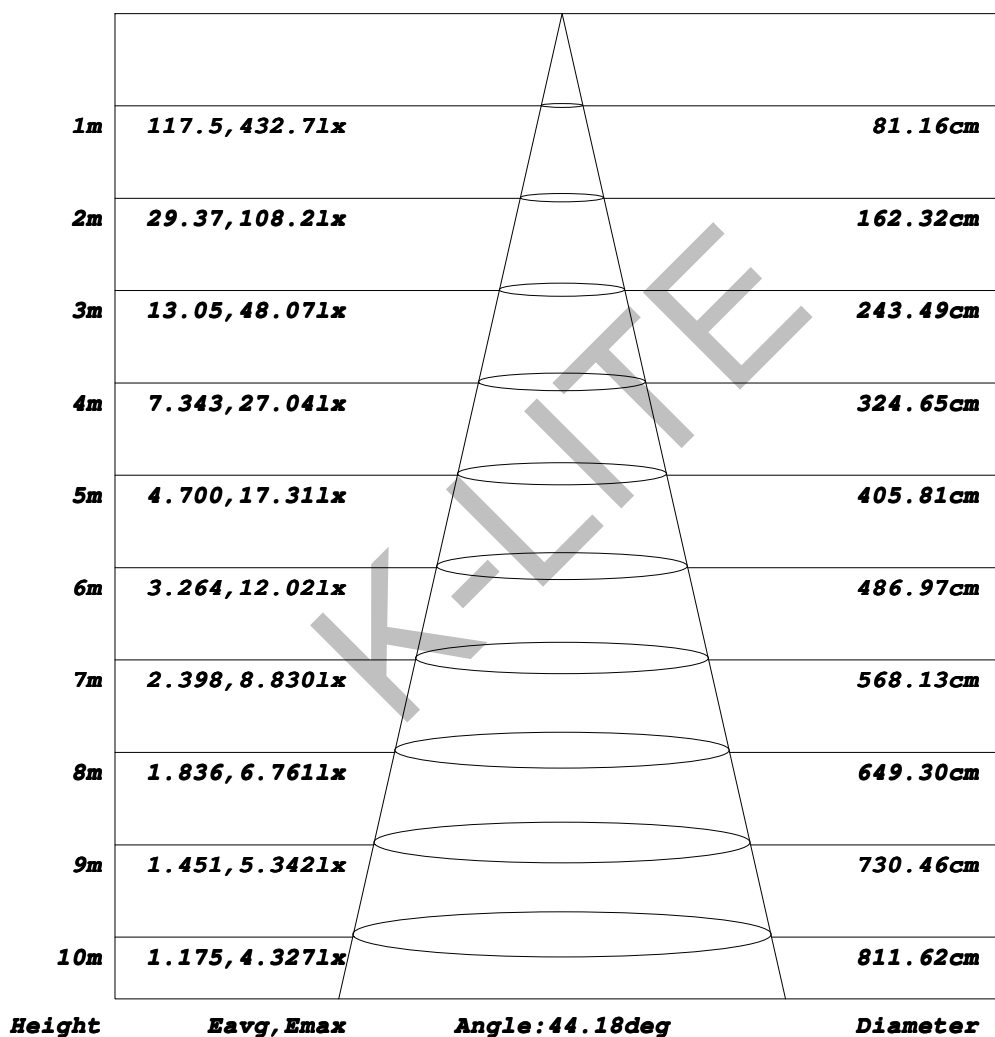


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γ Range: 0 - 90DEG
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Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:66.51 lm


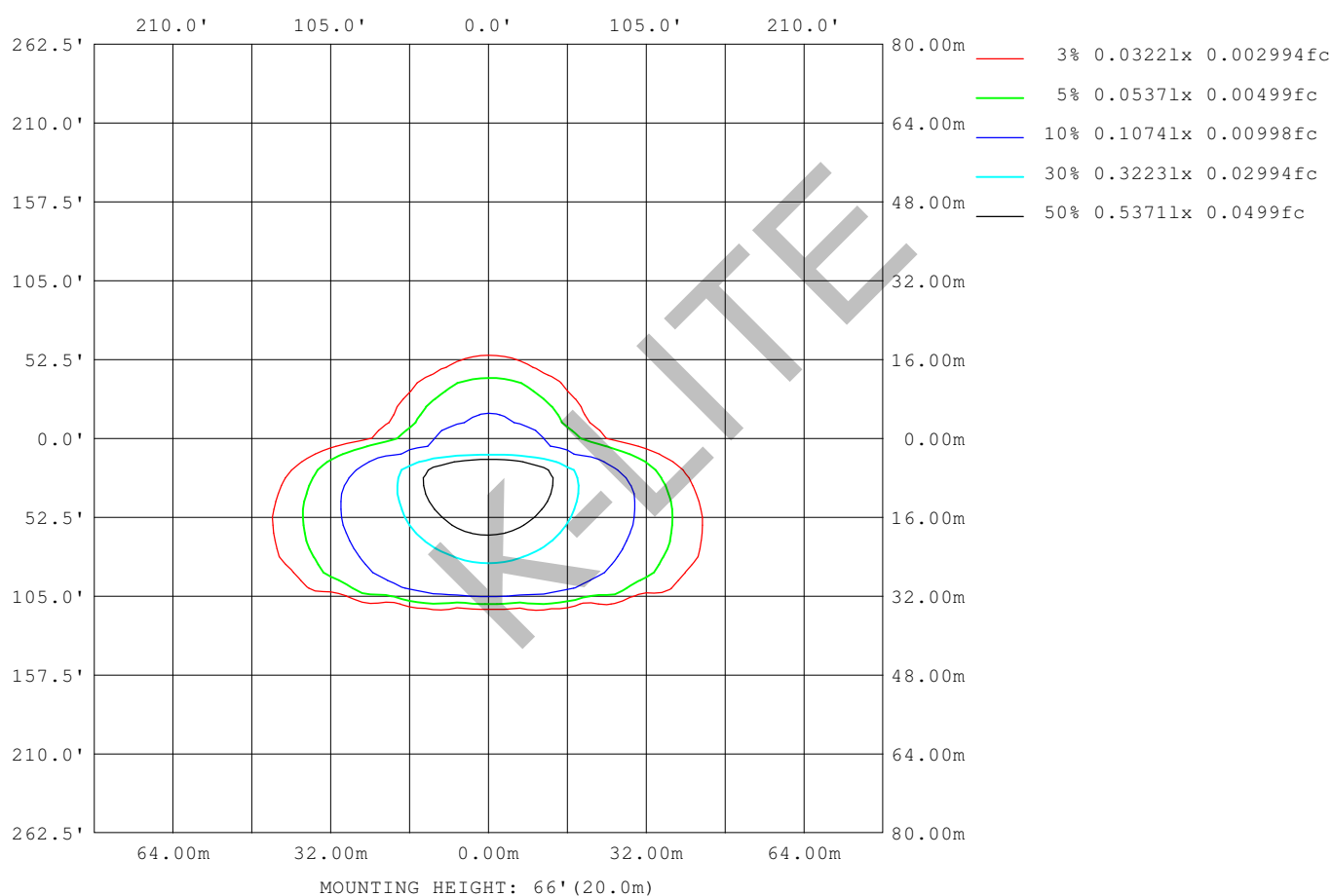
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Test Speed: HIGH
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γ Range: 0 - 90DEG
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Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
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Remarks:

ISOLUX DIAGRAM

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.77V I:0.0537A P:12.157W PF:0.9807 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4765
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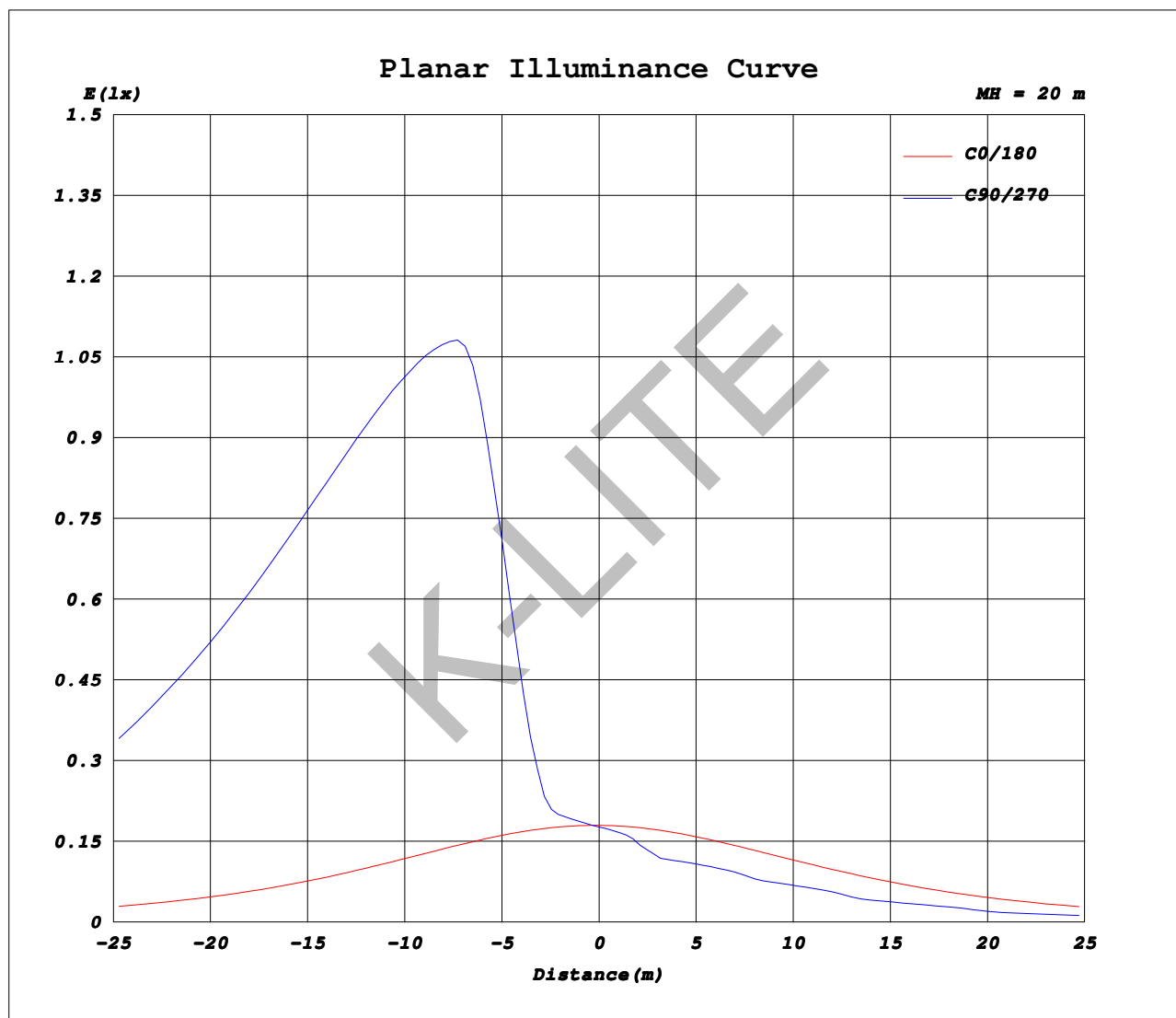
AvgL	cd/m2
L_0~180 (65) av	740
L_0~180 (75) av	700
L_0~180 (85) av	561
L_90~270 (65) av	729
L_90~270 (75) av	405
L_90~270 (85) av	171
L_45 (65) av	2921
L_45 (75) av	703
L_45 (85) av	225

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	38.5%	
Luminaire Power:	12.19 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

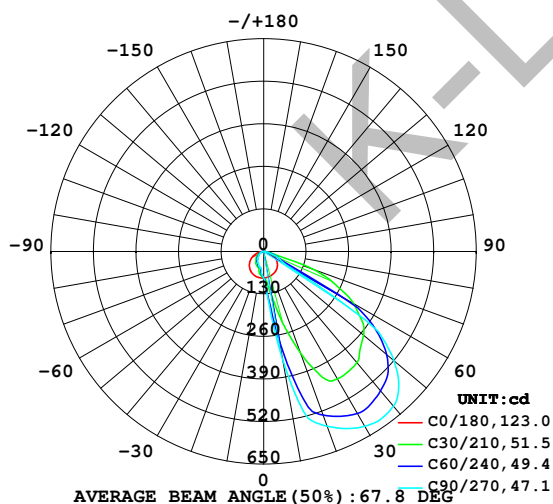
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

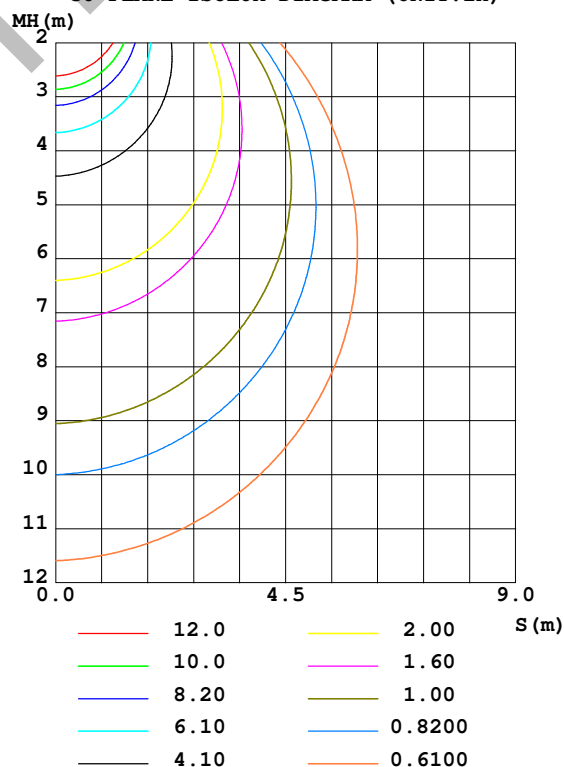
Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 65.46 lm/W
MODEL	KL-2743	I _{max} (cd)	625.3	S/MH (C0/180)	1.36	
NOMINAL POWER (W)	12	LOR (%)	38.5	S/MH (C90/270)	0.67	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	798.20	η UP, DN (C0-180)	0.0, 35.0	
NOMINAL FLUX (lm)	2073.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 3.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	38.5	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

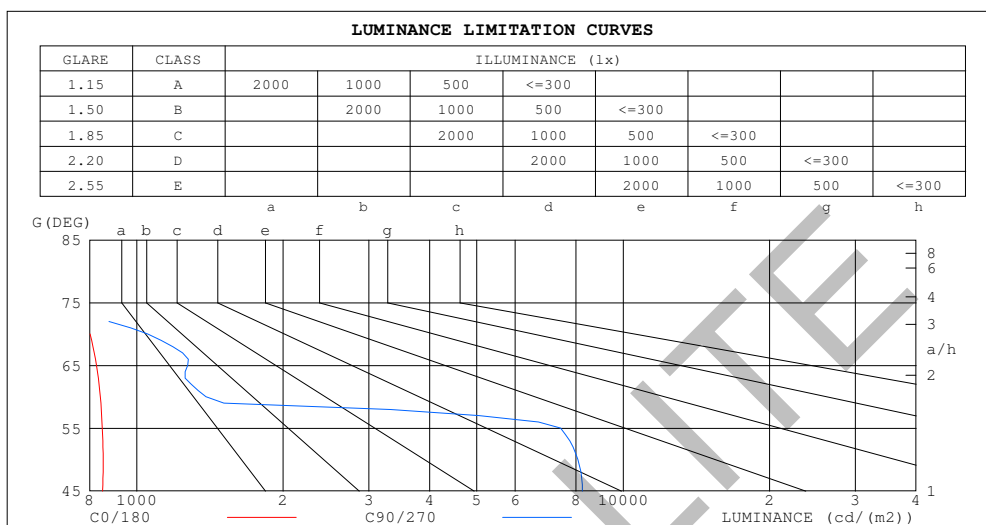
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	79.79	206.6	331.7	205.5	81.53	61.85	52.73	60.32	0- 10	10.03	10.03	1.26, 0.48
20	76.49	484.1	568.1	495.2	79.42	49.41	46.11	48.12	10- 20	54.86	64.90	8.13, 3.13
30	71.51	512.0	616.7	540.8	74.94	41.80	38.15	40.45	20- 30	112.3	177.2	22.2, 8.55
40	64.42	512.2	617.2	552.1	67.24	34.46	29.57	33.37	30- 40	160.7	337.9	42.3, 16.3
50	54.51	461.7	519.6	500.9	57.05	26.14	21.58	25.38	40- 50	187.3	525.3	65.8, 25.3
60	41.82	330.1	69.44	367.0	44.23	18.11	14.81	17.64	50- 60	166.9	692.1	86.7, 33.4
70	27.27	49.64	36.05	49.52	29.17	11.18	9.347	10.97	60- 70	76.88	769.0	96.3, 37.1
80	12.22	6.598	3.927	6.100	13.09	4.563	4.274	4.531	70- 80	25.75	794.8	99.6, 38.3
90	0	0	0	0.0000	0	0.0013	0.0200	0.0015	80- 90	3.433	798.2	100, 38.5
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:



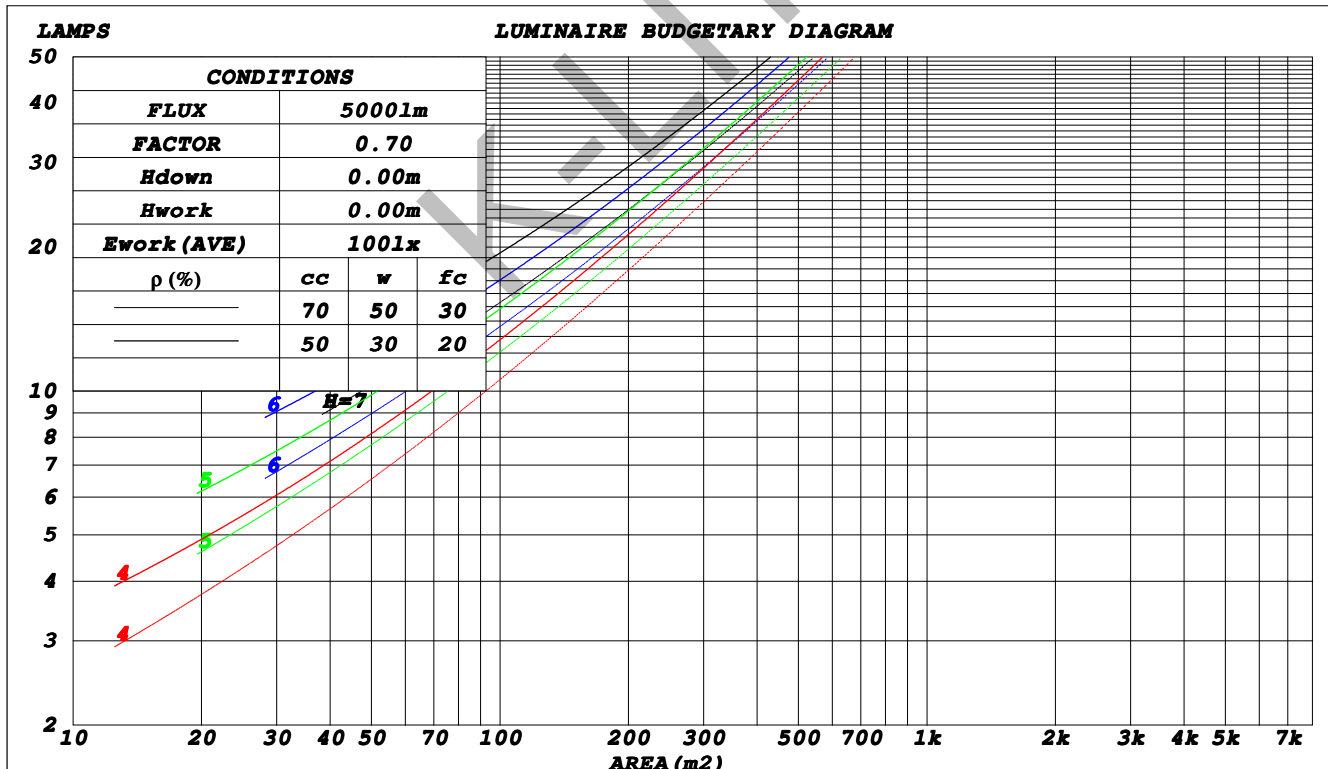
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.46	.46	.46	.45	.45	.45	.43	.43	.43	.41	.41	.41	.39	.39	.39	.38
1.0	.41	.39	.38	.40	.38	.37	.38	.37	.36	.37	.36	.35	.35	.34	.34	.33
2.0	.35	.33	.31	.35	.32	.31	.33	.31	.30	.32	.31	.29	.31	.30	.28	.28
3.0	.31	.28	.26	.30	.28	.25	.29	.27	.25	.28	.26	.24	.27	.26	.24	.23
4.0	.27	.24	.21	.27	.24	.21	.26	.23	.21	.25	.23	.21	.24	.22	.20	.20
5.0	.24	.21	.18	.24	.20	.18	.23	.20	.18	.22	.20	.18	.21	.19	.17	.17
6.0	.22	.18	.16	.21	.18	.15	.20	.18	.15	.20	.17	.15	.19	.17	.15	.14
7.0	.19	.16	.13	.19	.16	.13	.18	.15	.13	.18	.15	.13	.17	.15	.13	.12
8.0	.17	.14	.12	.17	.14	.12	.17	.14	.12	.16	.14	.12	.16	.13	.12	.11
9.0	.16	.13	.10	.16	.12	.10	.15	.12	.10	.15	.12	.10	.14	.12	.10	.09
10.0	.14	.11	.09	.14	.11	.09	.14	.11	.09	.13	.11	.09	.13	.11	.09	.08



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0		
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0		
ρ_{fc}	20%			20%			20%			20%			20%			0		
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)											
0.0																		
1.0	.108	.062	.020	.106	.060	.019	.101	.058	.018	.096	.055	.018	.092	.053	.017			
2.0	.106	.058	.018	.104	.057	.018	.099	.055	.017	.095	.053	.017	.091	.052	.016			
3.0	.101	.054	.016	.099	.053	.016	.095	.051	.016	.091	.050	.015	.088	.048	.015			
4.0	.095	.049	.014	.093	.048	.014	.089	.047	.014	.086	.046	.014	.083	.045	.014			
5.0	.088	.045	.013	.087	.045	.013	.084	.044	.013	.081	.043	.013	.078	.042	.013			
6.0	.083	.042	.012	.081	.041	.012	.079	.040	.012	.076	.039	.012	.073	.039	.011			
7.0	.078	.038	.011	.076	.038	.011	.074	.037	.011	.071	.037	.011	.069	.036	.011			
8.0	.073	.036	.010	.072	.035	.010	.069	.035	.010	.067	.034	.010	.065	.033	.010			
9.0	.068	.033	.009	.067	.033	.009	.065	.032	.009	.063	.032	.009	.062	.031	.009			
10.0	.064	.031	.009	.064	.031	.009	.062	.030	.009	.060	.030	.008	.058	.029	.008			

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.073	.073	.073	.063	.063	.063	.043	.043	.043	.025	.025	.025	.008	.008	.008	
1.0	.069	.060	.053	.059	.052	.045	.040	.036	.031	.023	.021	.018	.007	.007	.006	
2.0	.065	.051	.038	.056	.044	.033	.038	.030	.023	.022	.018	.014	.007	.006	.004	
3.0	.063	.044	.029	.054	.038	.025	.037	.026	.018	.021	.015	.010	.007	.005	.003	
4.0	.060	.039	.023	.052	.034	.020	.035	.023	.014	.020	.014	.008	.007	.004	.003	
5.0	.057	.035	.018	.049	.030	.016	.034	.021	.011	.020	.012	.007	.006	.004	.002	
6.0	.055	.032	.015	.047	.027	.013	.033	.019	.009	.019	.011	.005	.006	.004	.002	
7.0	.053	.029	.013	.045	.025	.011	.031	.018	.008	.018	.010	.005	.006	.003	.002	
8.0	.050	.027	.011	.043	.023	.009	.030	.016	.007	.017	.010	.004	.006	.003	.001	
9.0	.048	.025	.010	.041	.022	.008	.029	.015	.006	.017	.009	.004	.005	.003	.001	
10.0	.046	.023	.008	.039	.020	.007	.027	.014	.005	.016	.008	.003	.005	.003	.001	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm										
NAME: SUDO - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:4768		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	18.1	19.7	18.4	19.9	20.1	19.2	20.8	19.5	21.0	21.2
3H	19.1	20.5	19.4	20.7	21.0	19.1	20.5	19.4	20.8	21.0
4H	19.3	20.7	19.7	20.9	21.2	19.1	20.4	19.4	20.6	20.9
6H	19.4	20.7	19.7	20.9	21.2	18.9	20.2	19.3	20.5	20.7
8H	19.4	20.6	19.7	20.9	21.2	18.9	20.1	19.2	20.4	20.7
12H	19.4	20.5	19.7	20.8	21.1	18.8	20.0	19.2	20.3	20.6
4H 2H	19.0	20.3	19.3	20.6	20.8	19.6	21.0	19.9	21.2	21.5
3H	20.1	21.3	20.5	21.6	21.9	19.6	20.7	19.9	21.0	21.3
4H	20.5	21.5	20.8	21.8	22.1	19.5	20.5	19.9	20.8	21.2
6H	20.6	21.5	21.0	21.8	22.2	19.4	20.3	19.8	20.7	21.0
8H	20.6	21.4	21.0	21.8	22.2	19.4	20.2	19.8	20.6	20.9
12H	20.6	21.4	21.0	21.7	22.1	19.3	20.1	19.7	20.5	20.9
8H 4H	20.4	21.2	20.8	21.6	22.0	19.5	20.3	19.9	20.7	21.1
6H	20.5	21.2	21.0	21.6	22.0	19.4	20.1	19.8	20.5	20.9
8H	20.6	21.2	21.0	21.6	22.0	19.4	20.0	19.8	20.4	20.8
12H	20.6	21.1	21.0	21.5	22.0	19.3	19.8	19.8	20.3	20.8
12H 4H	20.3	21.1	20.7	21.5	21.9	19.4	20.2	19.9	20.6	21.0
6H	20.5	21.1	20.9	21.5	22.0	19.4	20.0	19.8	20.4	20.8
8H	20.5	21.0	21.0	21.5	22.0	19.3	19.9	19.8	20.3	20.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.9 / - 1.0				
1.5H	+ 1.4 / - 3.1					+ 1.2 / - 2.0				
2.0H	+ 2.0 / - 8.5					+ 2.1 / - 8.9				

CIE Pub.117, 2074 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 2.5$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

