



Light Output Ratio:	36.8%	
Luminaire Power:	12.15 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	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

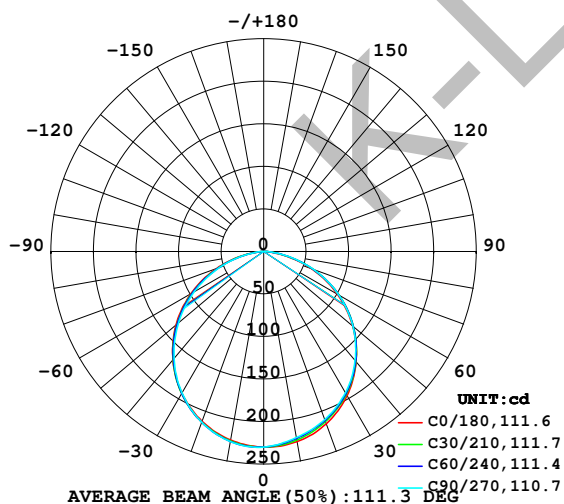
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

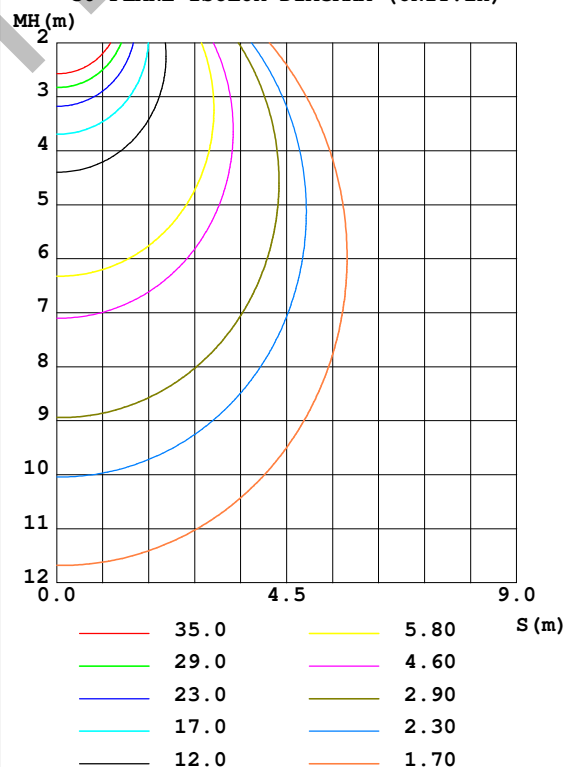
Test:U:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 52.72 lm/W
MODEL	KL-2741	I _{max} (cd)	230.4	S/MH (C0/180)	1.25	
NOMINAL POWER (W)	12	LOR (%)	36.8	S/MH (C90/270)	1.24	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	640.29	η UP, DN (C0-180)	0.0, 18.6	
NOMINAL FLUX (lm)	1742.04	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 18.2	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	36.8	CIBSE SHR MAX	1.35	

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:

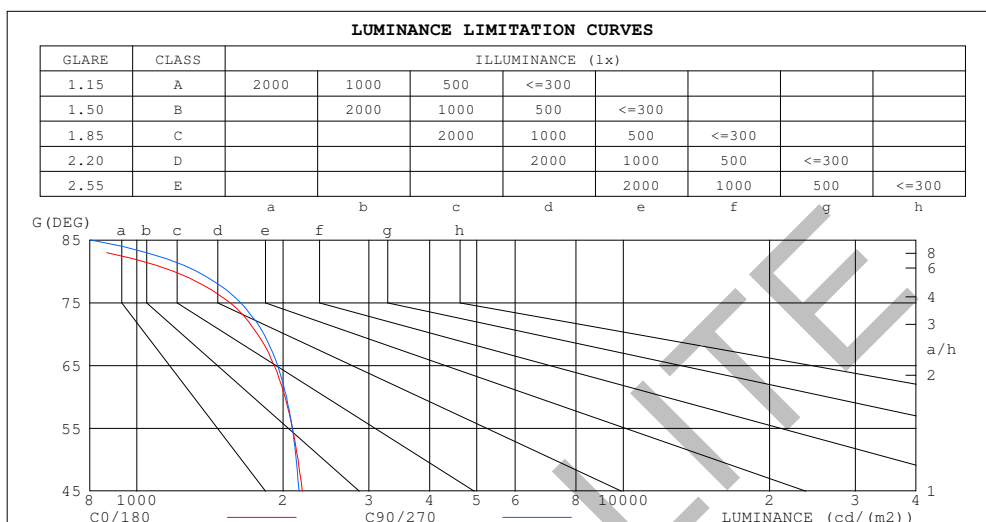
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	226.9	223.9	222.2	222.3	225.0	226.4	226.9	227.7	0- 10	21.71	21.71	3.39,1.25
20	215.5	211.9	210.2	208.9	212.2	213.5	213.5	215.7	10- 20	62.03	83.74	13.1,4.81
30	195.9	193.7	191.9	190.2	192.5	192.9	192.1	195.1	20- 30	93.87	177.6	27.7,10.2
40	169.1	168.7	167.2	165.5	166.2	165.8	164.1	167.6	30- 40	113.0	290.6	45.4,16.7
50	136.7	137.9	137.0	135.4	134.6	133.1	130.8	134.5	40- 50	116.8	407.4	63.6,23.4
60	100.0	102.1	101.8	100.5	98.60	96.33	93.77	97.23	50- 60	104.9	512.3	80,29.4
70	60.07	62.41	62.54	61.67	59.37	56.80	54.86	57.23	60- 70	78.42	590.7	92.3,33.9
80	20.47	22.66	23.11	22.67	20.39	18.86	17.62	18.73	70- 80	41.76	632.5	98.8,36.3
90	0	0.0004	0.0004	0.0060	0	0.0004	0	0	80- 90	7.794	640.3	100,36.8
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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:



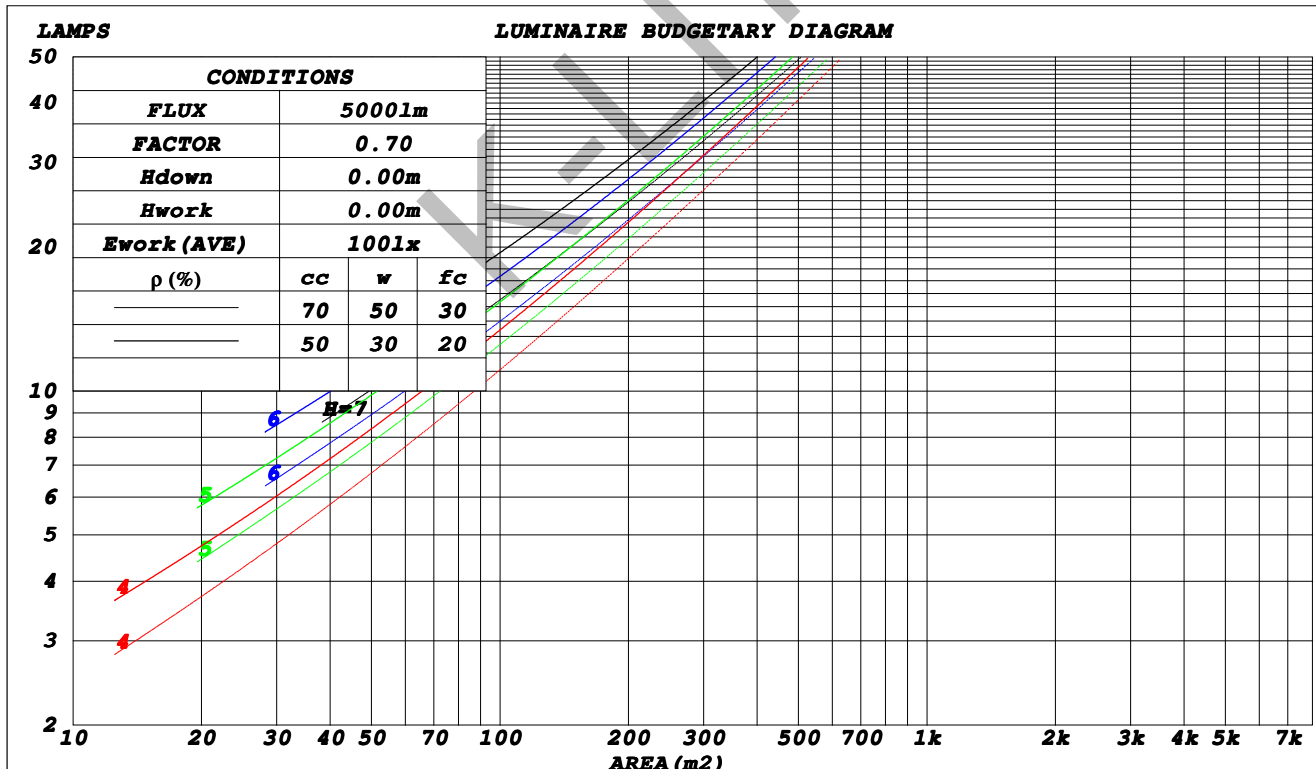
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
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	.44	.44	.44	.43	.43	.43	.41	.41	.41	.39	.39	.39	.38	.38	.38	.37
1.0	.38	.37	.35	.38	.36	.35	.36	.35	.34	.35	.34	.33	.33	.32	.32	.31
2.0	.33	.31	.29	.33	.30	.29	.31	.30	.28	.30	.29	.27	.29	.28	.27	.26
3.0	.29	.26	.24	.29	.26	.24	.28	.25	.23	.27	.25	.23	.26	.24	.23	.22
4.0	.26	.23	.20	.26	.23	.20	.25	.22	.20	.24	.21	.20	.23	.21	.19	.19
5.0	.23	.20	.18	.23	.20	.17	.22	.19	.17	.21	.19	.17	.21	.19	.17	.16
6.0	.21	.18	.15	.21	.17	.15	.20	.17	.15	.19	.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	.11	.16	.13	.11	.15	.13	.11	.15	.12	.11	.14	.12	.11	.10
10.0	.15	.12	.10	.14	.12	.10	.14	.12	.10	.14	.11	.10	.13	.11	.10	.09



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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
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	.110	.063	.020	.108	.061	.020	.103	.059	.019	.098	.057	.018	.094	.055	.018			
2.0	.105	.058	.018	.103	.057	.017	.099	.055	.017	.095	.053	.017	.091	.051	.016			
3.0	.098	.052	.016	.096	.051	.015	.092	.050	.015	.089	.049	.015	.085	.047	.015			
4.0	.091	.047	.014	.089	.046	.014	.085	.045	.014	.082	.044	.013	.079	.043	.013			
5.0	.084	.043	.012	.082	.042	.012	.079	.041	.012	.077	.040	.012	.074	.040	.012			
6.0	.078	.039	.011	.077	.039	.011	.074	.038	.011	.071	.037	.011	.069	.036	.011			
7.0	.073	.036	.010	.071	.036	.010	.069	.035	.010	.067	.034	.010	.065	.034	.010			
8.0	.068	.033	.009	.067	.033	.009	.065	.032	.009	.063	.032	.009	.061	.031	.009			
9.0	.064	.031	.009	.063	.031	.009	.061	.030	.009	.059	.030	.008	.057	.029	.008			
10.0	.060	.029	.008	.059	.028	.008	.057	.028	.008	.056	.028	.008	.054	.027	.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	.070	.070	.070	.060	.060	.060	.041	.041	.041	.023	.023	.023	.008	.008	.008	
1.0	.066	.057	.050	.056	.049	.043	.039	.034	.030	.022	.020	.017	.007	.006	.006	
2.0	.063	.048	.036	.054	.042	.031	.037	.029	.022	.021	.017	.013	.007	.005	.004	
3.0	.060	.042	.028	.052	.036	.024	.035	.025	.017	.020	.015	.010	.007	.005	.003	
4.0	.057	.037	.022	.049	.032	.019	.034	.022	.013	.020	.013	.008	.006	.004	.003	
5.0	.055	.033	.017	.047	.029	.015	.032	.020	.011	.019	.012	.006	.006	.004	.002	
6.0	.052	.030	.014	.045	.026	.013	.031	.018	.009	.018	.011	.005	.006	.004	.002	
7.0	.050	.028	.012	.043	.024	.011	.029	.017	.008	.017	.010	.005	.006	.003	.001	
8.0	.047	.026	.011	.041	.022	.009	.028	.016	.007	.016	.009	.004	.005	.003	.001	
9.0	.045	.024	.009	.039	.021	.008	.027	.014	.006	.016	.009	.003	.005	.003	.001	
10.0	.043	.022	.008	.037	.019	.007	.026	.014	.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: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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
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	13.6	15.2	13.9	15.4	15.6	13.6	15.1	13.9	15.3	15.5
3H	15.1	16.5	15.4	16.7	17.0	15.1	16.5	15.4	16.7	17.0
4H	15.6	16.9	15.9	17.2	17.5	15.7	17.0	16.0	17.3	17.5
6H	15.9	17.2	16.3	17.4	17.7	16.0	17.3	16.4	17.5	17.8
8H	16.0	17.2	16.3	17.5	17.7	16.1	17.3	16.4	17.6	17.9
12H	16.0	17.1	16.3	17.4	17.7	16.1	17.3	16.5	17.6	17.9
4H 2H	14.3	15.6	14.6	15.8	16.1	14.2	15.6	14.6	15.8	16.1
3H	15.9	17.0	16.2	17.3	17.6	15.9	17.1	16.3	17.4	17.7
4H	16.5	17.6	16.9	17.9	18.2	16.6	17.6	17.0	18.0	18.3
6H	16.9	17.9	17.3	18.2	18.6	17.0	18.0	17.4	18.3	18.7
8H	17.0	17.9	17.4	18.3	18.6	17.1	18.0	17.6	18.4	18.8
12H	17.0	17.8	17.5	18.2	18.6	17.2	18.0	17.6	18.4	18.8
8H 4H	16.8	17.6	17.2	18.0	18.4	16.8	17.7	17.2	18.1	18.4
6H	17.3	18.0	17.7	18.4	18.8	17.4	18.1	17.8	18.5	18.9
8H	17.4	18.1	17.9	18.5	18.9	17.6	18.2	18.0	18.6	19.1
12H	17.5	18.0	18.0	18.5	19.0	17.6	18.2	18.1	18.6	19.1
12H 4H	16.8	17.6	17.2	18.0	18.4	16.8	17.6	17.2	18.0	18.4
6H	17.3	18.0	17.8	18.4	18.8	17.4	18.1	17.9	18.5	18.9
8H	17.5	18.0	18.0	18.5	19.0	17.6	18.2	18.1	18.6	19.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

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
 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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:

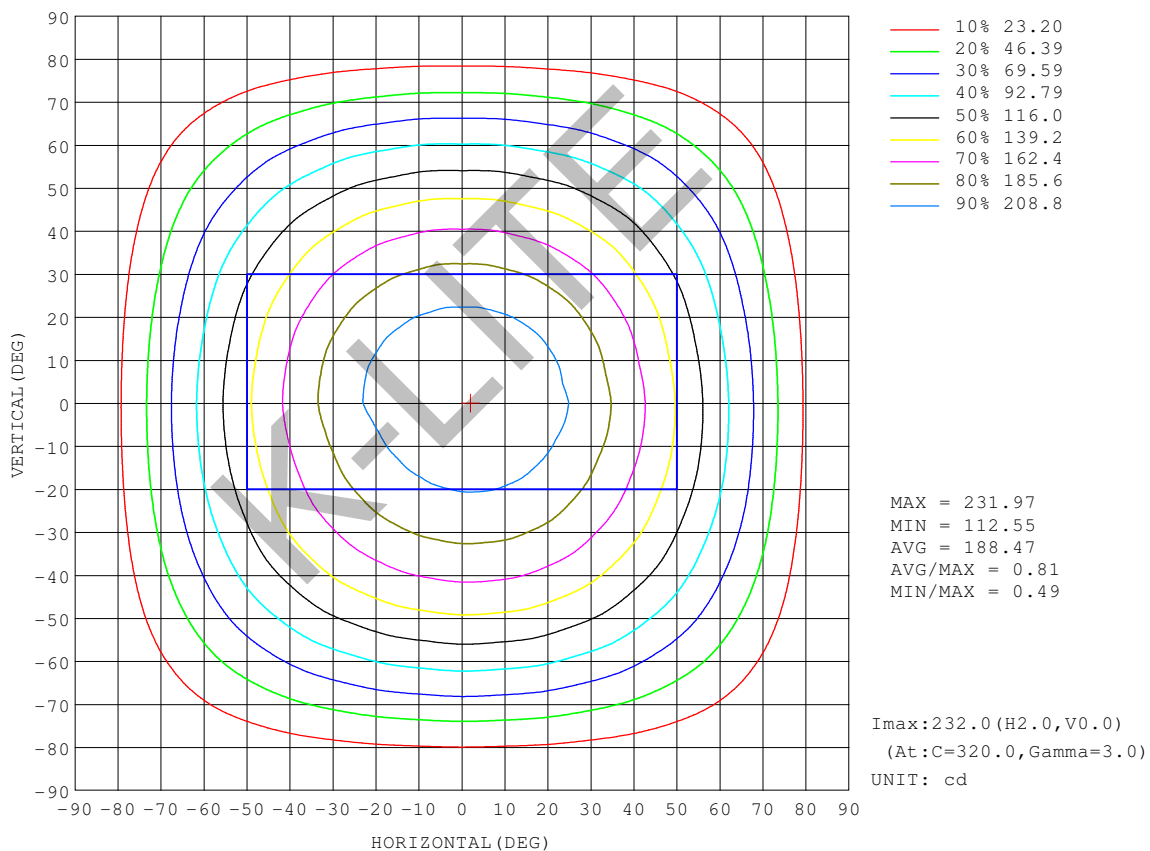
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	21	17	14	21	17	14	21	17	14	12
0.80	25	21	18	25	21	18	24	20	18	15
1.00	28	24	21	28	24	21	27	24	21	19
1.25	31	27	24	30	27	24	29	26	24	21
1.50	33	29	26	32	29	26	31	28	26	23
2.00	35	32	30	34	32	29	33	31	29	26
2.50	37	34	32	36	33	31	34	32	31	28
3.00	38	35	33	37	35	33	35	34	32	29
4.00	39	37	36	38	37	35	37	35	34	31
5.00	40	38	37	39	38	36	38	36	35	32
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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:

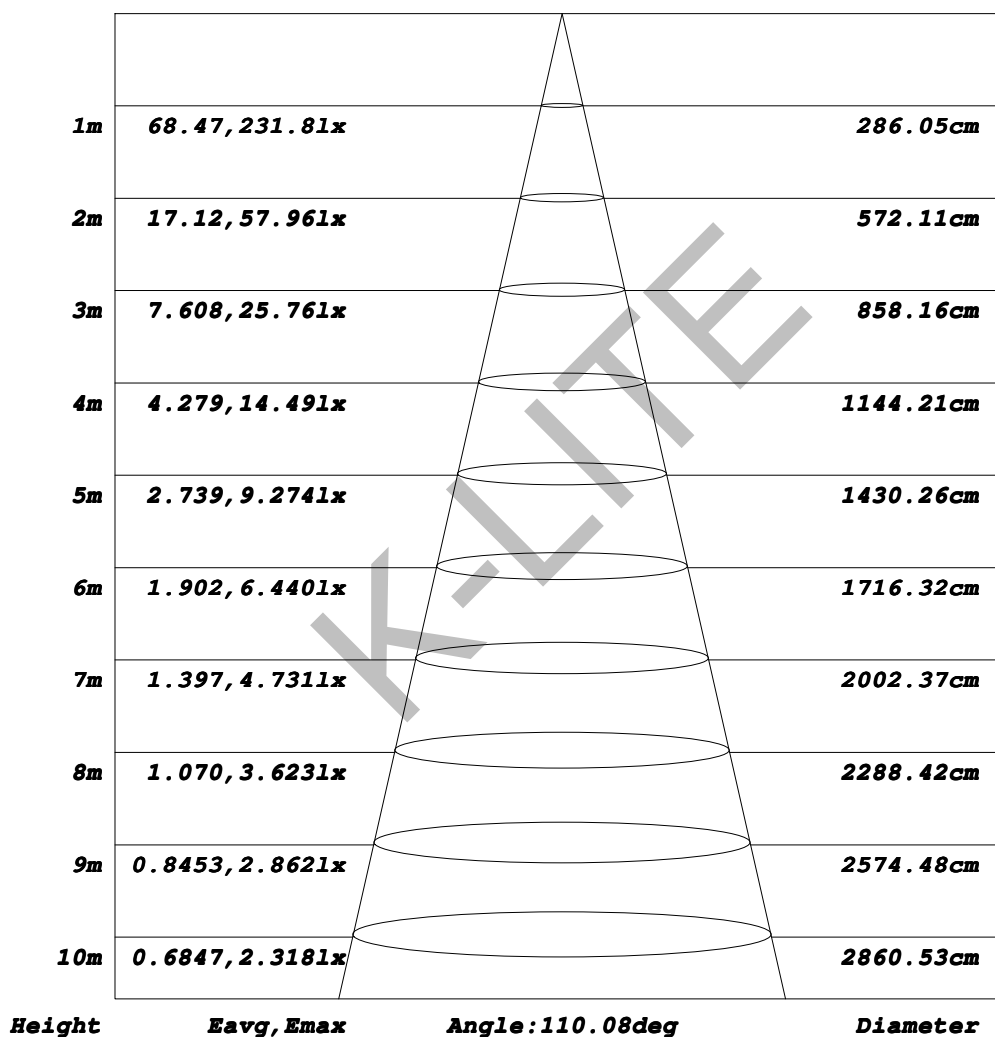


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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:472.8 lm