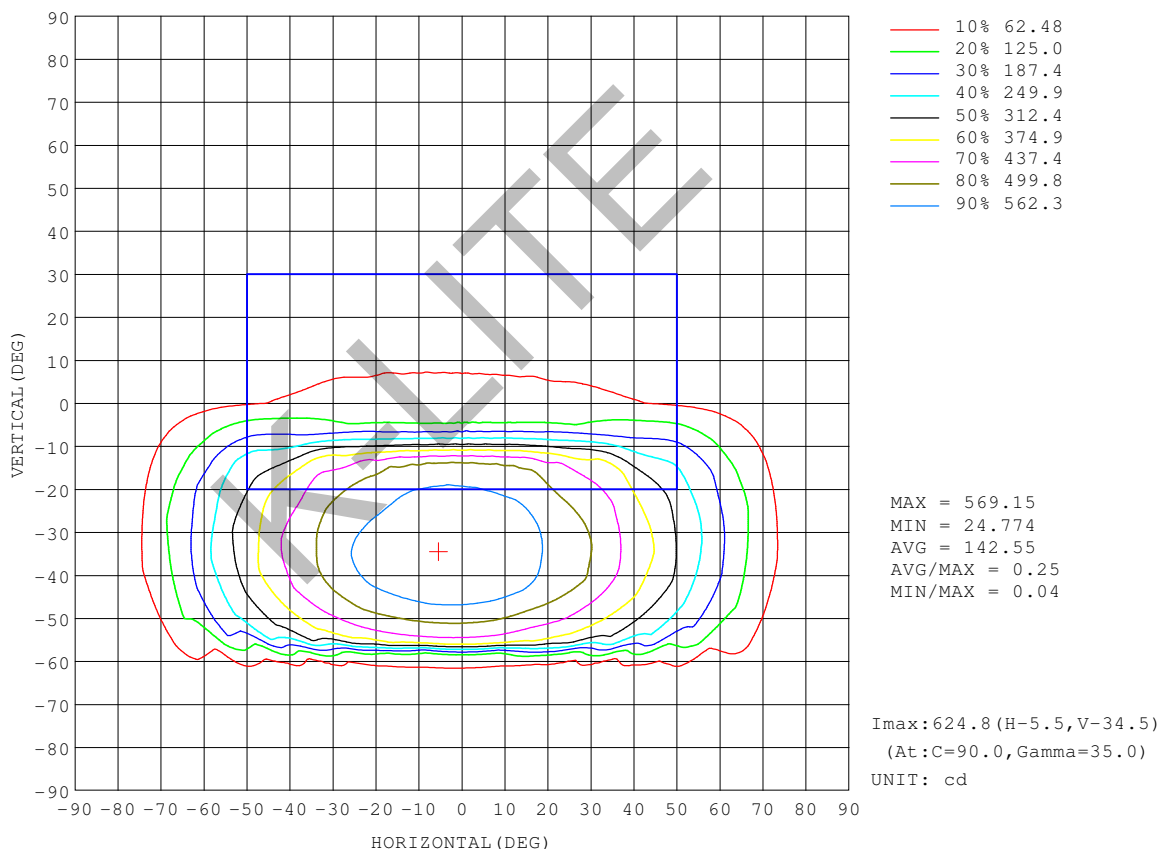
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	21	16	14	21	16	14	20	16	14	11
0.80	26	21	18	25	21	18	24	20	18	15
1.00	29	25	22	29	25	22	28	25	22	19
1.25	32	28	26	32	28	26	31	28	25	22
1.50	34	31	28	34	30	28	33	30	27	25
2.00	37	34	32	36	34	31	35	33	31	28
2.50	39	36	34	38	35	33	36	34	33	29
3.00	40	37	35	39	37	35	38	36	34	31
4.00	41	39	38	40	39	37	39	37	36	33
5.00	42	40	39	41	40	38	39	38	37	34
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

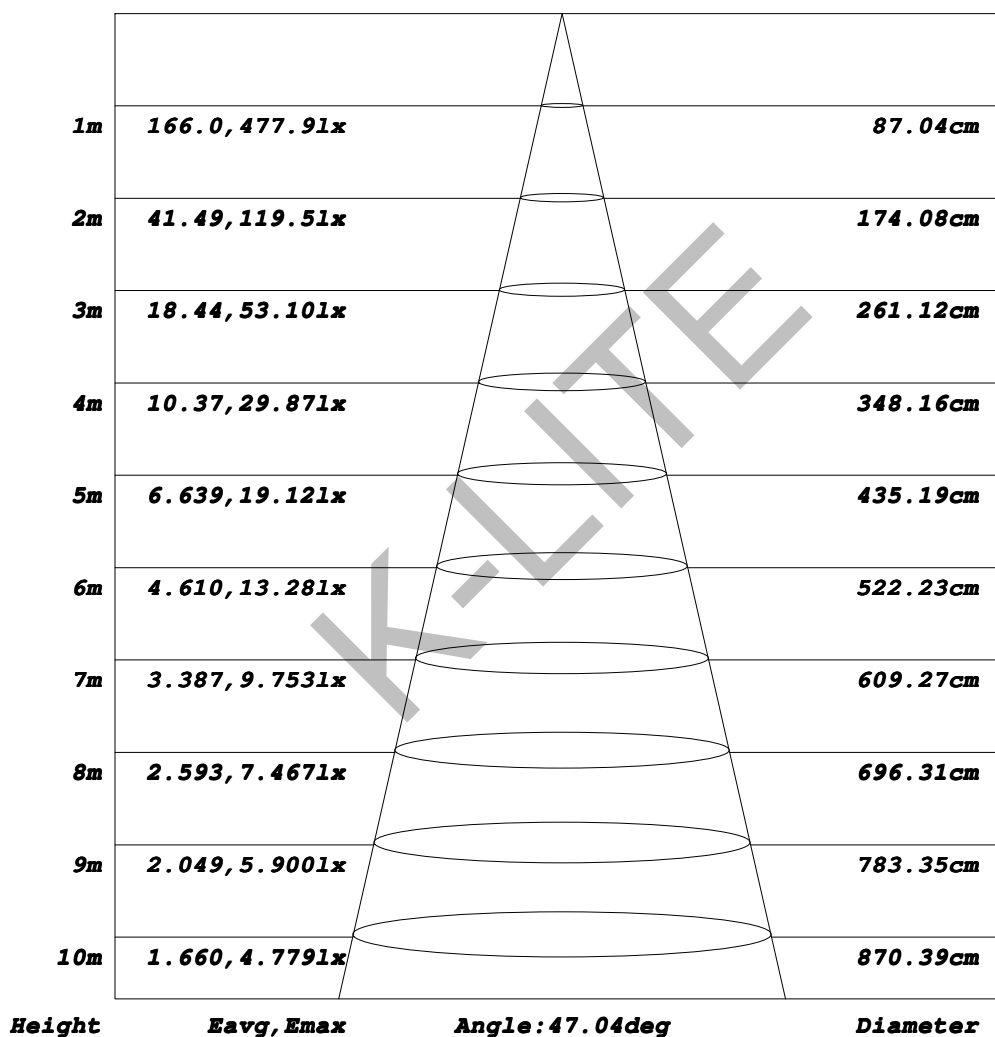


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:103.4 lm


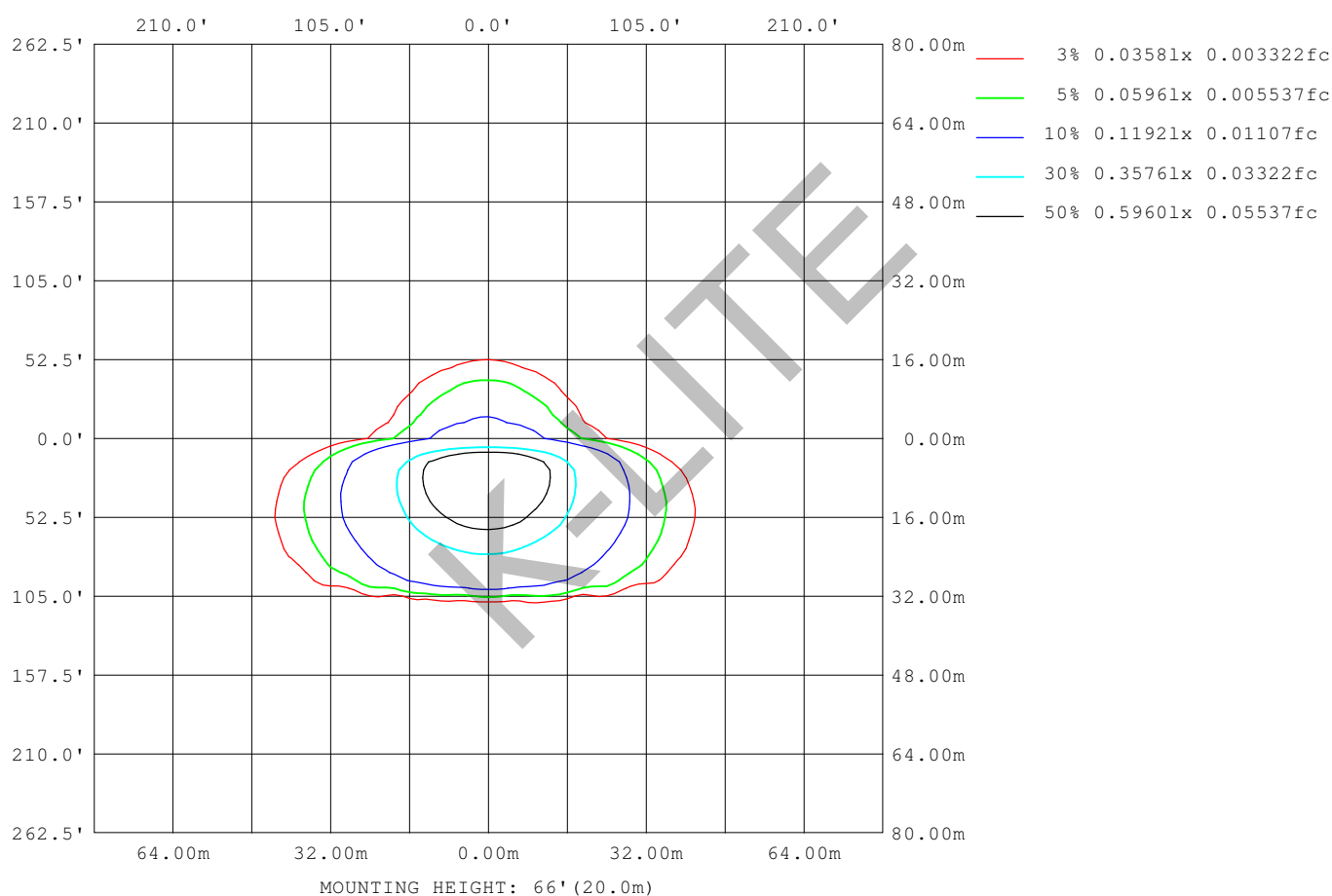
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.78V I:0.0539A P:12.193W PF:0.9809 Freq:50.00Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4768
MFR.: K-LITE	SUR.:	Shielding Angle:

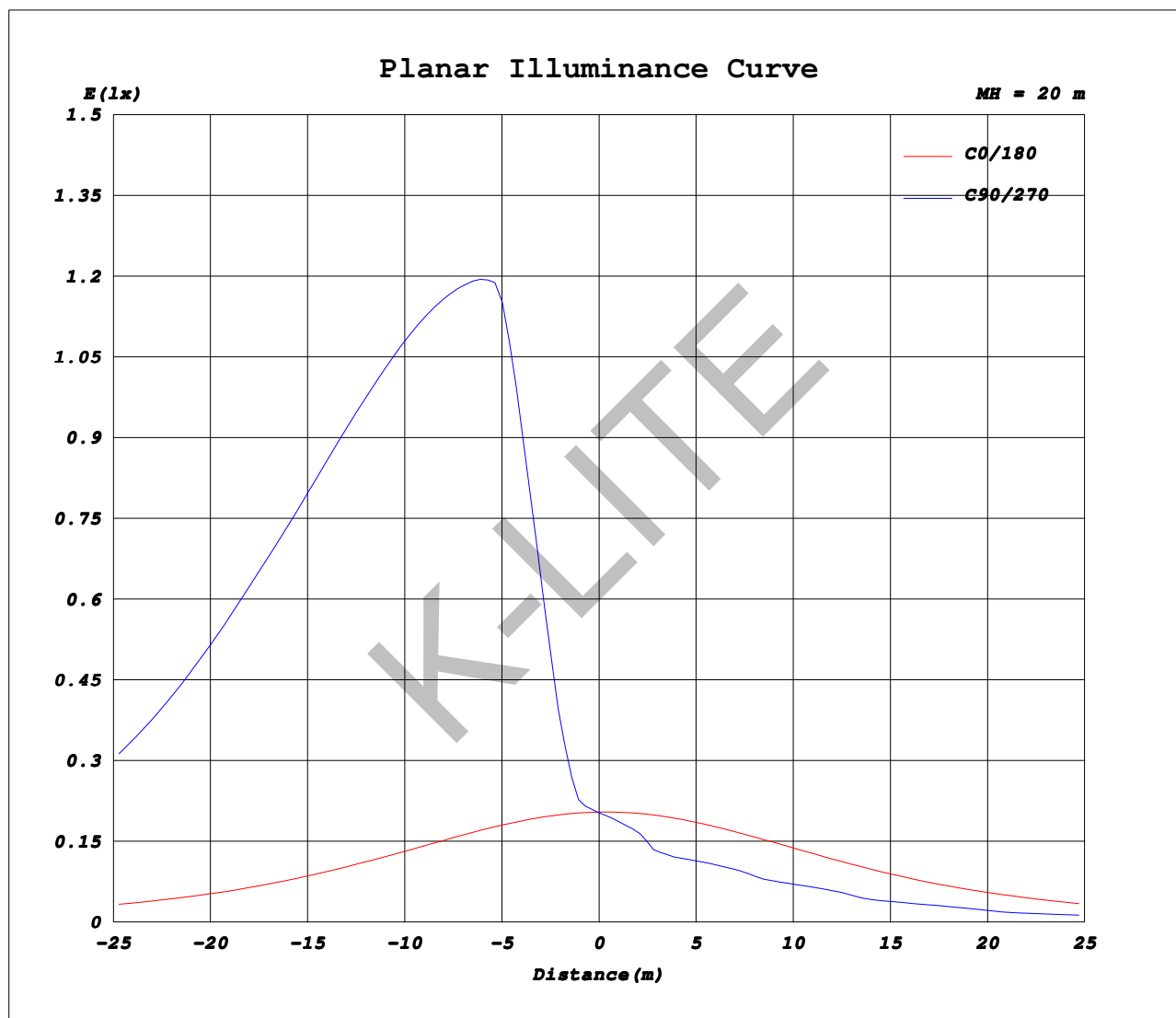
AvgL	cd/m2
L_0~180 (65) av	848
L_0~180 (75) av	786
L_0~180 (85) av	600
L_90~270 (65) av	786
L_90~270 (75) av	329
L_90~270 (85) av	184
L_45 (65) av	2108
L_45 (75) av	699
L_45 (85) av	216

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

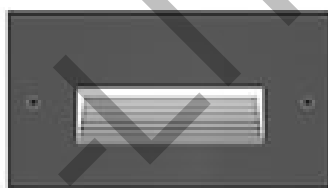
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	30.9%	
Luminaire Power:	6.205 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

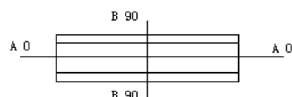
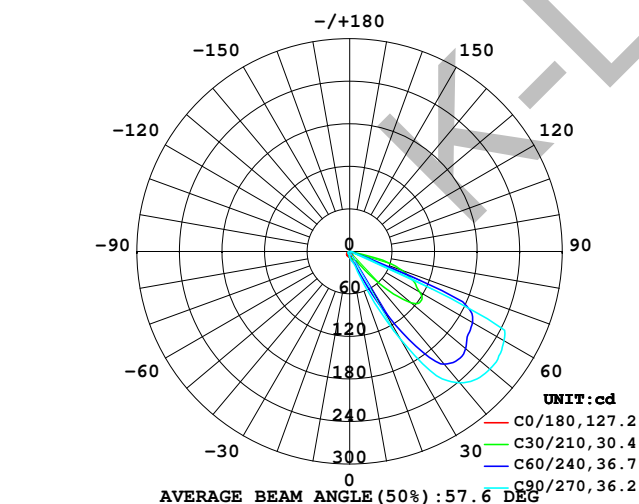
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

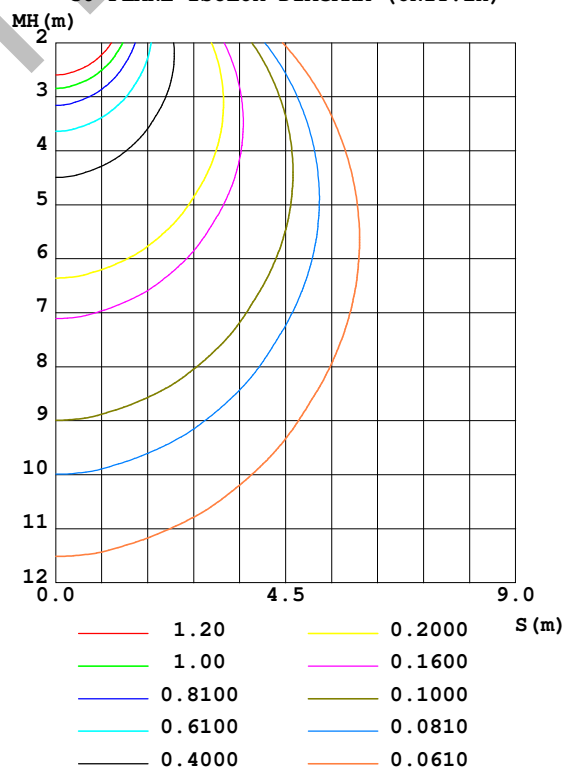
Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 37.15 lm/W
MODEL	KL-2747	I _{max} (cd)	258.8	S/MH (C0/180)	1.35	
NOMINAL POWER (W)	6	LOR (%)	30.9	S/MH (C90/270)	0.54	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	230.51	η UP, DN (C0-180)	0.0, 29.8	
NOMINAL FLUX (lm)	746	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 1.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	30.9	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

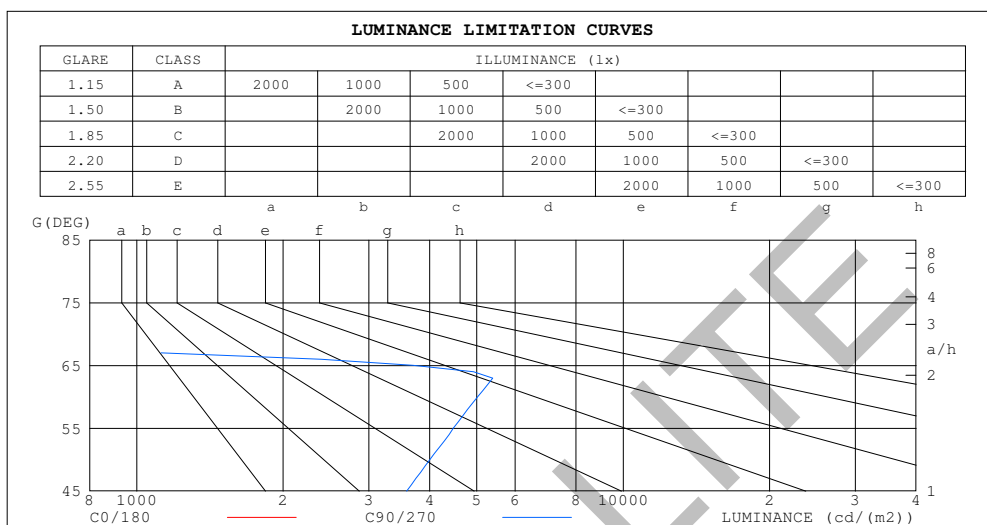
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	7.845	10.41	12.06	10.42	7.918	6.128	4.466	6.025	0- 10	0.7798	0.7798	0.34, 0.10
20	7.496	14.09	19.42	14.09	7.642	4.354	4.495	4.353	10- 20	2.478	3.258	1.41, 0.44
30	6.976	37.82	142.0	34.00	7.255	3.960	4.160	3.934	20- 30	8.527	11.78	5.11, 1.58
40	6.424	139.0	241.8	133.5	6.708	3.596	3.757	3.554	30- 40	31.64	43.42	18.8, 5.82
50	5.594	174.4	258.3	172.0	5.888	3.185	3.318	3.134	40- 50	55.03	98.45	42.7, 13.2
60	4.397	158.1	251.6	159.6	4.717	2.592	2.498	2.529	50- 60	67.52	166.0	72, 22.2
70	2.714	95.27	9.259	103.4	3.074	1.519	1.411	1.419	60- 70	54.50	220.5	95.6, 29.6
80	0.5844	0.6896	0.0842	1.561	0.7922	0.4992	0.4037	0.4690	70- 80	9.758	230.2	99.9, 30.9
90	0	0.0017	0.0053	0.0052	0	0.0024	0.0050	0.0036	80- 90	0.2800	230.5	100, 30.9
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: cd									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12	3
80	34	5
75	65	123
70	80	270
65	86	3704
60	88	5021
55	88	4474
50	87	4010
45	86	3587

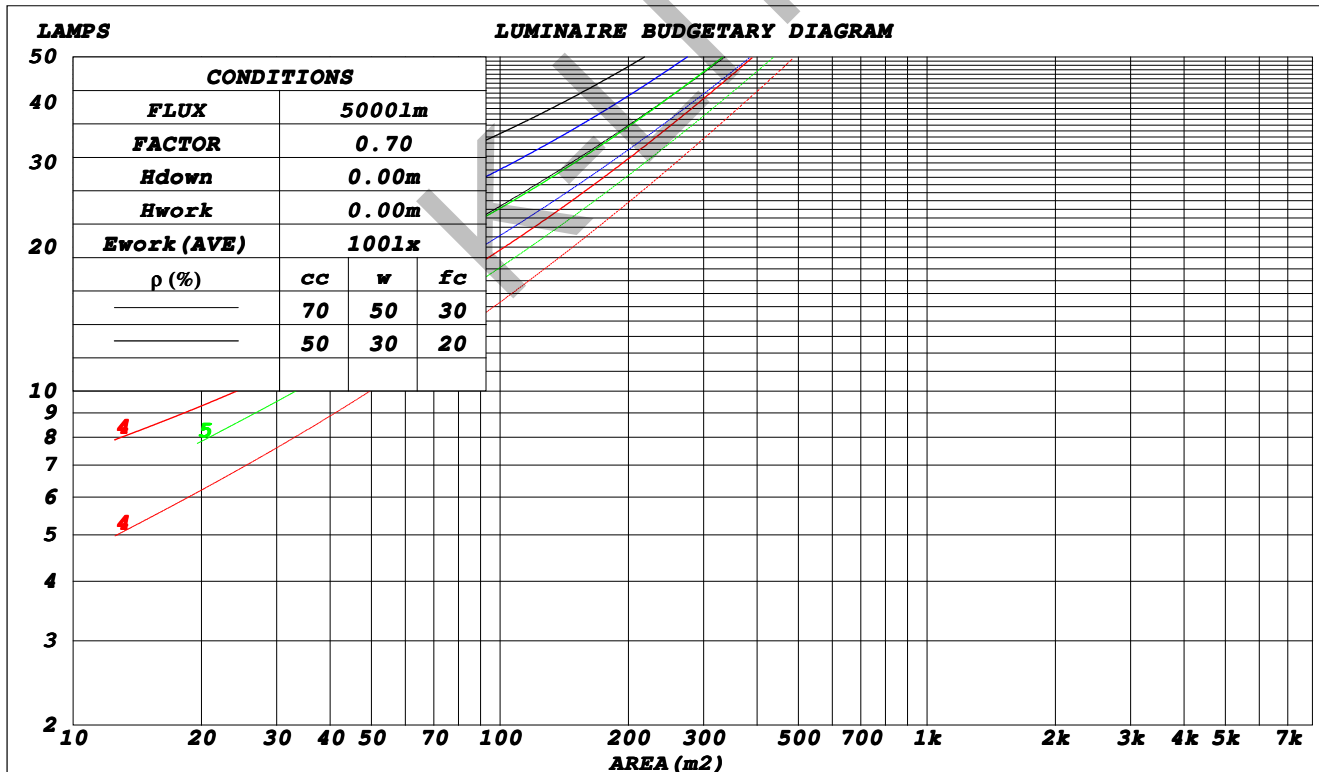
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.37	.37	.37	.36	.36	.36	.34	.34	.34	.33	.33	.33	.32	.32	.32	.31
1.0	.32	.30	.29	.31	.30	.29	.30	.29	.28	.28	.28	.27	.27	.27	.26	.25
2.0	.27	.24	.22	.26	.24	.22	.25	.23	.21	.24	.22	.21	.23	.22	.20	.20
3.0	.22	.20	.17	.22	.19	.17	.21	.19	.17	.20	.18	.16	.19	.18	.16	.15
4.0	.19	.16	.13	.19	.16	.13	.18	.15	.13	.17	.15	.13	.16	.14	.13	.12
5.0	.16	.13	.11	.16	.13	.11	.15	.13	.10	.15	.12	.10	.14	.12	.10	.09
6.0	.14	.11	.09	.14	.11	.09	.13	.10	.08	.13	.10	.08	.12	.10	.08	.07
7.0	.12	.09	.07	.12	.09	.07	.12	.09	.07	.11	.09	.07	.11	.08	.07	.06
8.0	.11	.08	.06	.11	.08	.06	.10	.08	.06	.10	.07	.06	.09	.07	.06	.05
9.0	.10	.07	.05	.10	.07	.05	.09	.07	.05	.09	.06	.05	.08	.06	.05	.04
10.0	.09	.06	.04	.09	.06	.04	.08	.06	.04	.08	.06	.04	.08	.05	.04	.03



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.103	.059	.019	.101	.058	.018	.097	.056	.018	.093	.054	.017	.090	.052	.017		
2.0	.102	.056	.017	.100	.055	.017	.096	.054	.017	.093	.052	.016	.090	.051	.016		
3.0	.096	.051	.015	.095	.051	.015	.091	.049	.015	.088	.048	.015	.085	.047	.015		
4.0	.090	.047	.014	.088	.046	.014	.085	.045	.013	.082	.044	.013	.080	.043	.013		
5.0	.083	.042	.012	.082	.042	.012	.079	.041	.012	.076	.040	.012	.074	.040	.012		
6.0	.077	.038	.011	.075	.038	.011	.073	.037	.011	.071	.037	.011	.069	.036	.011		
7.0	.071	.035	.010	.070	.035	.010	.068	.034	.010	.066	.034	.010	.064	.033	.010		
8.0	.066	.032	.009	.065	.032	.009	.063	.031	.009	.061	.031	.009	.059	.030	.009		
9.0	.061	.030	.008	.060	.029	.008	.059	.029	.008	.057	.029	.008	.056	.028	.008		
10.0	.057	.027	.008	.057	.027	.008	.055	.027	.008	.053	.027	.008	.052	.026	.008		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.059	.059	.059	.050	.050	.050	.034	.034	.034	.020	.020	.020	.006	.006	.006		
1.0	.056	.048	.041	.048	.041	.035	.033	.028	.024	.019	.016	.014	.006	.005	.005		
2.0	.055	.041	.029	.047	.035	.025	.032	.024	.017	.019	.014	.010	.006	.005	.003		
3.0	.053	.035	.021	.046	.031	.018	.031	.021	.013	.018	.012	.008	.006	.004	.002		
4.0	.052	.031	.016	.044	.027	.014	.030	.019	.010	.018	.011	.006	.006	.004	.002		
5.0	.050	.028	.013	.043	.025	.011	.029	.017	.008	.017	.010	.005	.005	.003	.002		
6.0	.048	.026	.011	.041	.023	.009	.028	.016	.007	.016	.009	.004	.005	.003	.001		
7.0	.045	.024	.009	.039	.021	.008	.027	.015	.006	.016	.009	.003	.005	.003	.001		
8.0	.043	.022	.008	.037	.019	.007	.026	.014	.005	.015	.008	.003	.005	.003	.001		
9.0	.041	.021	.007	.036	.018	.006	.025	.013	.004	.014	.007	.003	.005	.002	.001		
10.0	.039	.019	.006	.034	.017	.005	.024	.012	.004	.014	.007	.002	.004	.002	.001		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm											
NAME: SUDO MINI - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:			
SPEC.:CW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:4524			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	17.1	18.9	17.4	19.1	19.3	24.9	26.7	25.2	27.0	27.2	
	3H	17.8	19.5	18.1	19.7	20.0	25.2	26.9	25.5	27.1	27.4
	4H	17.9	19.4	18.2	19.7	20.0	25.1	26.7	25.4	27.0	27.2
	6H	17.8	19.2	18.1	19.5	19.8	25.0	26.5	25.3	26.8	27.1
	8H	17.7	19.1	18.1	19.4	19.7	24.9	26.4	25.3	26.7	27.0
	12H	17.7	19.0	18.0	19.3	19.7	24.9	26.3	25.2	26.6	26.9
4H	2H	20.5	22.1	20.9	22.4	22.6	25.3	26.9	25.6	27.1	27.4
	3H	21.6	23.0	22.0	23.3	23.6	25.6	27.0	26.0	27.3	27.6
	4H	21.8	23.1	22.2	23.4	23.7	25.5	26.7	25.9	27.1	27.4
	6H	21.8	22.9	22.2	23.2	23.6	25.4	26.5	25.8	26.9	27.2
	8H	21.7	22.7	22.1	23.1	23.5	25.4	26.4	25.8	26.8	27.1
	12H	21.7	22.6	22.1	23.0	23.4	25.3	26.3	25.8	26.6	27.1
8H	4H	21.9	22.9	22.3	23.2	23.6	25.5	26.5	25.9	26.8	27.2
	6H	21.8	22.6	22.3	23.1	23.5	25.4	26.2	25.8	26.6	27.1
	8H	21.8	22.5	22.3	22.9	23.4	25.4	26.1	25.8	26.5	27.0
	12H	21.8	22.4	22.2	22.8	23.3	25.3	26.0	25.8	26.4	26.9
12H	4H	21.8	22.7	22.3	23.1	23.5	25.4	26.3	25.9	26.7	27.1
	6H	21.8	22.5	22.3	22.9	23.4	25.4	26.1	25.8	26.5	27.0
	8H	21.8	22.4	22.2	22.8	23.3	25.3	26.0	25.8	26.4	26.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.4					+ 0.7 / - 0.8					
1.5H	+ 0.3 / - 0.4					+ 1.4 / - 1.7					
2.0H	+ 1.5 / - 1.9					+ 1.7 / - 3.8					