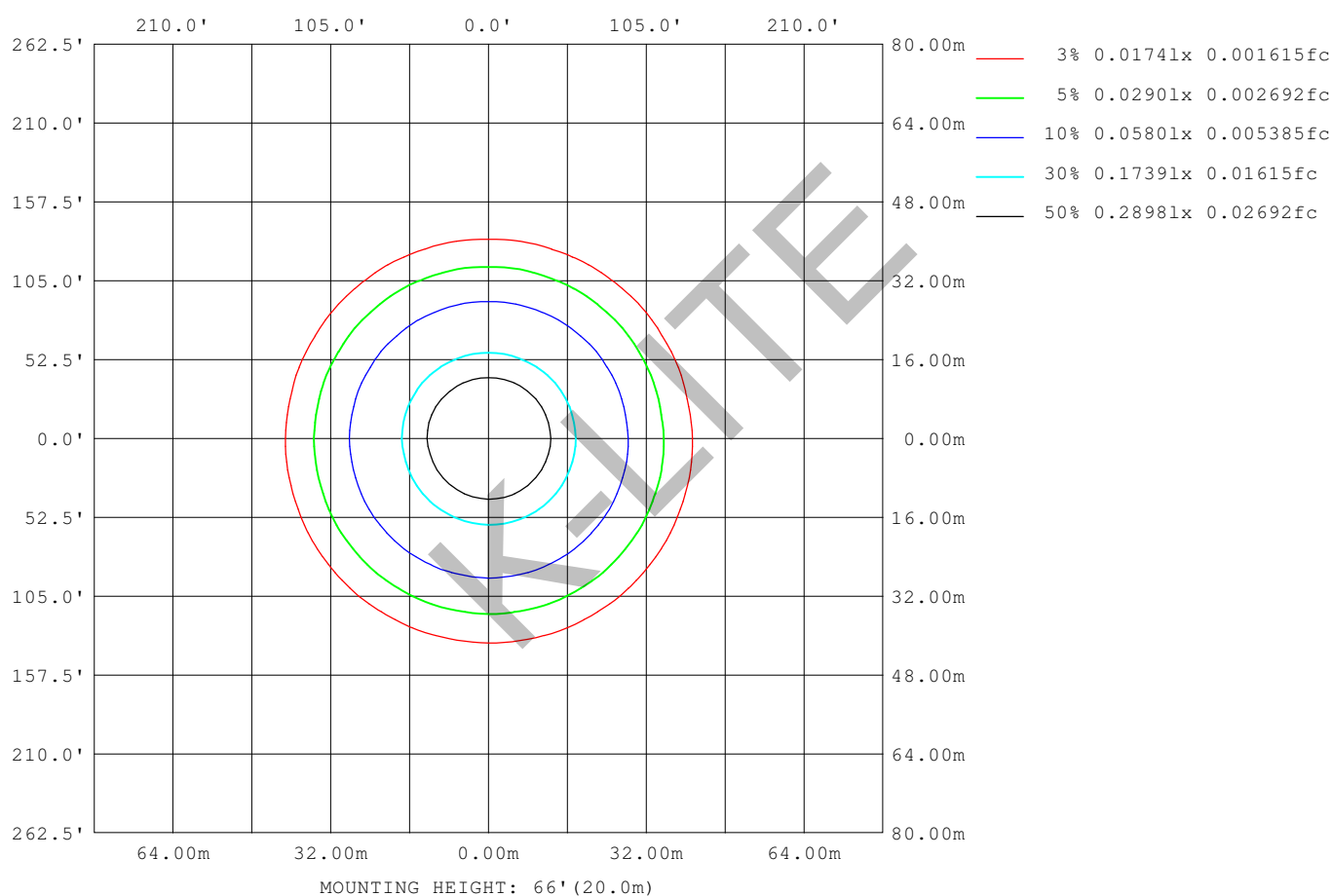
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
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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:230.76V I:0.0537A P:12.146W PF:0.9808 Freq:49.99Hz Lamp Flux:1742.04x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4766
MFR.: K-LITE	SUR.:	Shielding Angle:

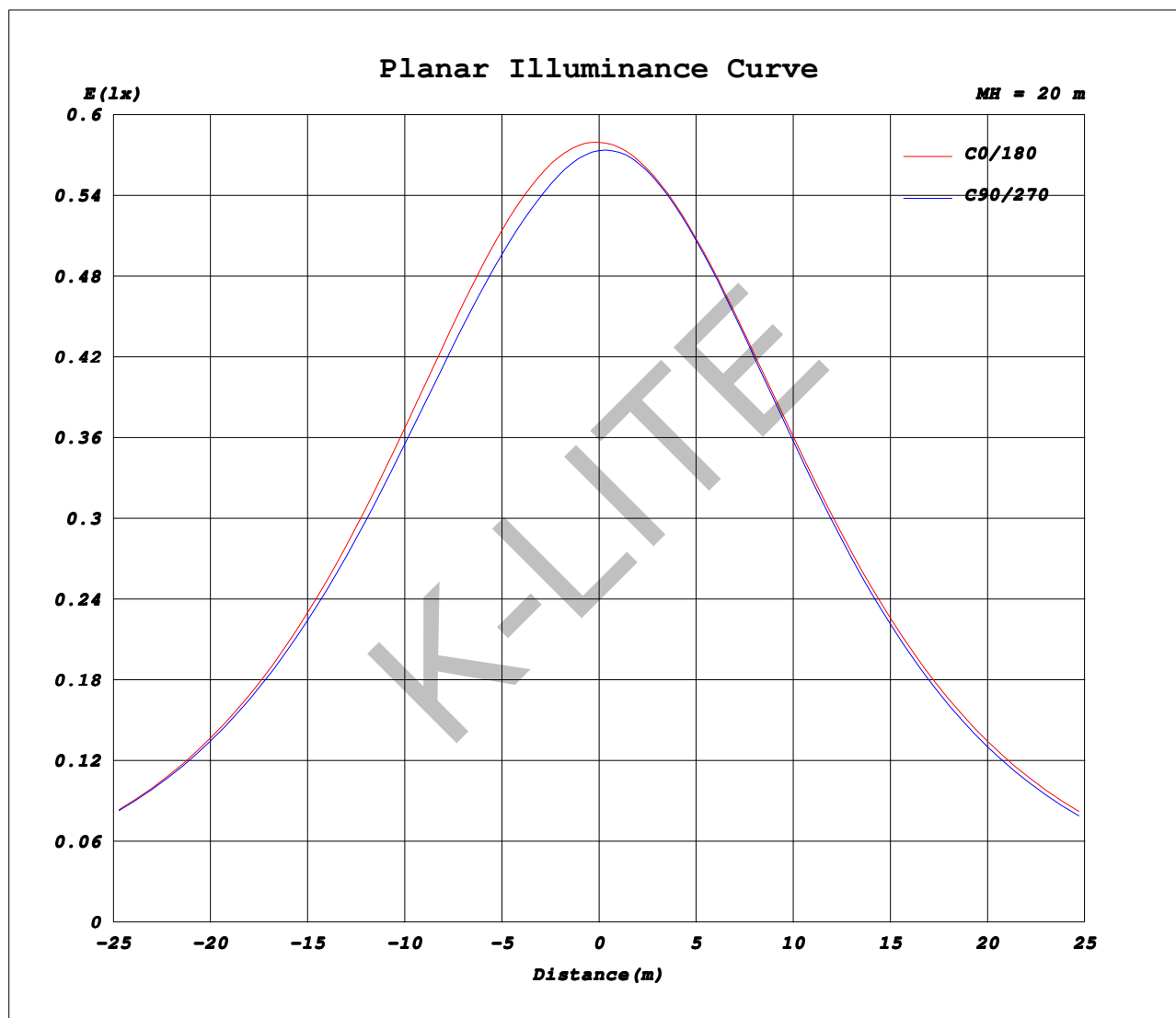
AvgL	cd/m2
L_0~180 (65) av	1888
L_0~180 (75) av	1532
L_0~180 (85) av	608
L_90~270 (65) av	1856
L_90~270 (75) av	1507
L_90~270 (85) av	634
L_45 (65) av	1883
L_45 (75) av	1531
L_45 (85) av	653

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:	31.4%	
Luminaire Power:	12.17 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	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

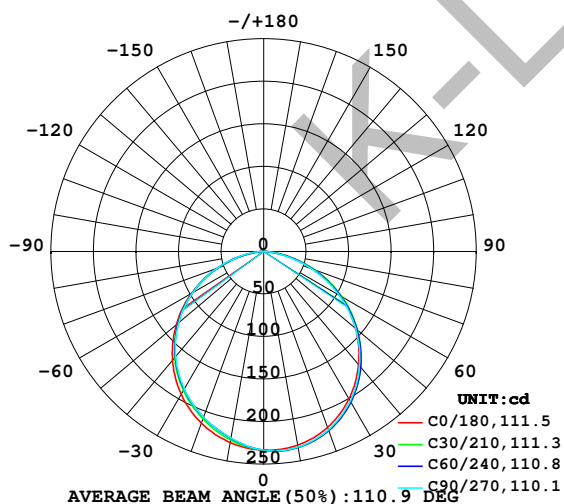
γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

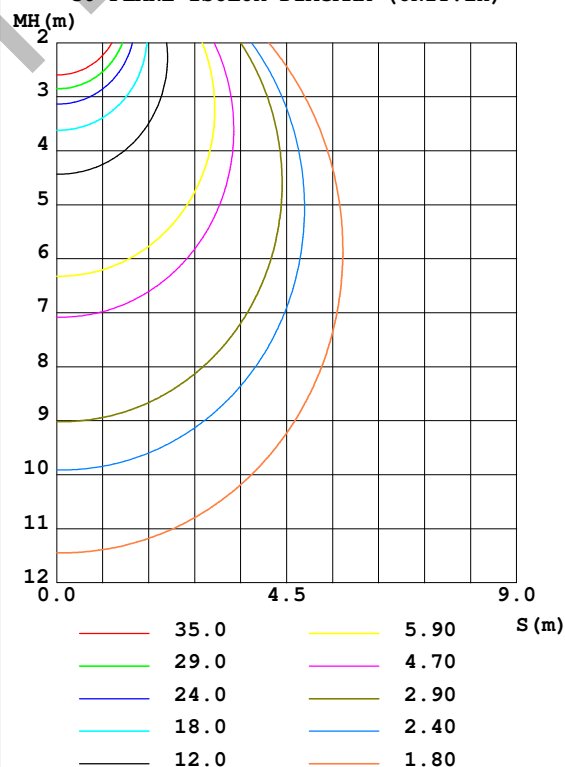
Test:U:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 53.44 lm/W
MODEL	KL-2741	I _{max} (cd)	235.3	S/MH (C0/180)	1.24	
NOMINAL POWER (W)	12	LOR (%)	31.4	S/MH (C90/270)	1.20	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	650.30	η UP, DN (C0-180)	0.0, 16.0	
NOMINAL FLUX (lm)	2073.6	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 15.3	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	31.4	CIBSE SHR MAX	1.35	

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:

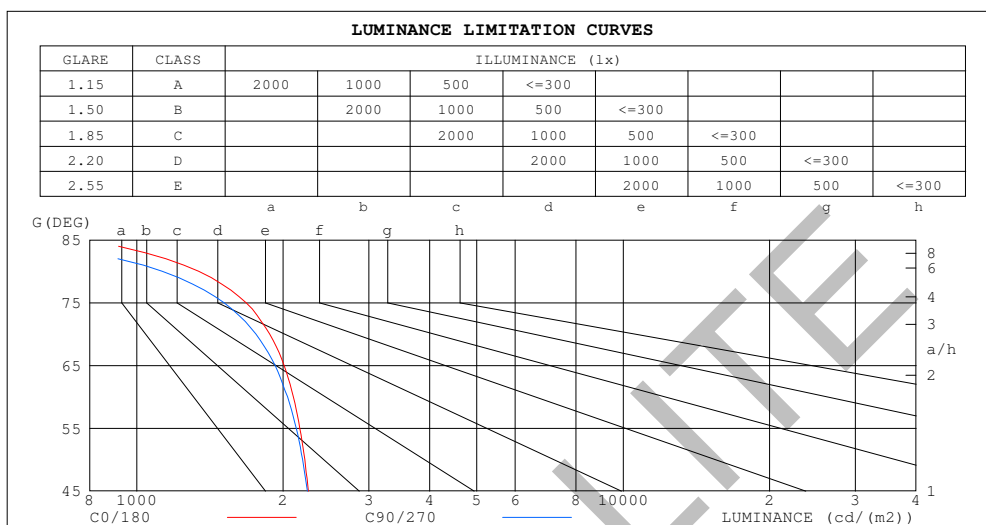
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	231.1	233.9	233.5	231.5	228.0	223.9	222.6	225.9	0- 10	22.07	22.07	3.39,1.06
20	220.0	224.1	222.9	219.6	214.5	208.1	207.3	211.6	10- 20	63.02	85.09	13.1,4.1
30	200.4	205.0	203.2	199.2	194.0	187.9	186.9	192.0	20- 30	95.35	180.4	27.7,8.7
40	173.5	177.8	175.4	171.6	166.8	162.3	161.1	166.6	30- 40	114.8	295.2	45.4,14.2
50	141.1	144.0	141.4	138.2	134.3	131.6	130.5	135.8	40- 50	118.6	413.9	63.6,20
60	104.0	105.4	102.3	100.1	97.51	96.26	96.02	100.5	50- 60	106.5	520.3	80,25.1
70	63.57	63.28	60.29	58.80	57.70	57.88	58.55	61.83	60- 70	79.60	599.9	92.3,28.9
80	23.07	22.04	19.63	18.90	18.67	20.25	21.54	23.19	70- 80	42.38	642.3	98.8,31
90	0.0015	0.0061	0	0.0046	0	0	0.0035	0.0023	80- 90	7.975	650.3	100,31.4
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:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	780	528
80	1341	1127
75	1677	1511
70	1876	1758
65	2007	1924
60	2099	2041
55	2164	2129
50	2215	2193
45	2253	2243

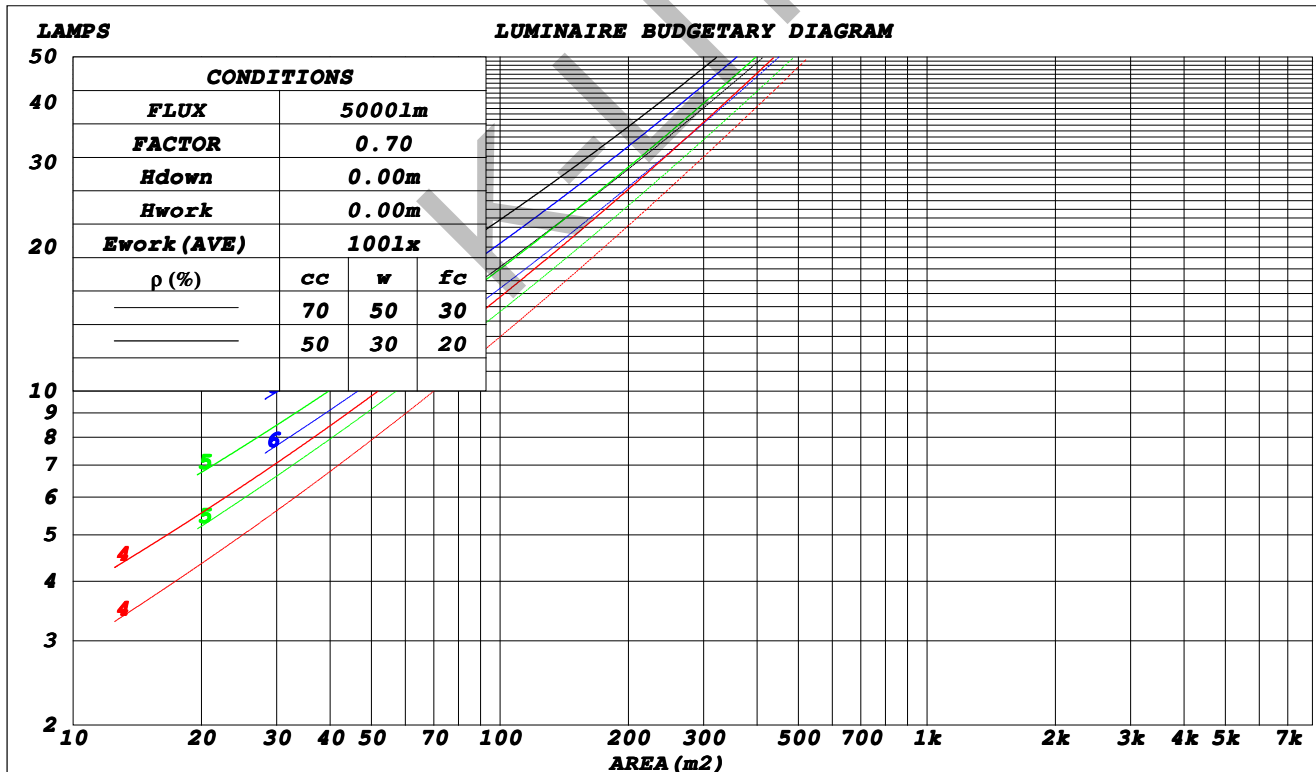
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 12 August 2022

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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
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	.35	.35	.35	.33	.33	.33	.32	.32	.32	.31
1.0	.33	.31	.30	.32	.31	.30	.31	.30	.29	.29	.29	.28	.28	.28	.27	.26
2.0	.29	.26	.25	.28	.26	.24	.27	.25	.24	.26	.24	.23	.25	.24	.23	.22
3.0	.25	.23	.21	.25	.22	.20	.24	.22	.20	.23	.21	.20	.22	.21	.19	.19
4.0	.22	.19	.17	.22	.19	.17	.21	.19	.17	.20	.18	.17	.20	.18	.17	.16
5.0	.20	.17	.15	.19	.17	.15	.19	.16	.15	.18	.16	.15	.18	.16	.14	.14
6.0	.18	.15	.13	.18	.15	.13	.17	.15	.13	.16	.14	.13	.16	.14	.13	.12
7.0	.16	.13	.12	.16	.13	.11	.15	.13	.11	.15	.13	.11	.15	.13	.11	.11
8.0	.15	.12	.10	.15	.12	.10	.14	.12	.10	.14	.12	.10	.13	.11	.10	.09
9.0	.14	.11	.09	.13	.11	.09	.13	.11	.09	.13	.11	.09	.12	.10	.09	.08
10.0	.13	.10	.08	.12	.10	.08	.12	.10	.08	.12	.10	.08	.11	.10	.08	.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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
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	.094	.054	.017	.092	.052	.017	.088	.050	.016	.084	.048	.016	.080	.047	.015			
2.0	.090	.049	.015	.088	.048	.015	.084	.047	.015	.081	.045	.014	.078	.044	.014			
3.0	.083	.044	.013	.082	.044	.013	.079	.043	.013	.076	.041	.013	.073	.040	.012			
4.0	.077	.040	.012	.076	.040	.012	.073	.039	.012	.070	.038	.011	.068	.037	.011			
5.0	.072	.036	.011	.070	.036	.011	.068	.035	.010	.065	.034	.010	.063	.034	.010			
6.0	.067	.033	.010	.065	.033	.009	.063	.032	.009	.061	.032	.009	.059	.031	.009			
7.0	.062	.031	.009	.061	.030	.009	.059	.030	.009	.057	.029	.009	.055	.029	.008			
8.0	.058	.028	.008	.057	.028	.008	.055	.028	.008	.053	.027	.008	.052	.027	.008			
9.0	.054	.026	.007	.053	.026	.007	.052	.026	.007	.050	.025	.007	.049	.025	.007			
10.0	.051	.025	.007	.050	.024	.007	.049	.024	.007	.047	.024	.007	.046	.023	.007			

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	.060	.060	.060	.051	.051	.051	.035	.035	.035	.020	.020	.020	.006	.006	.006	
1.0	.056	.049	.042	.048	.042	.036	.033	.029	.025	.019	.017	.015	.006	.005	.005	
2.0	.054	.041	.031	.046	.036	.027	.032	.025	.019	.018	.014	.011	.006	.005	.004	
3.0	.051	.036	.023	.044	.031	.020	.030	.021	.014	.017	.013	.008	.006	.004	.003	
4.0	.049	.032	.018	.042	.027	.016	.029	.019	.011	.017	.011	.007	.005	.004	.002	
5.0	.047	.028	.015	.040	.025	.013	.028	.017	.009	.016	.010	.005	.005	.003	.002	
6.0	.044	.026	.012	.038	.022	.011	.026	.016	.008	.015	.009	.005	.005	.003	.001	
7.0	.042	.024	.010	.036	.020	.009	.025	.014	.006	.015	.008	.004	.005	.003	.001	
8.0	.040	.022	.009	.035	.019	.008	.024	.013	.006	.014	.008	.003	.005	.003	.001	
9.0	.038	.020	.008	.033	.018	.007	.023	.012	.005	.013	.007	.003	.004	.002	.001	
10.0	.037	.019	.007	.032	.016	.006	.022	.012	.004	.013	.007	.003	.004	.002	.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:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm										
NAME: SUDO - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:4770		
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	13.3	14.8	13.5	15.0	15.2	13.1	14.7	13.4	14.9	15.1
3H	14.7	16.1	15.0	16.4	16.6	14.5	15.9	14.8	16.2	16.4
4H	15.3	16.6	15.6	16.9	17.1	15.0	16.3	15.3	16.6	16.8
6H	15.6	16.9	15.9	17.1	17.4	15.3	16.5	15.6	16.8	17.1
8H	15.7	16.9	16.0	17.2	17.5	15.3	16.5	15.6	16.8	17.1
12H	15.7	16.8	16.0	17.1	17.4	15.3	16.4	15.6	16.7	17.0
4H 2H	13.9	15.2	14.2	15.4	15.7	13.8	15.1	14.1	15.3	15.6
3H	15.5	16.7	15.9	17.0	17.3	15.3	16.5	15.7	16.8	17.1
4H	16.2	17.2	16.5	17.5	17.9	15.9	17.0	16.3	17.3	17.6
6H	16.6	17.5	17.0	17.9	18.2	16.3	17.2	16.7	17.5	17.9
8H	16.7	17.6	17.1	17.9	18.3	16.3	17.2	16.7	17.6	18.0
12H	16.7	17.5	17.1	17.9	18.3	16.3	17.1	16.8	17.5	17.9
8H 4H	16.4	17.2	16.8	17.6	18.0	16.1	17.0	16.6	17.4	17.8
6H	16.9	17.6	17.4	18.0	18.5	16.6	17.3	17.0	17.7	18.2
8H	17.1	17.7	17.5	18.1	18.6	16.7	17.4	17.2	17.8	18.2
12H	17.1	17.7	17.6	18.1	18.6	16.8	17.3	17.2	17.7	18.2
12H 4H	16.4	17.2	16.8	17.5	17.9	16.1	16.9	16.6	17.3	17.7
6H	16.9	17.6	17.4	18.0	18.4	16.6	17.3	17.1	17.7	18.1
8H	17.1	17.7	17.6	18.1	18.6	16.8	17.3	17.2	17.8	18.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:

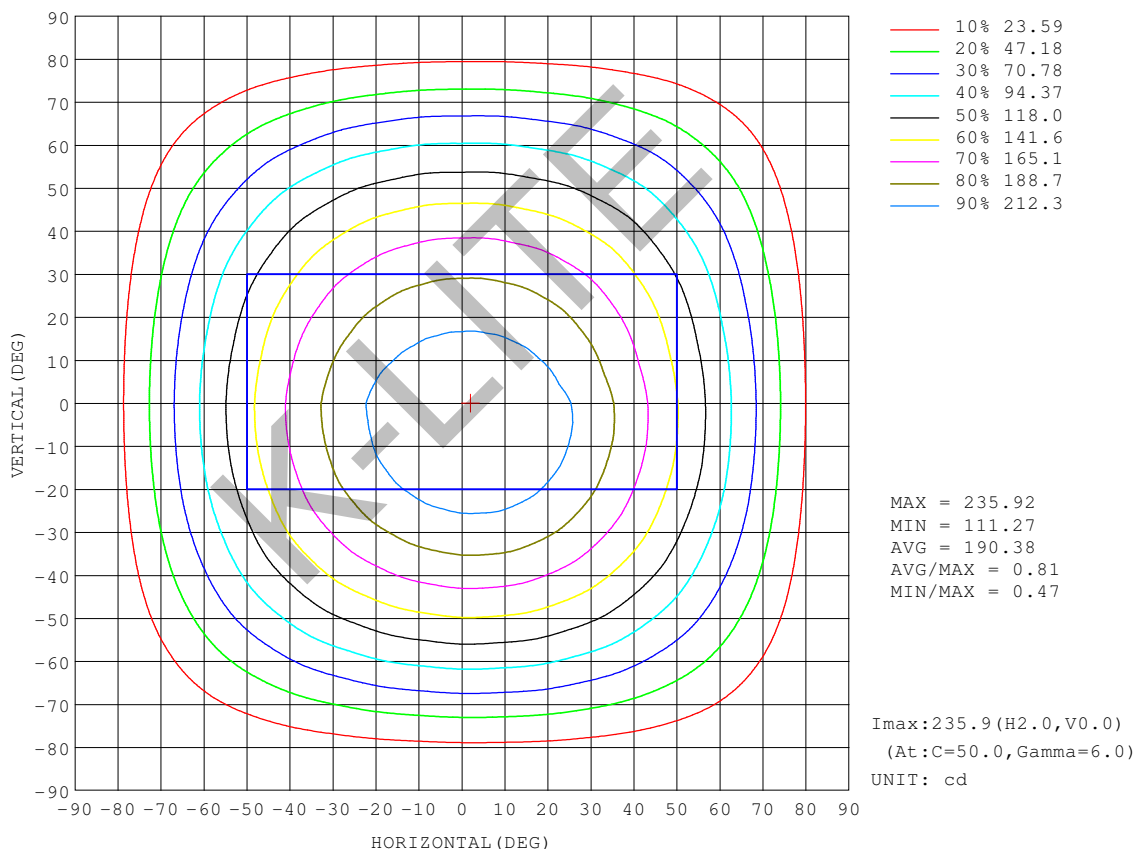
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	18	15	12	18	14	12	18	14	12	10
0.80	21	18	15	21	18	15	20	17	15	13
1.00	24	21	18	24	20	18	23	21	18	16
1.25	26	23	21	26	23	21	25	22	20	18
1.50	28	25	23	27	24	22	26	24	22	20
2.00	30	27	25	29	27	25	28	26	25	22
2.50	31	29	27	31	28	27	29	28	26	23
3.00	32	30	28	32	30	28	30	29	27	25
4.00	33	32	30	33	31	30	31	30	29	26
5.00	34	33	31	33	32	31	32	31	30	27
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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:

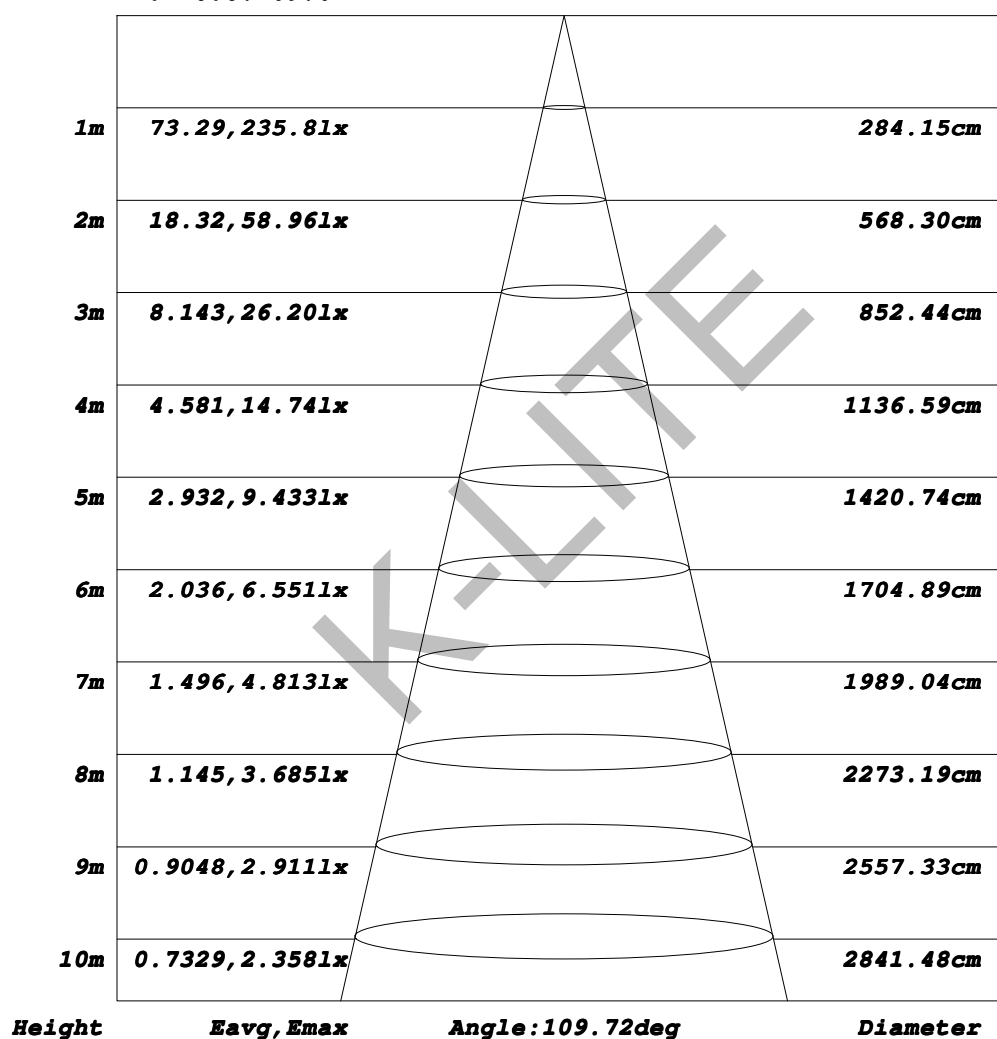


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:12 August 2022

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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:469.6 lm


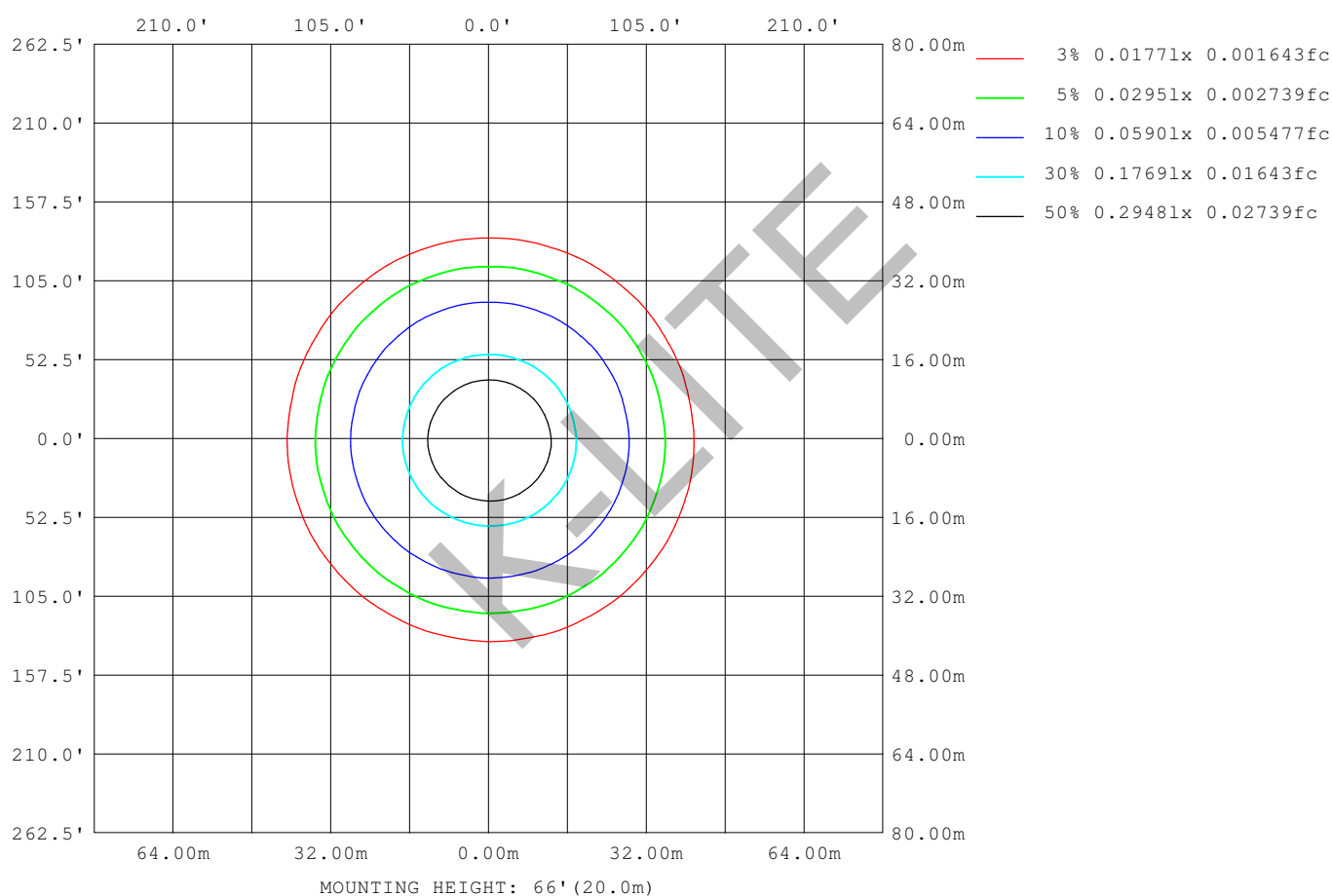
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
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:230.77V I:0.0538A P:12.168W PF:0.9809 Freq:49.98Hz Lamp Flux:2073.6x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4770
MFR.: K-LITE	SUR.:	Shielding Angle:

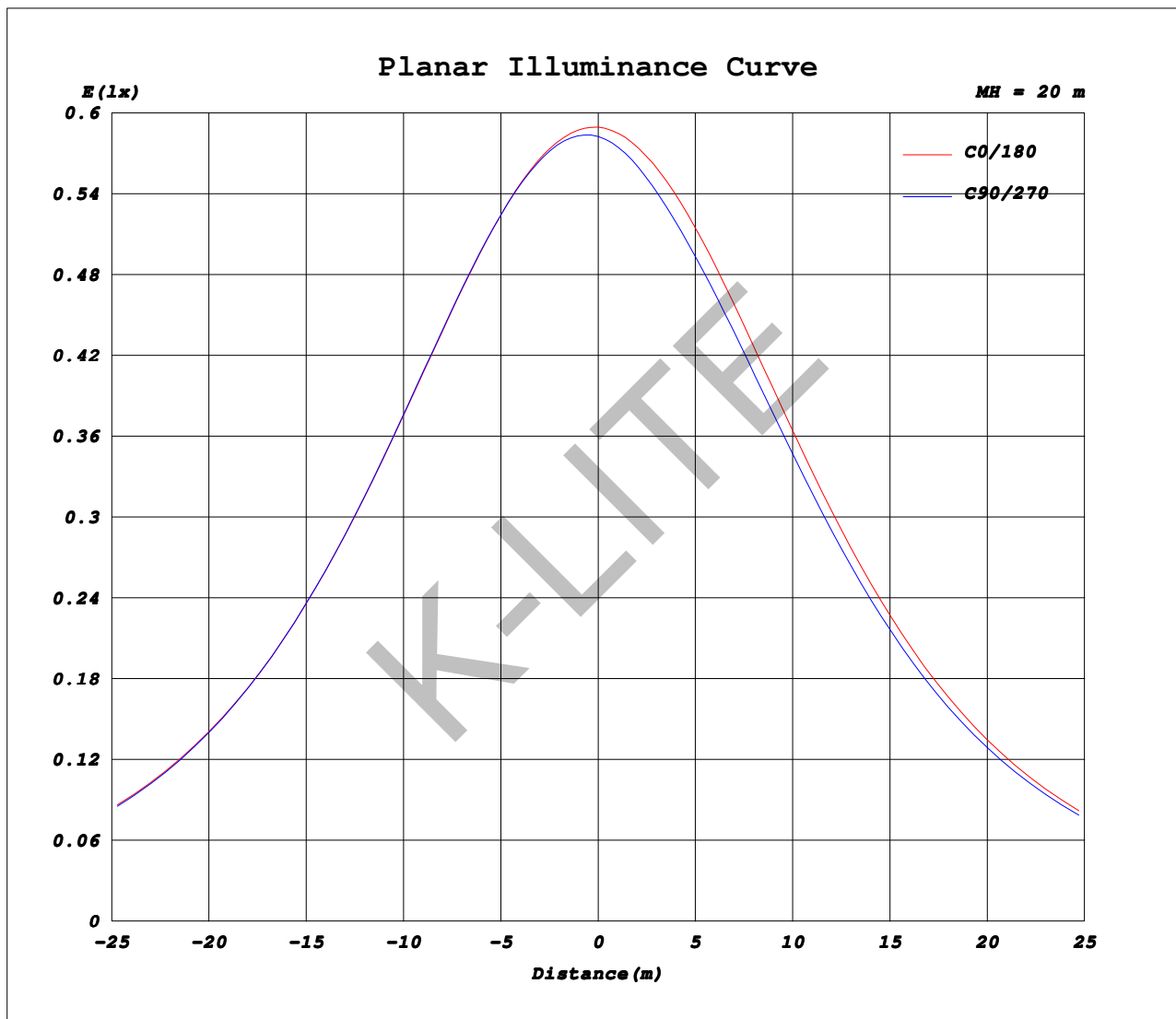
AvgL	cd/m2
L_0~180 (65) av	1916
L_0~180 (75) av	1556
L_0~180 (85) av	627
L_90~270 (65) av	1882
L_90~270 (75) av	1524
L_90~270 (85) av	639
L_45 (65) av	1912
L_45 (75) av	1555
L_45 (85) av	673

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:	29.4%	
Luminaire Power:	11.56 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 07 May 2022

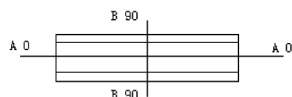
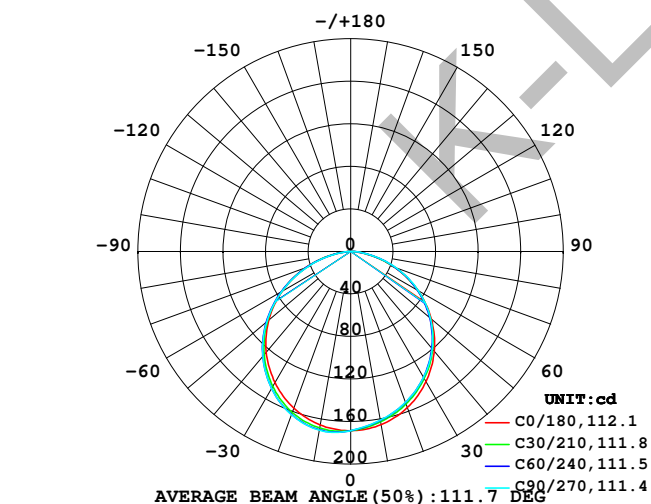
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

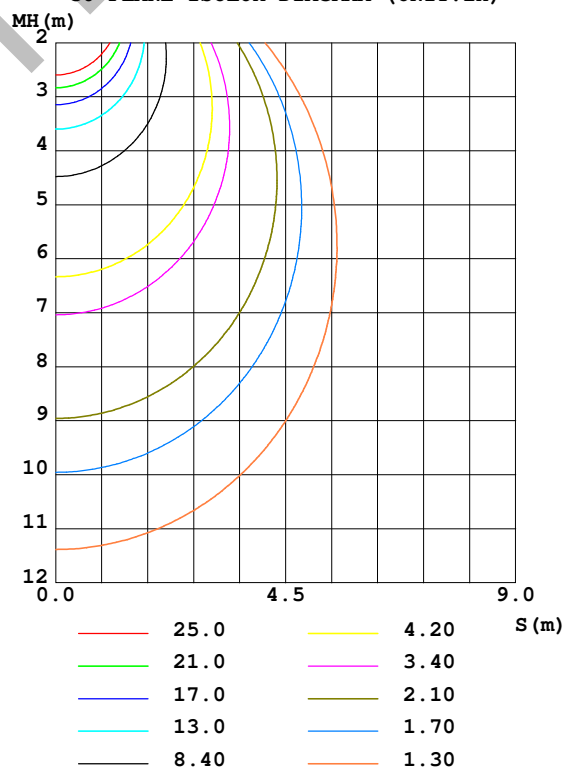
Test:U:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 41.22 lm/W
MODEL	KL-2741	I _{max} (cd)	171.1	S/MH (C0/180)	1.26	
NOMINAL POWER (W)	12	LOR (%)	29.4	S/MH (C90/270)	1.30	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	476.46	η UP, DN (C0-180)	0.0, 14.5	
NOMINAL FLUX (lm)	1620	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 14.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	29.4	CIBSE SHR MAX	1.35	

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: 07 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:

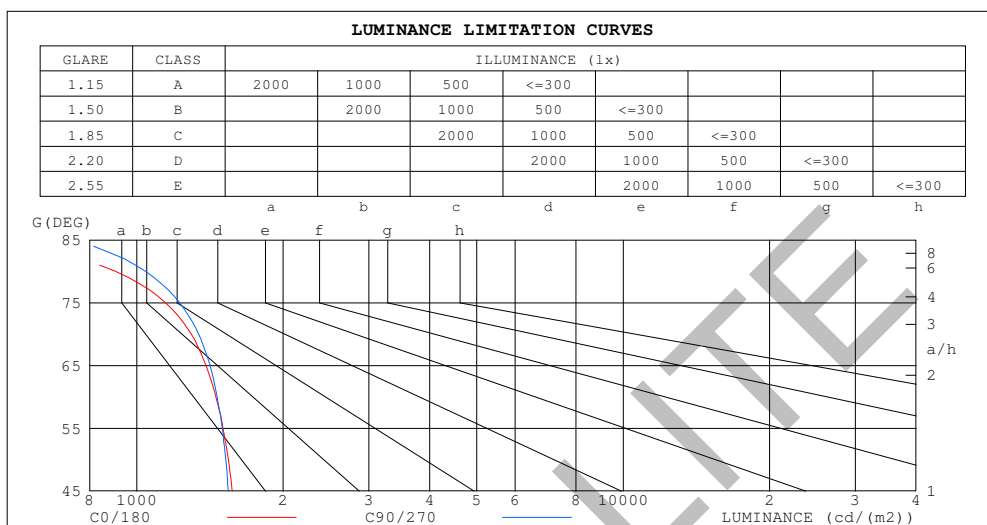
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	165.4	161.8	161.0	162.2	165.6	169.6	170.6	169.4	0- 10	15.95	15.95	3.35, 0.98
20	156.2	151.7	151.0	152.3	156.7	162.1	163.3	161.7	10- 20	45.72	61.67	12.9, 3.81
30	141.6	137.3	136.9	138.2	142.4	147.7	148.9	147.1	20- 30	69.29	131.0	27.5, 8.08
40	122.3	119.3	119.3	120.3	123.7	127.8	128.5	126.9	30- 40	83.55	214.5	45, 13.2
50	99.14	97.49	97.90	98.61	100.7	103.1	103.1	102.1	40- 50	86.63	301.1	63.2, 18.6
60	72.76	72.49	73.17	73.55	74.21	74.98	74.41	73.99	50- 60	78.01	379.2	79.6, 23.4
70	44.27	44.93	45.83	45.95	45.26	44.91	44.00	43.95	60- 70	58.78	437.9	91.9, 27
80	15.69	17.13	18.08	17.84	16.35	15.51	14.68	14.87	70- 80	31.98	469.9	98.6, 29
90	0.0041	0.1331	0.2973	0.1767	0.0033	0.0096	0.0060	0.0100	80- 90	6.552	476.5	100, 29.4
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: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	500	743
80	904	1041
75	1145	1225
70	1294	1341
65	1387	1415
60	1455	1464
55	1504	1499
50	1542	1524
45	1572	1543

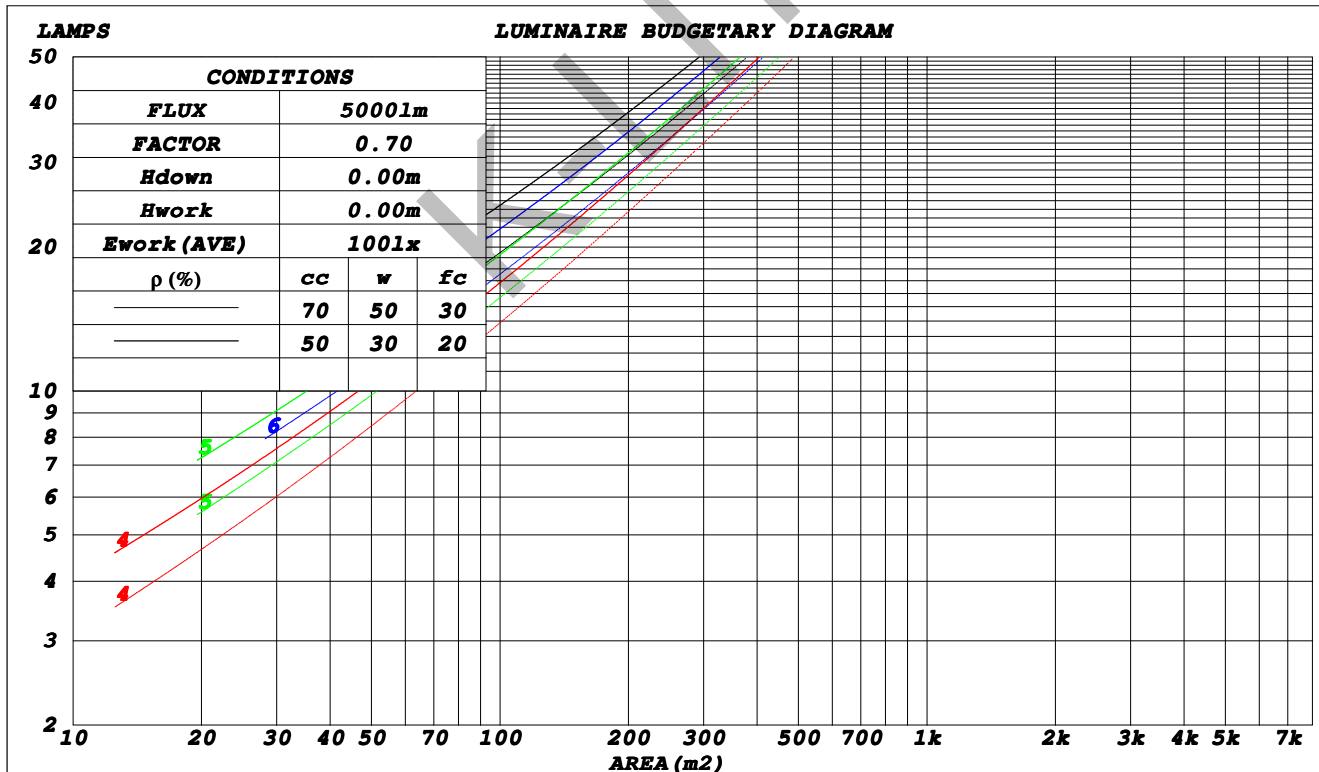
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 07 May 2022