CIE Pub.117, 746.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -1.0$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

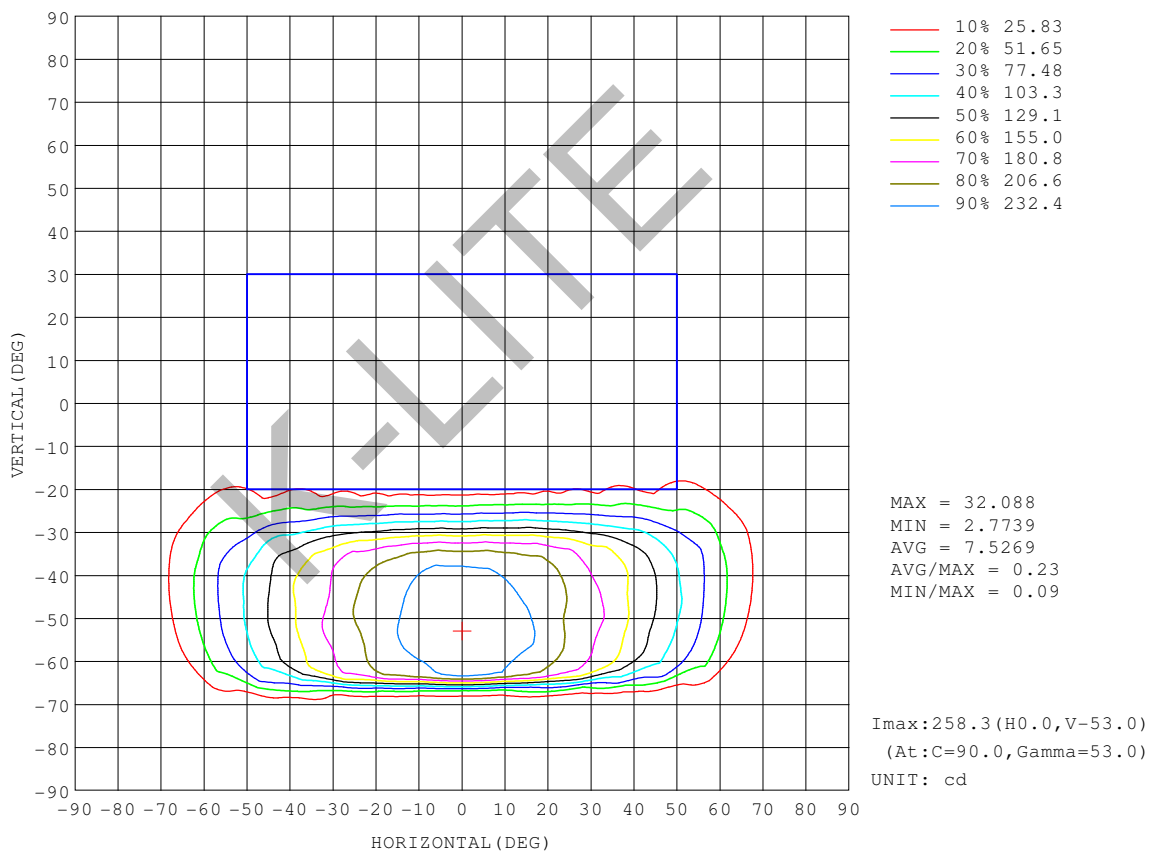
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	13	8	6	12	8	6	12	8	5	3
0.80	16	12	9	16	12	9	15	11	9	6
1.00	20	16	13	19	15	13	19	16	12	10
1.25	23	19	16	22	18	16	21	18	16	13
1.50	25	21	18	24	21	18	23	20	18	15
2.00	28	24	22	27	24	22	26	23	21	19
2.50	29	26	24	29	26	24	27	25	23	20
3.00	31	28	26	30	28	26	29	27	25	22
4.00	32	30	29	31	30	28	30	29	27	24
5.00	33	31	30	32	31	30	31	30	29	26
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.825m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:



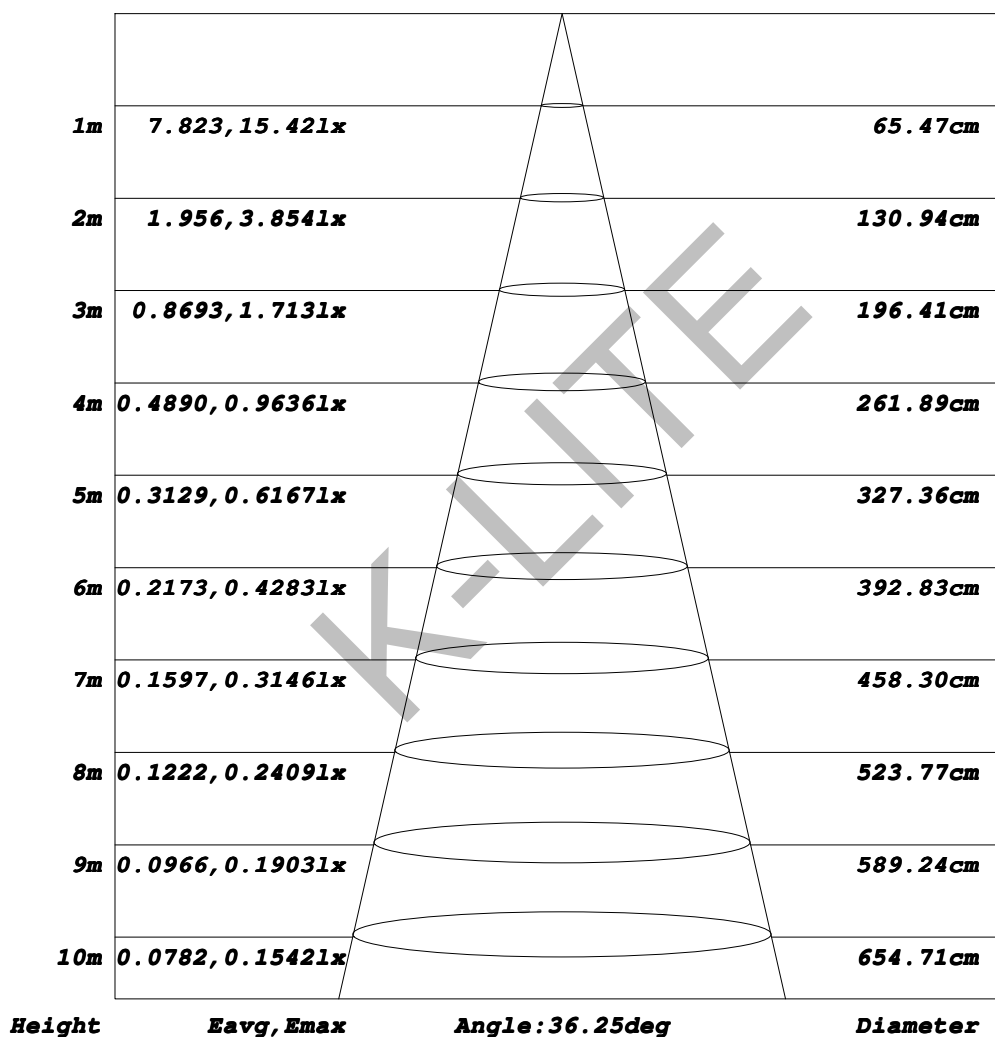
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:2.914 lm

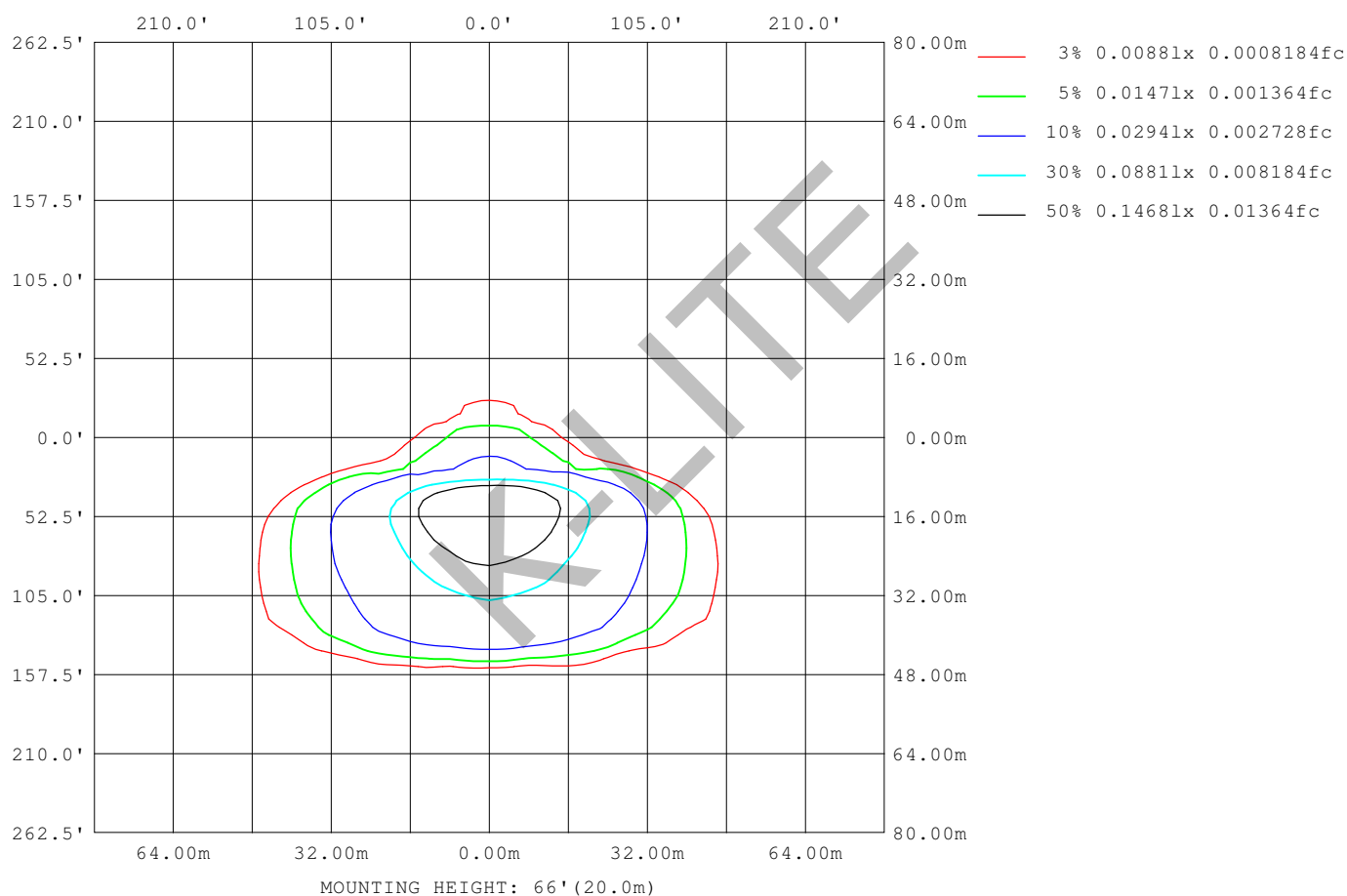


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.48V I:0.0294A P:6.2049W PF:0.9149 Freq:49.99Hz Lamp Flux:746x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4524
MFR.: K-LITE	SUR.:	Shielding Angle:

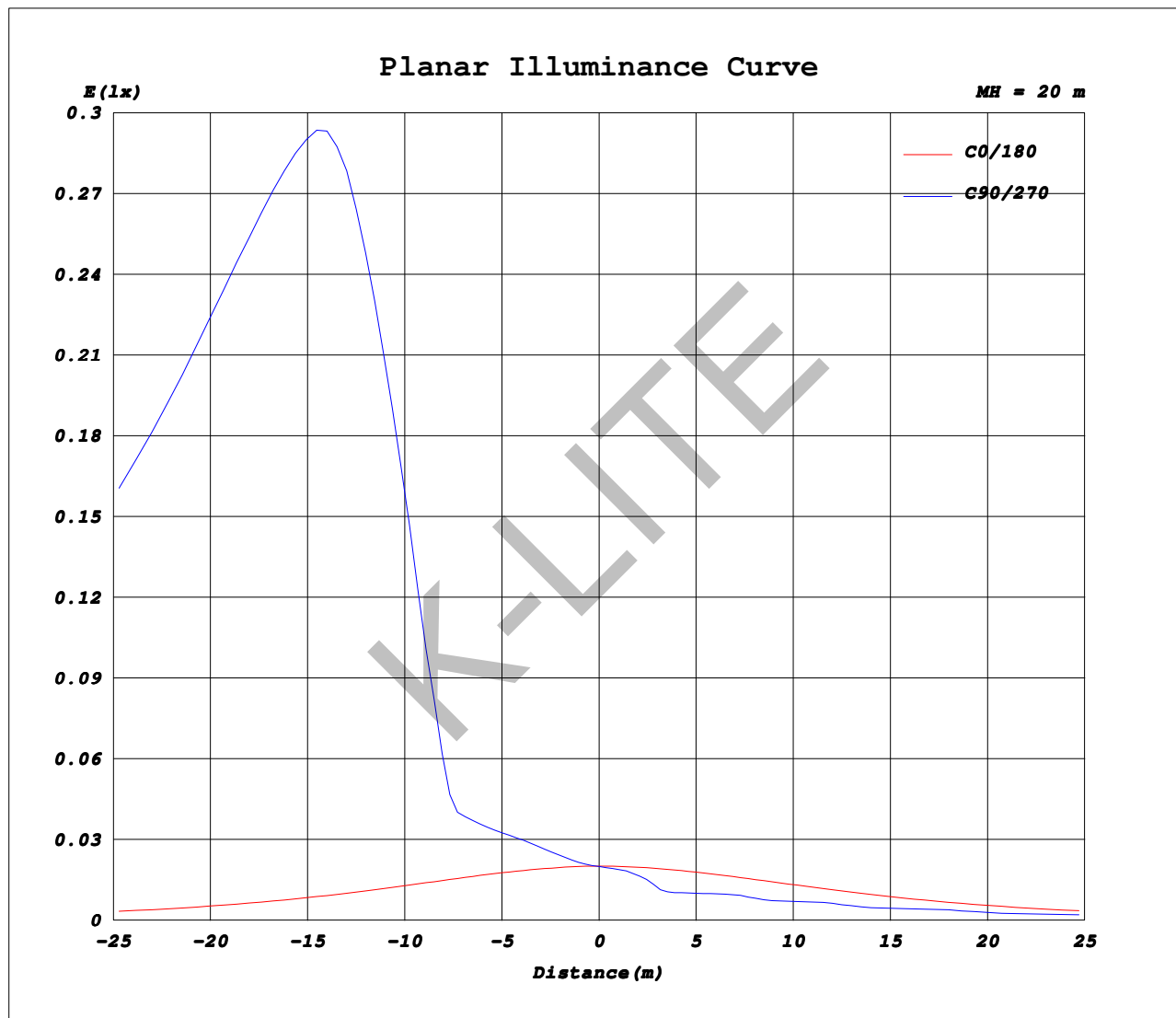
AvgL	cd/m2
L_0~180 (65) av	90
L_0~180 (75) av	71
L_0~180 (85) av	17
L_90~270 (65) av	1877
L_90~270 (75) av	76
L_90~270 (85) av	12
L_45 (65) av	1721
L_45 (75) av	216
L_45 (85) av	16

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 05 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```



Light Output Ratio:	37.7%	
Luminaire Power:	11.35 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

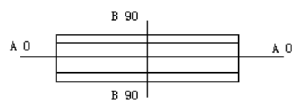
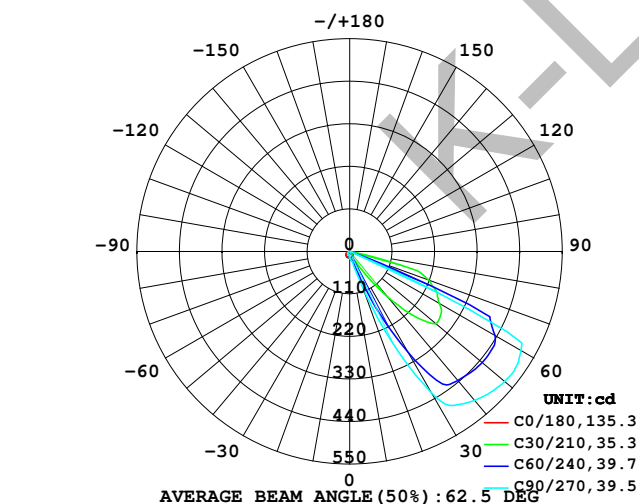
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

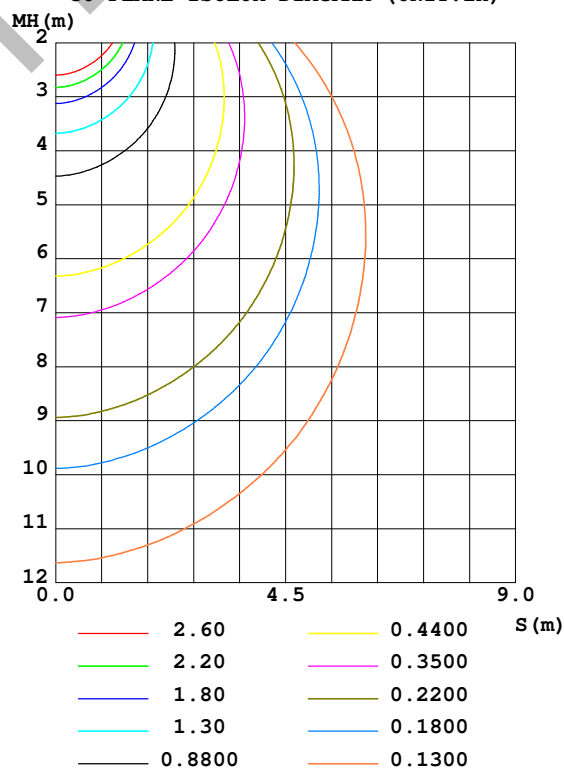
Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 48.48 lm/W
MODEL	KL-2743	I _{max} (cd)	526.1	S/MH (C0/180)	1.36	
NOMINAL POWER (W)	12	LOR (%)	37.7	S/MH (C90/270)	0.51	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	550.21	η UP, DN (C0-180)	0.0, 36.5	
NOMINAL FLUX (lm)	1460	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 1.2	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	37.7	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

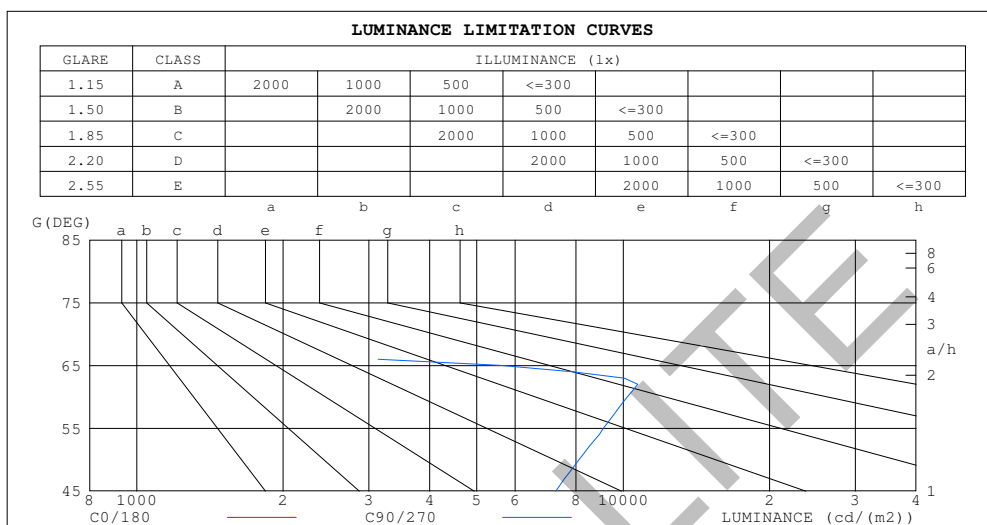
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	17.10	21.31	24.01	21.53	17.38	11.97	9.310	11.61	0- 10	1.648	1.648	0.30,0.11
20	16.37	27.41	97.10	27.97	16.81	9.506	9.375	9.353	10- 20	5.447	7.094	1.29,0.49
30	15.40	152.0	419.5	157.1	15.95	8.492	8.809	8.235	20- 30	28.27	35.36	6.43,2.42
40	14.10	355.9	502.6	373.5	14.82	7.957	7.850	7.681	30- 40	81.49	116.9	21.2,8
50	12.53	382.4	523.2	412.5	13.35	7.150	6.629	6.857	40- 50	124.8	241.7	43.9,16.6
60	10.43	359.6	511.4	395.7	11.39	5.810	4.603	5.482	50- 60	152.6	394.2	71.7,27
70	7.421	224.7	10.16	286.1	8.499	3.413	2.400	2.853	60- 70	123.5	517.8	94.1,35.5
80	2.961	1.668	0.1617	3.322	4.193	1.009	0.7134	0.8826	70- 80	30.44	548.2	99.6,37.5
90	0	0	0	0.0001	0.0292	0.0240	0	0	80- 90	2.015	550.2	100,37.7
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	68	7
80	171	9
75	210	206
70	218	296
65	216	5582
60	210	10200
55	203	9110
50	196	8118
45	190	7268

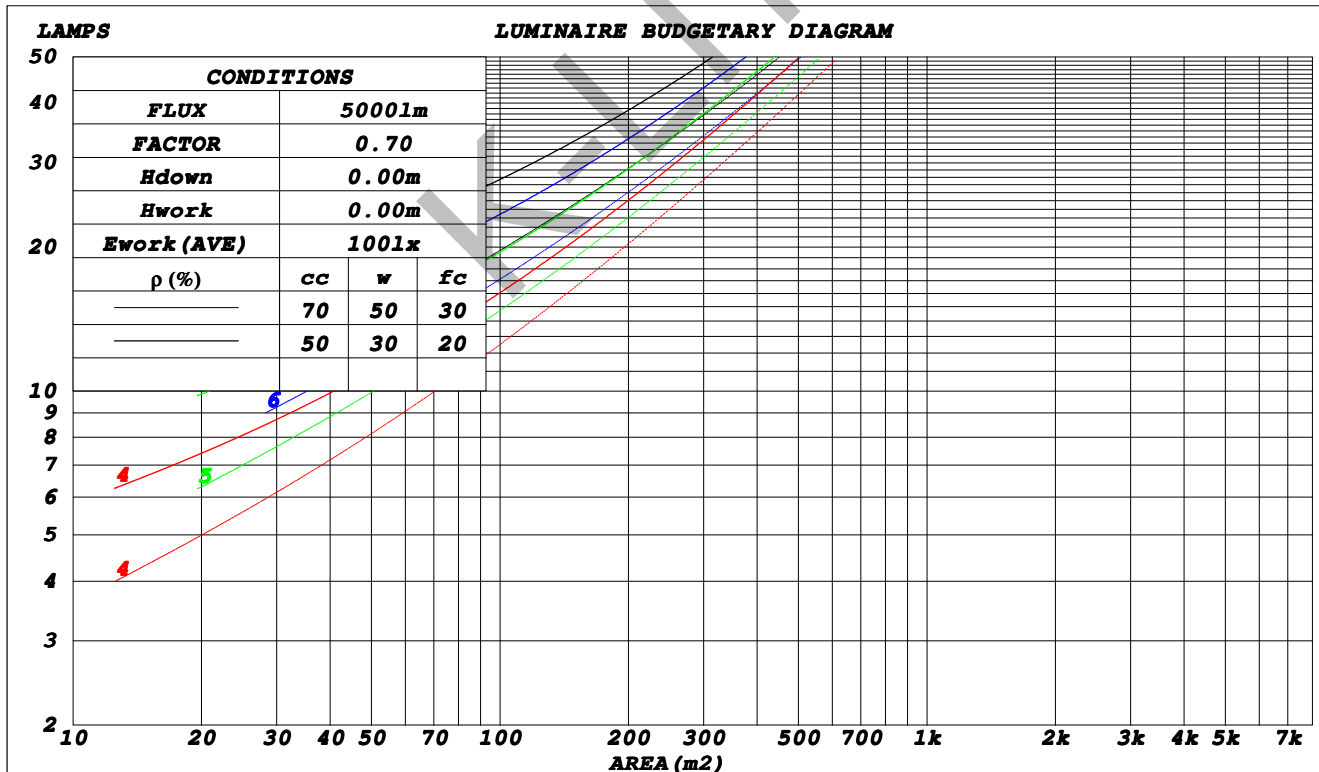
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.45	.45	.45	.44	.44	.44	.42	.42	.42	.40	.40	.40	.38	.38	.38	.38
1.0	.39	.37	.35	.38	.36	.35	.36	.35	.34	.35	.34	.33	.33	.32	.32	.31
2.0	.33	.30	.27	.32	.29	.27	.30	.28	.26	.29	.27	.26	.28	.26	.25	.24
3.0	.27	.24	.21	.27	.24	.21	.26	.23	.20	.25	.22	.20	.24	.21	.20	.19
4.0	.23	.19	.17	.23	.19	.16	.22	.19	.16	.21	.18	.16	.20	.18	.16	.15
5.0	.20	.16	.13	.20	.16	.13	.19	.15	.13	.18	.15	.13	.17	.15	.13	.12
6.0	.17	.13	.11	.17	.13	.11	.16	.13	.10	.16	.13	.10	.15	.12	.10	.09
7.0	.15	.11	.09	.15	.11	.09	.14	.11	.09	.14	.11	.09	.13	.10	.08	.08
8.0	.13	.10	.07	.13	.10	.07	.13	.09	.07	.12	.09	.07	.12	.09	.07	.06
9.0	.12	.09	.06	.12	.08	.06	.11	.08	.06	.11	.08	.06	.10	.08	.06	.05
10.0	.11	.07	.05	.11	.07	.05	.10	.07	.05	.10	.07	.05	.09	.07	.05	.04