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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
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	.35	.35	.35	.34	.34	.34	.33	.33	.33	.31	.31	.31	.30	.30	.30	.29
1.0	.31	.29	.28	.30	.29	.28	.29	.28	.27	.28	.27	.26	.27	.26	.25	.25
2.0	.27	.25	.23	.26	.24	.23	.25	.24	.22	.24	.23	.22	.23	.22	.21	.21
3.0	.23	.21	.19	.23	.21	.19	.22	.20	.19	.21	.20	.18	.21	.19	.18	.17
4.0	.21	.18	.16	.20	.18	.16	.20	.18	.16	.19	.17	.16	.18	.17	.15	.15
5.0	.19	.16	.14	.18	.16	.14	.18	.15	.14	.17	.15	.14	.16	.15	.13	.13
6.0	.17	.14	.12	.16	.14	.12	.16	.14	.12	.15	.13	.12	.15	.13	.12	.11
7.0	.15	.13	.11	.15	.12	.11	.14	.12	.11	.14	.12	.11	.14	.12	.10	.10
8.0	.14	.11	.10	.14	.11	.10	.13	.11	.09	.13	.11	.09	.12	.11	.09	.09
9.0	.13	.10	.09	.12	.10	.09	.12	.10	.09	.12	.10	.08	.12	.10	.08	.08
10.0	.12	.09	.08	.12	.09	.08	.11	.09	.08	.11	.09	.08	.11	.09	.08	.07



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
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	.089	.051	.016	.087	.050	.016	.083	.048	.015	.080	.046	.015	.076	.044	.014		
2.0	.085	.046	.014	.083	.046	.014	.079	.044	.014	.076	.043	.013	.073	.041	.013		
3.0	.079	.042	.013	.077	.041	.012	.074	.040	.012	.071	.039	.012	.069	.038	.012		
4.0	.073	.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	.032	.010	.059	.032	.010		
6.0	.063	.031	.009	.061	.031	.009	.059	.030	.009	.057	.030	.009	.055	.029	.009		
7.0	.058	.029	.008	.057	.029	.008	.055	.028	.008	.054	.027	.008	.052	.027	.008		
8.0	.054	.027	.007	.054	.026	.007	.052	.026	.007	.050	.025	.007	.049	.025	.007		
9.0	.051	.025	.007	.050	.024	.007	.049	.024	.007	.047	.024	.007	.046	.023	.007		
10.0	.048	.023	.006	.047	.023	.006	.046	.022	.006	.045	.022	.006	.043	.022	.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	.056	.056	.056	.048	.048	.048	.033	.033	.033	.019	.019	.019	.006	.006	.006		
1.0	.053	.046	.040	.045	.039	.034	.031	.027	.024	.018	.016	.014	.006	.005	.004		
2.0	.051	.039	.029	.043	.033	.025	.030	.023	.017	.017	.013	.010	.005	.004	.003		
3.0	.048	.034	.022	.041	.029	.019	.028	.020	.013	.016	.012	.008	.005	.004	.003		
4.0	.046	.030	.017	.039	.026	.015	.027	.018	.011	.016	.010	.006	.005	.003	.002		
5.0	.044	.027	.014	.038	.023	.012	.026	.016	.009	.015	.009	.005	.005	.003	.002		
6.0	.042	.024	.012	.036	.021	.010	.025	.015	.007	.014	.009	.004	.005	.003	.001		
7.0	.040	.022	.010	.034	.019	.009	.024	.013	.006	.014	.008	.004	.004	.003	.001		
8.0	.038	.020	.008	.033	.018	.007	.023	.012	.005	.013	.007	.003	.004	.002	.001		
9.0	.036	.019	.007	.031	.016	.006	.022	.012	.005	.013	.007	.003	.004	.002	.001		
10.0	.034	.018	.007	.030	.015	.006	.021	.011	.004	.012	.006	.002	.004	.002	.001		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm										
NAME: SUDO - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:CW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:4531		
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	12.6	14.1	12.8	14.3	14.5	12.5	14.1	12.8	14.3	14.5
3H	14.0	15.4	14.3	15.7	15.9	14.1	15.5	14.4	15.7	16.0
4H	14.6	15.9	14.9	16.2	16.4	14.7	16.0	15.0	16.3	16.5
6H	14.9	16.2	15.3	16.4	16.7	15.1	16.3	15.4	16.6	16.9
8H	15.0	16.2	15.3	16.5	16.8	15.2	16.4	15.5	16.7	17.0
12H	15.0	16.1	15.3	16.4	16.7	15.2	16.4	15.6	16.7	17.0
4H 2H	13.2	14.5	13.5	14.8	15.0	13.2	14.5	13.5	14.7	15.0
3H	14.8	16.0	15.2	16.3	16.6	14.9	16.1	15.2	16.3	16.6
4H	15.5	16.6	15.9	16.9	17.2	15.6	16.7	16.0	17.0	17.3
6H	15.9	16.9	16.3	17.2	17.6	16.1	17.1	16.5	17.4	17.8
8H	16.0	16.9	16.4	17.3	17.7	16.3	17.1	16.7	17.5	17.9
12H	16.1	16.9	16.5	17.3	17.7	16.3	17.1	16.8	17.5	17.9
8H 4H	15.8	16.6	16.2	17.0	17.4	15.8	16.7	16.3	17.1	17.5
6H	16.3	17.0	16.8	17.4	17.9	16.5	17.2	16.9	17.6	18.0
8H	16.5	17.1	16.9	17.5	18.0	16.7	17.3	17.2	17.8	18.2
12H	16.5	17.1	17.0	17.5	18.0	16.8	17.4	17.3	17.8	18.3
12H 4H	15.8	16.6	16.2	16.9	17.4	15.8	16.6	16.3	17.0	17.4
6H	16.4	17.0	16.8	17.4	17.9	16.5	17.2	17.0	17.6	18.0
8H	16.5	17.1	17.0	17.5	18.0	16.8	17.3	17.2	17.8	18.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1620 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.7$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:

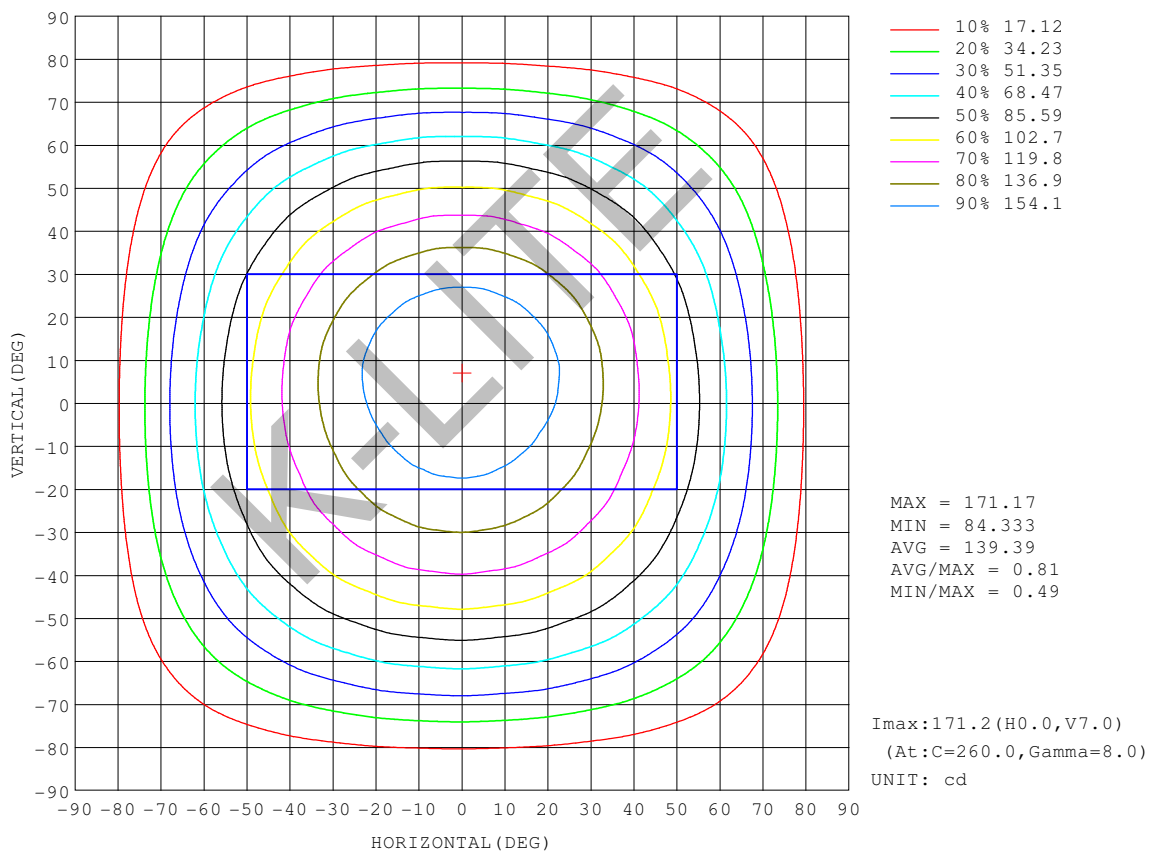
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	17	14	12	17	13	11	16	13	11	10
0.80	20	17	14	20	16	14	19	16	14	12
1.00	22	19	17	22	19	17	21	19	17	15
1.25	25	21	19	24	21	19	23	21	19	17
1.50	26	23	21	26	23	21	25	22	21	18
2.00	28	26	24	27	25	23	26	25	23	21
2.50	29	27	25	29	27	25	27	26	24	22
3.00	30	28	27	30	28	26	28	27	26	23
4.00	31	30	28	31	29	28	29	28	27	25
5.00	32	31	29	31	30	29	30	29	28	25
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: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:



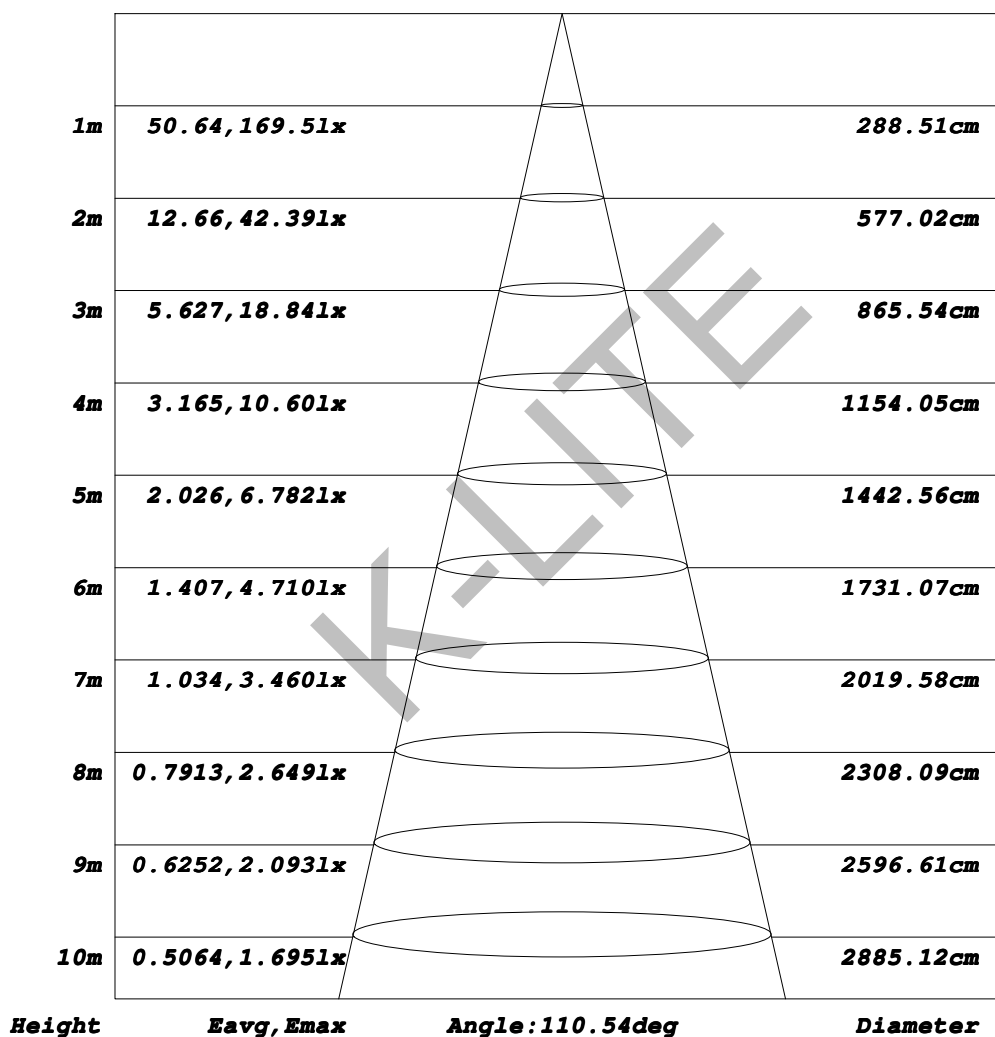
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:07 May 2022

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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:349.7 lm



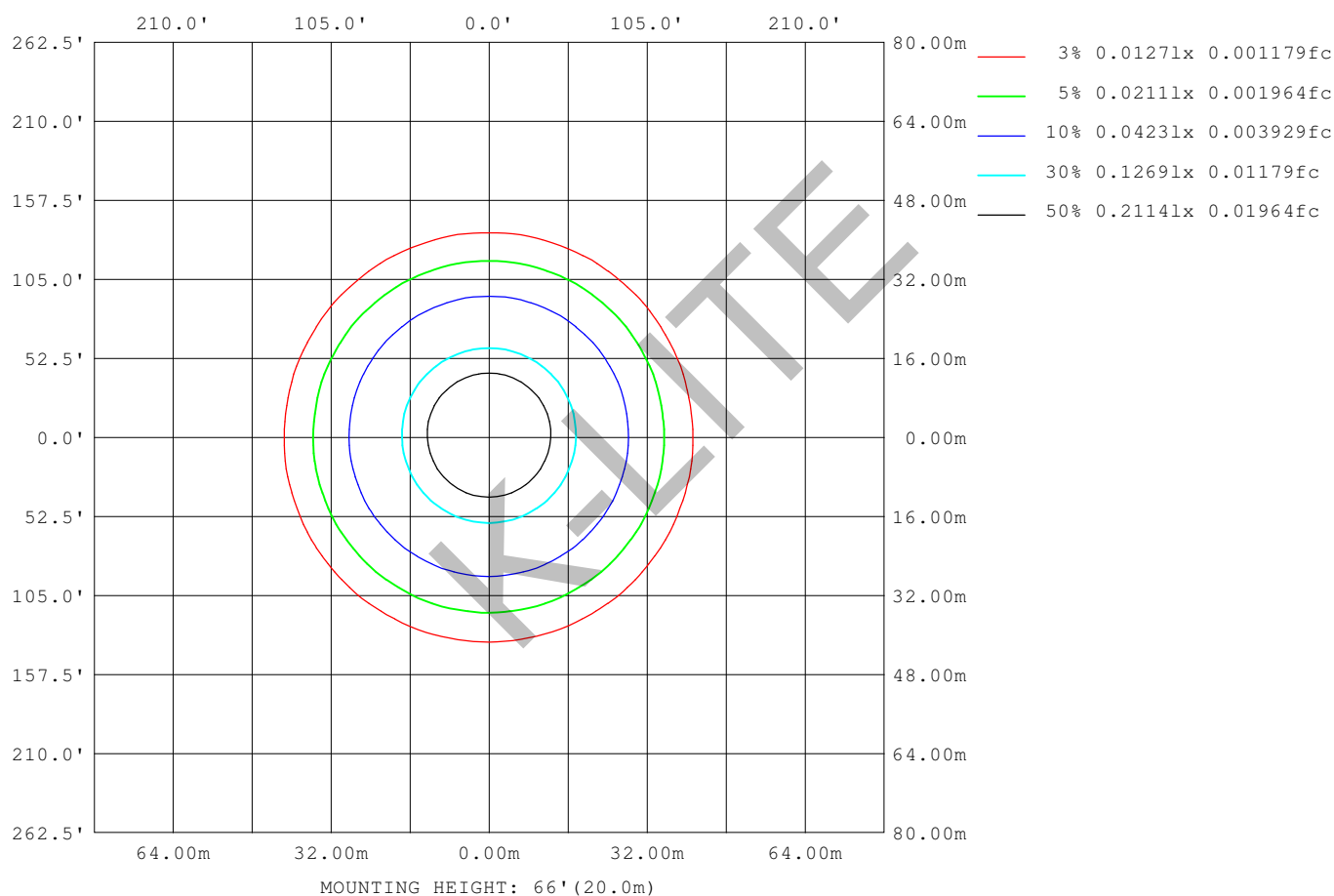
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
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: 07 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:230.53V I:0.0515A P:11.559W PF:0.9746 Freq:49.99Hz Lamp Flux:1620x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:4531
MFR.: K-LITE	SUR.:	Shielding Angle:

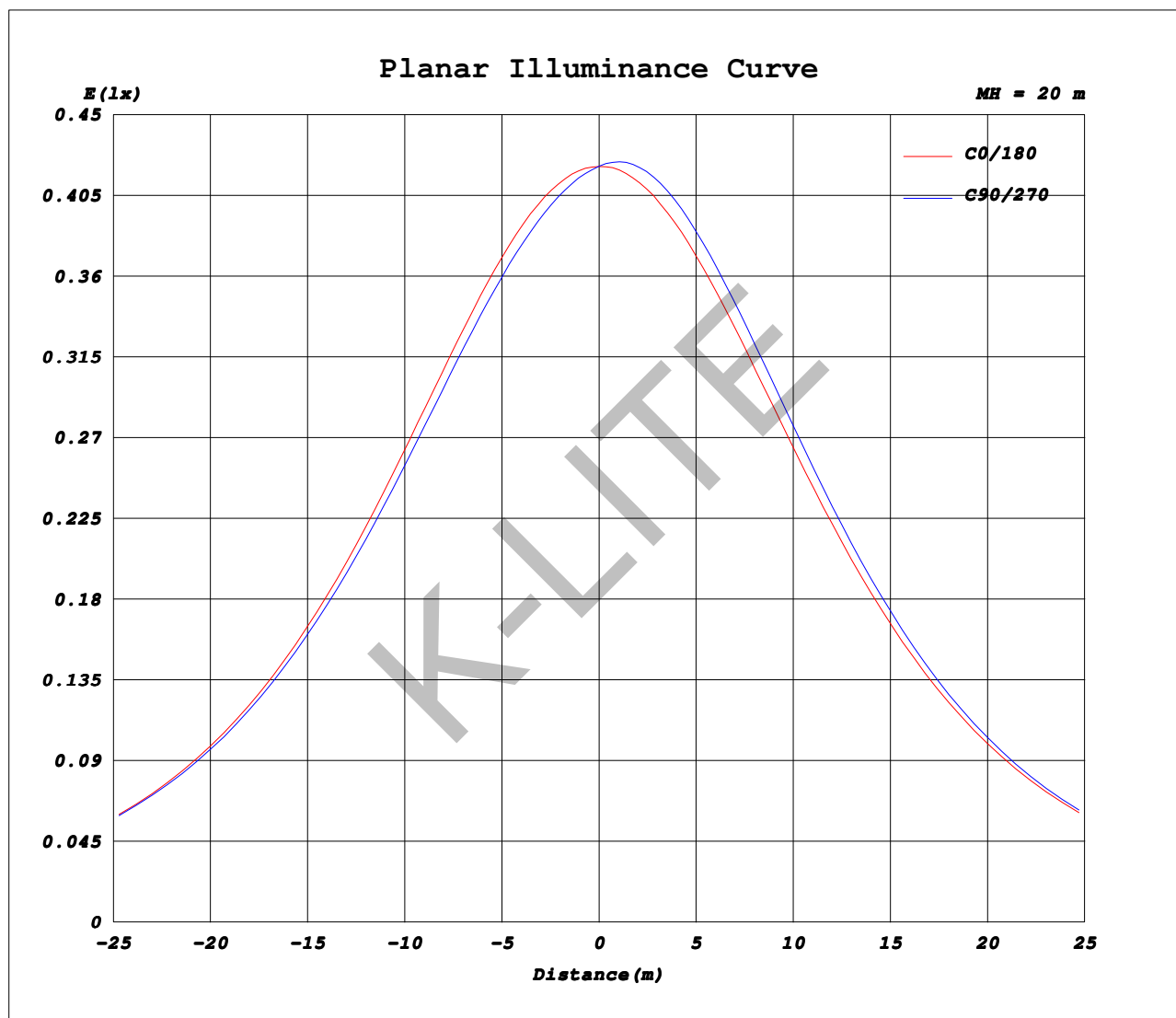
AvgL	cd/m2
L_0~180 (65) av	1403
L_0~180 (75) av	1162
L_0~180 (85) av	519
L_90~270 (65) av	1407
L_90~270 (75) av	1169
L_90~270 (85) av	587
L_45 (65) av	1408
L_45 (75) av	1169
L_45 (85) av	575

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 07 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: 07 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:

```

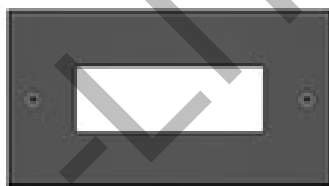
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