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.127	.072	.023	.125	.071	.023	.119	.069	.022	.115	.066	.021	.111	.064	.021		
2.0	.125	.068	.021	.122	.067	.021	.118	.066	.020	.114	.064	.020	.110	.062	.020		
3.0	.117	.062	.019	.115	.062	.019	.111	.060	.018	.107	.059	.018	.104	.057	.018		
4.0	.109	.057	.017	.107	.056	.017	.103	.055	.016	.100	.054	.016	.097	.053	.016		
5.0	.101	.051	.015	.099	.051	.015	.096	.050	.015	.093	.049	.015	.090	.048	.014		
6.0	.093	.047	.013	.091	.046	.013	.088	.045	.013	.086	.045	.013	.083	.044	.013		
7.0	.086	.043	.012	.085	.042	.012	.082	.041	.012	.080	.041	.012	.077	.040	.012		
8.0	.080	.039	.011	.079	.039	.011	.076	.038	.011	.074	.038	.011	.072	.037	.011		
9.0	.074	.036	.010	.073	.036	.010	.071	.035	.010	.069	.035	.010	.067	.034	.010		
10.0	.070	.033	.009	.069	.033	.009	.067	.033	.009	.065	.032	.009	.063	.032	.009		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.072	.072	.072	.061	.061	.061	.042	.042	.042	.024	.024	.024	.008	.008	.008		
1.0	.069	.059	.050	.059	.050	.043	.040	.035	.030	.023	.020	.017	.007	.006	.006		
2.0	.067	.050	.035	.057	.043	.030	.039	.030	.021	.023	.017	.012	.007	.006	.004		
3.0	.065	.043	.026	.056	.037	.022	.038	.026	.016	.022	.015	.009	.007	.005	.003		
4.0	.063	.038	.020	.054	.033	.017	.037	.023	.012	.021	.014	.007	.007	.004	.002		
5.0	.060	.035	.016	.052	.030	.014	.036	.021	.010	.021	.012	.006	.007	.004	.002		
6.0	.058	.032	.013	.050	.027	.011	.034	.019	.008	.020	.011	.005	.006	.004	.002		
7.0	.055	.029	.011	.048	.025	.010	.033	.018	.007	.019	.010	.004	.006	.003	.001		
8.0	.053	.027	.010	.045	.024	.008	.031	.017	.006	.018	.010	.004	.006	.003	.001		
9.0	.050	.025	.008	.043	.022	.007	.030	.015	.005	.017	.009	.003	.006	.003	.001		
10.0	.048	.024	.008	.041	.021	.007	.029	.014	.005	.017	.009	.003	.005	.003	.001		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm										
NAME: SUDO - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:CW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:4521		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						17.9	19.7	18.2	19.9	20.1
4H						24.7	26.5	25.0	26.8	27.0
6H						19.0	20.7	19.3	20.9	21.2
8H						24.7	26.4	25.0	26.6	26.9
12H						19.3	20.9	19.7	21.2	21.4
2H						24.6	26.2	24.9	26.4	26.7
4H						19.4	20.9	19.8	21.2	21.5
6H						24.5	26.0	24.8	26.2	26.5
8H						19.4	20.8	19.7	21.1	21.4
12H						24.4	25.8	24.8	26.1	26.4
2H						24.4	25.7	24.7	26.0	26.4
4H						21.1	22.7	21.4	22.9	23.2
6H						25.2	26.7	25.5	27.0	27.3
8H						22.7	24.0	23.0	24.3	24.6
12H						25.2	26.6	25.6	26.9	27.2
2H						23.1	24.4	23.5	24.7	25.1
4H						25.1	26.3	25.5	26.7	27.0
6H						23.3	24.4	23.7	24.8	25.2
8H						25.0	26.1	25.4	26.5	26.8
12H						23.3	24.3	23.7	24.7	25.1
2H						25.0	26.0	25.4	26.4	26.7
4H						23.3	24.2	23.7	24.6	25.0
6H						24.9	25.9	25.4	26.2	26.7
8H						23.1	24.1	23.5	24.5	24.9
12H						25.1	26.1	25.5	26.5	26.9
2H						23.3	24.2	23.8	24.6	25.0
4H						25.0	25.9	25.5	26.3	26.7
6H						23.3	24.1	23.8	24.5	24.9
8H						25.0	25.7	25.5	26.2	26.6
12H						23.3	23.9	23.8	24.4	24.9
2H						25.0	25.6	25.5	26.1	26.5
4H						23.1	24.0	23.5	24.4	24.8
6H						25.1	26.0	25.5	26.4	26.8
8H						23.3	24.0	23.8	24.5	24.9
12H						25.0	25.7	25.5	26.2	26.6
2H						23.3	23.9	23.8	24.4	24.8
4H						25.0	25.6	25.5	26.1	26.5
Variations with the observer position at spacings:										
S = 1.0H						+ 0.3 / - 0.4			+ 0.7 / - 0.9	
1.5H						+ 0.7 / - 0.7			+ 1.8 / - 3.4	
2.0H						+ 1.4 / - 2.7			+ 1.7 / - 3.6	

CIE Pub.117, 1460 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.3$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

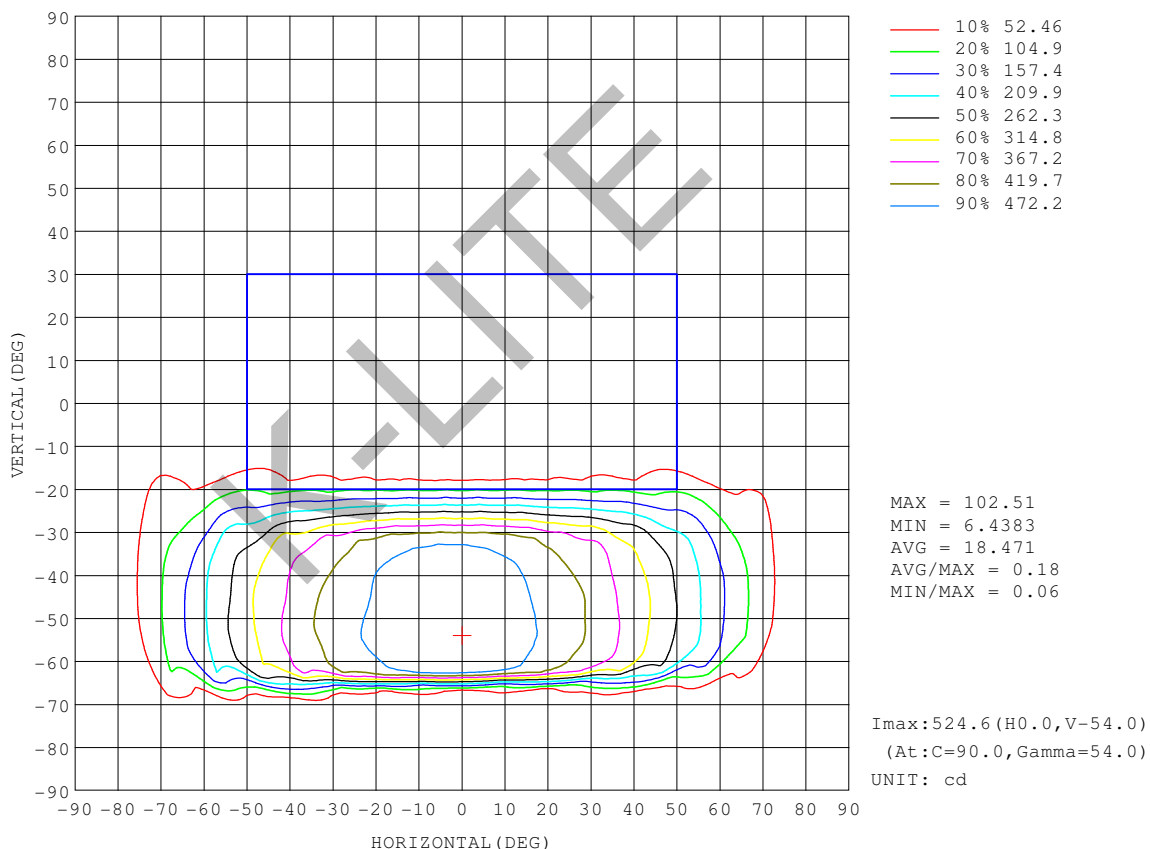
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	16	11	8	16	11	8	15	10	7	4
0.80	21	15	12	20	15	12	19	15	11	8
1.00	25	19	16	24	19	16	23	20	16	12
1.25	28	23	20	27	23	20	26	22	19	16
1.50	30	26	22	30	25	22	28	25	22	19
2.00	34	30	27	33	29	27	32	29	26	23
2.50	36	32	30	35	32	29	33	31	29	25
3.00	37	34	32	36	34	32	35	33	31	27
4.00	39	37	35	38	36	34	37	35	33	30
5.00	40	38	37	39	38	36	38	36	35	31
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:



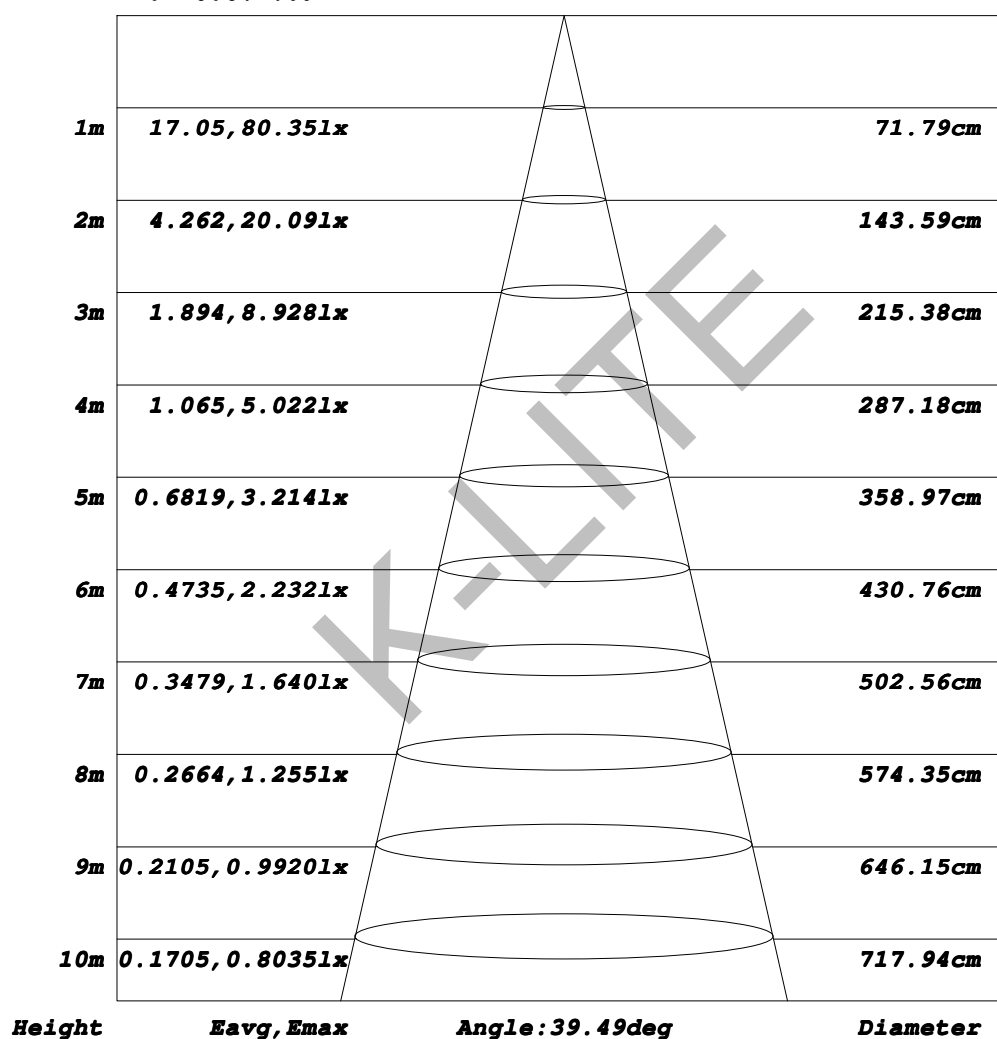
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:7.094 lm

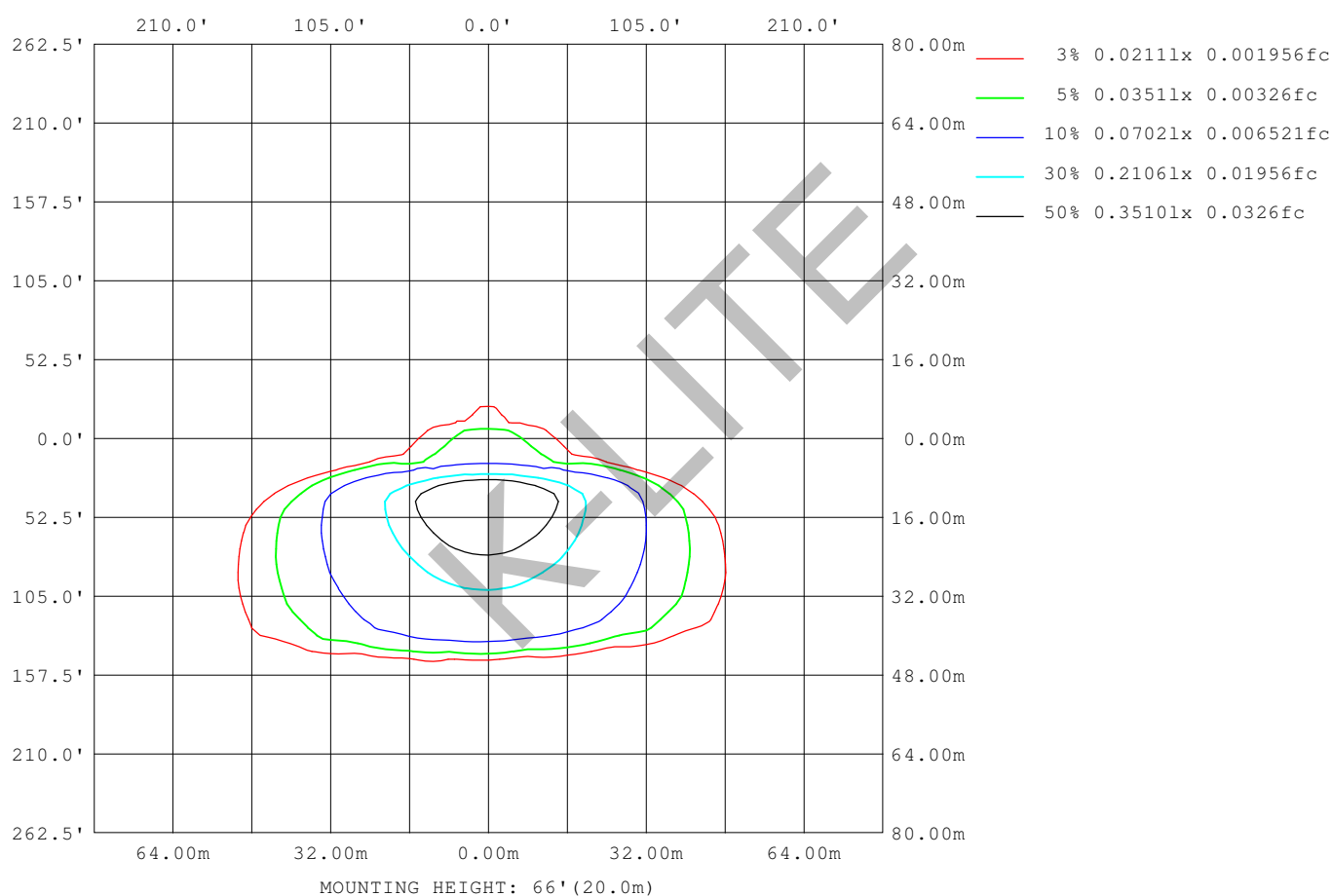


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.44V I:0.0504A P:11.350W PF:0.9769 Freq:50.00Hz Lamp Flux:1460x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4521
MFR.: K-LITE	SUR.:	Shielding Angle:

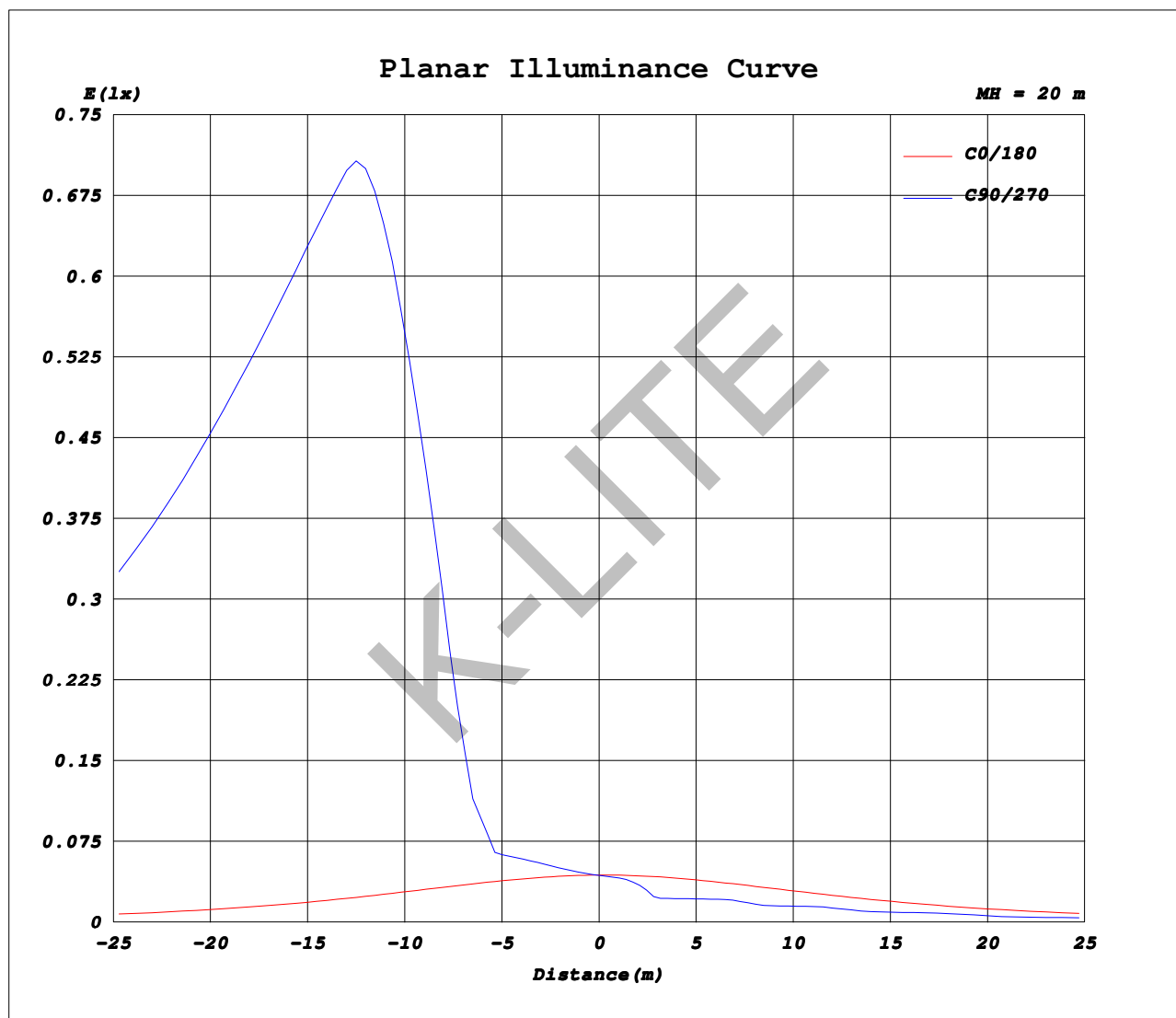
AvgL	cd/m2
L_0~180 (65) av	227
L_0~180 (75) av	231
L_0~180 (85) av	116
L_90~270 (65) av	2835
L_90~270 (75) av	128
L_90~270 (85) av	22
L_45 (65) av	4285
L_45 (75) av	270
L_45 (85) av	29

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 May 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```



Light Output Ratio:	26.6%	
Luminaire Power:	6.417 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 August 2020

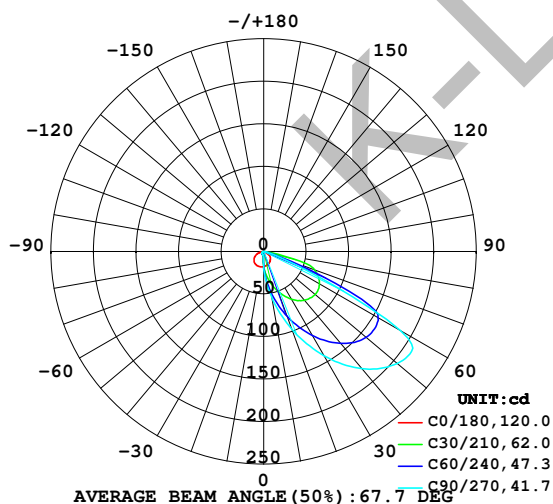
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

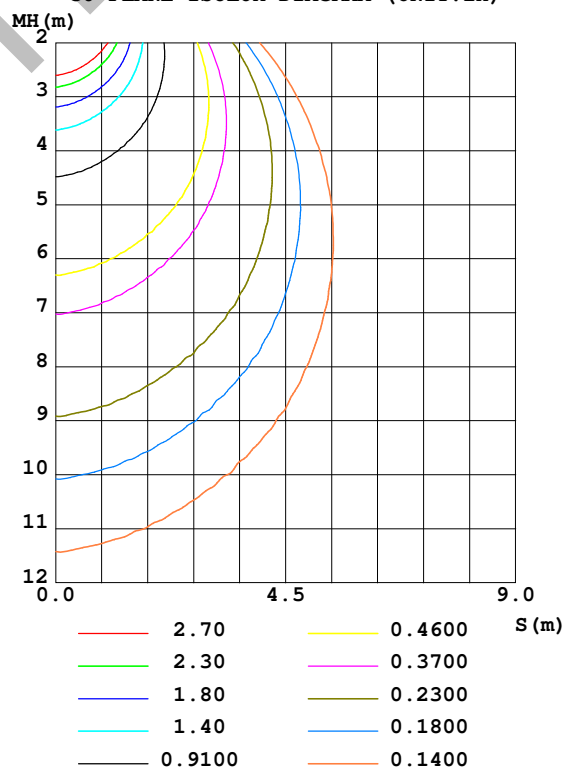
Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 32.98 lm/W
MODEL	KL-2757	I _{max} (cd)	210.1	S/MH (C0/180)	1.51	
NOMINAL POWER (W)	6	LOR (%)	26.6	S/MH (C90/270)	0.11	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	211.63	η UP, DN (C0-180)	0.0, 25.5	
NOMINAL FLUX (lm)	796	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 1.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	26.6	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.836m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

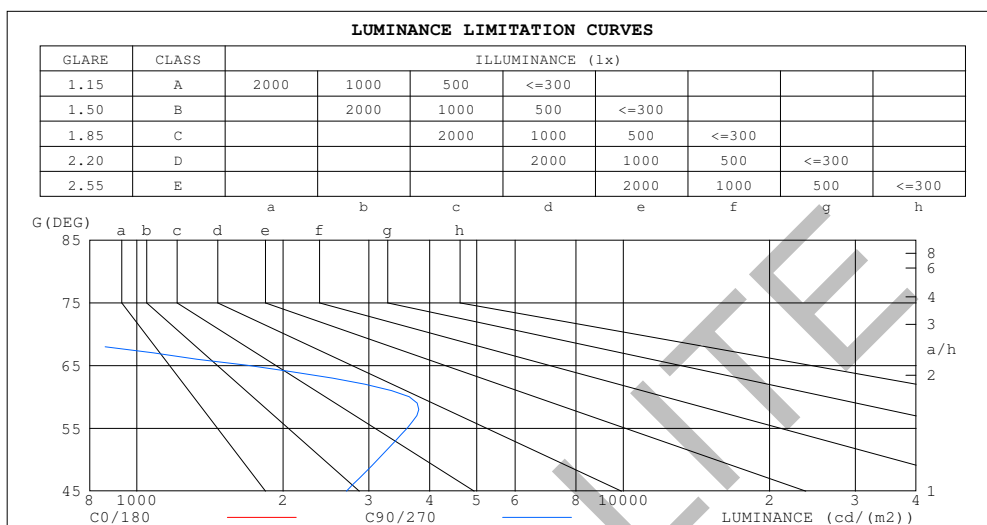
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	17.03	41.52	54.44	43.27	18.49	4.980	4.339	4.877	0- 10	1.970	1.970	0.93,0.25
20	15.83	66.76	97.27	70.91	18.67	4.161	3.987	4.241	10- 20	8.440	10.41	4.92,1.31
30	14.49	90.89	141.3	97.20	18.24	3.467	3.632	3.451	20- 30	19.08	29.49	13.9,3.7
40	12.54	109.7	180.0	117.2	17.24	3.062	3.223	3.028	30- 40	32.45	61.94	29.3,7.78
50	10.19	119.0	204.9	128.3	15.08	2.585	2.726	2.672	40- 50	45.62	107.6	50.8,13.5
60	7.226	117.3	185.1	126.0	12.04	2.046	1.906	2.111	50- 60	54.52	162.1	76.6,20.4
70	3.909	66.24	19.56	59.22	8.069	1.177	0.9615	1.173	60- 70	38.65	200.7	94.8,25.2
80	1.117	2.267	0.0754	1.458	3.170	0.3588	0.2462	0.3640	70- 80	10.19	210.9	99.7,26.5
90	0	0	0	0	0	0	0	0	80- 90	0.7067	211.6	100,26.6
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.836m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	30	3
80	66	4
75	92	160
70	117	561
65	135	1692
60	148	3633
55	156	3596
50	162	3128
45	165	2699

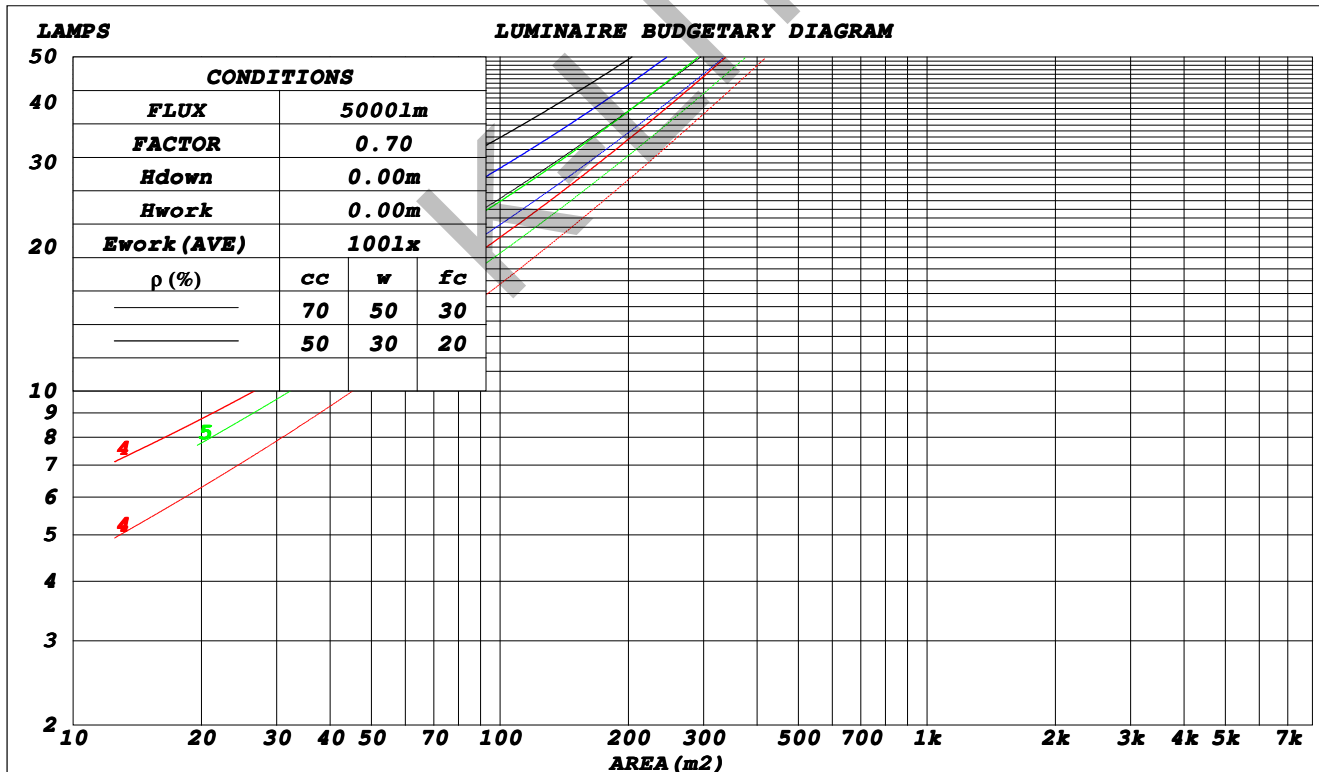
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 August 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.32	.32	.32	.31	.31	.31	.30	.30	.30	.28	.28	.28	.27	.27	.27	.27
1.0	.28	.26	.25	.27	.26	.25	.26	.25	.24	.25	.24	.23	.24	.23	.23	.22
2.0	.24	.22	.20	.23	.21	.20	.22	.21	.19	.21	.20	.19	.20	.19	.18	.18
3.0	.20	.18	.16	.20	.18	.16	.19	.17	.15	.18	.17	.15	.17	.16	.15	.14
4.0	.17	.15	.13	.17	.15	.13	.16	.14	.13	.16	.14	.12	.15	.13	.12	.12
5.0	.15	.12	.11	.15	.12	.10	.14	.12	.10	.14	.12	.10	.13	.11	.10	.09
6.0	.13	.11	.09	.13	.11	.09	.13	.10	.09	.12	.10	.09	.12	.10	.08	.08
7.0	.12	.09	.07	.12	.09	.07	.11	.09	.07	.11	.09	.07	.10	.09	.07	.07
8.0	.11	.08	.06	.10	.08	.06	.10	.08	.06	.10	.08	.06	.09	.08	.06	.06
9.0	.10	.07	.06	.09	.07	.05	.09	.07	.05	.09	.07	.05	.08	.07	.05	.05
10.0	.09	.06	.05	.08	.06	.05	.08	.06	.05	.08	.06	.05	.08	.06	.05	.04