```

```

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:	25.5%	
Luminaire Power:	6.299 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	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

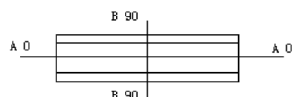
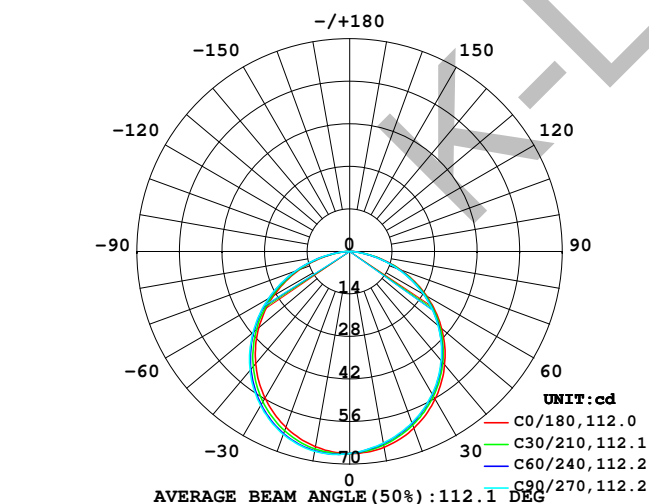
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

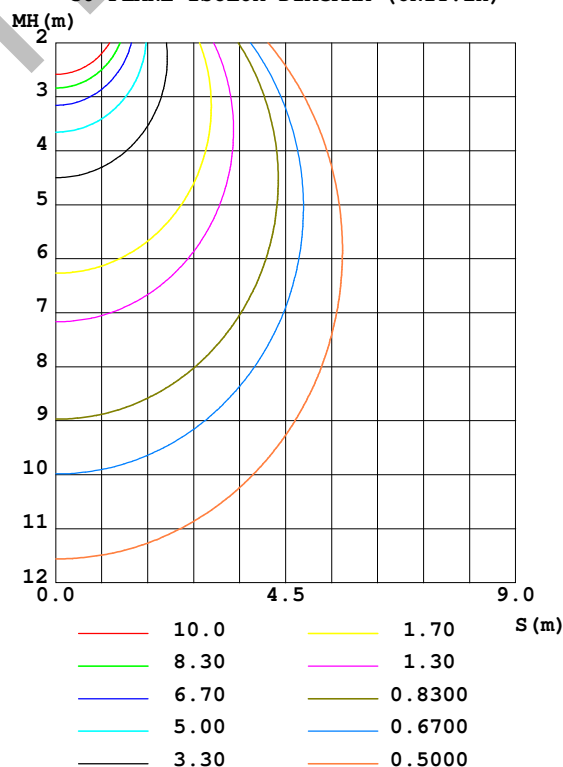
Test:U:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 29.93 lm/W
MODEL	KL-2745	I _{max} (cd)	67.07	S/MH (C0/180)	1.25	
NOMINAL POWER (W)	6	LOR (%)	25.5	S/MH (C90/270)	1.30	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	188.53	η UP, DN (C0-180)	0.0, 12.4	
NOMINAL FLUX (lm)	740	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 13.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	25.5	CIBSE SHR MAX	1.35	

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:

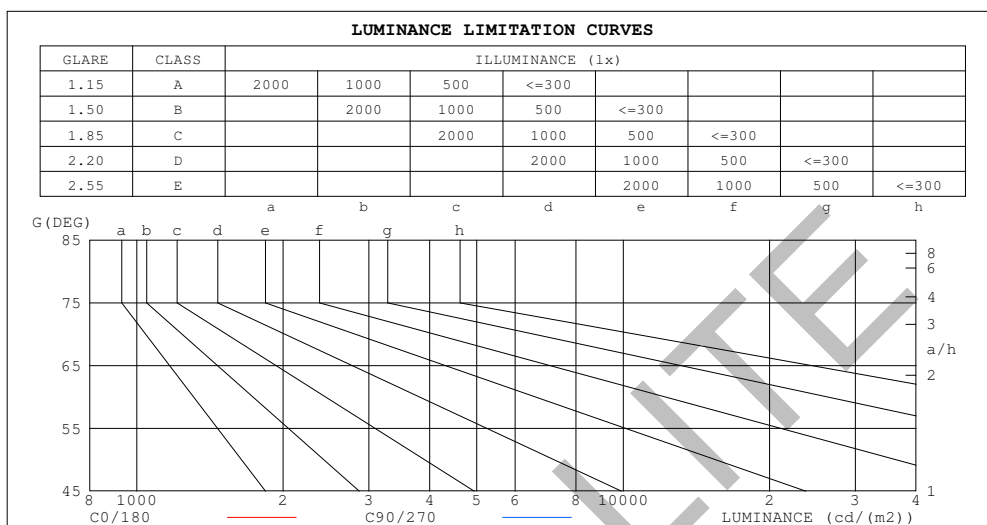
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	65.42	64.37	64.05	64.24	65.23	66.32	66.77	66.42	0- 10	6.294	6.294	3.34, 0.85
20	61.87	60.45	59.99	60.22	61.55	63.33	64.04	63.50	10- 20	18.03	24.32	12.9, 3.29
30	56.17	54.74	54.24	54.44	55.77	57.74	58.59	57.99	20- 30	27.33	51.65	27.4, 6.98
40	48.64	47.33	46.84	47.05	48.19	50.06	51.05	50.34	30- 40	32.95	84.60	44.9, 11.4
50	39.56	38.50	38.04	38.20	39.09	40.70	41.61	40.99	40- 50	34.18	118.8	63, 16.1
60	29.19	28.36	27.96	28.06	28.76	30.07	30.79	30.34	50- 60	30.85	149.6	79.4, 20.2
70	17.93	17.27	16.93	17.00	17.54	18.56	19.10	18.80	60- 70	23.35	173.0	91.7, 23.4
80	6.733	6.230	5.958	6.044	6.382	7.124	7.491	7.312	70- 80	12.85	185.8	98.6, 25.1
90	0.0024	0	0	0	0	0.0030	0.0507	0.0448	80- 90	2.712	188.5	100, 25.5
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: 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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:



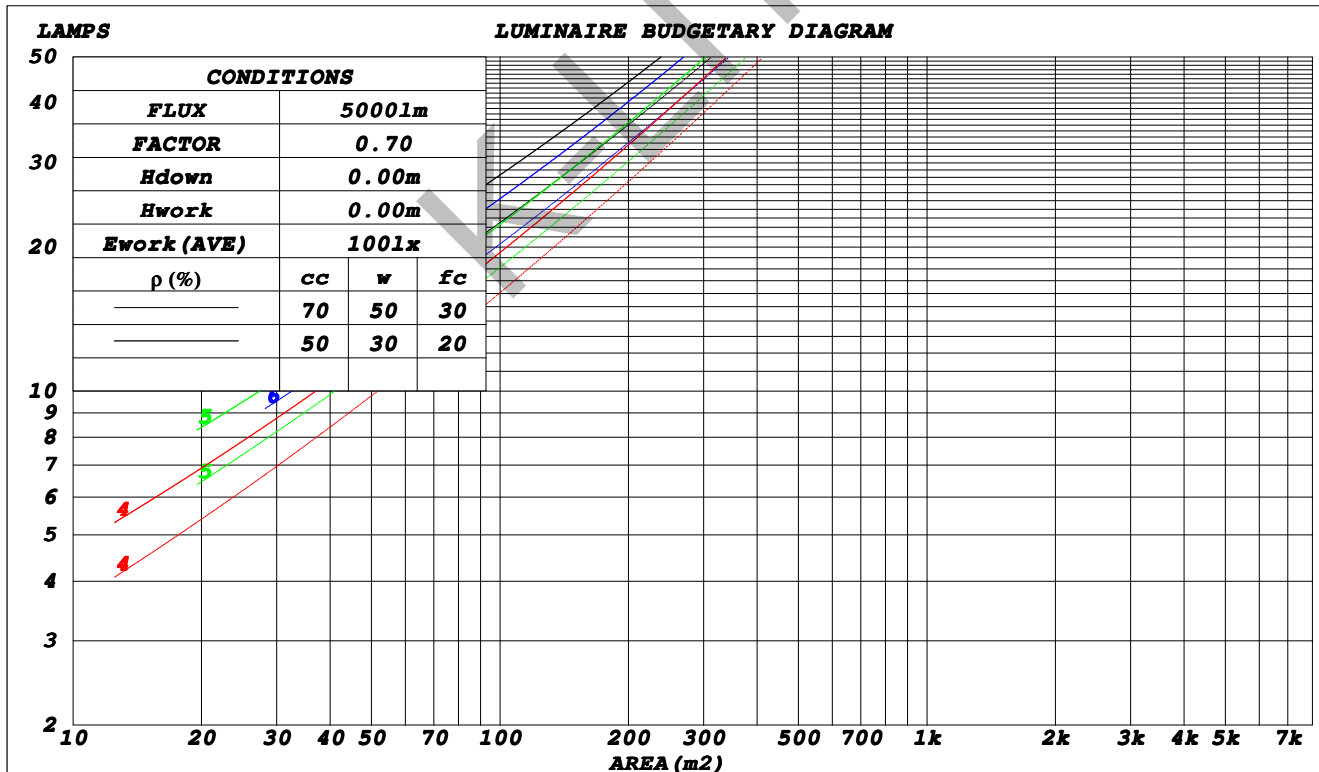
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 04 May 2022

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
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	.30	.30	.30	.30	.30	.30	.28	.28	.28	.27	.27	.27	.26	.26	.26	.25
1.0	.27	.25	.24	.26	.25	.24	.25	.24	.23	.24	.23	.23	.23	.22	.22	.21
2.0	.23	.21	.20	.23	.21	.20	.22	.20	.19	.21	.20	.19	.20	.19	.18	.18
3.0	.20	.18	.17	.20	.18	.16	.19	.17	.16	.18	.17	.16	.18	.17	.16	.15
4.0	.18	.16	.14	.18	.16	.14	.17	.15	.14	.16	.15	.14	.16	.14	.13	.13
5.0	.16	.14	.12	.16	.14	.12	.15	.13	.12	.15	.13	.12	.14	.13	.12	.11
6.0	.14	.12	.11	.14	.12	.10	.14	.12	.10	.13	.12	.10	.13	.11	.10	.10
7.0	.13	.11	.09	.13	.11	.09	.12	.11	.09	.12	.10	.09	.12	.10	.09	.09
8.0	.12	.10	.08	.12	.10	.08	.11	.10	.08	.11	.09	.08	.11	.09	.08	.08
9.0	.11	.09	.07	.11	.09	.07	.10	.09	.07	.10	.09	.07	.10	.08	.07	.07
10.0	.10	.08	.07	.10	.08	.07	.10	.08	.07	.09	.08	.07	.09	.08	.07	.06



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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
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	.078	.044	.014	.076	.043	.014	.072	.042	.013	.069	.040	.013	.066	.039	.012		
2.0	.074	.040	.012	.072	.040	.012	.069	.038	.012	.066	.037	.012	.064	.036	.011		
3.0	.068	.036	.011	.067	.036	.011	.064	.035	.011	.062	.034	.010	.060	.033	.010		
4.0	.063	.033	.010	.062	.032	.010	.060	.032	.009	.057	.031	.009	.055	.030	.009		
5.0	.058	.030	.009	.057	.029	.009	.055	.029	.008	.053	.028	.008	.052	.028	.008		
6.0	.054	.027	.008	.053	.027	.008	.051	.026	.008	.050	.026	.008	.048	.025	.008		
7.0	.051	.025	.007	.050	.025	.007	.048	.024	.007	.046	.024	.007	.045	.023	.007		
8.0	.047	.023	.006	.046	.023	.006	.045	.022	.006	.044	.022	.006	.042	.022	.006		
9.0	.044	.021	.006	.044	.021	.006	.042	.021	.006	.041	.021	.006	.040	.020	.006		
10.0	.042	.020	.006	.041	.020	.006	.040	.020	.005	.039	.019	.005	.038	.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	.049	.049	.049	.041	.041	.041	.028	.028	.028	.016	.016	.016	.005	.005	.005		
1.0	.046	.040	.034	.039	.034	.030	.027	.023	.020	.015	.014	.012	.005	.004	.004		
2.0	.044	.034	.025	.038	.029	.022	.026	.020	.015	.015	.012	.009	.005	.004	.003		
3.0	.042	.029	.019	.036	.025	.016	.025	.017	.012	.014	.010	.007	.005	.003	.002		
4.0	.040	.026	.015	.034	.022	.013	.024	.015	.009	.014	.009	.005	.004	.003	.002		
5.0	.038	.023	.012	.033	.020	.010	.022	.014	.007	.013	.008	.004	.004	.003	.001		
6.0	.036	.021	.010	.031	.018	.009	.021	.013	.006	.012	.007	.004	.004	.002	.001		
7.0	.034	.019	.008	.030	.017	.007	.020	.012	.005	.012	.007	.003	.004	.002	.001		
8.0	.033	.018	.007	.028	.015	.006	.020	.011	.005	.011	.006	.003	.004	.002	.001		
9.0	.031	.016	.006	.027	.014	.006	.019	.010	.004	.011	.006	.002	.004	.002	.001		
10.0	.030	.015	.006	.026	.013	.005	.018	.009	.004	.010	.006	.002	.003	.002	.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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm										
NAME: SUDO MINI - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:CW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:4523		
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				
						12.1	13.6	12.4	13.8	14.0
						11.9	13.4	12.2	13.6	13.8
						13.4	14.8	13.7	15.0	15.2
						13.9	15.2	14.2	15.5	15.7
						14.2	15.5	14.5	15.7	16.0
4H	2H	12.7	14.0	13.0	14.3	14.5	12.5	13.9	12.9	14.1
	3H	14.4	15.5	14.7	15.8	16.1	14.2	15.3	14.5	15.6
	4H	15.1	16.1	15.4	16.4	16.8	14.8	15.9	15.2	16.2
	6H	15.5	16.5	15.9	16.8	17.2	15.2	16.2	15.6	16.5
	8H	15.6	16.5	16.1	16.9	17.3	15.3	16.2	15.7	16.5
	12H	15.7	16.5	16.1	16.9	17.3	15.3	16.1	15.7	16.5
8H	2H	12.7	14.0	13.0	14.3	14.5	12.5	13.9	12.9	14.1
	3H	14.4	15.5	14.7	15.8	16.1	14.2	15.3	14.5	15.6
	4H	15.1	16.1	15.4	16.4	16.8	14.8	15.9	15.2	16.2
	6H	15.5	16.5	15.9	16.8	17.2	15.2	16.2	15.6	16.5
	8H	15.6	16.5	16.1	16.9	17.3	15.3	16.2	15.7	16.5
	12H	15.7	16.5	16.1	16.9	17.3	15.3	16.1	15.7	16.5
12H	2H	12.7	14.0	13.0	14.3	14.5	12.5	13.9	12.9	14.1
	3H	14.4	15.5	14.7	15.8	16.1	14.2	15.3	14.5	15.6
	4H	15.1	16.1	15.4	16.4	16.8	14.8	15.9	15.2	16.2
	6H	15.5	16.5	15.9	16.8	17.2	15.2	16.2	15.6	16.5
	8H	15.6	16.5	16.1	16.9	17.3	15.3	16.2	15.7	16.5
	12H	15.7	16.5	16.1	16.9	17.3	15.3	16.1	15.7	16.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 740.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -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: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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:

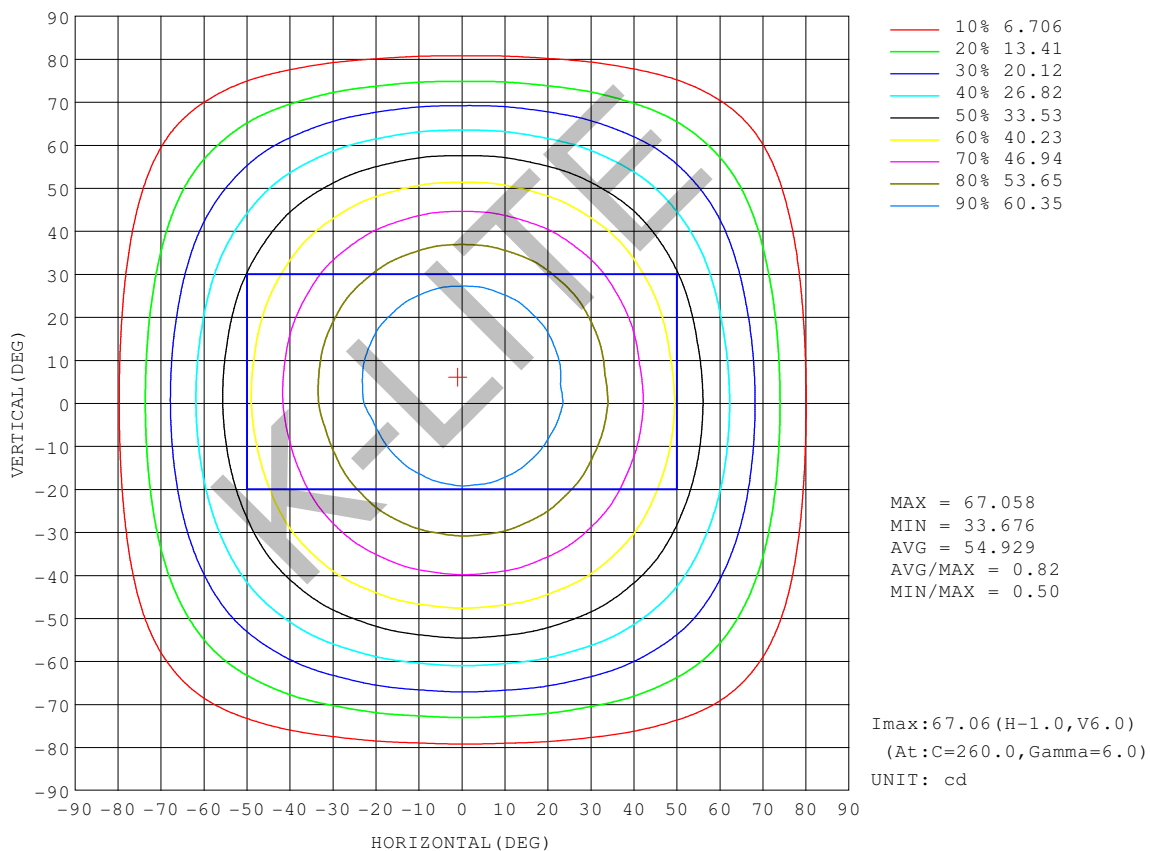
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	15	12	10	14	12	10	14	12	10	8
0.80	17	14	12	17	14	12	17	14	12	11
1.00	19	17	15	19	16	15	19	17	15	13
1.25	21	19	17	21	18	17	20	18	16	15
1.50	23	20	18	22	20	18	21	19	18	16
2.00	24	22	20	24	22	20	23	21	20	18
2.50	25	23	22	25	23	22	24	22	21	19
3.00	26	24	23	26	24	23	25	23	22	20
4.00	27	26	25	27	25	24	25	24	23	21
5.00	28	27	26	27	26	25	26	25	24	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 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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:



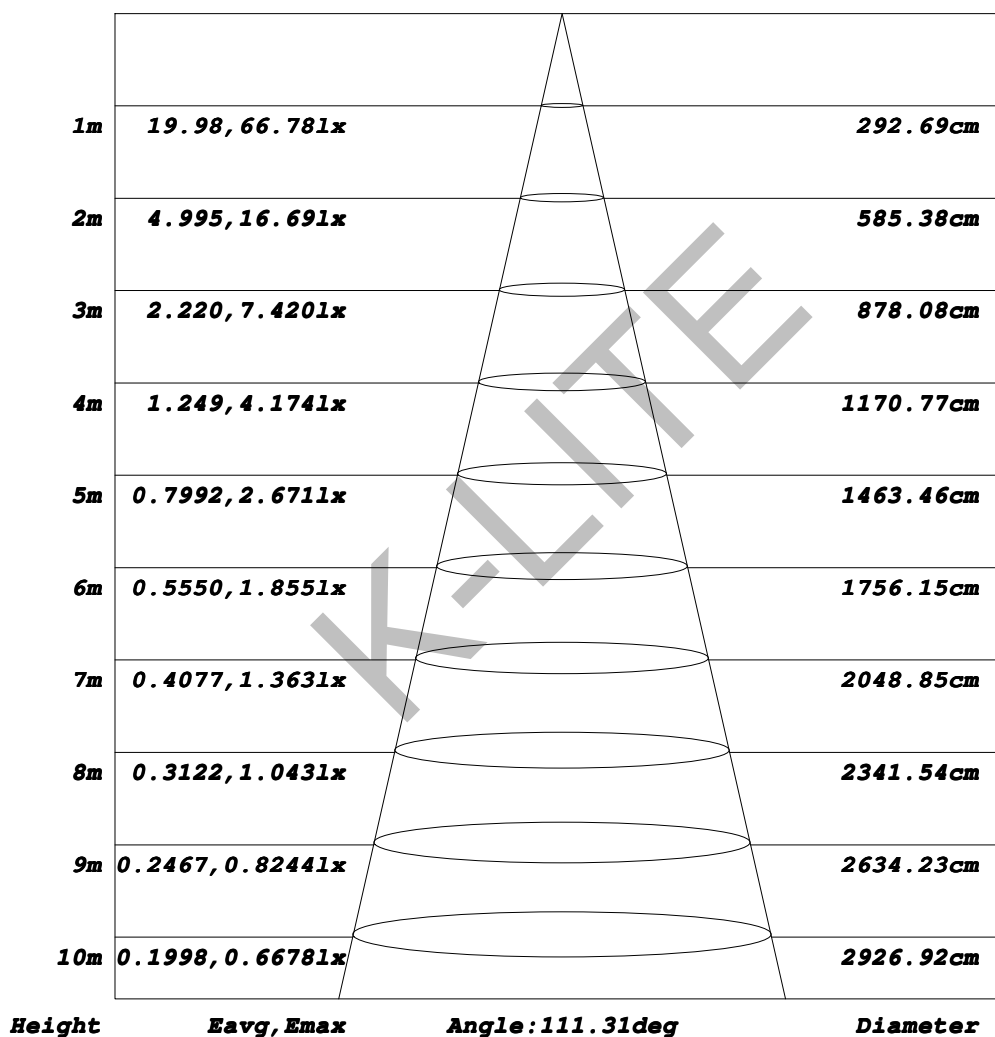
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 May 2022

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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:138.0 lm



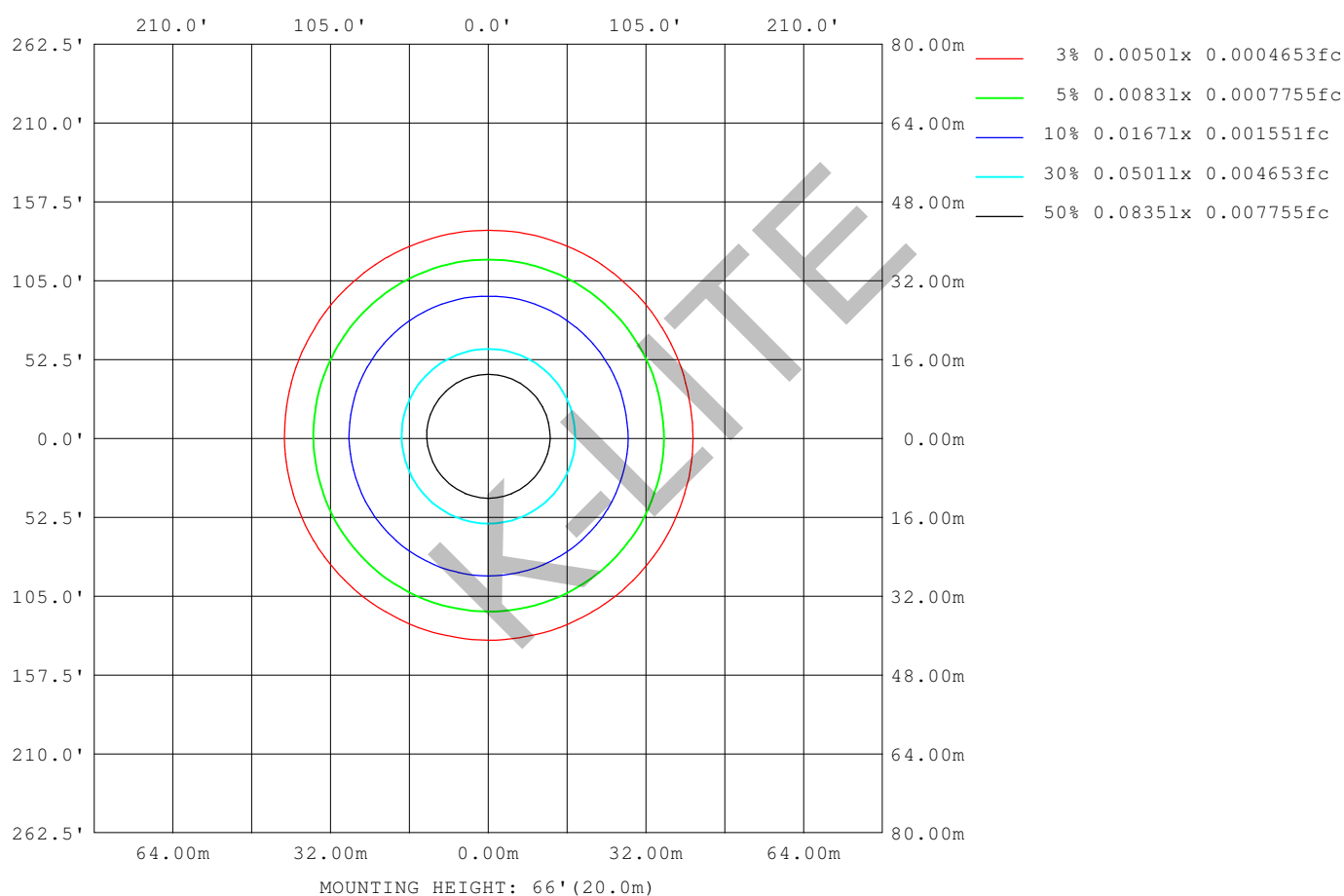
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 04 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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
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:230.46V I:0.0298A P:6.2986W PF:0.9176 Freq:49.99Hz Lamp Flux:740x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4523
MFR.: K-LITE	SUR.:	Shielding Angle:

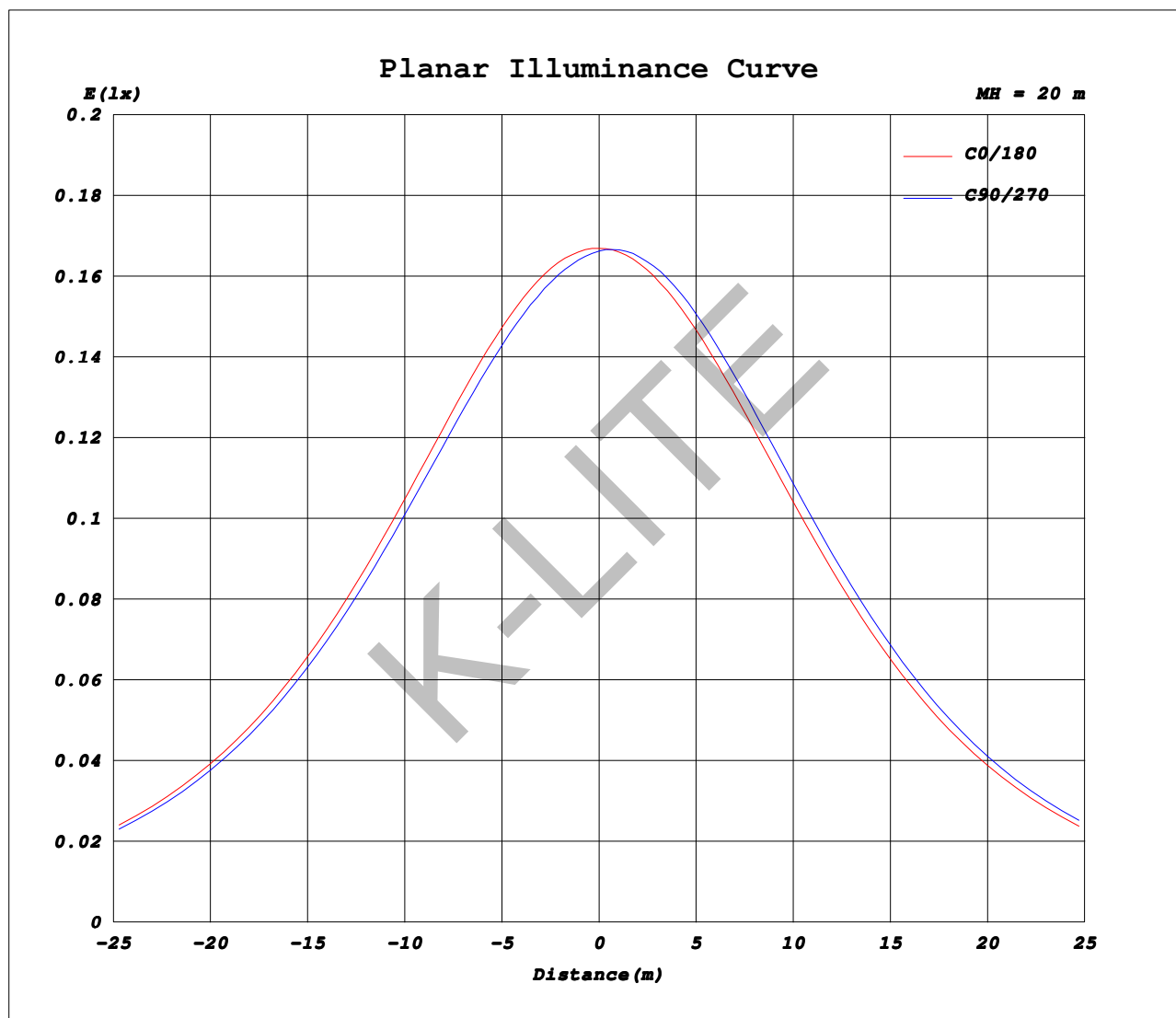
AvgL	cd/m2
L_0~180 (65) av	555
L_0~180 (75) av	464
L_0~180 (85) av	221
L_90~270 (65) av	563