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.836m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.084	.048	.015	.082	.047	.015	.079	.045	.014	.076	.044	.014	.073	.042	.014		
2.0	.083	.045	.014	.081	.045	.014	.078	.043	.013	.075	.042	.013	.072	.041	.013		
3.0	.078	.041	.012	.076	.041	.012	.074	.040	.012	.071	.039	.012	.069	.038	.012		
4.0	.072	.038	.011	.071	.037	.011	.069	.036	.011	.066	.036	.011	.064	.035	.011		
5.0	.067	.034	.010	.066	.034	.010	.064	.033	.010	.062	.033	.010	.060	.032	.010		
6.0	.062	.031	.009	.061	.031	.009	.059	.030	.009	.057	.030	.009	.056	.029	.009		
7.0	.058	.029	.008	.057	.028	.008	.055	.028	.008	.053	.027	.008	.052	.027	.008		
8.0	.054	.026	.007	.053	.026	.007	.051	.026	.007	.050	.025	.007	.048	.025	.007		
9.0	.050	.024	.007	.050	.024	.007	.048	.024	.007	.047	.023	.007	.045	.023	.007		
10.0	.047	.023	.006	.046	.022	.006	.045	.022	.006	.044	.022	.006	.043	.021	.006		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.051	.051	.051	.043	.043	.043	.030	.030	.030	.017	.017	.017	.005	.005	.005		
1.0	.048	.041	.036	.041	.036	.031	.028	.025	.021	.016	.014	.012	.005	.005	.004		
2.0	.046	.035	.025	.040	.030	.022	.027	.021	.015	.016	.012	.009	.005	.004	.003		
3.0	.045	.030	.019	.039	.026	.016	.026	.018	.011	.015	.011	.007	.005	.003	.002		
4.0	.043	.027	.015	.037	.023	.013	.026	.016	.009	.015	.010	.005	.005	.003	.002		
5.0	.041	.024	.012	.036	.021	.010	.025	.015	.007	.014	.009	.004	.005	.003	.001		
6.0	.040	.022	.010	.034	.019	.008	.024	.013	.006	.014	.008	.004	.004	.003	.001		
7.0	.038	.020	.008	.033	.018	.007	.023	.012	.005	.013	.007	.003	.004	.002	.001		
8.0	.036	.019	.007	.031	.016	.006	.022	.012	.004	.013	.007	.003	.004	.002	.001		
9.0	.034	.018	.006	.030	.015	.005	.021	.011	.004	.012	.006	.002	.004	.002	.001		
10.0	.033	.016	.006	.028	.014	.005	.020	.010	.003	.011	.006	.002	.004	.002	.001		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.836m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	15.1	16.8	15.4	17.0	17.3	22.7	24.4	23.0	24.6	24.9
3H	16.2	17.7	16.5	18.0	18.2	22.8	24.4	23.2	24.6	24.9
4H	16.5	18.0	16.8	18.2	18.5	22.7	24.2	23.1	24.5	24.7
6H	16.6	18.0	17.0	18.3	18.6	22.6	24.0	23.0	24.3	24.6
8H	16.6	18.0	17.0	18.3	18.6	22.6	23.9	22.9	24.2	24.5
12H	16.6	17.9	17.0	18.2	18.5	22.5	23.8	22.9	24.1	24.4
4H 2H	18.5	20.0	18.8	20.3	20.5	23.1	24.5	23.4	24.8	25.1
3H	19.9	21.2	20.3	21.5	21.8	23.3	24.5	23.6	24.8	25.2
4H	20.4	21.6	20.8	21.9	22.2	23.2	24.3	23.6	24.7	25.0
6H	20.7	21.7	21.1	22.1	22.4	23.1	24.1	23.5	24.5	24.8
8H	20.7	21.6	21.1	22.0	22.4	23.0	24.0	23.5	24.4	24.7
12H	20.7	21.6	21.1	21.9	22.3	23.0	23.9	23.4	24.3	24.7
8H 4H	20.5	21.5	20.9	21.8	22.2	23.2	24.1	23.6	24.5	24.9
6H	20.9	21.7	21.3	22.1	22.5	23.1	23.9	23.6	24.3	24.7
8H	20.9	21.6	21.4	22.0	22.5	23.1	23.8	23.5	24.2	24.6
12H	20.9	21.5	21.4	22.0	22.4	23.0	23.6	23.5	24.1	24.6
12H 4H	20.5	21.3	20.9	21.7	22.1	23.2	24.0	23.6	24.4	24.8
6H	20.8	21.5	21.3	22.0	22.4	23.1	23.8	23.5	24.2	24.6
8H	20.9	21.5	21.4	21.9	22.4	23.1	23.6	23.5	24.1	24.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.3				
1.5H	+ 0.7 / - 0.6					+ 1.6 / - 1.7				
2.0H	+ 1.1 / - 1.9					+ 1.4 / - 4.0				

CIE Pub.117, 796.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.8$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.836m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

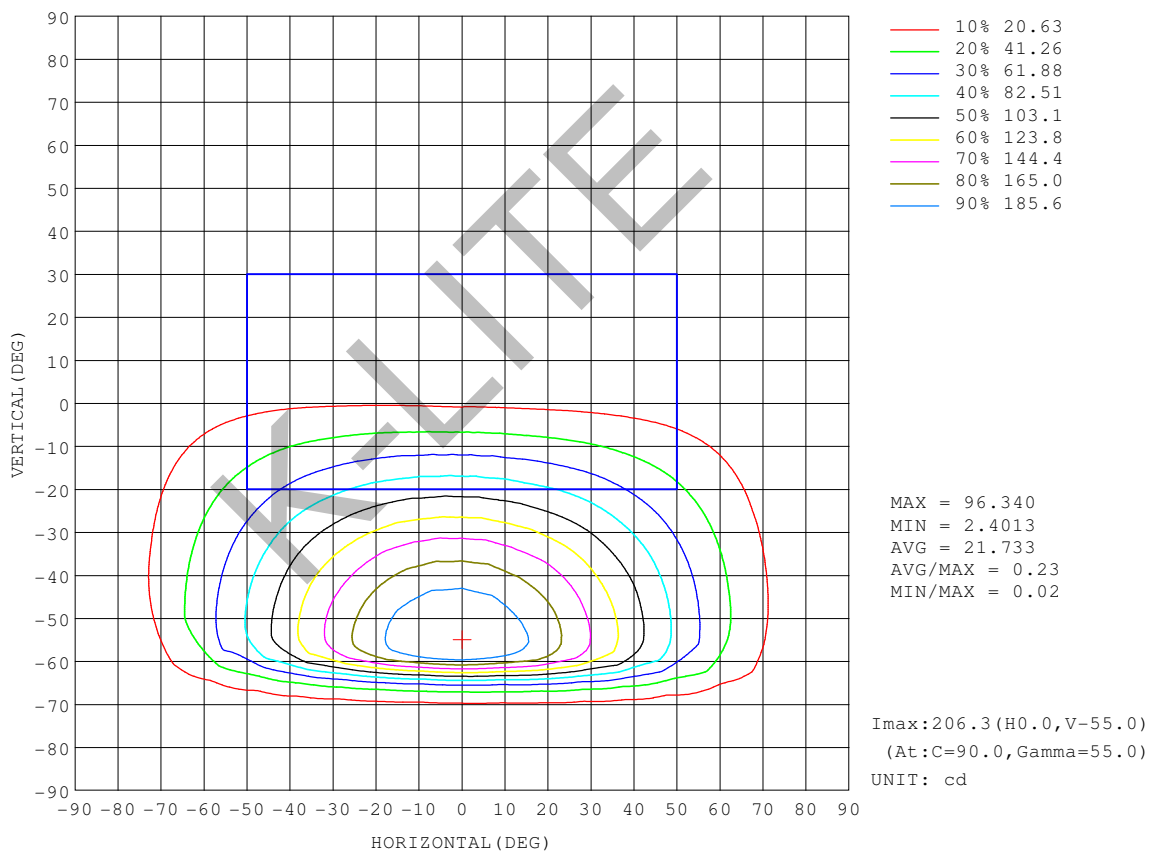
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	13	9	7	12	9	7	12	9	7	5
0.80	16	12	10	15	12	10	15	12	10	8
1.00	18	15	13	18	15	13	17	15	13	10
1.25	21	17	15	20	17	15	19	17	15	13
1.50	22	19	17	22	19	17	21	19	17	15
2.00	24	22	20	24	22	20	23	21	19	17
2.50	26	23	22	25	23	21	24	22	21	19
3.00	27	25	23	26	24	23	25	24	22	20
4.00	28	26	25	27	26	25	26	25	24	22
5.00	29	27	26	28	27	26	27	26	25	22
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.836m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:



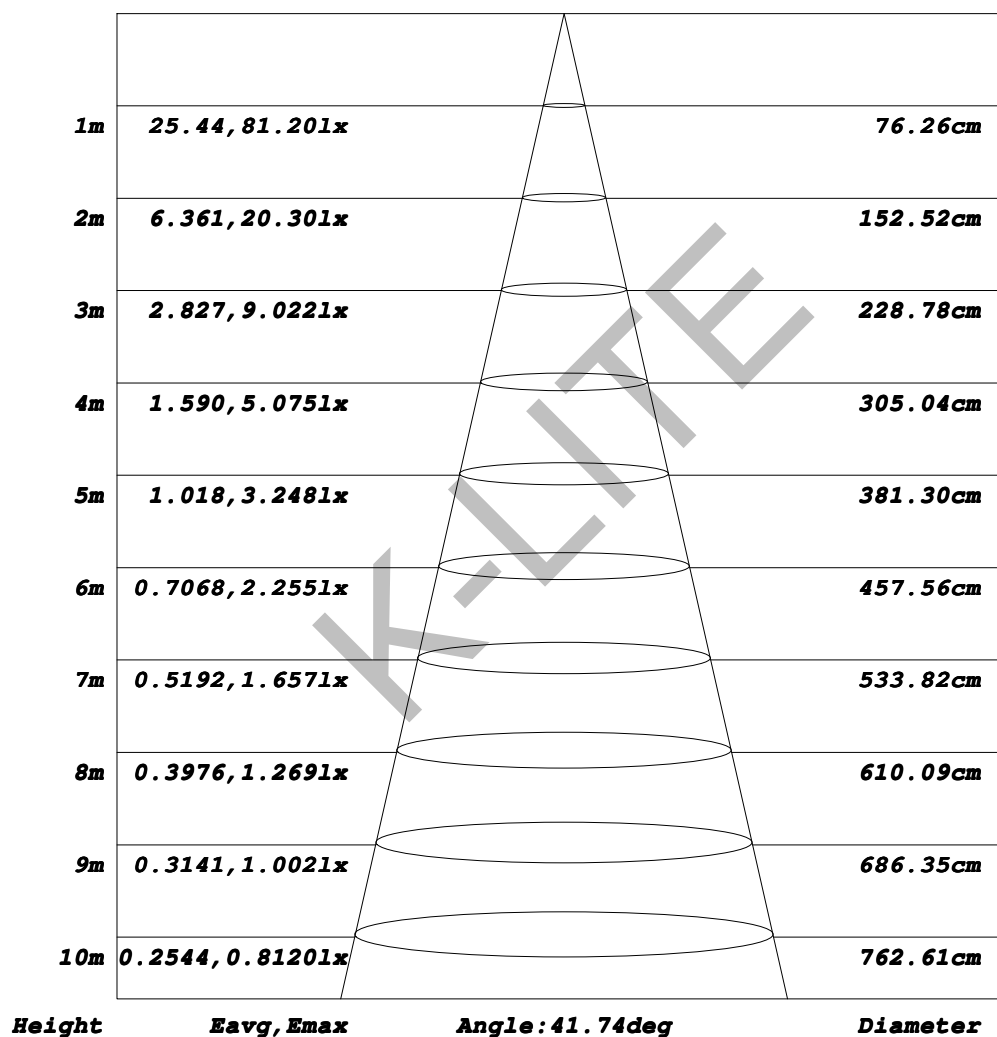
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 August 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.836m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:11.78 lm



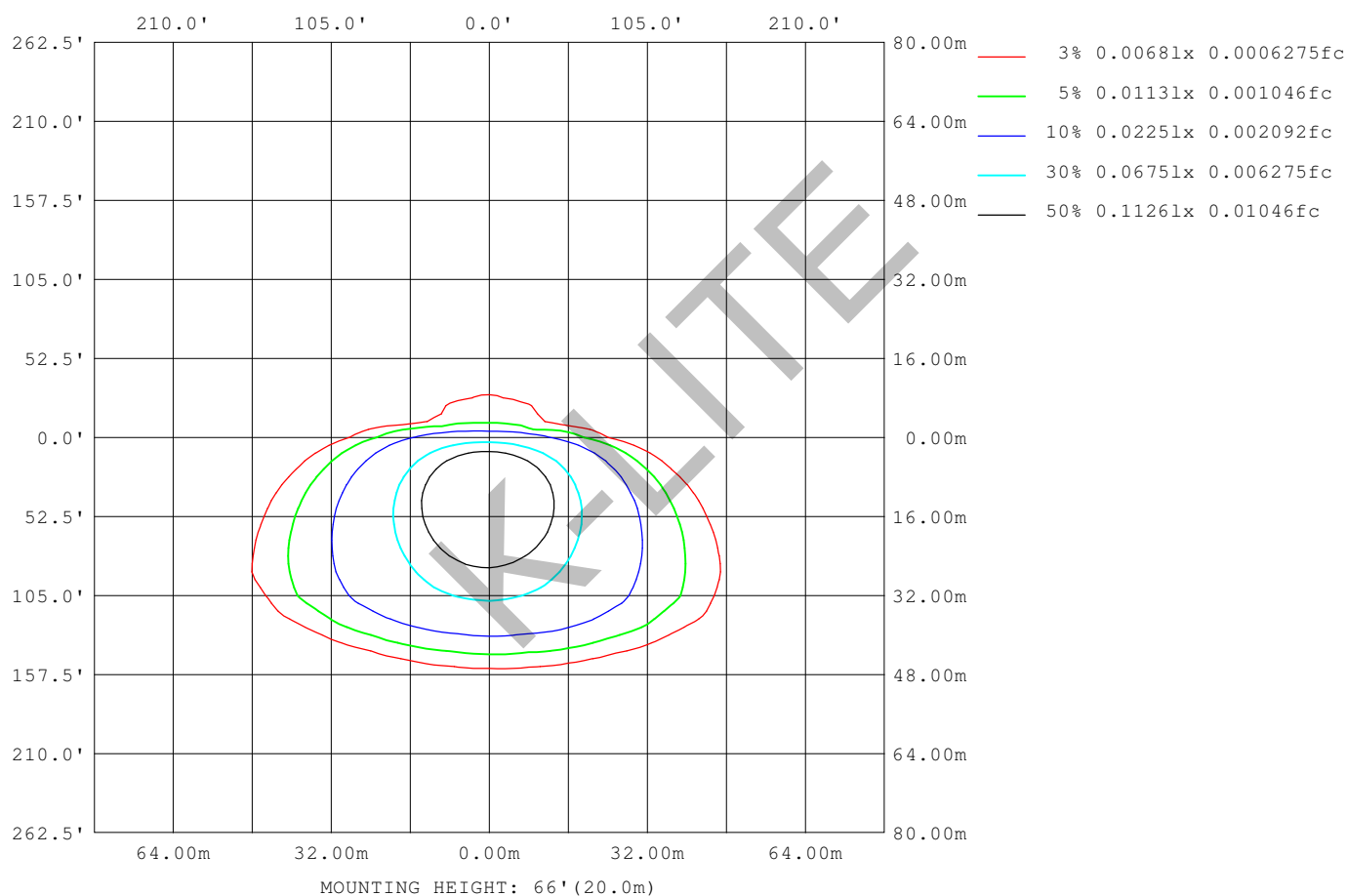
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.836m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 August 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.46V I:0.0287A P:6.4173W PF:0.9696 Freq:49.99Hz Lamp Flux:796x1 lm		
NAME: SUDO - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:1.0Kg
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1621
MFR.: K-LITE	SUR.:	Shielding Angle:

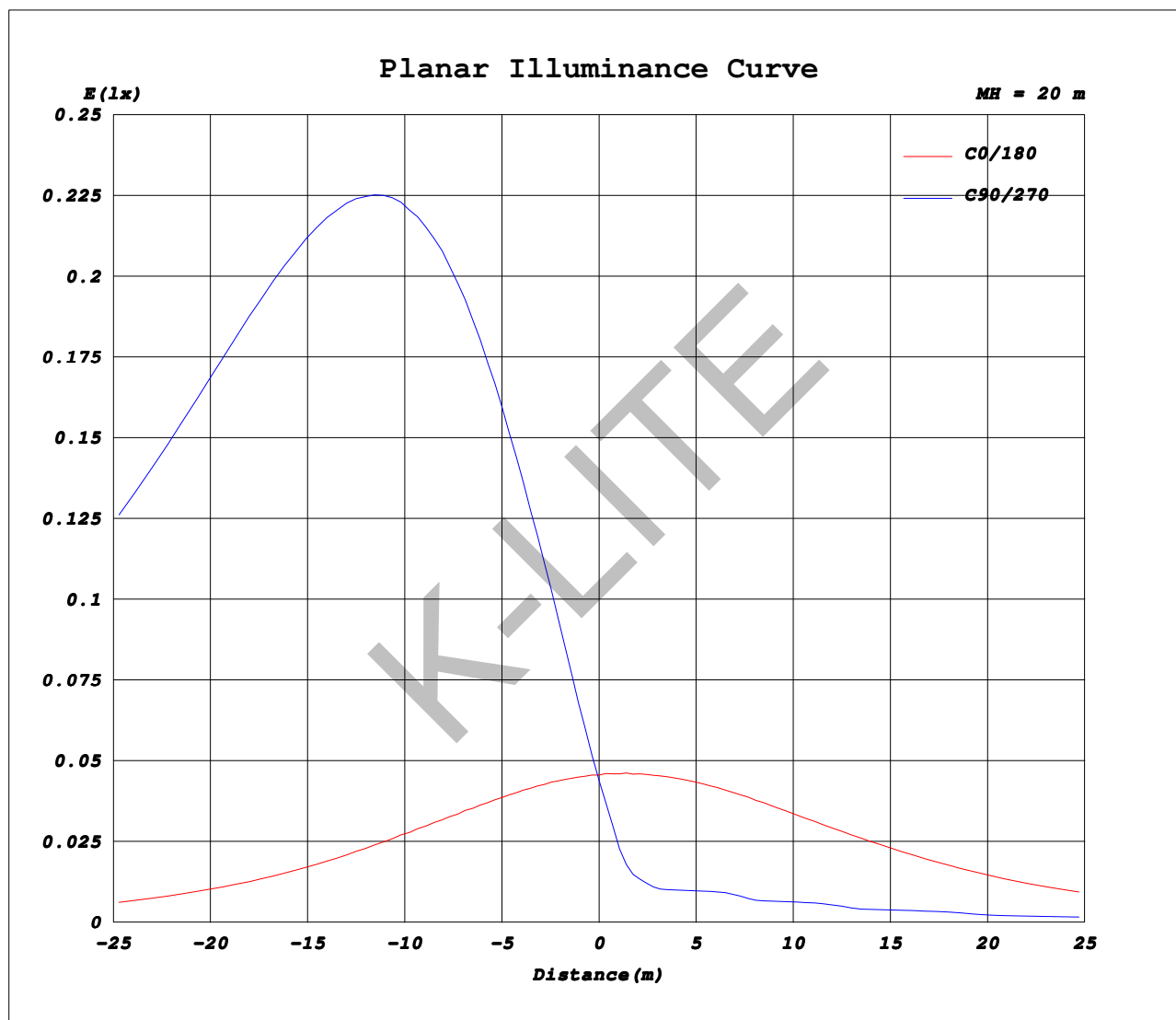
AvgL	cd/m2
L_0~180 (65) av	186
L_0~180 (75) av	156
L_0~180 (85) av	38
L_90~270 (65) av	876
L_90~270 (75) av	91
L_90~270 (85) av	6
L_45 (65) av	1371
L_45 (75) av	312
L_45 (85) av	11

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 August 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 August 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

```

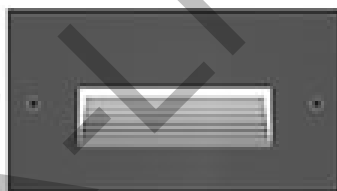
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.836m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.836m [K=1.0000]
Remarks:

```



Light Output Ratio:	22.7%	
Luminaire Power:	3.342 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

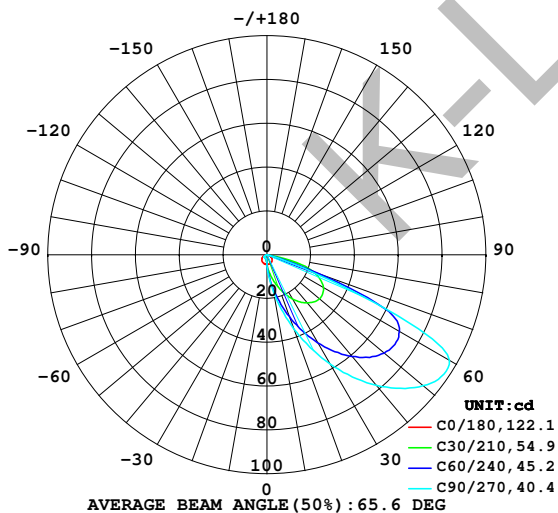
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

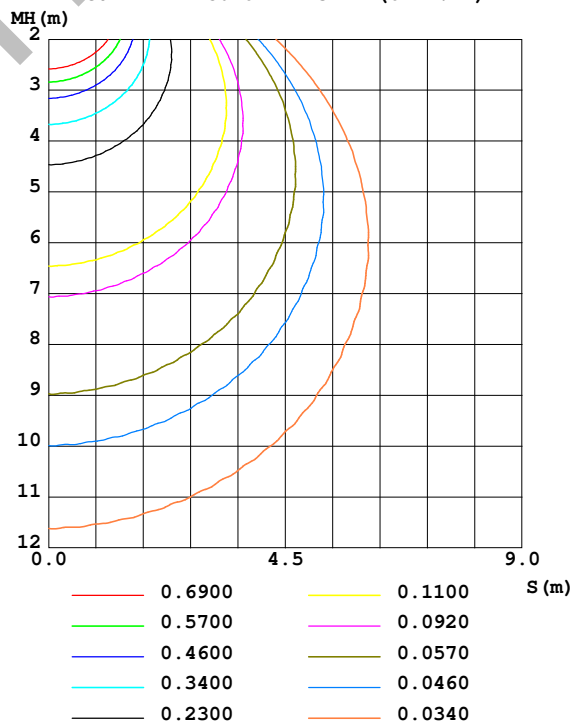
Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 26.80 lm/W
MODEL	KL-2758	I _{max} (cd)	97.62	S/MH (C0/180)	1.34	
NOMINAL POWER (W)	3	LOR (%)	22.7	S/MH (C90/270)	0.23	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	89.561	η UP, DN (C0-180)	0.0, 21.8	
NOMINAL FLUX (lm)	395.25	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 0.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	22.7	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

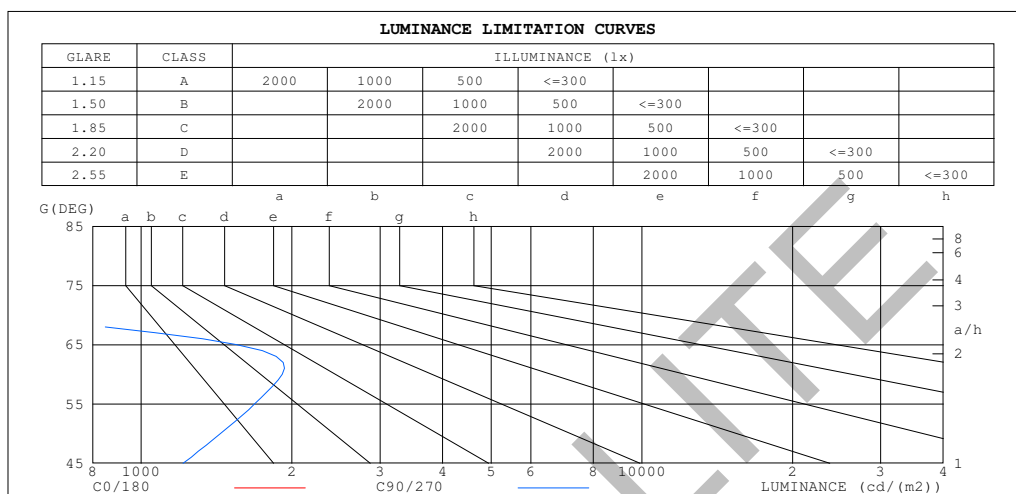
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	4.458	12.33	17.10	12.32	4.454	2.249	2.123	2.248	0- 10	0.5648	0.5648	0.63, 0.14
20	4.323	23.50	36.15	23.36	4.277	2.009	1.952	2.015	10- 20	2.803	3.368	3.76, 0.85
30	4.096	35.19	57.55	34.81	4.053	1.714	1.763	1.716	20- 30	7.041	10.41	11.6, 2.63
40	3.735	45.01	77.80	44.56	3.671	1.497	1.719	1.496	30- 40	12.85	23.26	26, 5.89
50	3.182	50.22	92.96	49.64	3.113	1.335	1.809	1.337	40- 50	18.93	42.19	47.1, 10.7
60	2.350	49.45	96.09	48.61	2.364	1.225	1.570	1.225	50- 60	23.35	65.54	73.2, 16.6
70	1.258	31.90	18.28	33.24	1.327	0.7492	0.7249	0.7290	60- 70	19.52	85.05	95, 21.5
80	0.2702	0.5580	0.0374	0.8245	0.3162	0.2047	0.1498	0.1932	70- 80	4.384	89.44	99.9, 22.6
90	0	0	0	0	0	0.0002	0	0.0005	80- 90	0.1218	89.56	100, 22.7
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7	1
80	16	2
75	27	92
70	37	532
65	44	1549
60	48	1913
55	50	1685
50	50	1439
45	50	1213