L_90~270 (75) av	472
L_90~270 (85) av	246
L_45 (65) av	560
L_45 (75) av	469
L_45 (85) av	242

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:	27.6%	
Luminaire Power:	7.127 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 30 January 2020

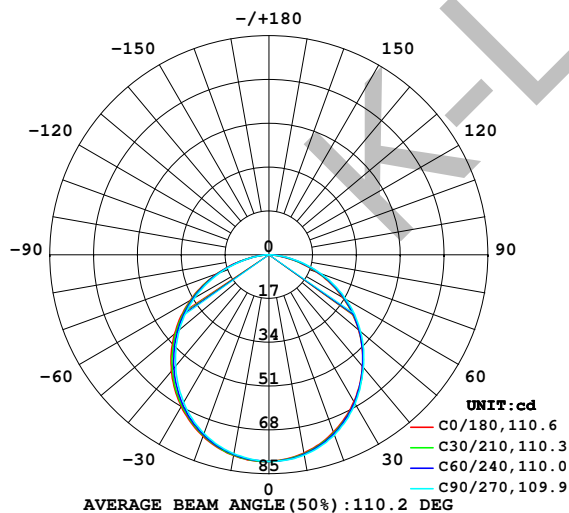
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

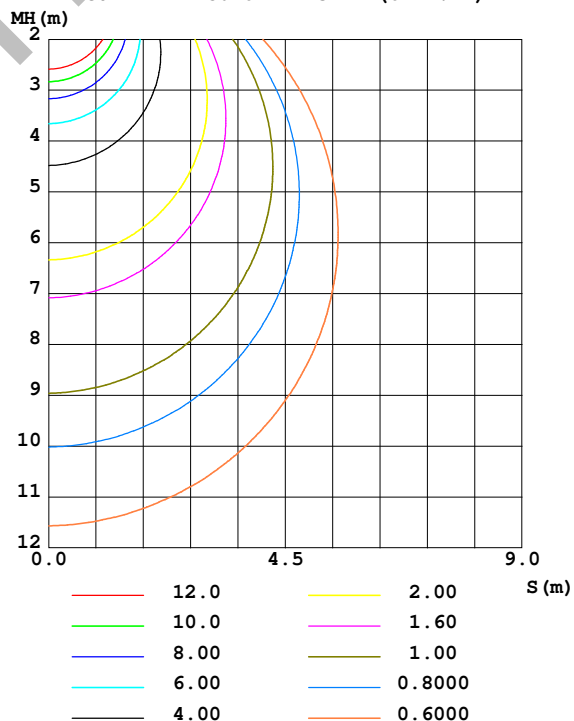
Test:U:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 31.07 lm/W
MODEL	KL-2753	I _{max} (cd)	80.30	S/MH (C0/180)	1.26	
NOMINAL POWER (W)	6	LOR (%)	27.6	S/MH (C90/270)	1.23	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	221.48	η UP, DN (C0-180)	0.0, 13.9	
NOMINAL FLUX (lm)	802.9	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 13.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	27.6	CIBSE SHR MAX	1.35	

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: 30 January 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:

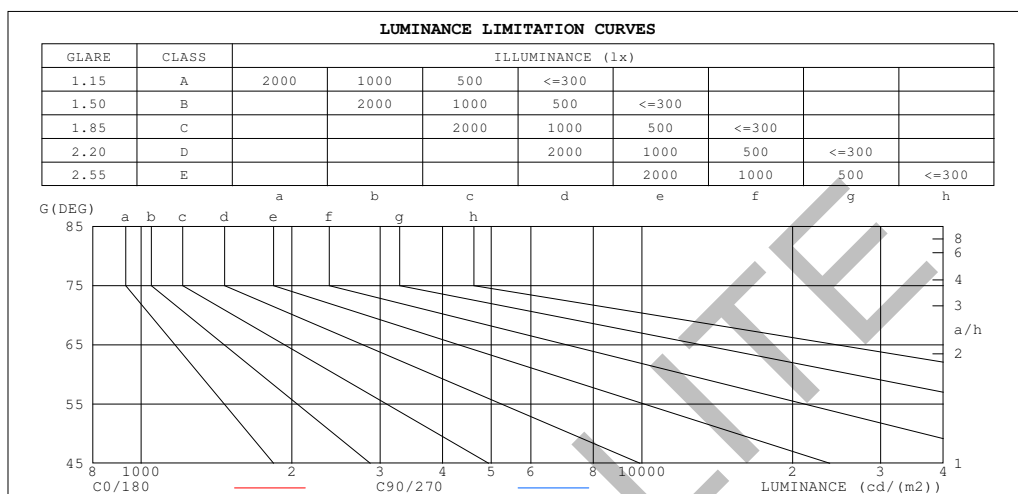
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	78.13	78.49	78.97	79.26	79.06	78.82	78.40	78.10	0- 10	7.581	7.581	3.42, 0.94
20	73.27	73.74	74.46	75.00	74.93	74.47	73.77	73.21	10- 20	21.64	29.22	13.2, 3.64
30	65.90	66.28	66.78	67.93	68.02	67.36	66.21	65.72	20- 30	32.59	61.82	27.9, 7.7
40	56.52	56.63	57.02	58.40	58.91	57.91	56.37	56.20	30- 40	38.92	100.7	45.5, 12.5
50	45.39	45.62	46.39	47.40	47.87	46.73	45.46	45.02	40- 50	40.03	140.8	63.6, 17.5
60	33.07	33.53	34.50	35.09	35.14	34.27	33.21	32.72	50- 60	35.94	176.7	79.8, 22
70	19.78	20.50	21.32	21.71	21.34	20.74	19.93	19.55	60- 70	27.05	203.8	92, 25.4
80	6.750	7.610	8.226	8.299	7.529	7.412	6.956	6.719	70- 80	14.66	218.4	98.6, 27.2
90	0.0021	0.1408	0.2709	0.1794	0	0.1716	0.2508	0.1061	80- 90	3.064	221.5	100, 27.6
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: 30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:



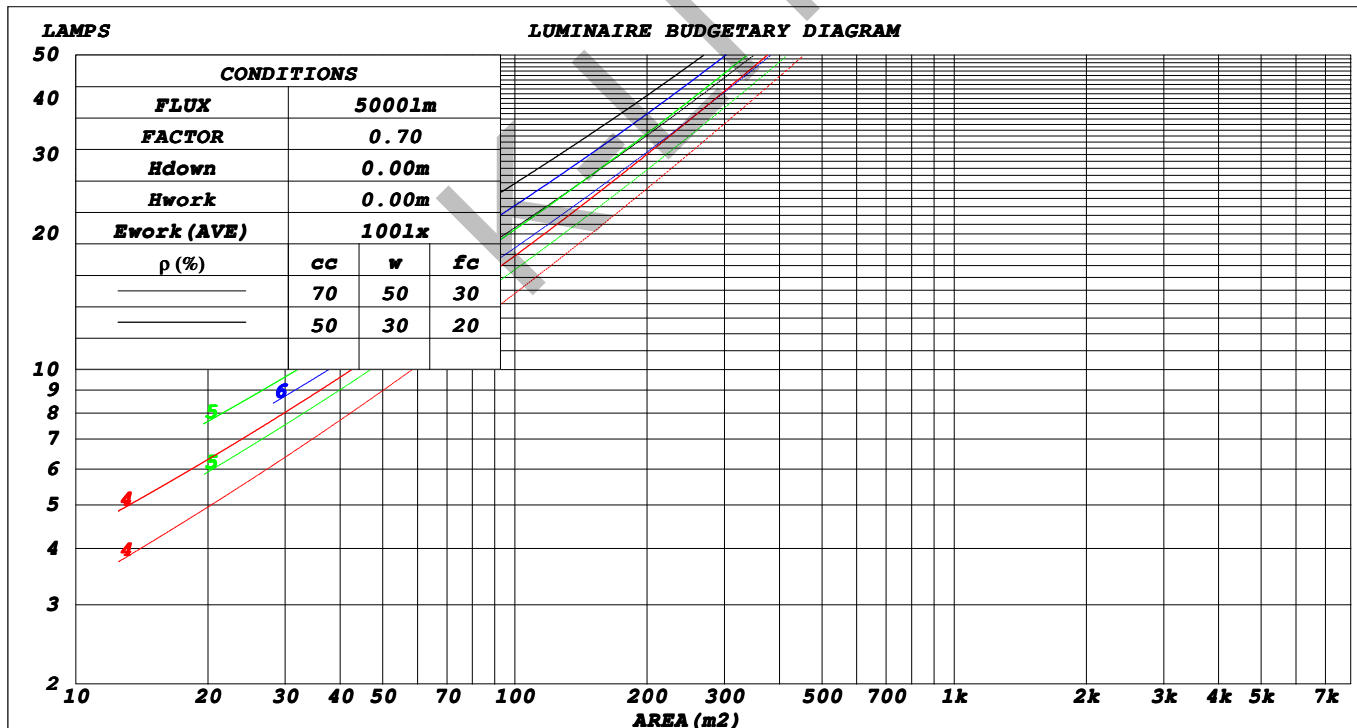
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 30 January 2020

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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
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	.33	.33	.33	.32	.32	.32	.31	.31	.31	.29	.29	.29	.28	.28	.28	.28
1.0	.29	.28	.27	.28	.27	.26	.27	.26	.25	.26	.25	.25	.25	.24	.24	.23
2.0	.25	.23	.22	.25	.23	.21	.24	.22	.21	.23	.21	.20	.22	.21	.20	.19
3.0	.22	.20	.18	.22	.20	.18	.21	.19	.18	.20	.19	.17	.19	.18	.17	.16
4.0	.20	.17	.15	.19	.17	.15	.18	.17	.15	.18	.16	.15	.17	.16	.15	.14
5.0	.17	.15	.13	.17	.15	.13	.17	.15	.13	.16	.14	.13	.15	.14	.13	.12
6.0	.16	.13	.11	.15	.13	.11	.15	.13	.11	.14	.13	.11	.14	.12	.11	.11
7.0	.14	.12	.10	.14	.12	.10	.14	.12	.10	.13	.11	.10	.13	.11	.10	.09
8.0	.13	.11	.09	.13	.11	.09	.12	.10	.09	.12	.10	.09	.12	.10	.09	.08
9.0	.12	.10	.08	.12	.10	.08	.11	.09	.08	.11	.09	.08	.11	.09	.08	.07
10.0	.11	.09	.07	.11	.09	.07	.11	.09	.07	.10	.09	.07	.10	.08	.07	.07



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
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	.083	.047	.015	.081	.046	.015	.078	.045	.014	.074	.043	.014	.071	.041	.013	
2.0	.079	.043	.013	.077	.043	.013	.074	.041	.013	.071	.040	.013	.068	.039	.012	
3.0	.074	.039	.012	.072	.039	.012	.069	.037	.011	.067	.036	.011	.064	.035	.011	
4.0	.068	.035	.010	.067	.035	.010	.064	.034	.010	.062	.033	.010	.060	.032	.010	
5.0	.063	.032	.009	.062	.032	.009	.060	.031	.009	.057	.030	.009	.056	.030	.009	
6.0	.058	.029	.008	.057	.029	.008	.055	.028	.008	.054	.028	.008	.052	.027	.008	
7.0	.054	.027	.008	.054	.027	.008	.052	.026	.008	.050	.026	.007	.049	.025	.007	
8.0	.051	.025	.007	.050	.025	.007	.049	.024	.007	.047	.024	.007	.046	.023	.007	
9.0	.048	.023	.006	.047	.023	.006	.046	.023	.006	.044	.022	.006	.043	.022	.006	
10.0	.045	.022	.006	.044	.021	.006	.043	.021	.006	.042	.021	.006	.041	.020	.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	.053	.053	.053	.045	.045	.045	.031	.031	.031	.018	.018	.018	.006	.006	.006	
1.0	.050	.043	.037	.042	.037	.032	.029	.025	.022	.017	.015	.013	.005	.005	.004	
2.0	.047	.036	.027	.041	.031	.024	.028	.022	.016	.016	.013	.010	.005	.004	.003	
3.0	.045	.032	.021	.039	.027	.018	.027	.019	.013	.015	.011	.007	.005	.004	.002	
4.0	.043	.028	.016	.037	.024	.014	.025	.017	.010	.015	.010	.006	.005	.003	.002	
5.0	.041	.025	.013	.035	.022	.011	.024	.015	.008	.014	.009	.005	.005	.003	.002	
6.0	.039	.023	.011	.034	.020	.009	.023	.014	.007	.013	.008	.004	.004	.003	.001	
7.0	.037	.021	.009	.032	.018	.008	.022	.013	.006	.013	.007	.003	.004	.002	.001	
8.0	.035	.019	.008	.031	.017	.007	.021	.012	.005	.012	.007	.003	.004	.002	.001	
9.0	.034	.018	.007	.029	.015	.006	.020	.011	.004	.012	.006	.003	.004	.002	.001	
10.0	.032	.017	.006	.028	.014	.005	.019	.010	.004	.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:30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm											
NAME: SUDO - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:0.8Kg			
SPEC.:WW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:1032			
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	12.3	13.8	12.6	14.0	14.2	12.4	13.9	12.7	14.1	14.3	
3H	13.7	15.1	14.0	15.3	15.6	13.9	15.3	14.2	15.5	15.8	
4H	14.2	15.6	14.6	15.8	16.1	14.5	15.8	14.8	16.1	16.3	
6H	14.5	15.8	14.9	16.0	16.3	14.9	16.1	15.2	16.4	16.7	
8H	14.6	15.8	14.9	16.1	16.4	15.0	16.2	15.3	16.5	16.7	
12H	14.6	15.7	14.9	16.0	16.3	15.0	16.2	15.3	16.4	16.8	
4H 2H	12.9	14.2	13.2	14.5	14.7	13.0	14.3	13.3	14.6	14.8	
3H	14.5	15.7	14.9	16.0	16.3	14.7	15.8	15.0	16.1	16.4	
4H	15.1	16.2	15.5	16.5	16.8	15.4	16.4	15.8	16.8	17.1	
6H	15.5	16.5	15.9	16.8	17.2	15.9	16.8	16.3	17.2	17.5	
8H	15.6	16.5	16.0	16.9	17.2	16.0	16.9	16.4	17.2	17.6	
12H	15.6	16.4	16.1	16.8	17.2	16.1	16.9	16.5	17.2	17.7	
8H 4H	15.4	16.3	15.8	16.6	17.0	15.6	16.5	16.0	16.8	17.2	
6H	15.9	16.6	16.3	17.0	17.5	16.2	16.9	16.6	17.3	17.8	
8H	16.0	16.7	16.5	17.1	17.6	16.4	17.0	16.9	17.5	17.9	
12H	16.1	16.6	16.6	17.1	17.6	16.5	17.1	17.0	17.5	18.0	
12H 4H	15.4	16.2	15.8	16.6	17.0	15.6	16.4	16.0	16.8	17.2	
6H	15.9	16.6	16.4	17.0	17.5	16.2	16.9	16.7	17.3	17.8	
8H	16.1	16.7	16.6	17.1	17.6	16.5	17.0	16.9	17.5	17.9	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					

CIE Pub.117, 802.9 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:30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:

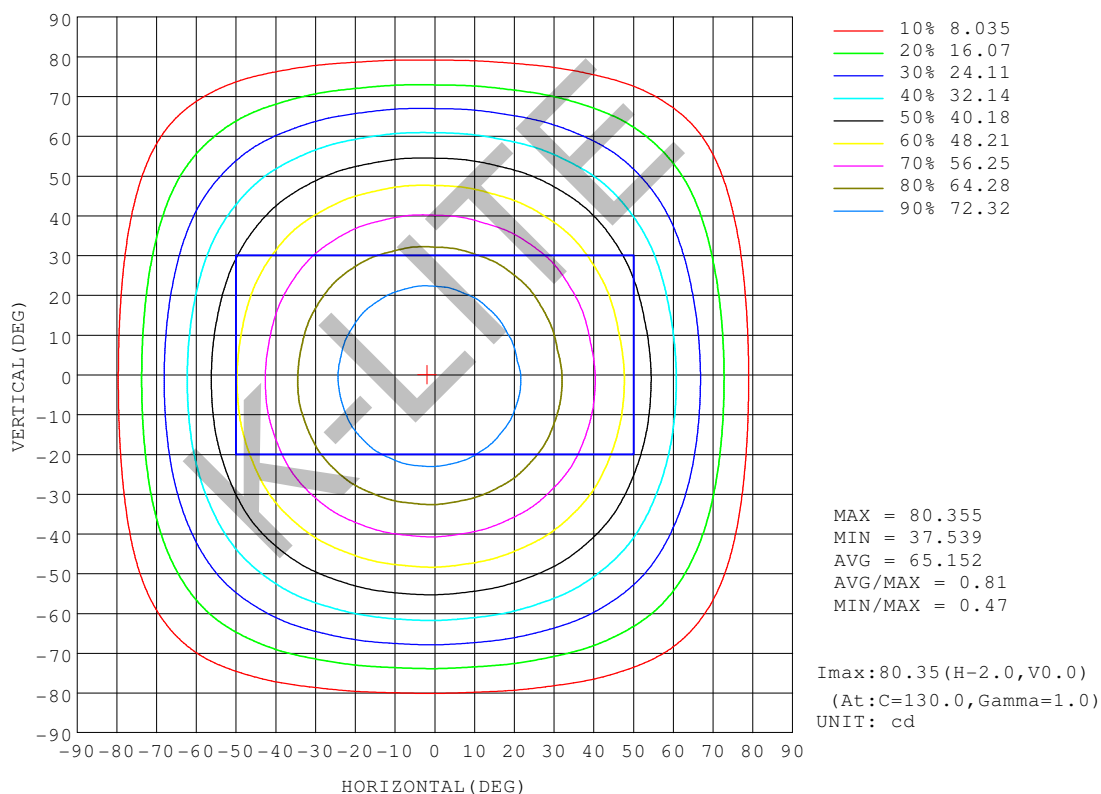
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	16	13	11	16	13	11	15	13	11	9
0.80	19	16	14	18	15	14	18	15	13	12
1.00	21	18	16	21	18	16	20	18	16	14
1.25	23	20	18	23	20	18	22	20	18	16
1.50	24	22	20	24	22	20	23	21	19	17
2.00	26	24	22	26	24	22	25	23	22	19
2.50	27	25	24	27	25	23	26	24	23	21
3.00	28	26	25	28	26	25	27	25	24	22
4.00	29	28	27	29	27	26	28	26	25	23
5.00	30	29	28	29	28	27	28	27	26	24
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: 30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:

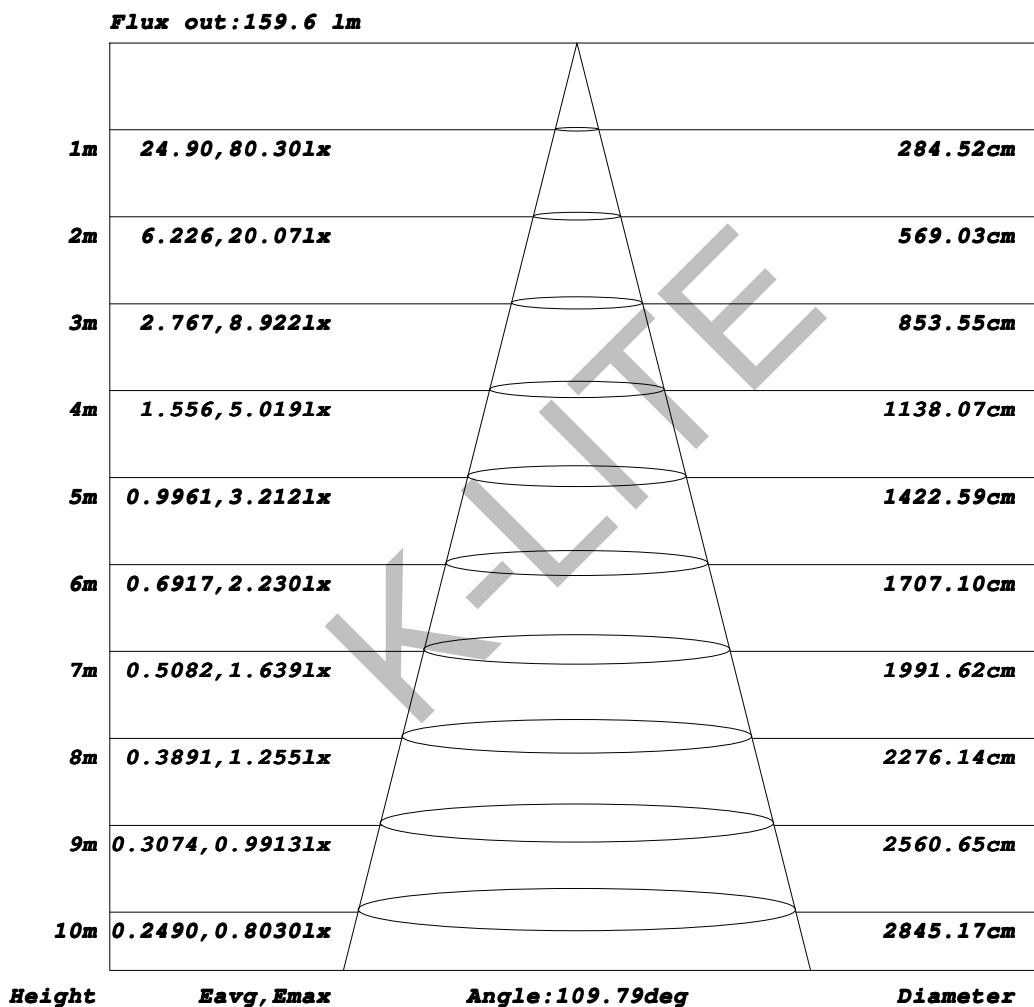


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:30 January 2020

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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:



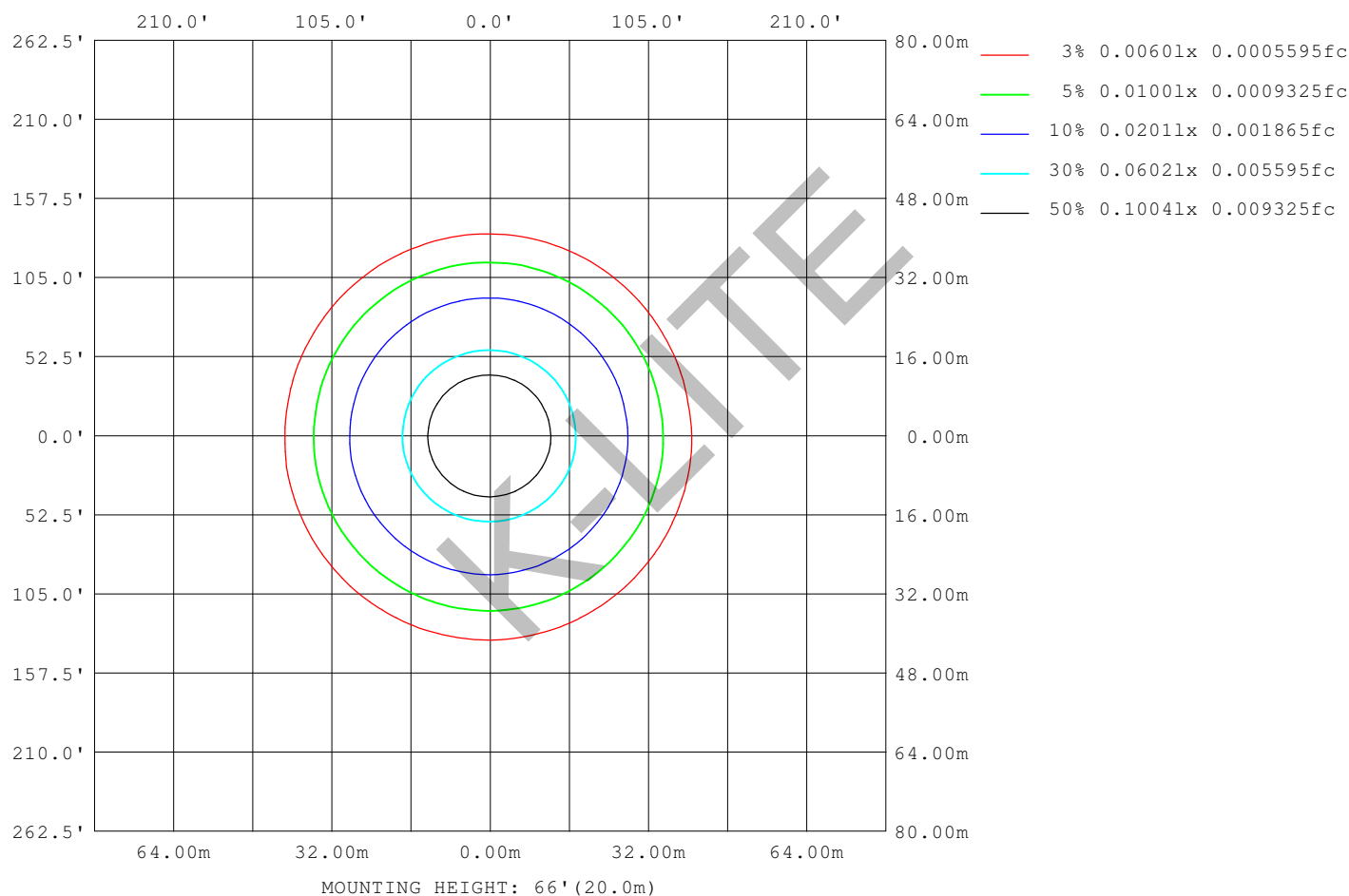
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
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: 30 January 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:230.21V I:0.0677A P:7.1275W PF:0.9825 Freq:49.99Hz Lamp Flux:802.9x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:0.8Kg
SPEC.:WW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1032
MFR.: K-LITE	SUR.:	Shielding Angle:

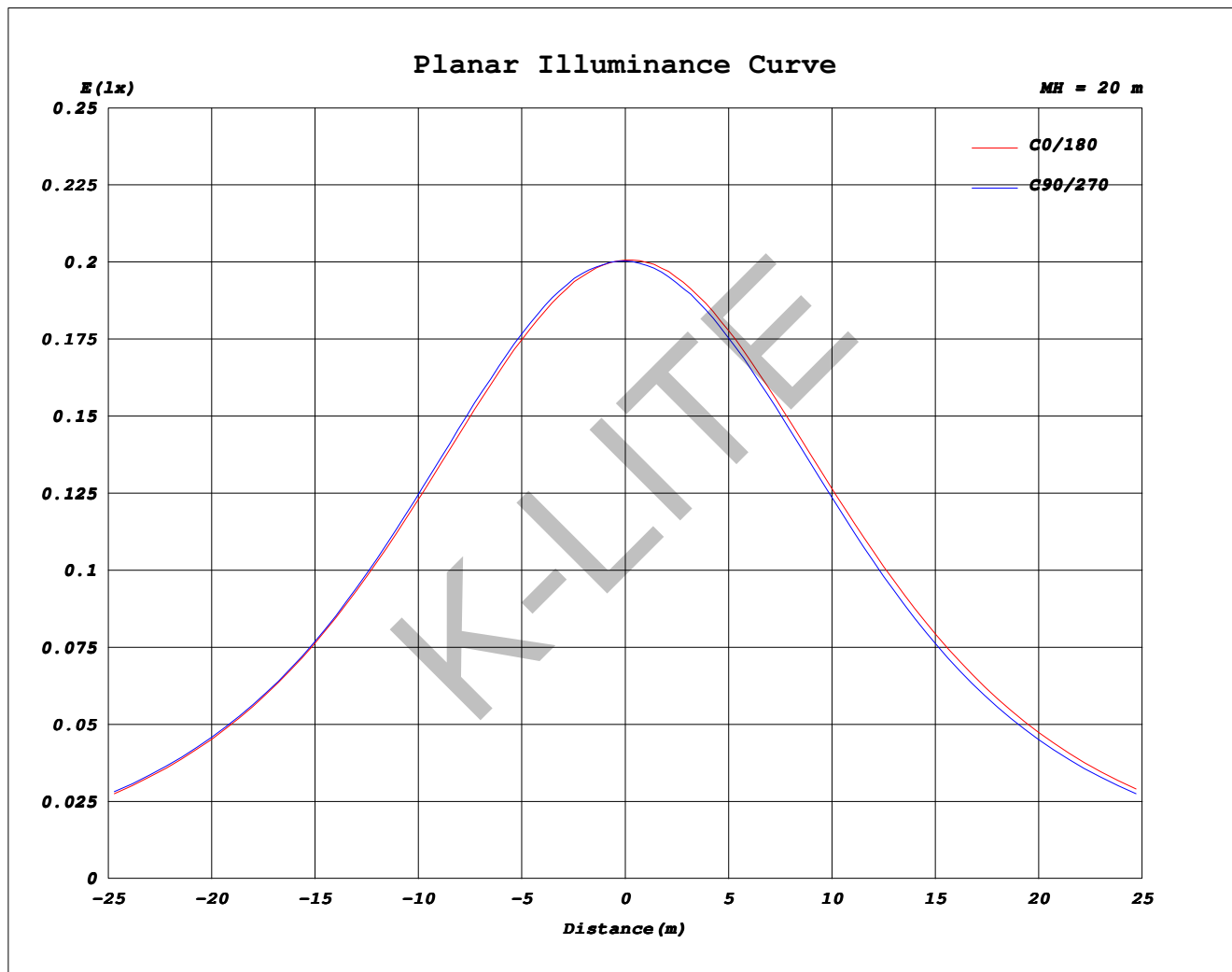
AvgL	cd/m2
L_0~180 (65) av	649
L_0~180 (75) av	529
L_0~180 (85) av	219
L_90~270 (65) av	647
L_90~270 (75) av	538
L_90~270 (85) av	285
L_45 (65) av	648
L_45 (75) av	537
L_45 (85) av	273