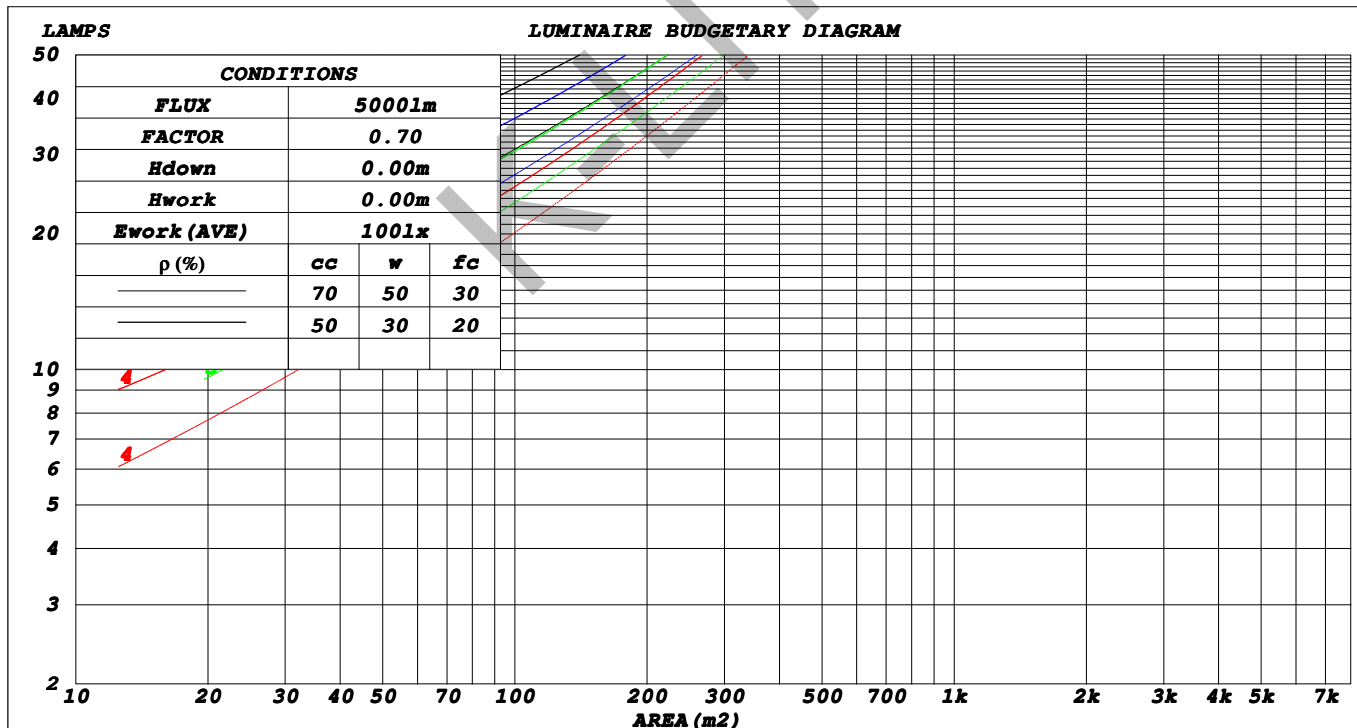
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.27	.27	.27	.26	.26	.26	.25	.25	.25	.24	.24	.24	.23	.23	.23	.23
1.0	.23	.22	.21	.23	.22	.21	.22	.21	.20	.21	.20	.20	.20	.20	.19	.19
2.0	.20	.18	.17	.19	.18	.16	.19	.17	.16	.18	.17	.16	.17	.16	.15	.15
3.0	.17	.15	.13	.16	.15	.13	.16	.14	.13	.15	.14	.13	.15	.13	.12	.12
4.0	.14	.12	.10	.14	.12	.10	.14	.12	.10	.13	.11	.10	.12	.11	.10	.09
5.0	.13	.10	.09	.12	.10	.08	.12	.10	.08	.11	.10	.08	.11	.09	.08	.08
6.0	.11	.09	.07	.11	.09	.07	.10	.08	.07	.10	.08	.07	.09	.08	.07	.06
7.0	.10	.07	.06	.09	.07	.06	.09	.07	.06	.09	.07	.06	.08	.07	.06	.05
8.0	.09	.06	.05	.08	.06	.05	.08	.06	.05	.08	.06	.05	.08	.06	.05	.04
9.0	.08	.06	.04	.08	.06	.04	.07	.06	.04	.07	.05	.04	.07	.05	.04	.04
10.0	.07	.05	.04	.07	.05	.04	.07	.05	.04	.06	.05	.04	.06	.05	.04	.03



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.074	.042	.013	.072	.041	.013	.069	.040	.013	.066	.038	.012	.064	.037	.012	
2.0	.073	.040	.012	.071	.039	.012	.068	.038	.012	.066	.037	.012	.064	.036	.011	
3.0	.068	.036	.011	.067	.036	.011	.065	.035	.011	.062	.034	.010	.060	.033	.010	
4.0	.063	.033	.010	.062	.033	.010	.060	.032	.010	.058	.031	.009	.056	.031	.009	
5.0	.059	.030	.009	.058	.030	.009	.056	.029	.009	.054	.028	.008	.052	.028	.008	
6.0	.054	.027	.008	.053	.027	.008	.052	.026	.008	.050	.026	.008	.048	.026	.008	
7.0	.050	.025	.007	.050	.025	.007	.048	.024	.007	.047	.024	.007	.045	.023	.007	
8.0	.047	.023	.006	.046	.023	.006	.045	.022	.006	.043	.022	.006	.042	.022	.006	
9.0	.044	.021	.006	.043	.021	.006	.042	.021	.006	.041	.020	.006	.039	.020	.006	
10.0	.041	.020	.005	.040	.019	.005	.039	.019	.005	.038	.019	.005	.037	.019	.005	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.043	.043	.043	.037	.037	.037	.025	.025	.025	.014	.014	.014	.005	.005	.005	
1.0	.041	.035	.030	.035	.030	.026	.024	.021	.018	.014	.012	.010	.004	.004	.003	
2.0	.040	.030	.021	.034	.026	.019	.023	.018	.013	.013	.010	.008	.004	.003	.002	
3.0	.039	.026	.016	.033	.022	.014	.023	.016	.010	.013	.009	.006	.004	.003	.002	
4.0	.037	.023	.012	.032	.020	.011	.022	.014	.007	.013	.008	.004	.004	.003	.001	
5.0	.036	.021	.010	.031	.018	.008	.021	.013	.006	.012	.007	.004	.004	.002	.001	
6.0	.034	.019	.008	.029	.016	.007	.020	.012	.005	.012	.007	.003	.004	.002	.001	
7.0	.033	.017	.007	.028	.015	.006	.019	.011	.004	.011	.006	.002	.004	.002	.001	
8.0	.031	.016	.006	.027	.014	.005	.019	.010	.004	.011	.006	.002	.003	.002	.001	
9.0	.030	.015	.005	.026	.013	.005	.018	.009	.003	.010	.005	.002	.003	.002	.001	
10.0	.028	.014	.005	.024	.012	.004	.017	.009	.003	.010	.005	.002	.003	.002	.001	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.825m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm											
NAME: SUDO MINI - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:0.6Kg			
SPEC.:WW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:1521			
MFR.: K-LITE					SUR.:			Shielding Angle:			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	14.1	15.8	14.4	16.0	16.3	23.2	25.0	23.5	25.2	25.4	
3H	14.9	16.5	15.2	16.7	17.0	24.0	25.6	24.3	25.8	26.1	
4H	15.0	16.5	15.3	16.8	17.0	23.9	25.4	24.2	25.7	25.9	
6H	14.9	16.3	15.3	16.6	16.9	23.8	25.2	24.1	25.5	25.8	
8H	14.9	16.2	15.2	16.5	16.8	23.7	25.1	24.1	25.4	25.7	
12H	14.8	16.1	15.2	16.4	16.7	23.6	25.0	24.0	25.3	25.6	
4H 2H	17.9	19.4	18.2	19.7	20.0	23.5	25.0	23.8	25.3	25.5	
3H	18.9	20.2	19.3	20.5	20.9	24.3	25.6	24.6	25.9	26.2	
4H	19.1	20.3	19.5	20.7	21.0	24.2	25.4	24.6	25.7	26.1	
6H	19.1	20.2	19.5	20.5	20.9	24.1	25.2	24.5	25.5	25.9	
8H	19.1	20.1	19.5	20.4	20.8	24.1	25.0	24.5	25.4	25.8	
12H	19.0	19.9	19.5	20.3	20.7	24.0	24.9	24.5	25.3	25.7	
8H 4H	19.4	20.4	19.8	20.8	21.2	24.1	25.1	24.6	25.5	25.9	
6H	19.4	20.2	19.9	20.6	21.1	24.1	24.9	24.5	25.3	25.7	
8H	19.4	20.1	19.9	20.5	21.0	24.0	24.7	24.5	25.2	25.6	
12H	19.4	20.0	19.9	20.4	20.9	24.0	24.6	24.5	25.1	25.5	
12H 4H	19.4	20.3	19.8	20.7	21.1	24.1	25.0	24.5	25.4	25.8	
6H	19.4	20.1	19.9	20.5	21.0	24.0	24.7	24.5	25.2	25.6	
8H	19.4	20.0	19.9	20.4	20.9	24.0	24.6	24.5	25.1	25.5	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.5					
1.5H	+ 0.3 / - 0.4					+ 0.6 / - 1.1					
2.0H	+ 1.0 / - 0.8					+ 2.0 / - 4.5					

CIE Pub.117, 395.3 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -3.2$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

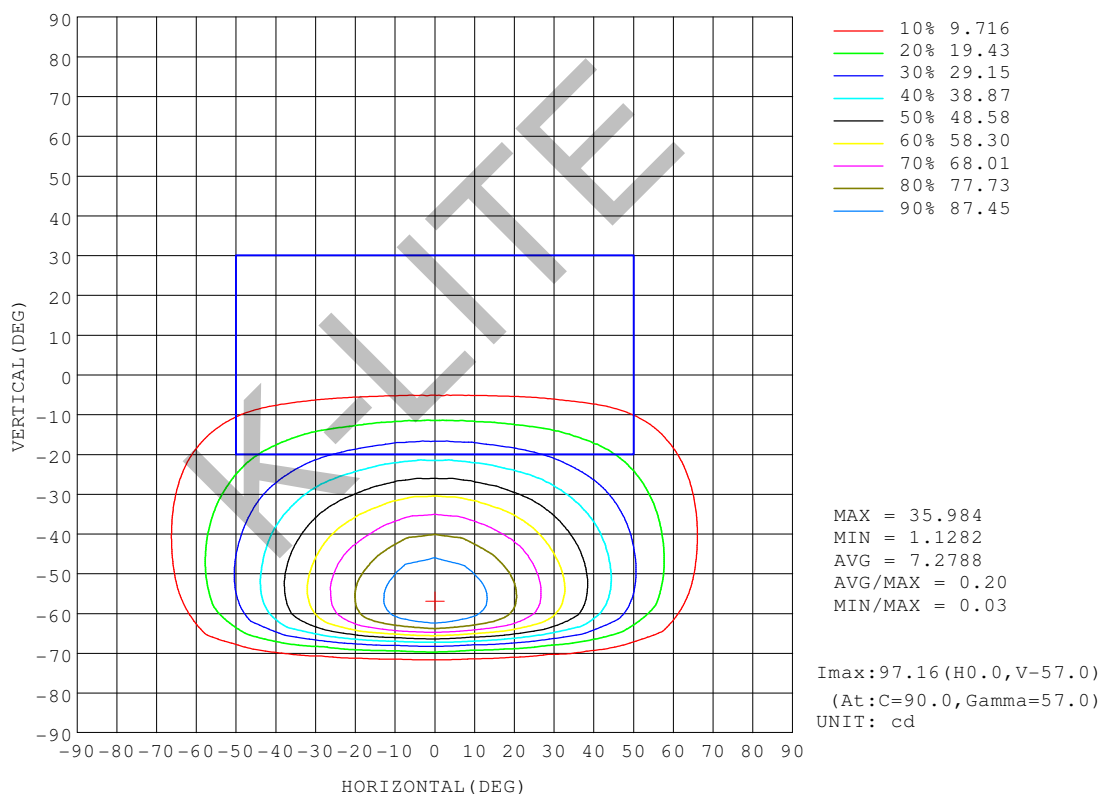
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	10	7	5	10	7	5	10	7	5	4
0.80	13	10	8	13	10	8	12	9	8	6
1.00	15	12	10	15	12	10	14	13	10	8
1.25	17	14	12	17	14	12	16	14	12	10
1.50	19	16	14	18	16	14	17	15	14	12
2.00	21	18	17	20	18	16	19	18	16	14
2.50	22	20	18	21	19	18	20	19	18	16
3.00	23	21	20	22	21	19	21	20	19	17
4.00	24	22	21	23	22	21	22	21	20	18
5.00	24	23	22	24	23	22	23	22	21	19
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

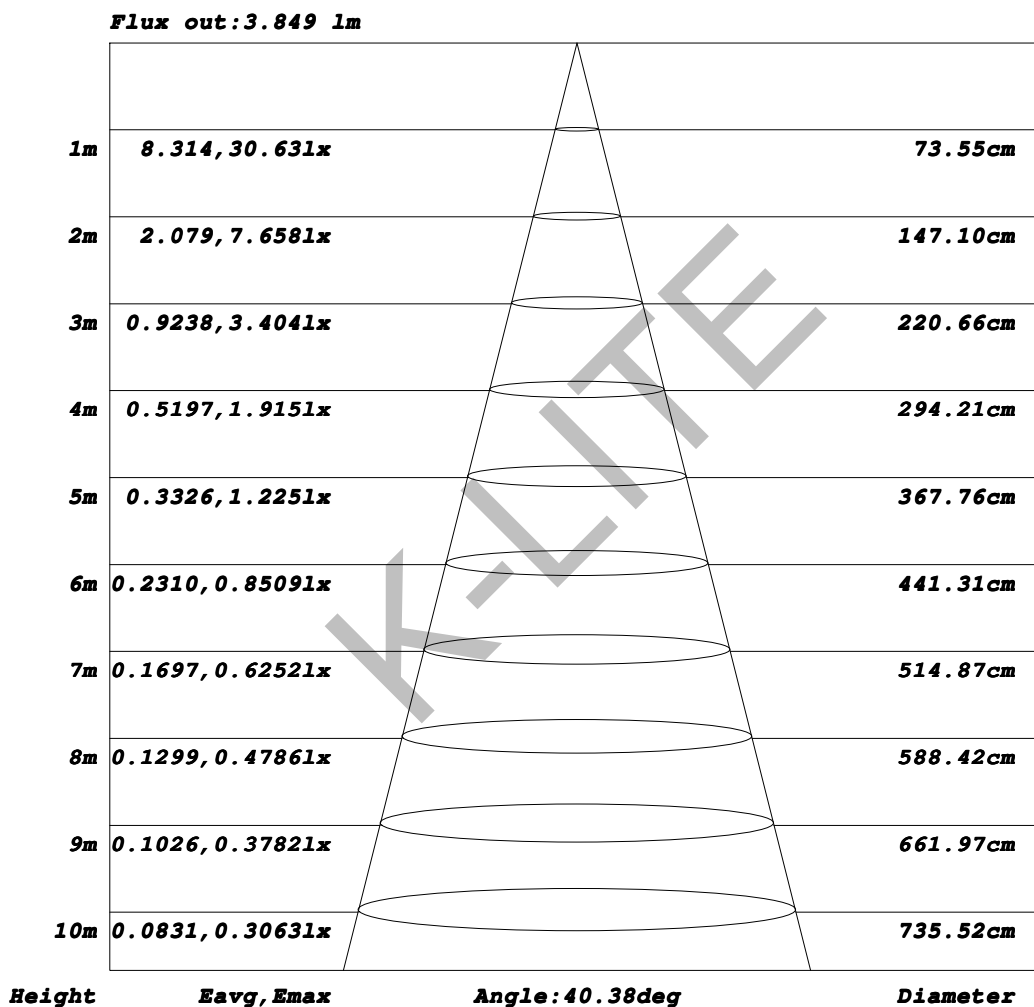


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:



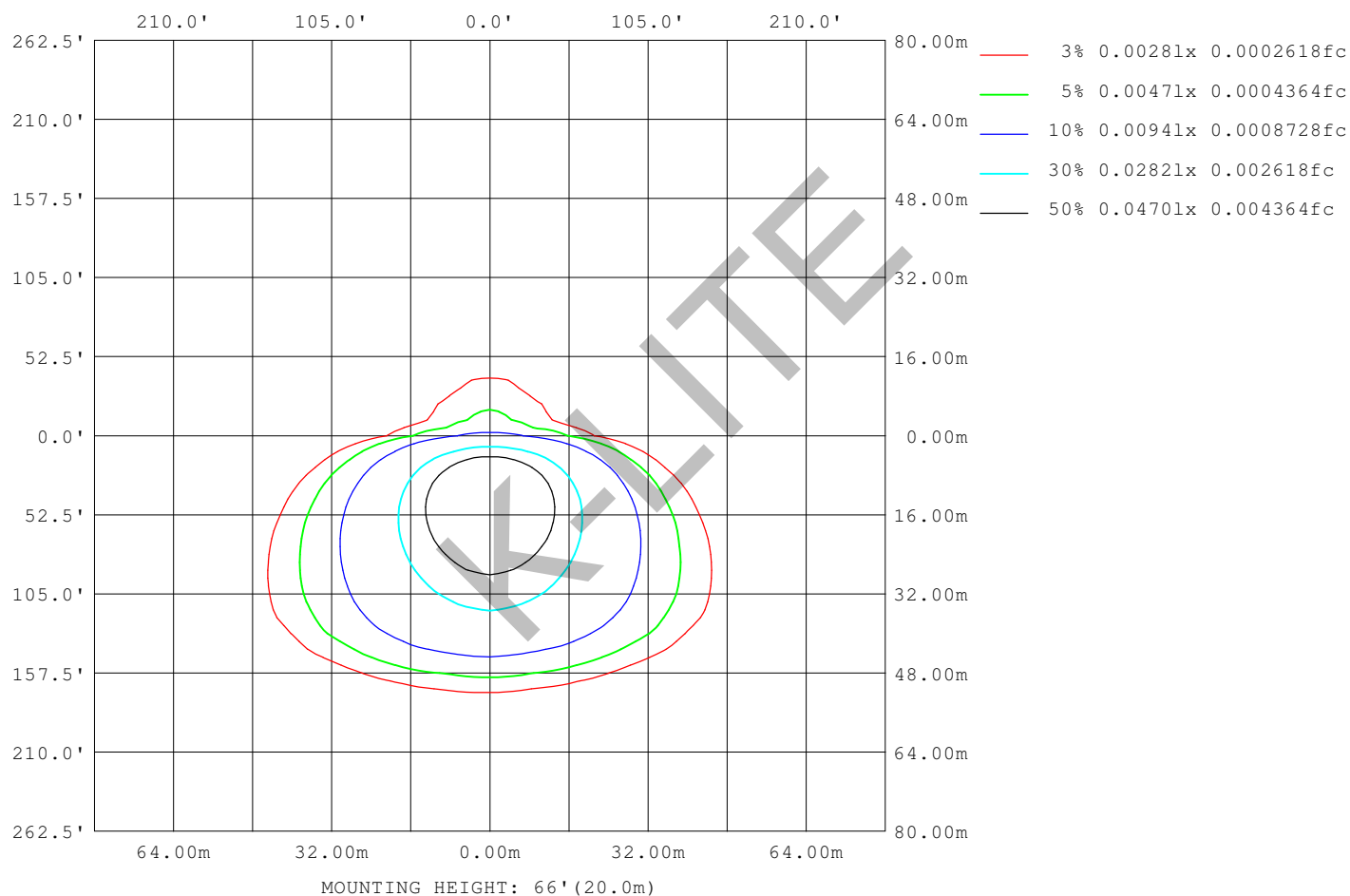
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.825m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.825m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.48V I:0.0152A P:3.3418W PF:0.9568 Freq:49.99Hz Lamp Flux:395.25x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:0.6Kg
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:1521
MFR.: K-LITE	SUR.:	Shielding Angle:

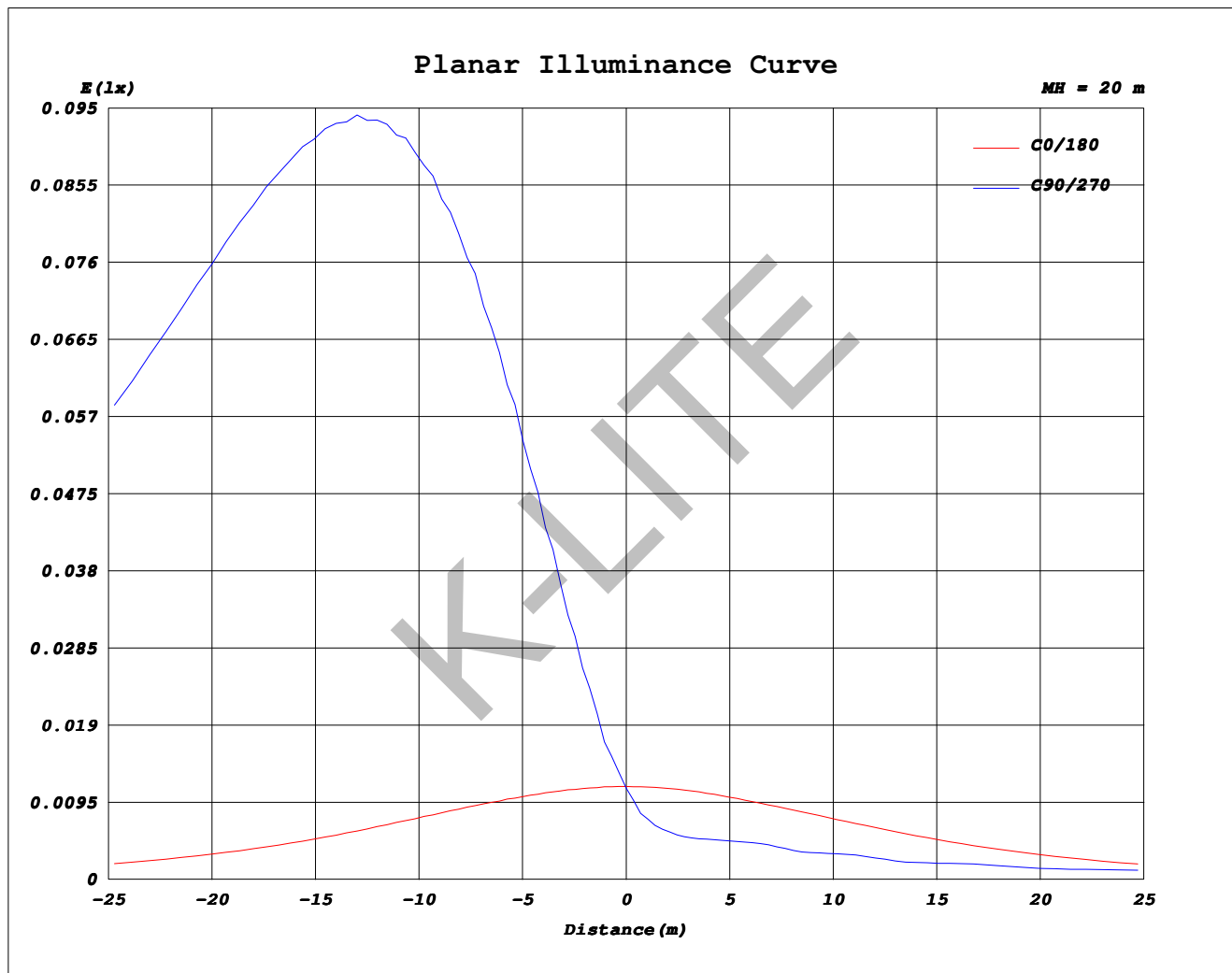
AvgL	cd/m2
L_0~180 (65) av	44
L_0~180 (75) av	28
L_0~180 (85) av	7
L_90~270 (65) av	789
L_90~270 (75) av	53
L_90~270 (85) av	4
L_45 (65) av	546
L_45 (75) av	192
L_45 (85) av	6

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 20 July 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

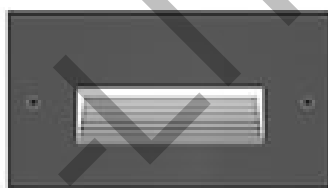
Range: 0 - 90DEG
Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

```



Light Output Ratio:	39.3%	
Luminaire Power:	6.144 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

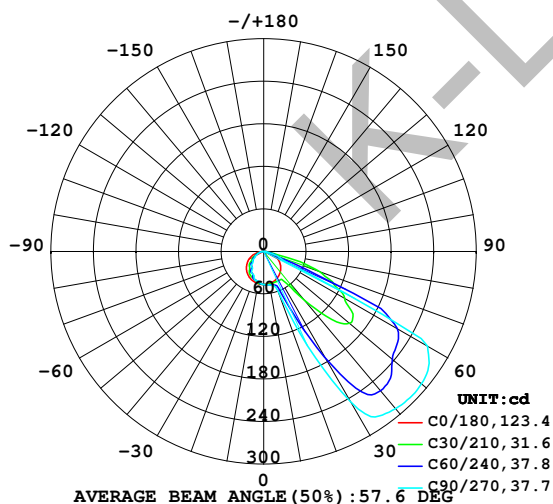
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

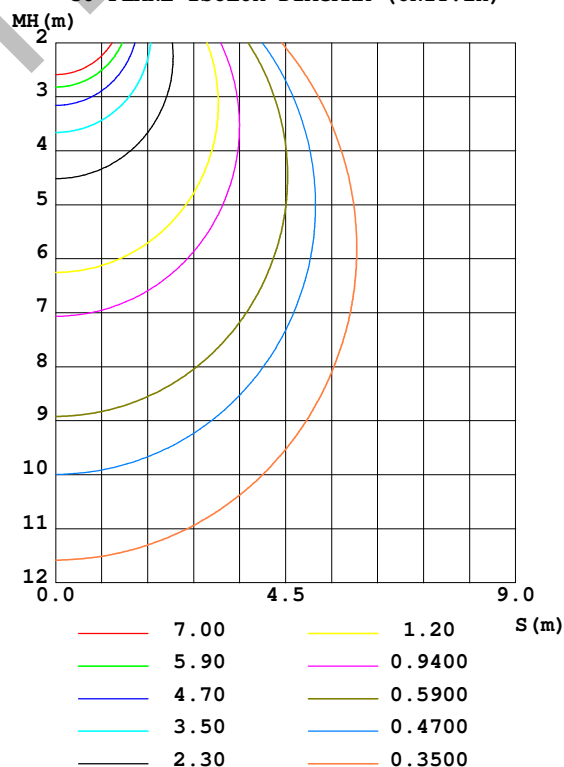
Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 55.76 lm/W
MODEL	KL-2747	I _{max} (cd)	292.0	S/MH (C0/180)	1.32	
NOMINAL POWER (W)	6	LOR (%)	39.3	S/MH (C90/270)	1.12	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	342.58	η UP, DN (C0-180)	0.0, 32.6	
NOMINAL FLUX (lm)	871.02	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 6.8	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	39.3	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

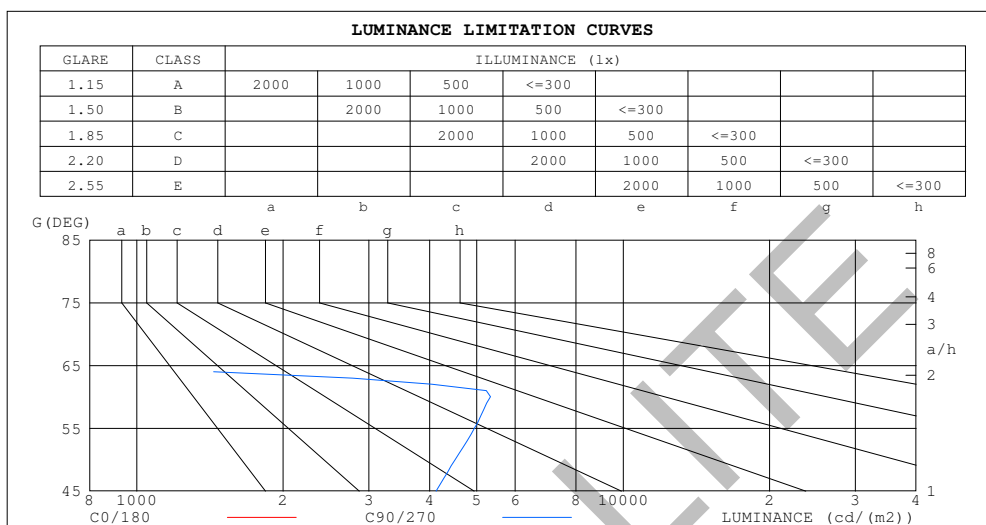
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	46.14	47.30	48.17	47.39	46.28	44.21	42.88	44.02	0- 10	4.425	4.425	1.29,0.51
20	44.33	48.58	60.79	48.72	44.54	41.52	40.21	41.42	10- 20	12.93	17.35	5.07,1.99
30	41.19	91.86	244.1	88.66	41.57	35.87	34.73	35.63	20- 30	27.80	45.15	13.2,5.18
40	36.88	204.3	289.5	203.6	37.29	29.69	27.36	29.31	30- 40	58.31	103.5	30.2,11.9
50	31.25	208.1	290.5	207.0	31.79	23.08	20.36	22.70	40- 50	79.19	182.7	53.3,21
60	24.32	174.9	267.2	176.5	25.06	16.28	14.05	15.90	50- 60	86.83	269.5	78.7,30.9
70	16.37	61.97	22.20	70.73	17.18	9.641	8.818	9.278	60- 70	55.55	325.0	94.9,37.3
80	6.700	5.881	3.863	6.910	7.454	4.175	3.155	4.006	70- 80	15.26	340.3	99.3,39.1
90	0	0.0070	0	0.0021	0	0	0.0074	0	80- 90	2.293	342.6	100,39.3
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	207	151
80	387	222
75	460	491
70	480	648
65	486	772
60	488	5340
55	488	4944
50	488	4516
45	486	4123

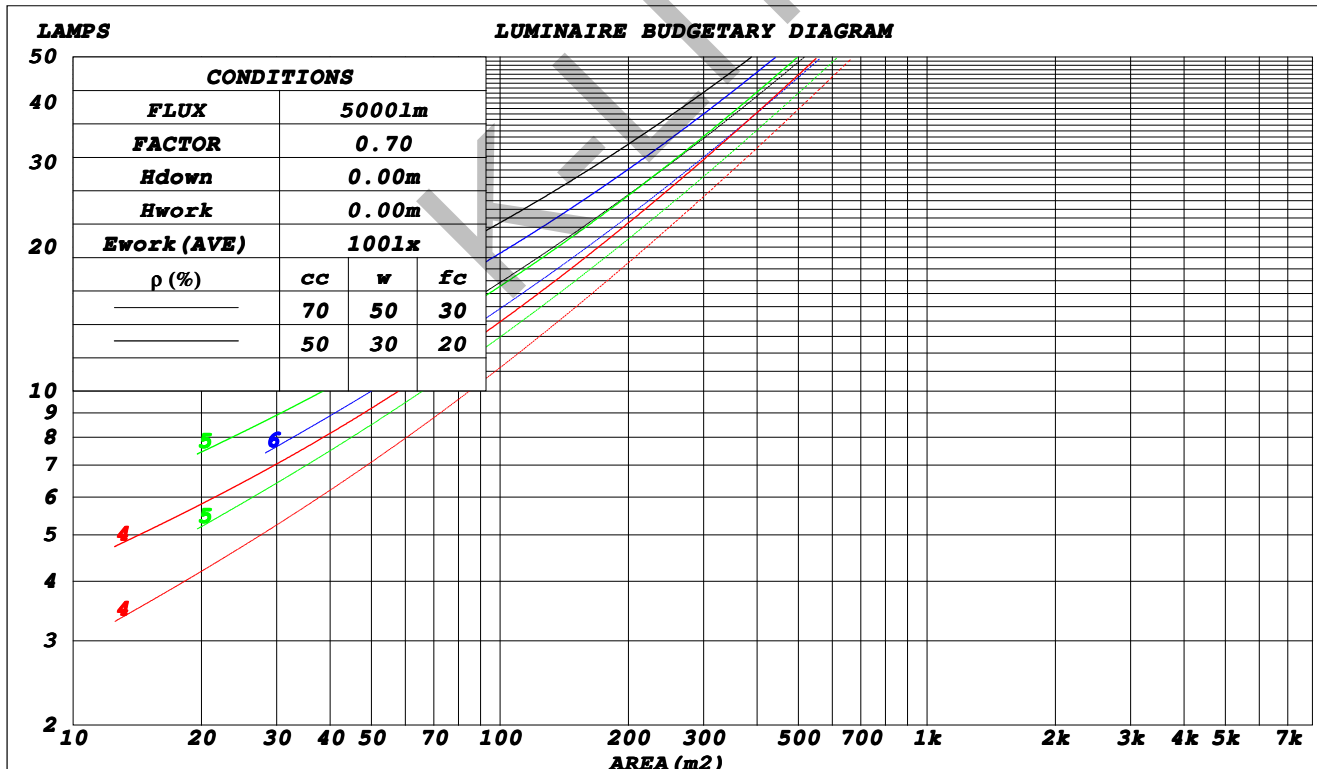
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.47	.47	.47	.46	.46	.46	.44	.44	.44	.42	.42	.42	.40	.40	.40	.39
1.0	.41	.39	.38	.40	.38	.37	.38	.37	.36	.37	.36	.35	.35	.34	.34	.33
2.0	.35	.32	.30	.34	.32	.29	.33	.31	.29	.31	.30	.28	.30	.29	.27	.26
3.0	.30	.27	.24	.29	.26	.24	.28	.25	.23	.27	.25	.23	.26	.24	.22	.21
4.0	.26	.22	.19	.25	.22	.19	.24	.21	.19	.23	.21	.19	.23	.20	.18	.17
5.0	.23	.19	.16	.22	.19	.16	.21	.18	.16	.21	.18	.15	.20	.17	.15	.14
6.0	.20	.16	.13	.20	.16	.13	.19	.16	.13	.18	.15	.13	.17	.15	.13	.12
7.0	.18	.14	.11	.17	.14	.11	.17	.13	.11	.16	.13	.11	.16	.13	.11	.10
8.0	.16	.12	.10	.16	.12	.10	.15	.12	.10	.14	.12	.09	.14	.11	.09	.09
9.0	.14	.11	.08	.14	.11	.08	.14	.10	.08	.13	.10	.08	.13	.10	.08	.07
10.0	.13	.10	.07	.13	.09	.07	.12	.09	.07	.12	.09	.07	.12	.09	.07	.06



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.124	.070	.022	.121	.069	.022	.116	.066	.021	.111	.064	.020	.106	.062	.020		
2.0	.121	.066	.020	.118	.065	.020	.114	.063	.020	.109	.061	.019	.105	.060	.019		
3.0	.114	.061	.018	.112	.060	.018	.107	.058	.018	.104	.057	.017	.100	.055	.017		
4.0	.106	.055	.016	.104	.054	.016	.100	.053	.016	.097	.052	.016	.094	.051	.015		
5.0	.098	.050	.015	.097	.050	.014	.093	.049	.014	.090	.048	.014	.087	.047	.014		
6.0	.091	.046	.013	.090	.045	.013	.087	.045	.013	.084	.044	.013	.081	.043	.013		
7.0	.085	.042	.012	.084	.042	.012	.081	.041	.012	.078	.040	.012	.076	.040	.012		
8.0	.079	.039	.011	.078	.038	.011	.076	.038	.011	.073	.037	.011	.071	.037	.011		
9.0	.074	.036	.010	.073	.036	.010	.071	.035	.010	.069	.034	.010	.067	.034	.010		
10.0	.069	.033	.009	.068	.033	.009	.067	.033	.009	.065	.032	.009	.063	.032	.009		

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.075	.075	.075	.064	.064	.064	.044	.044	.044	.025	.025	.025	.008	.008	.008		
1.0	.071	.061	.053	.061	.053	.045	.042	.036	.031	.024	.021	.018	.008	.007	.006		
2.0	.069	.052	.038	.059	.045	.033	.040	.031	.023	.023	.018	.013	.007	.006	.004		
3.0	.066	.045	.028	.057	.039	.024	.039	.027	.017	.022	.016	.010	.007	.005	.003		
4.0	.064	.040	.022	.055	.034	.019	.038	.024	.013	.022	.014	.008	.007	.005	.003		
5.0	.061	.036	.017	.052	.031	.015	.036	.022	.011	.021	.013	.006	.007	.004	.002		
6.0	.058	.033	.014	.050	.028	.012	.035	.020	.009	.020	.012	.005	.006	.004	.002		
7.0	.056	.030	.012	.048	.026	.011	.033	.018	.007	.019	.011	.004	.006	.004	.001		
8.0	.053	.028	.010	.046	.024	.009	.032	.017	.006	.018	.010	.004	.006	.003	.001		
9.0	.051	.026	.009	.044	.023	.008	.030	.016	.006	.018	.009	.003	.006	.003	.001		
10.0	.048	.024	.008	.042	.021	.007	.029	.015	.005	.017	.009	.003	.005	.003	.001		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	16.9	18.6	17.2	18.8	19.1	22.9	24.6	23.2	24.8	25.0
3H	17.8	19.3	18.1	19.6	19.8	22.8	24.3	23.1	24.6	24.8
4H	18.0	19.4	18.3	19.7	20.0	22.7	24.2	23.0	24.4	24.7
6H	18.0	19.4	18.3	19.6	19.9	22.6	24.0	22.9	24.2	24.5
8H	18.0	19.3	18.3	19.6	19.9	22.5	23.9	22.9	24.1	24.4
12H	17.9	19.2	18.3	19.5	19.8	22.5	23.8	22.8	24.1	24.4
4H 2H	19.4	20.8	19.7	21.1	21.4	23.3	24.7	23.6	25.0	25.2
3H	20.5	21.7	20.8	22.0	22.3	23.1	24.4	23.5	24.7	25.0
4H	20.7	21.8	21.1	22.1	22.5	23.1	24.2	23.5	24.6	24.9
6H	20.7	21.7	21.1	22.1	22.4	23.0	24.0	23.4	24.4	24.7
8H	20.7	21.6	21.1	22.0	22.4	23.0	23.9	23.4	24.3	24.7
12H	20.6	21.5	21.1	21.9	22.3	22.9	23.8	23.3	24.2	24.6
8H 4H	20.6	21.6	21.0	21.9	22.3	23.0	24.0	23.5	24.3	24.7
6H	20.7	21.4	21.1	21.8	22.3	23.0	23.7	23.4	24.2	24.6
8H	20.7	21.4	21.1	21.8	22.2	22.9	23.6	23.4	24.0	24.5
12H	20.7	21.2	21.1	21.7	22.2	22.9	23.5	23.4	23.9	24.4
12H 4H	20.6	21.4	21.0	21.8	22.2	23.0	23.9	23.4	24.2	24.7
6H	20.6	21.3	21.1	21.7	22.2	22.9	23.6	23.4	24.0	24.5
8H	20.7	21.2	21.1	21.7	22.2	22.9	23.5	23.4	23.9	24.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.6					+ 0.7 / - 0.7				
1.5H	+ 0.8 / - 0.4					+ 1.7 / - 2.8				
2.0H	+ 2.0 / - 6.0					+ 2.1 / - 3.2				

CIE Pub.117, 871.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.5$)
 Area: 0.1 m²

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

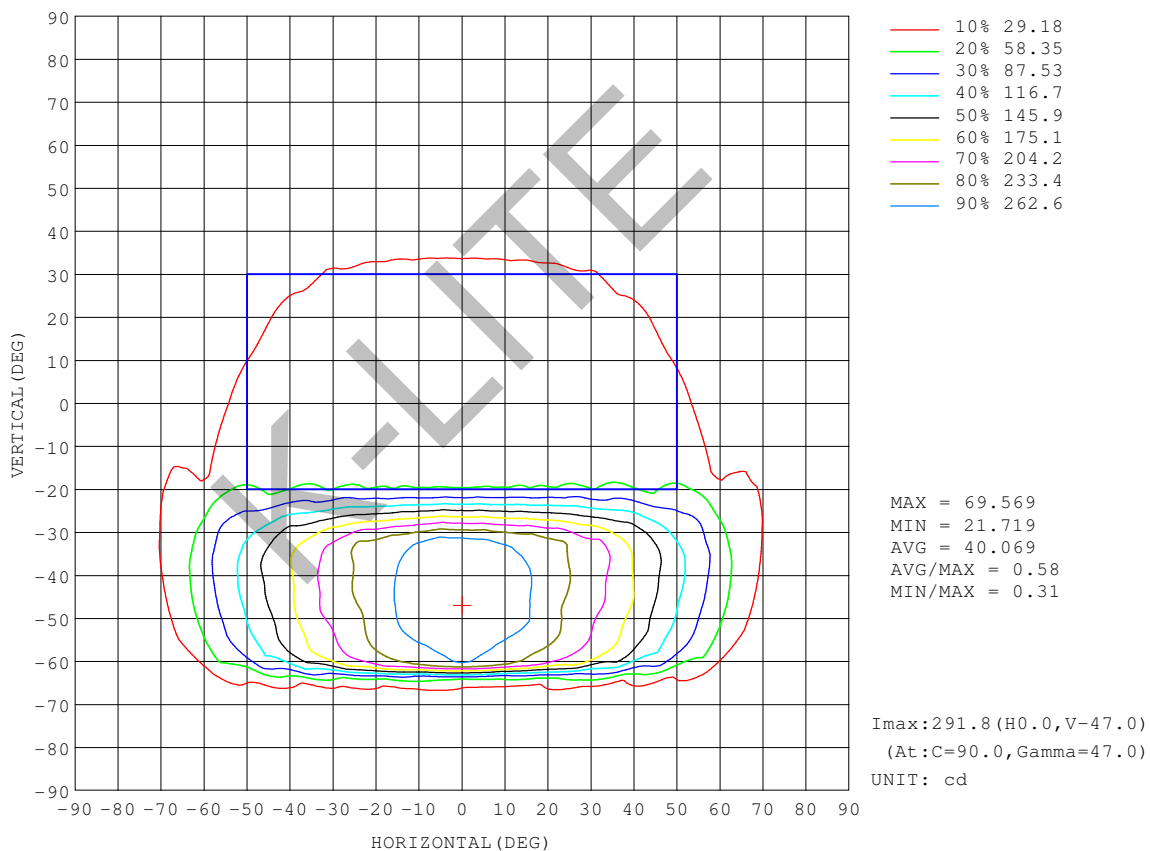
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	19	14	10	18	13	10	18	13	10	7
0.80	23	18	15	23	18	15	22	18	15	11
1.00	27	23	19	27	22	19	26	23	19	16
1.25	31	26	23	30	26	23	29	25	23	19
1.50	33	29	26	32	28	26	31	28	25	22
2.00	36	33	30	36	32	30	34	31	29	26
2.50	38	35	32	37	34	32	36	33	31	28
3.00	40	37	35	39	36	34	37	35	33	30
4.00	41	39	37	40	38	37	39	37	36	32
5.00	42	40	39	41	40	38	40	38	37	33
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

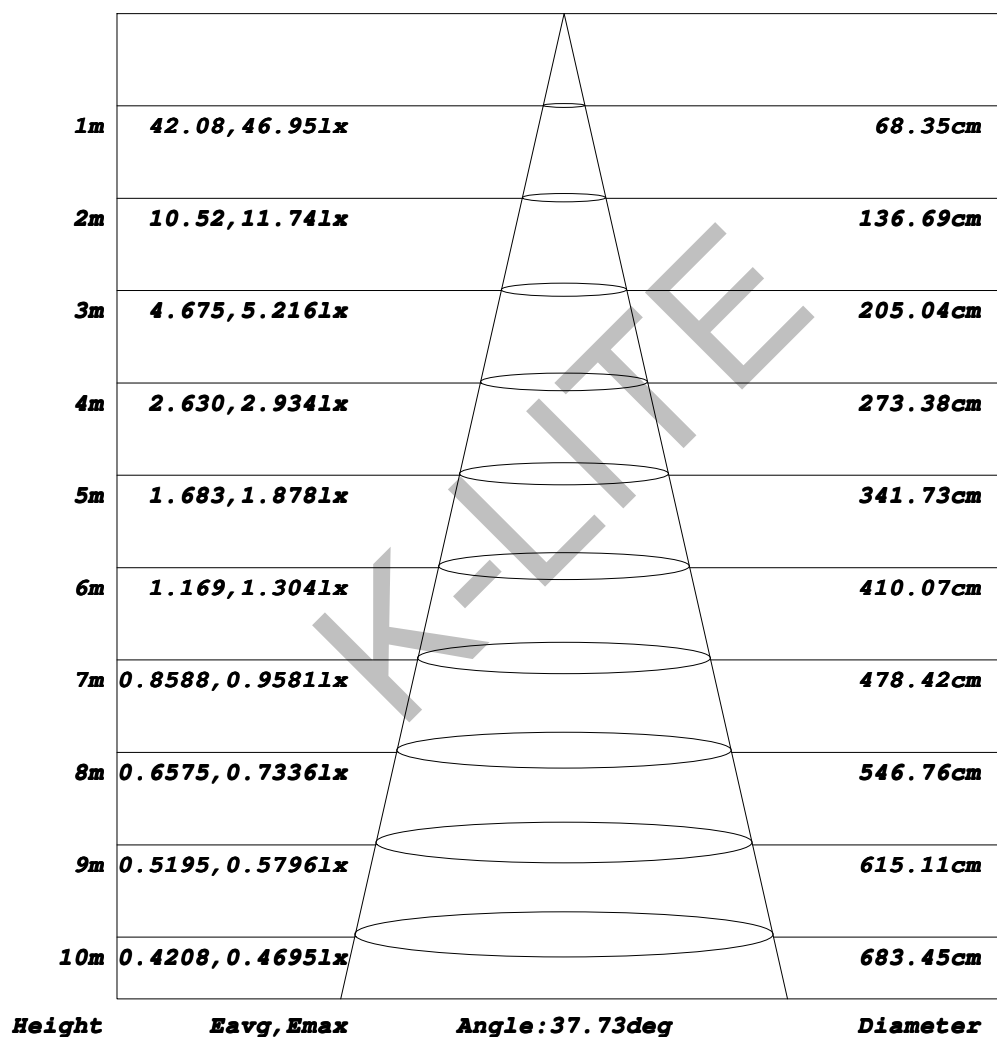


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:15.67 lm


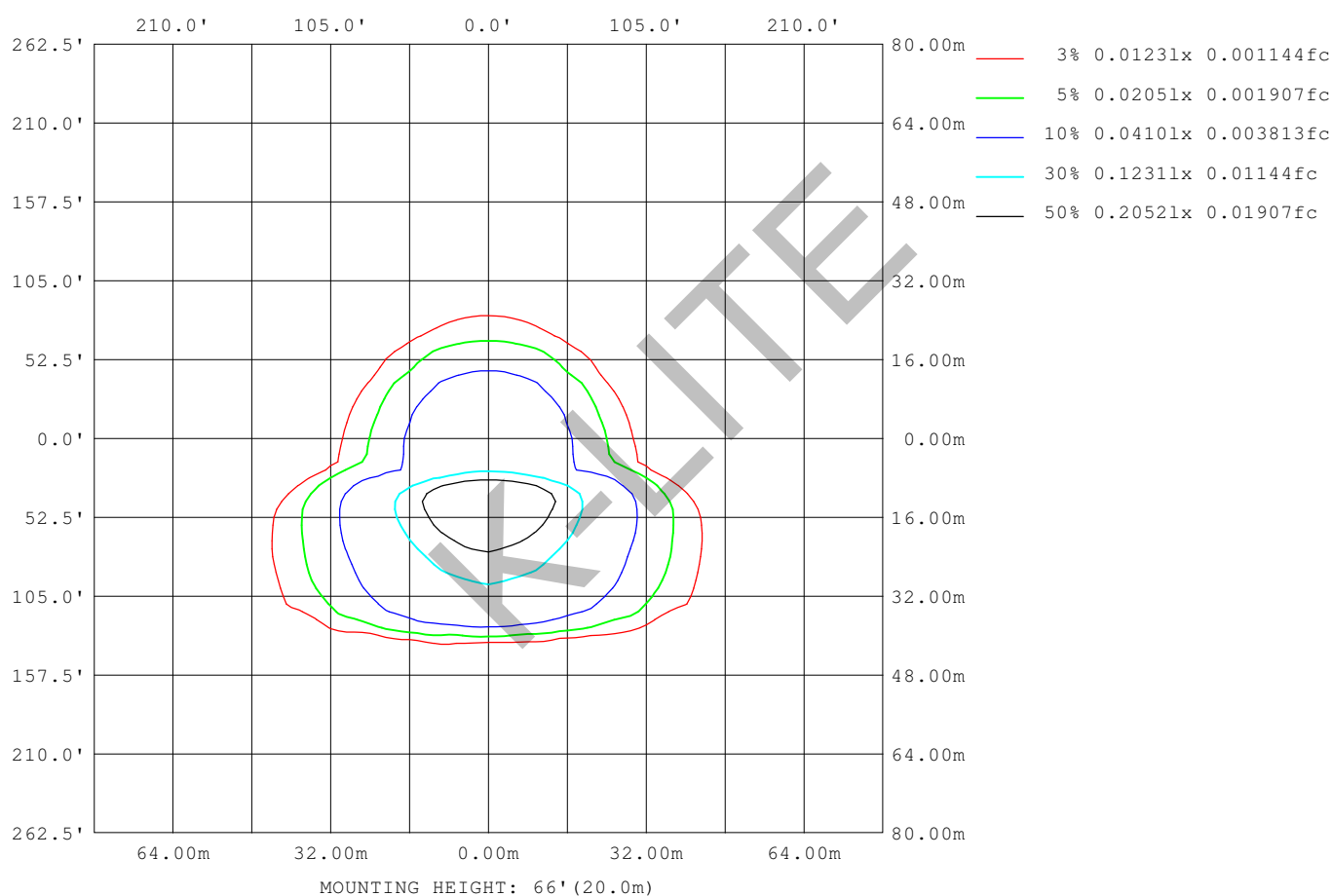
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.68V I:0.0272A P:6.1444W PF:0.9775 Freq:49.98Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4860
MFR.: K-LITE	SUR.:	Shielding Angle:

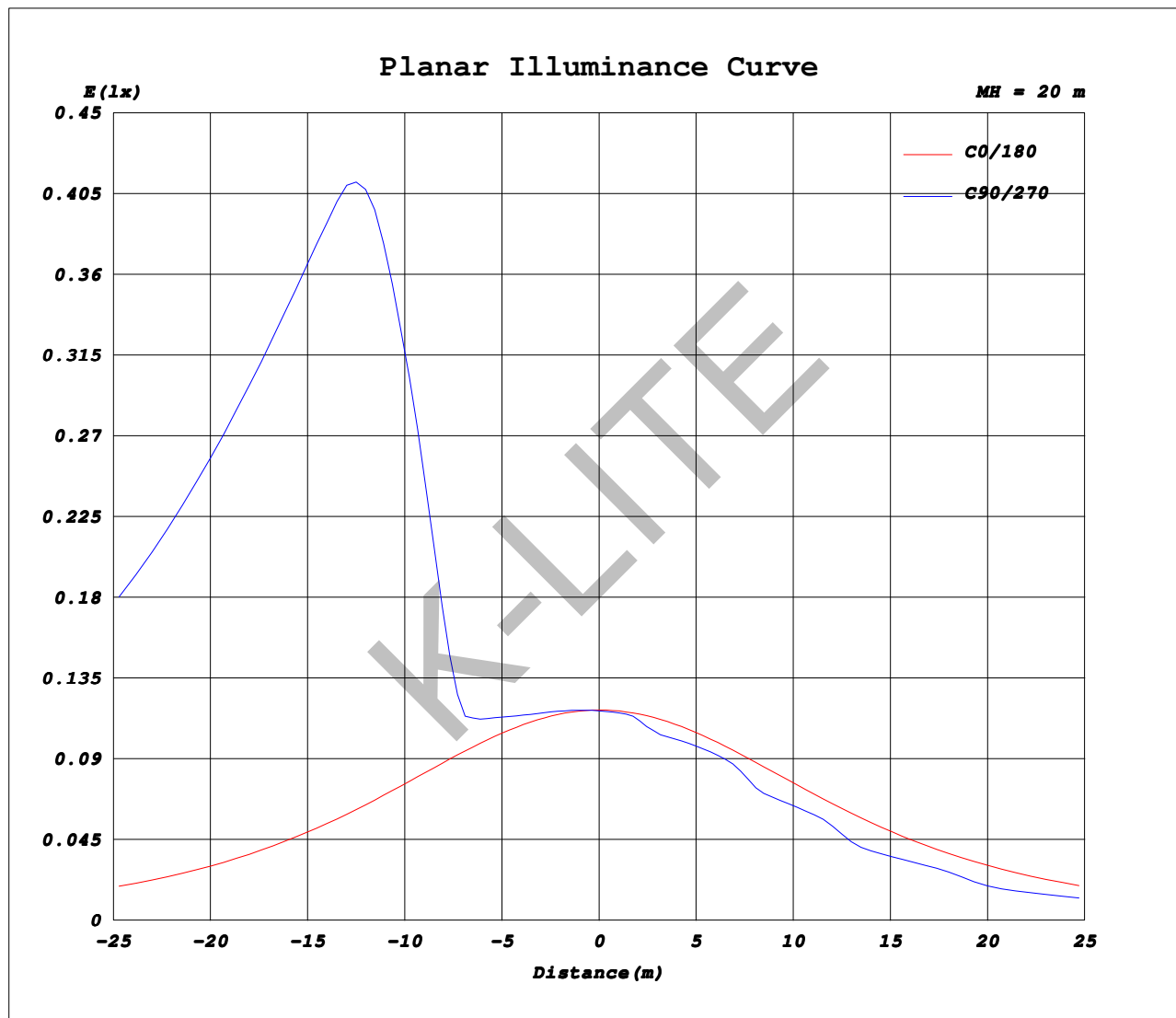
AvgL	cd/m2
L_0~180 (65) av	493
L_0~180 (75) av	471
L_0~180 (85) av	236
L_90~270 (65) av	508
L_90~270 (75) av	355
L_90~270 (85) av	145
L_45 (65) av	1974
L_45 (75) av	412
L_45 (85) av	199

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

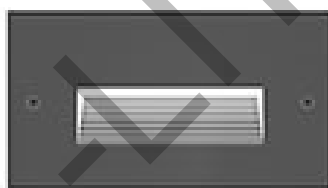
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```



Light Output Ratio:	35.3%	
Luminaire Power:	6.355 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

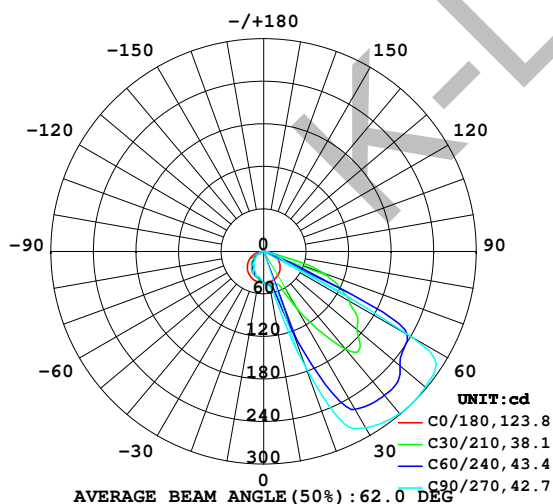
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

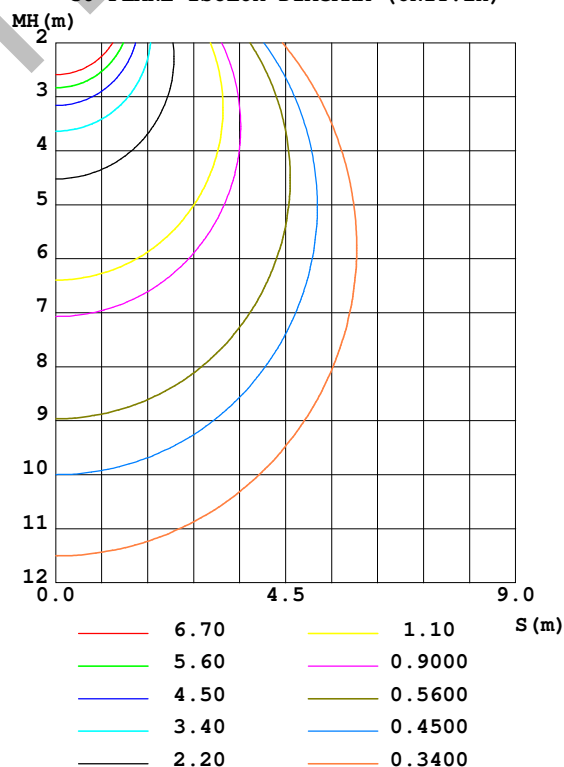
Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 57.62 lm/W
MODEL	KL-2747	I _{max} (cd)	299.6	S/MH (C0/180)	1.32	
NOMINAL POWER (W)	6	LOR (%)	35.3	S/MH (C90/270)	0.97	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	366.16	η UP, DN (C0-180)	0.0, 30.4	
NOMINAL FLUX (lm)	1036.8	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 4.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00	
TEST VOLTAGE (V)	230	η down (%)	35.3	CIBSE SHR MAX	1.00	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

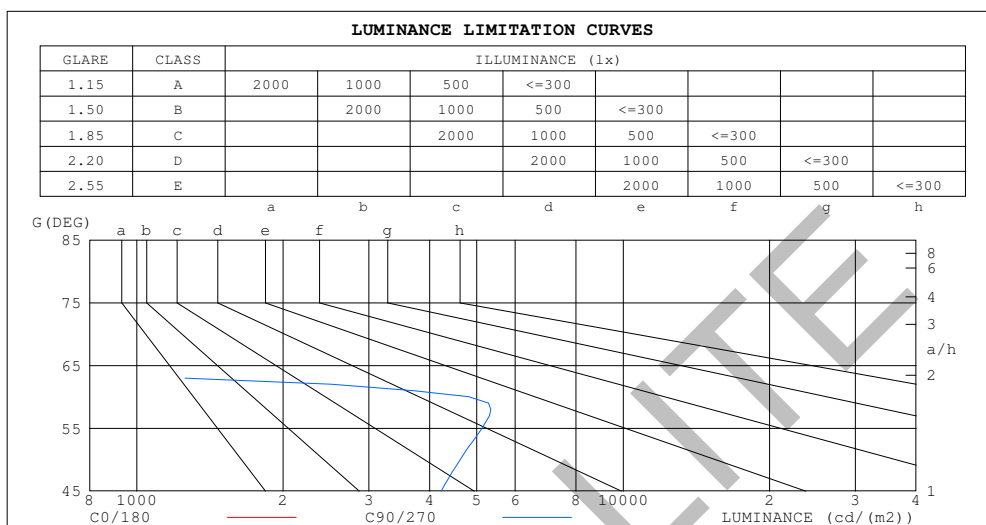
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	44.11	47.64	50.58	47.72	44.12	38.35	37.51	38.26	0- 10	4.196	4.196	1.15, 0.40
20	42.46	69.05	175.5	68.03	42.42	36.08	33.56	35.90	10- 20	14.29	18.49	5.05, 1.78
30	39.63	199.2	287.3	188.7	39.52	30.37	28.98	30.37	20- 30	39.92	58.41	16, 5.63
40	35.62	232.1	298.5	219.7	35.42	24.97	23.08	24.86	30- 40	66.80	125.2	34.2, 12.1
50	30.23	217.7	297.9	204.1	30.15	19.32	17.00	19.29	40- 50	83.86	209.1	57.1, 20.2
60	23.67	185.8	241.1	173.2	23.74	13.47	11.53	13.37	50- 60	89.44	298.5	81.5, 28.8
70	16.07	50.29	23.28	59.61	16.28	7.819	6.925	7.661	60- 70	51.00	349.5	95.5, 33.7
80	6.501	7.220	3.861	7.910	7.082	3.314	2.375	3.203	70- 80	14.47	364.0	99.4, 35.1
90	0	0.0018	0.0012	0.0009	0	0	0.0002	0	80- 90	2.177	366.2	100, 35.3
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity: 65.0%
 Test Distance: 1.852m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	210	177
80	377	222
75	452	541
70	473	679
65	476	744
60	477	4811
55	476	5130
50	474	4625
45	472	4228

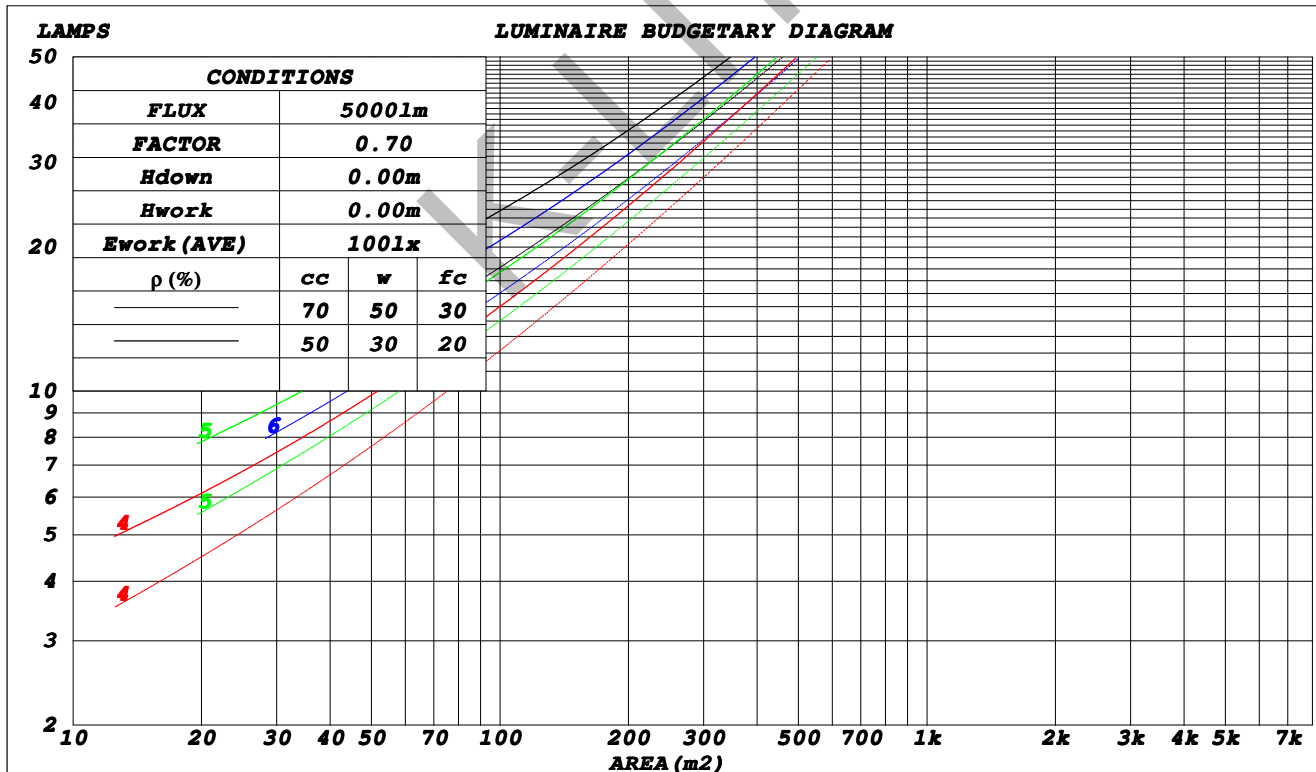
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.42	.42	.42	.41	.41	.41	.39	.39	.39	.38	.38	.38	.36	.36	.36	.35
1.0	.37	.35	.34	.36	.35	.33	.34	.33	.32	.33	.32	.31	.32	.31	.30	.30
2.0	.32	.29	.27	.31	.29	.27	.30	.28	.26	.29	.27	.26	.28	.26	.25	.24
3.0	.27	.24	.22	.27	.24	.22	.26	.23	.21	.25	.23	.21	.24	.22	.21	.20
4.0	.24	.21	.18	.23	.20	.18	.22	.20	.18	.22	.19	.17	.21	.19	.17	.16
5.0	.21	.18	.15	.20	.17	.15	.20	.17	.15	.19	.17	.15	.18	.16	.14	.14
6.0	.18	.15	.13	.18	.15	.13	.17	.15	.12	.17	.14	.12	.16	.14	.12	.11
7.0	.16	.13	.11	.16	.13	.11	.16	.13	.11	.15	.12	.11	.15	.12	.10	.10
8.0	.15	.11	.09	.14	.11	.09	.14	.11	.09	.13	.11	.09	.13	.11	.09	.08
9.0	.13	.10	.08	.13	.10	.08	.13	.10	.08	.12	.10	.08	.12	.10	.08	.07
10.0	.12	.09	.07	.12	.09	.07	.11	.09	.07	.11	.09	.07	.11	.09	.07	.06



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.107	.061	.019	.105	.060	.019	.100	.057	.018	.096	.055	.018	.092	.053	.017		
2.0	.105	.057	.018	.103	.057	.017	.098	.055	.017	.095	.053	.017	.091	.052	.016		
3.0	.099	.053	.016	.097	.052	.016	.093	.051	.015	.090	.049	.015	.087	.048	.015		
4.0	.093	.048	.014	.091	.048	.014	.088	.046	.014	.084	.045	.014	.082	.044	.014		
5.0	.086	.044	.013	.085	.043	.013	.082	.043	.013	.079	.042	.012	.076	.041	.012		
6.0	.080	.040	.012	.079	.040	.011	.076	.039	.011	.074	.038	.011	.071	.038	.011		
7.0	.075	.037	.010	.074	.037	.010	.071	.036	.010	.069	.035	.010	.067	.035	.010		
8.0	.070	.034	.010	.069	.034	.010	.067	.033	.010	.065	.033	.009	.063	.032	.009		
9.0	.065	.032	.009	.064	.031	.009	.063	.031	.009	.061	.030	.009	.059	.030	.009		
10.0	.062	.029	.008	.061	.029	.008	.059	.029	.008	.057	.028	.008	.056	.028	.008		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.067	.067	.067	.057	.057	.057	.039	.039	.039	.023	.023	.023	.007	.007	.007	
1.0	.064	.055	.048	.054	.047	.041	.037	.033	.028	.021	.019	.016	.007	.006	.005	
2.0	.061	.047	.034	.052	.040	.030	.036	.028	.021	.021	.016	.012	.007	.005	.004	
3.0	.059	.040	.026	.050	.035	.022	.035	.024	.016	.020	.014	.009	.006	.005	.003	
4.0	.057	.036	.020	.049	.031	.017	.033	.022	.012	.019	.013	.007	.006	.004	.002	
5.0	.054	.032	.016	.047	.028	.014	.032	.019	.010	.019	.011	.006	.006	.004	.002	
6.0	.052	.029	.013	.045	.025	.011	.031	.018	.008	.018	.010	.005	.006	.003	.002	
7.0	.050	.027	.011	.043	.023	.010	.029	.016	.007	.017	.010	.004	.006	.003	.001	
8.0	.047	.025	.010	.041	.022	.008	.028	.015	.006	.016	.009	.004	.005	.003	.001	
9.0	.045	.023	.008	.039	.020	.007	.027	.014	.005	.016	.008	.003	.005	.003	.001	
10.0	.043	.022	.008	.037	.019	.007	.026	.013	.005	.015	.008	.003	.005	.003	.001	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm										
NAME: SUDO MINI - ASY FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:4864		
MFR.: K-LITE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	17.0	18.7	17.3	18.9	19.1	22.1	23.8	22.4	24.0	24.2
3H	17.9	19.4	18.2	19.7	19.9	22.0	23.5	22.3	23.7	24.0
4H	18.0	19.5	18.4	19.7	20.0	21.9	23.3	22.2	23.6	23.9
6H	18.0	19.4	18.4	19.6	19.9	21.8	23.1	22.2	23.4	23.7
8H	18.0	19.3	18.3	19.6	19.9	21.8	23.0	22.1	23.3	23.6
12H	18.0	19.2	18.3	19.5	19.8	21.7	22.9	22.1	23.2	23.6
4H 2H	19.2	20.6	19.5	20.8	21.1	22.5	23.9	22.8	24.1	24.4
3H	20.2	21.4	20.6	21.7	22.0	22.3	23.6	22.7	23.9	24.2
4H	20.4	21.5	20.7	21.8	22.1	22.3	23.4	22.7	23.7	24.1
6H	20.4	21.3	20.8	21.7	22.1	22.2	23.2	22.6	23.5	23.9
8H	20.4	21.3	20.8	21.6	22.0	22.2	23.1	22.6	23.5	23.8
12H	20.3	21.2	20.8	21.5	21.9	22.1	23.0	22.6	23.4	23.8
8H 4H	20.3	21.2	20.7	21.6	22.0	22.2	23.2	22.7	23.5	23.9
6H	20.3	21.1	20.8	21.5	21.9	22.2	22.9	22.6	23.3	23.8
8H	20.4	21.0	20.8	21.4	21.9	22.2	22.8	22.6	23.2	23.7
12H	20.3	20.9	20.8	21.4	21.8	22.1	22.7	22.6	23.1	23.6
12H 4H	20.3	21.1	20.7	21.5	21.9	22.2	23.0	22.6	23.4	23.8
6H	20.3	21.0	20.8	21.4	21.8	22.2	22.8	22.6	23.2	23.7
8H	20.3	20.9	20.8	21.3	21.8	22.1	22.7	22.6	23.1	23.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 0.8					+ 0.4 / - 0.4				
1.5H	+ 0.7 / - 0.6					+ 1.7 / - 2.8				
2.0H	+ 2.0 / - 7.1					+ 1.4 / - 2.7				

CIE Pub.117, 1037 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.1$)
 Area: 0.1 m²

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
 Humidity:65.0%
 Test Distance:1.852m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

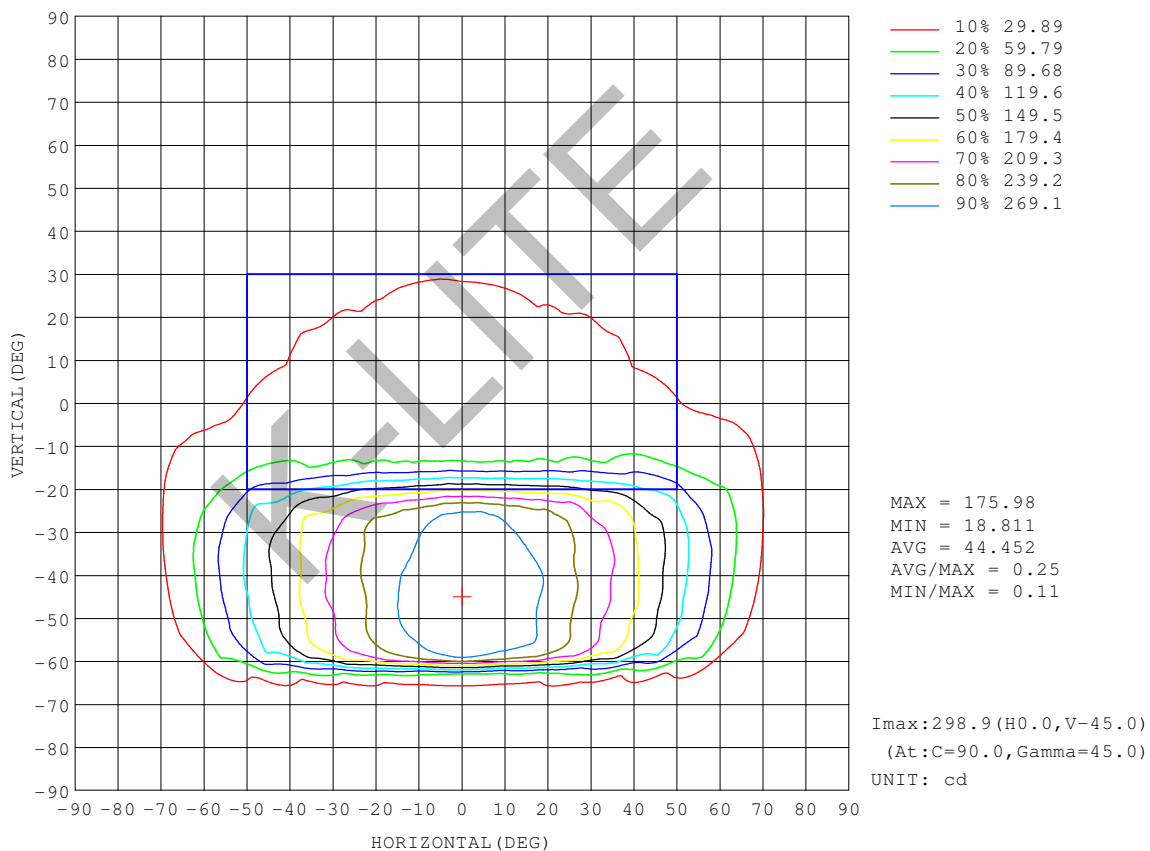
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	18	13	10	17	13	10	17	13	10	8
0.80	22	17	14	21	17	14	21	17	14	11
1.00	25	21	18	25	21	18	24	22	18	15
1.25	28	24	22	28	24	22	27	24	21	18
1.50	30	27	24	30	26	24	29	26	23	21
2.00	33	30	28	33	30	27	31	29	27	24
2.50	35	32	30	34	31	29	33	30	29	26
3.00	36	33	31	35	33	31	34	32	30	27
4.00	37	35	34	37	35	33	35	34	32	29
5.00	38	37	35	37	36	35	36	35	33	30
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

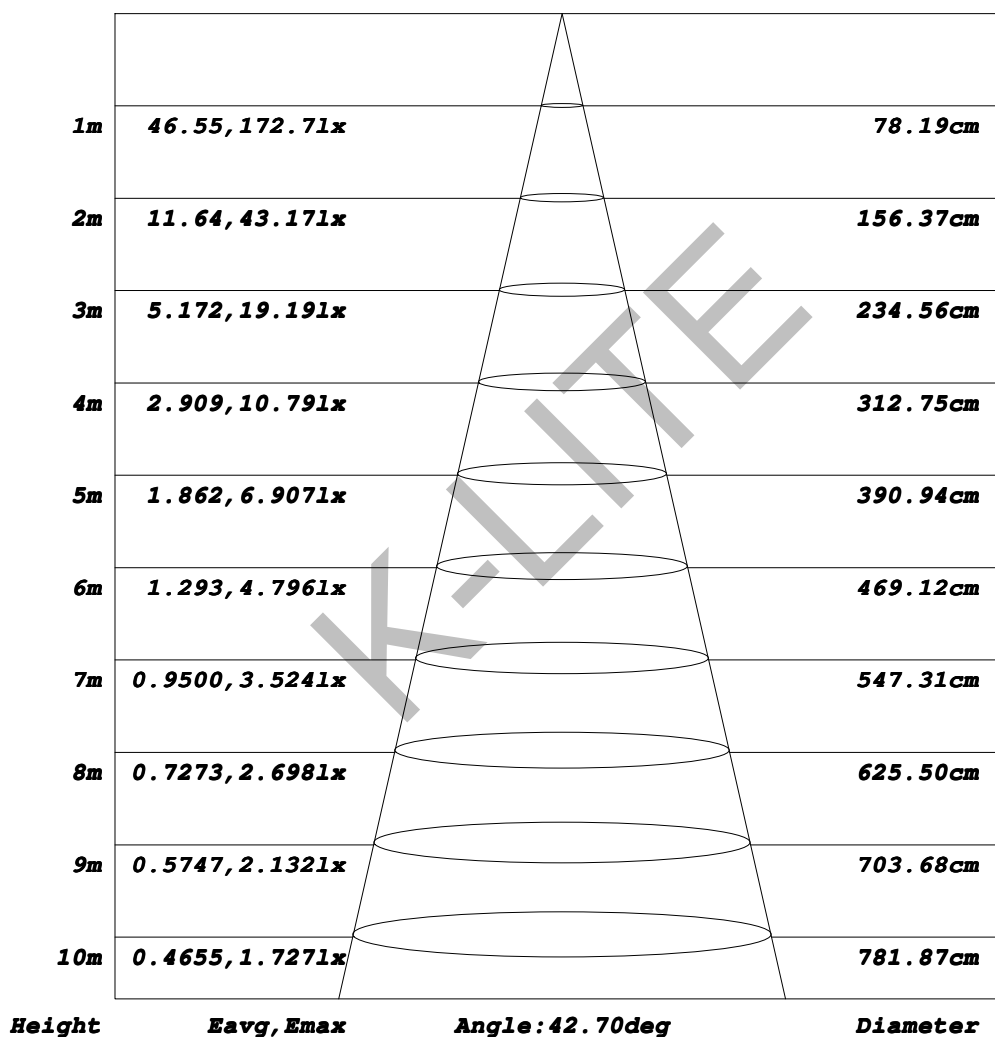


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:23.87 lm


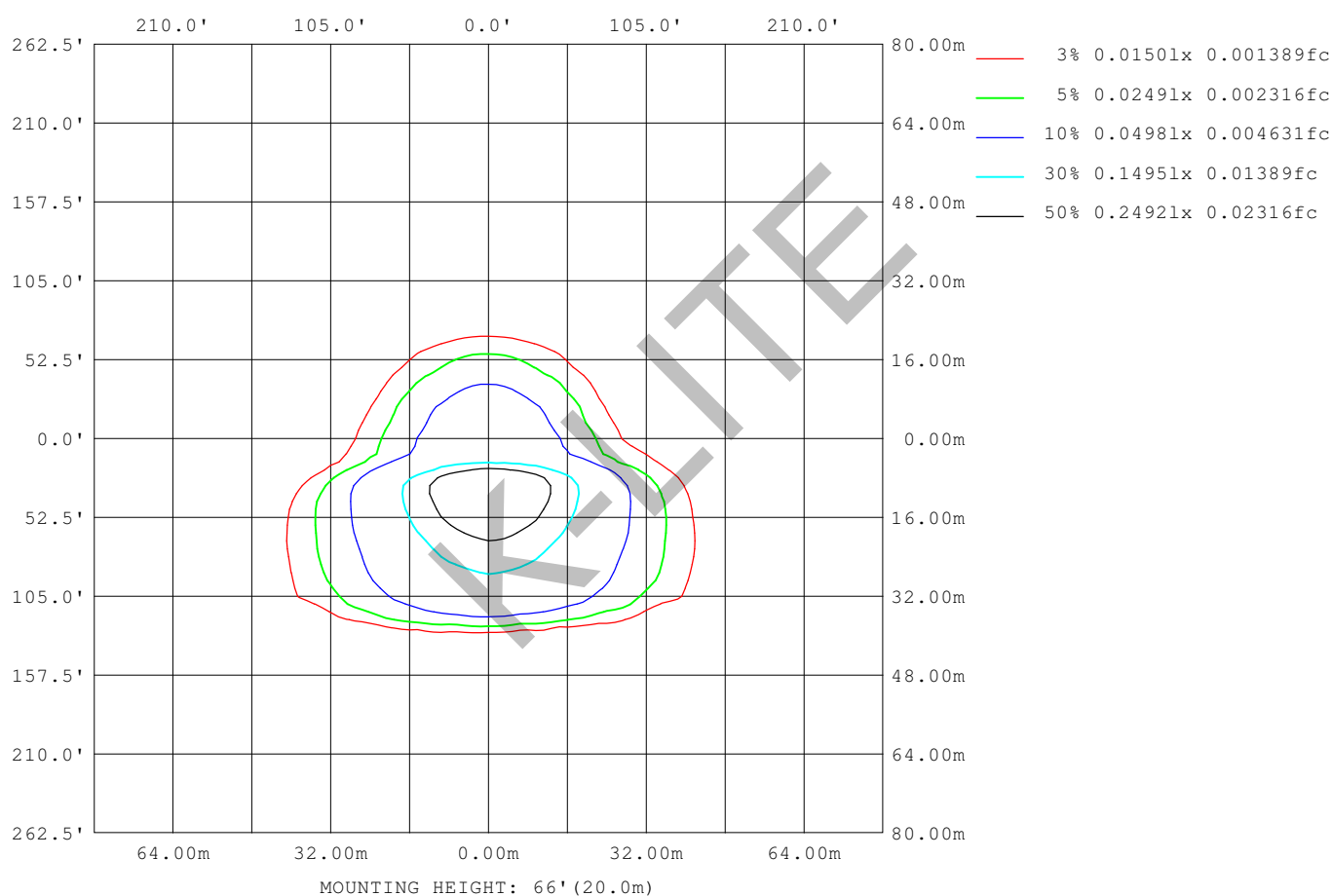
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.57V I:0.0281A P:6.3549W PF:0.9801 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - ASY FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4864
MFR.: K-LITE	SUR.:	Shielding Angle:

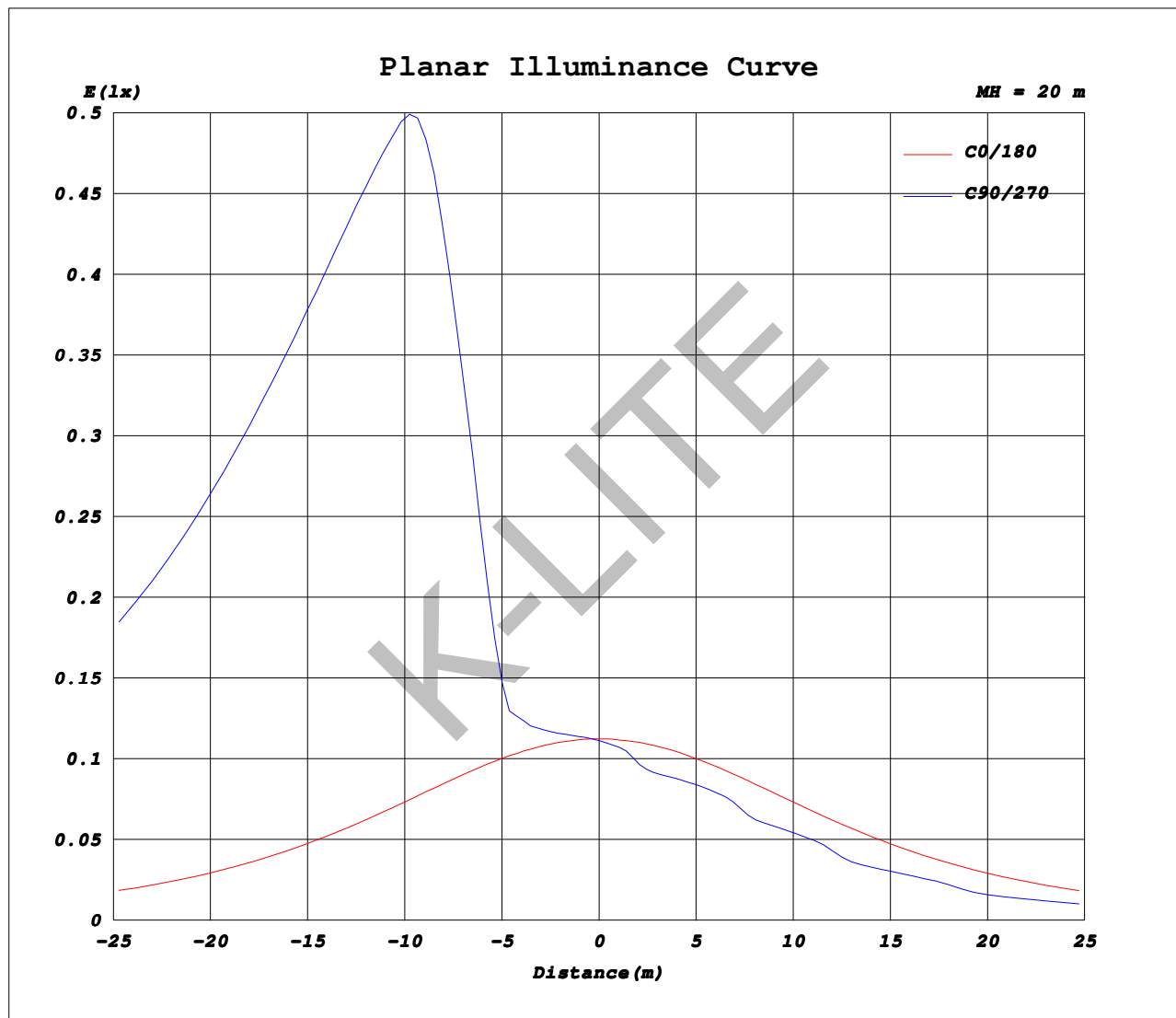
AvgL	cd/m2
L_0~180 (65) av	474
L_0~180 (75) av	455
L_0~180 (85) av	221
L_90~270 (65) av	467
L_90~270 (75) av	358
L_90~270 (85) av	135
L_45 (65) av	2024
L_45 (75) av	411
L_45 (85) av	175

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

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