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 30 January 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: 30 January 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:	36.7%	
Luminaire Power:	6.432 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 03 August 2020

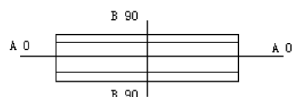
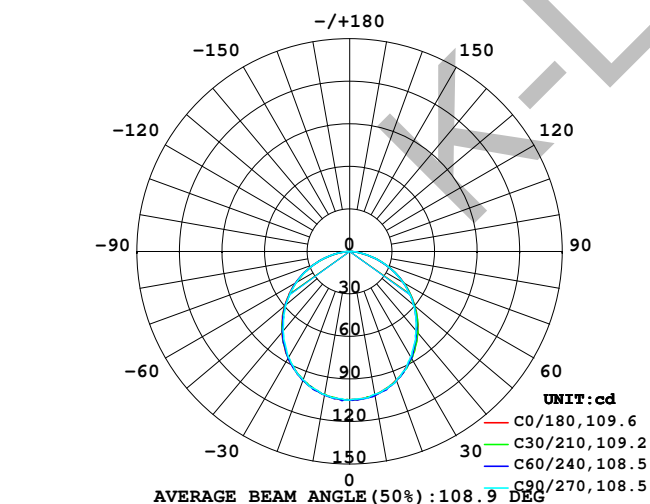
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.836m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

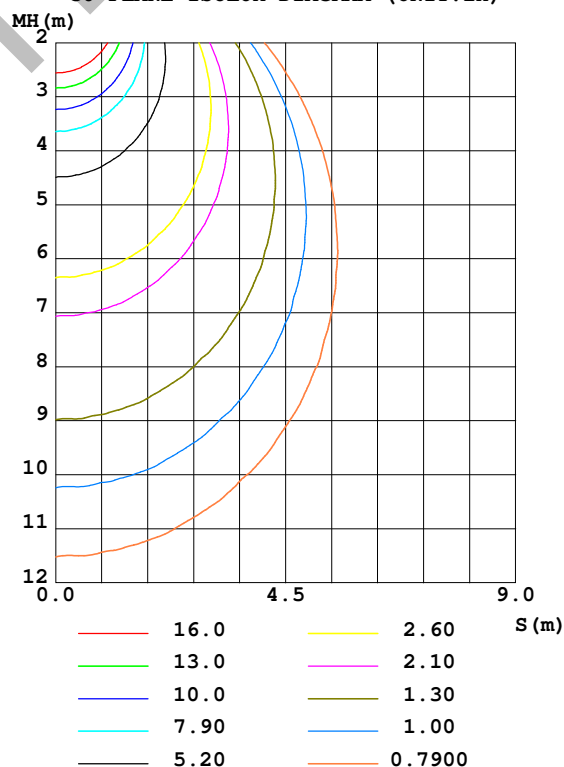
Test:U:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 44.47 lm/W
MODEL	KL-2753	I _{max} (cd)	105.4	S/MH (C0/180)	1.24	
NOMINAL POWER (W)	6	LOR (%)	36.7	S/MH (C90/270)	1.23	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	286.05	η UP, DN (C0-180)	0.0, 18.3	
NOMINAL FLUX (lm)	780	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 18.3	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	36.7	CIBSE SHR MAX	1.35	

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: 03 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:

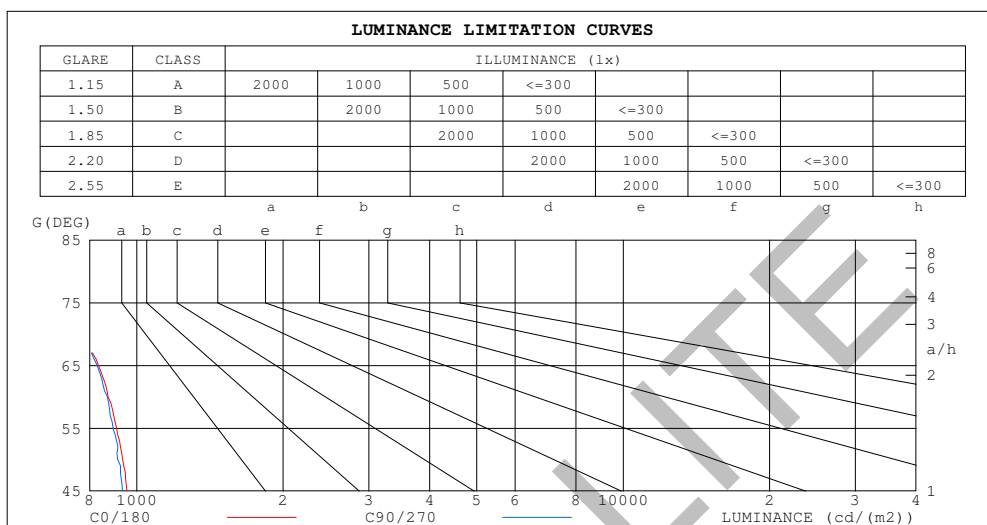
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	102.9	102.5	102.3	102.8	102.5	102.4	102.6	102.9	0- 10	9.896	9.896	3.46, 1.27
20	96.26	96.02	96.57	96.49	96.62	95.93	96.45	96.71	10- 20	28.23	38.12	13.3, 4.89
30	87.06	86.70	86.08	86.87	86.73	86.08	86.26	87.09	20- 30	42.40	80.53	28.2, 10.3
40	74.78	73.90	72.87	74.15	74.58	73.64	73.25	74.33	30- 40	50.37	130.9	45.8, 16.8
50	60.06	59.05	58.72	59.28	59.90	58.98	58.60	59.46	40- 50	51.52	182.4	63.8, 23.4
60	43.60	43.34	43.48	43.45	43.67	43.22	43.06	43.54	50- 60	46.11	228.5	79.9, 29.3
70	26.47	26.26	26.37	26.48	26.51	26.45	26.38	26.60	60- 70	34.67	263.2	92, 33.7
80	9.368	9.509	9.666	9.737	9.512	9.813	9.887	9.754	70- 80	18.90	282.1	98.6, 36.2
90	0	0.0778	0.1437	0.0845	0	0.0384	0.1035	0.0514	80- 90	3.950	286.0	100, 36.7
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: 03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	302	346
80	540	557
75	684	688
70	775	771
65	834	829
60	873	870
55	909	895
50	936	914
45	955	935

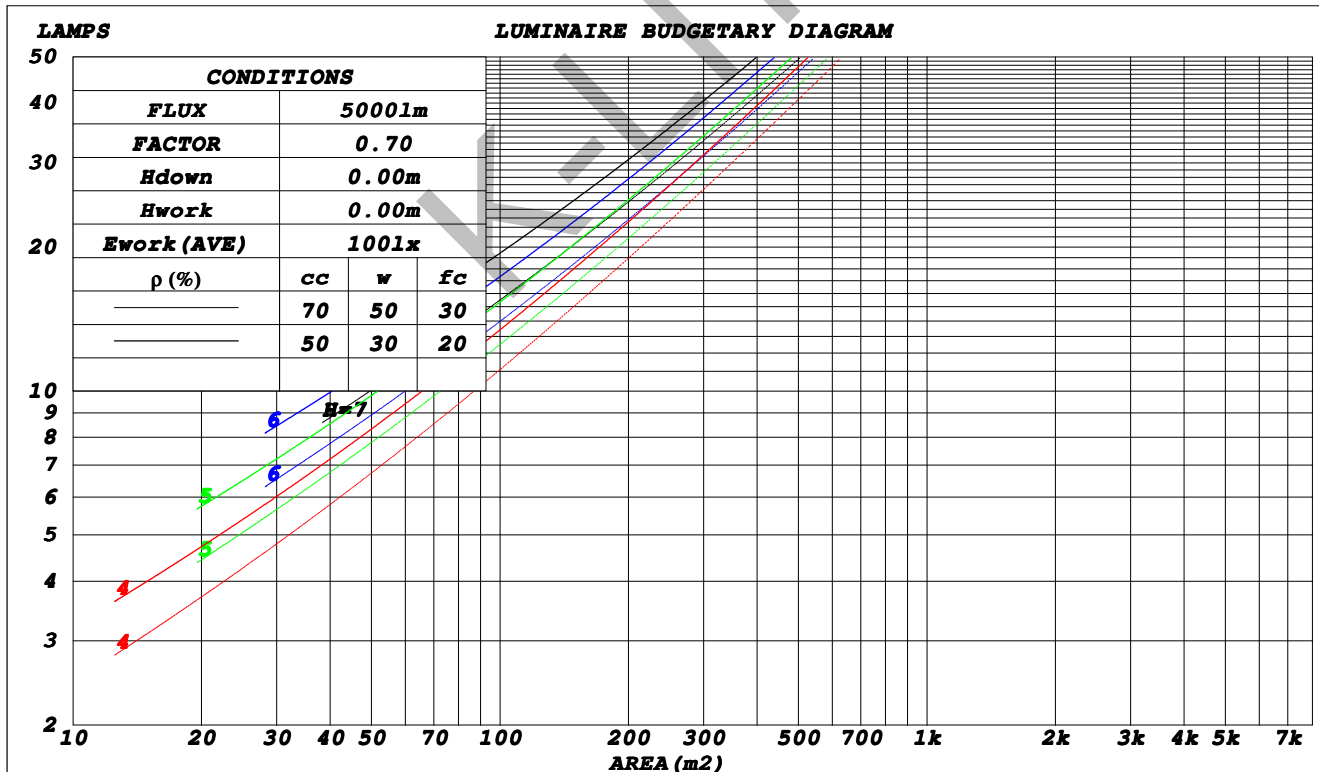
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 03 August 2020

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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
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	.44	.44	.44	.43	.43	.43	.41	.41	.41	.39	.39	.39	.37	.37	.37	.37
1.0	.38	.37	.35	.37	.36	.35	.36	.35	.34	.34	.33	.33	.33	.32	.32	.31
2.0	.33	.31	.29	.33	.30	.28	.31	.29	.28	.30	.29	.27	.29	.28	.27	.26
3.0	.29	.26	.24	.29	.26	.24	.28	.25	.23	.27	.25	.23	.26	.24	.23	.22
4.0	.26	.23	.20	.26	.23	.20	.25	.22	.20	.24	.21	.20	.23	.21	.19	.19
5.0	.23	.20	.18	.23	.20	.17	.22	.19	.17	.21	.19	.17	.21	.19	.17	.16
6.0	.21	.18	.15	.21	.17	.15	.20	.17	.15	.19	.17	.15	.19	.17	.15	.14
7.0	.19	.16	.14	.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	.11	.16	.13	.11	.15	.13	.11	.15	.12	.11	.15	.12	.11	.10
10.0	.15	.12	.10	.14	.12	.10	.14	.12	.10	.14	.11	.10	.13	.11	.10	.09



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
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	.111	.063	.020	.108	.062	.020	.103	.059	.019	.099	.057	.018	.095	.055	.018		
2.0	.105	.058	.018	.103	.057	.017	.098	.055	.017	.094	.053	.017	.091	.051	.016		
3.0	.098	.052	.016	.096	.051	.015	.092	.050	.015	.088	.048	.015	.085	.047	.015		
4.0	.090	.047	.014	.088	.046	.014	.085	.045	.013	.082	.044	.013	.079	.043	.013		
5.0	.084	.043	.012	.082	.042	.012	.079	.041	.012	.076	.040	.012	.074	.039	.012		
6.0	.078	.039	.011	.076	.039	.011	.074	.038	.011	.071	.037	.011	.069	.036	.011		
7.0	.072	.036	.010	.071	.035	.010	.069	.035	.010	.066	.034	.010	.064	.033	.010		
8.0	.068	.033	.009	.066	.033	.009	.064	.032	.009	.062	.032	.009	.061	.031	.009		
9.0	.063	.031	.009	.062	.030	.009	.060	.030	.008	.059	.029	.008	.057	.029	.008		
10.0	.060	.029	.008	.059	.028	.008	.057	.028	.008	.055	.028	.008	.054	.027	.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	.070	.070	.070	.060	.060	.060	.041	.041	.041	.023	.023	.023	.007	.007	.007		
1.0	.066	.057	.050	.056	.049	.043	.039	.034	.029	.022	.020	.017	.007	.006	.006		
2.0	.063	.048	.036	.054	.042	.031	.037	.029	.022	.021	.017	.013	.007	.005	.004		
3.0	.060	.042	.027	.051	.036	.024	.035	.025	.017	.020	.015	.010	.007	.005	.003		
4.0	.057	.037	.022	.049	.032	.019	.034	.022	.013	.020	.013	.008	.006	.004	.003		
5.0	.055	.033	.017	.047	.029	.015	.032	.020	.011	.019	.012	.006	.006	.004	.002		
6.0	.052	.030	.014	.045	.026	.013	.031	.018	.009	.018	.011	.005	.006	.004	.002		
7.0	.049	.028	.012	.043	.024	.011	.029	.017	.008	.017	.010	.005	.006	.003	.001		
8.0	.047	.025	.011	.041	.022	.009	.028	.015	.007	.016	.009	.004	.005	.003	.001		
9.0	.045	.024	.009	.039	.021	.008	.027	.014	.006	.016	.009	.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: 03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm										
NAME: SUDO - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: 255 x 87 x 76			SERIAL No.:1618		
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						13.4	14.9	13.7	15.1	15.3
4H						13.3	14.8	13.6	15.0	15.2
6H						14.8	16.2	15.1	16.4	16.6
8H						15.3	16.7	15.6	16.9	17.2
12H						15.7	16.9	16.0	17.2	17.5
15.8						15.7	16.9	16.1	17.2	17.5
15.8						15.7	16.9	16.1	17.2	17.5
4H 2H						14.0	15.3	14.3	15.6	15.8
3H						15.6	16.8	16.0	17.1	17.4
4H						16.3	17.3	16.6	17.6	18.0
6H						16.7	17.6	17.1	18.0	18.3
8H						16.8	17.7	17.2	18.0	18.4
12H						16.8	17.6	17.2	18.0	18.4
8H 4H						16.5	17.4	16.9	17.7	18.1
6H						17.0	17.8	17.5	18.2	18.6
8H						17.2	17.8	17.6	18.2	18.7
12H						17.2	17.8	17.7	18.2	18.7
12H 4H						16.5	17.3	16.9	17.7	18.1
6H						17.1	17.7	17.5	18.1	18.6
8H						17.2	17.8	17.7	18.2	18.7
Variations with the observer position at spacings:										
S = 1.0H		+ 0.2 / - 0.2				+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3				+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3				+ 0.2 / - 0.3				

CIE Pub.117, 780.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.9$)
Area: 0.1 m²

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:

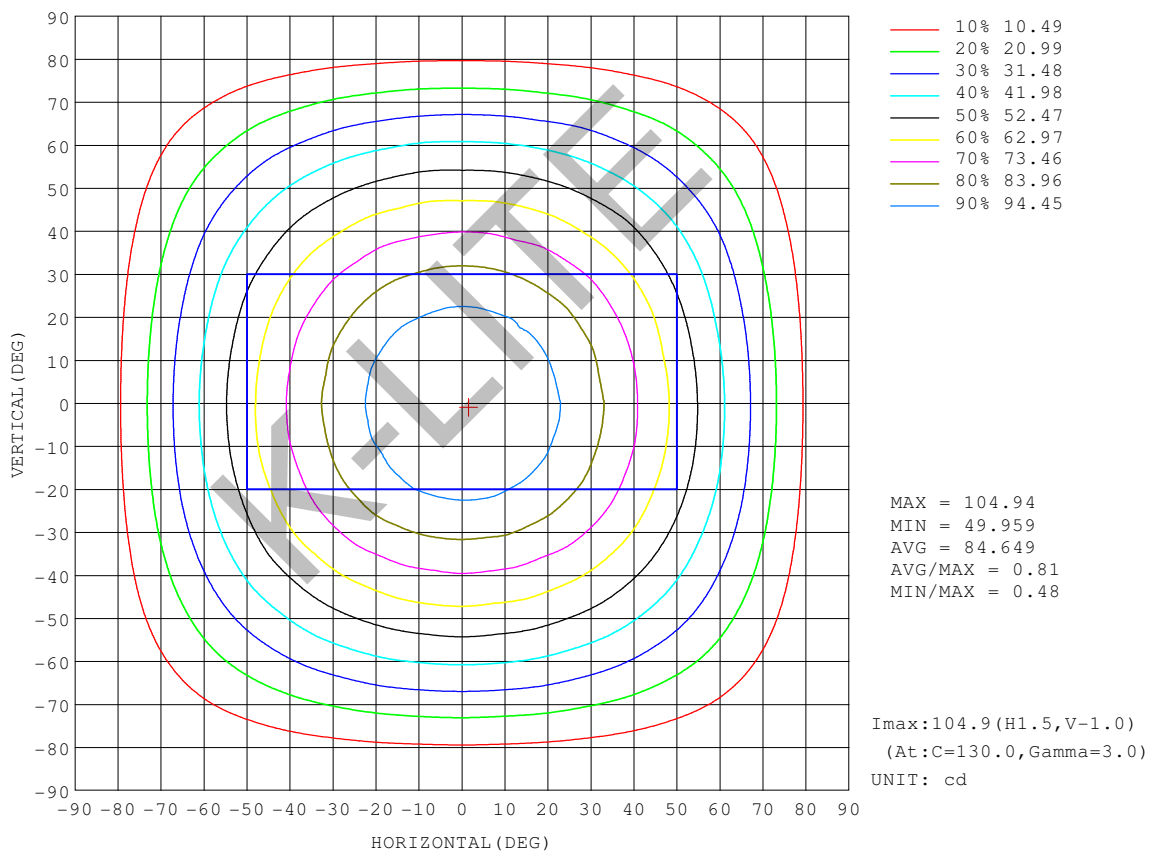
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	21	17	15	21	17	15	21	17	14	12
0.80	25	21	18	25	21	18	24	20	18	15
1.00	28	24	21	28	24	21	27	24	21	19
1.25	31	27	24	30	27	24	29	26	24	21
1.50	33	29	26	32	29	26	31	28	26	23
2.00	35	32	30	34	32	29	33	31	29	26
2.50	36	34	31	36	33	31	34	32	30	27
3.00	38	35	33	37	35	33	35	34	32	29
4.00	39	37	35	38	36	35	37	35	34	31
5.00	40	38	37	39	38	36	37	36	35	32
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:03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:



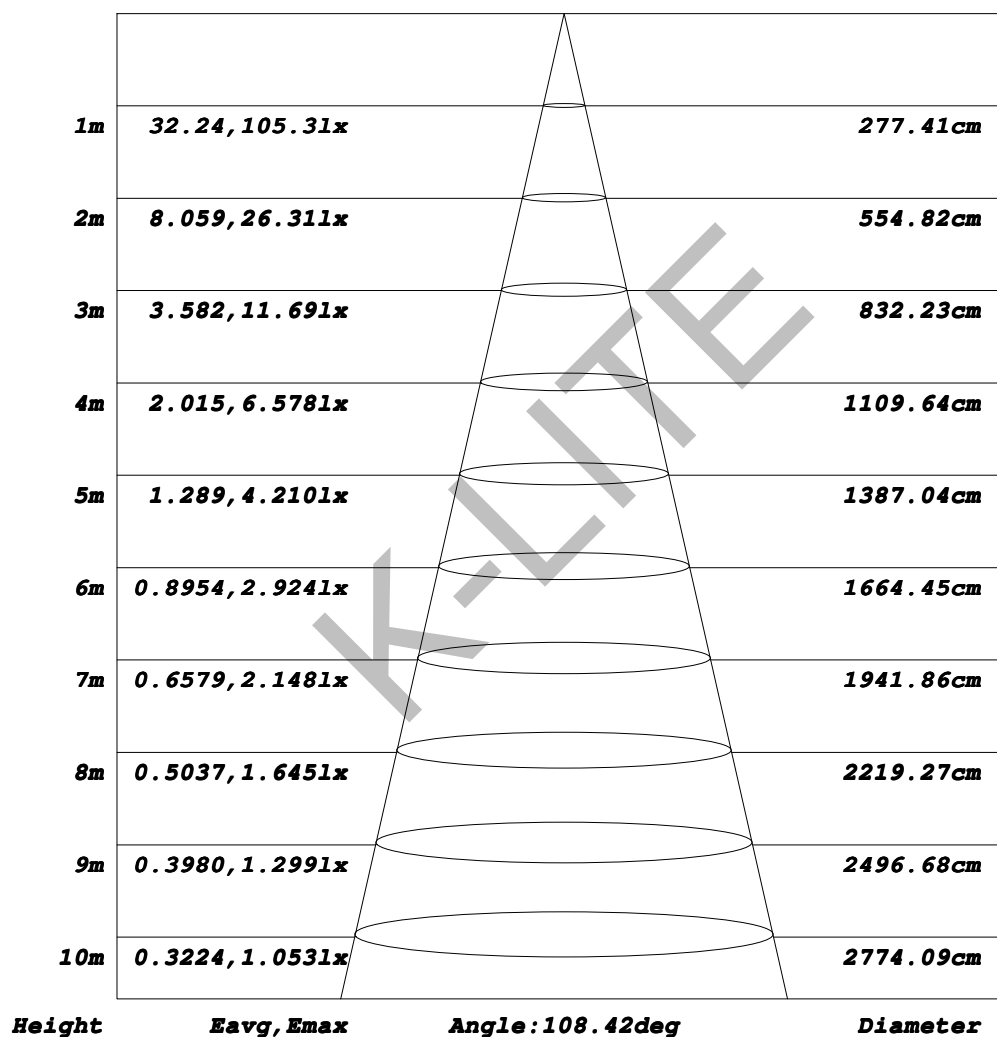
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:K-LITE
 Test Date:03 August 2020

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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:206.5 lm



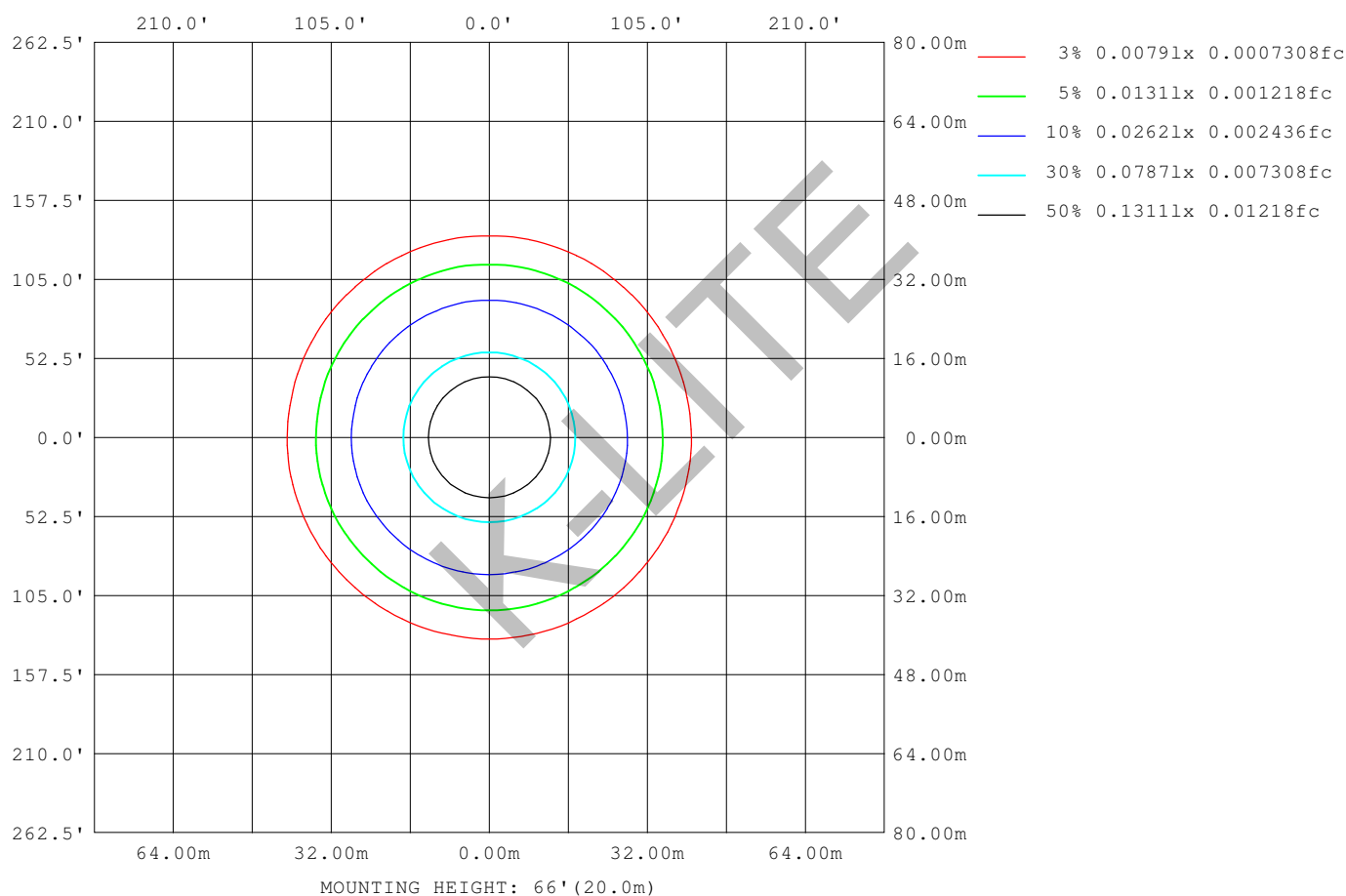
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
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: 03 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:230.38V I:0.0290A P:6.4316W PF:0.9624 Freq:49.99Hz Lamp Flux:780x1 lm		
NAME: SUDO - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 255 x 87 x 76	SERIAL No.:1618
MFR.: K-LITE	SUR.:	Shielding Angle:

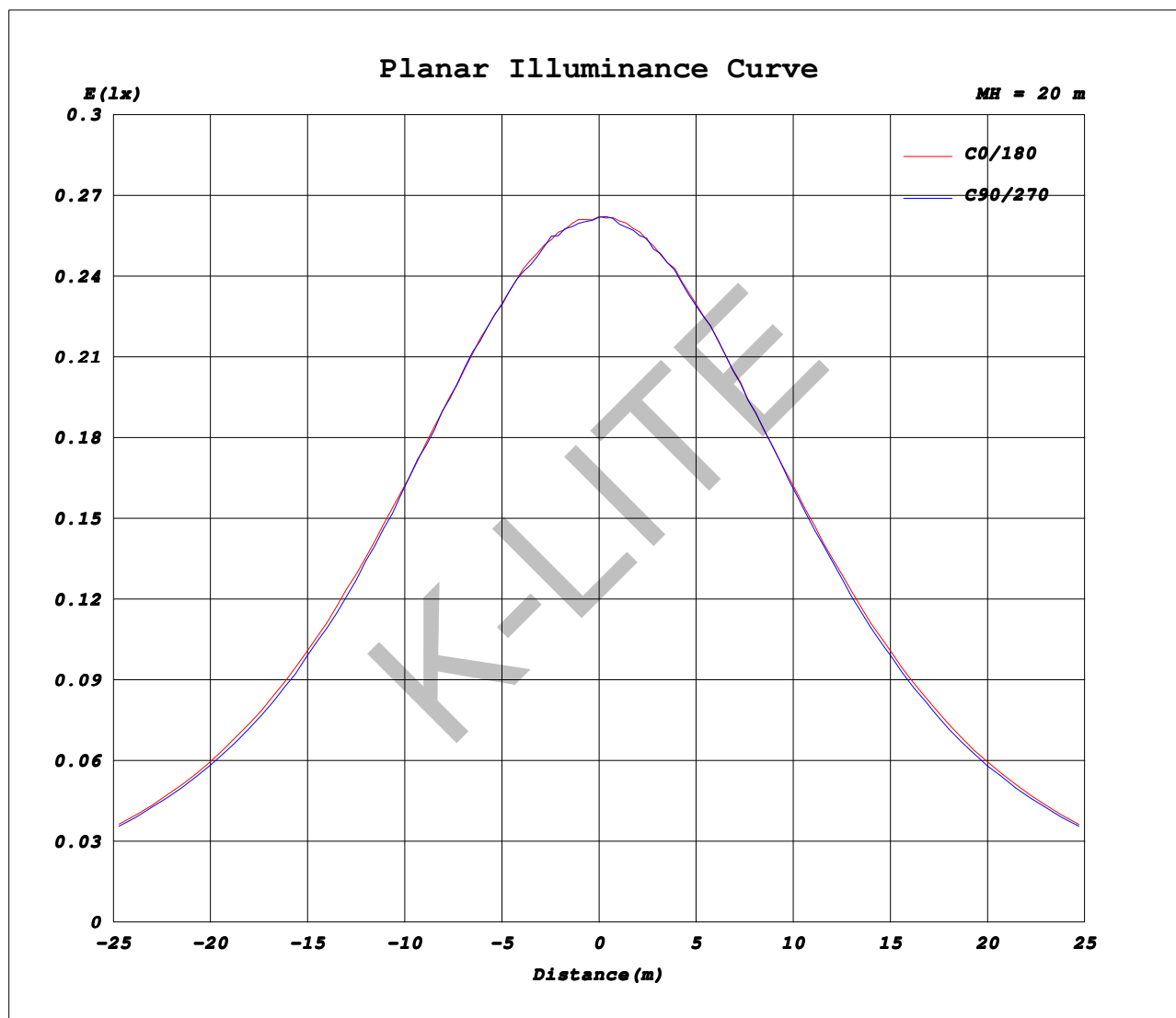
AvgL	cd/m2
L_0~180 (65) av	832
L_0~180 (75) av	687
L_0~180 (85) av	307
L_90~270 (65) av	828
L_90~270 (75) av	691
L_90~270 (85) av	359
L_45 (65) av	827
L_45 (75) av	691
L_45 (85) av	352

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:03 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: 03 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:

```

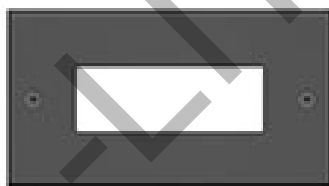
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.836m [K=1.0000]
Remarks:

```

```

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:	32.8%	
Luminaire Power:	6.065 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	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

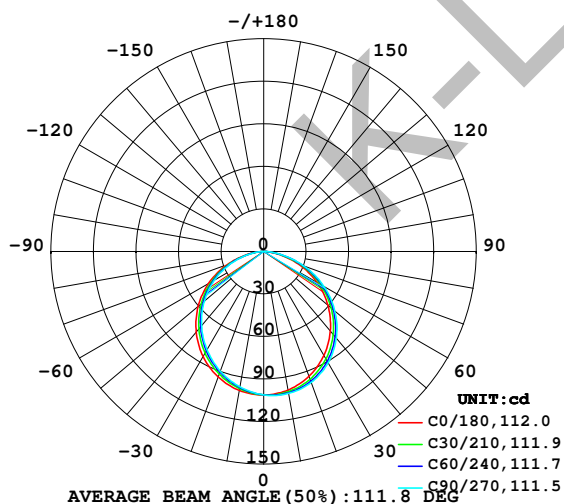
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

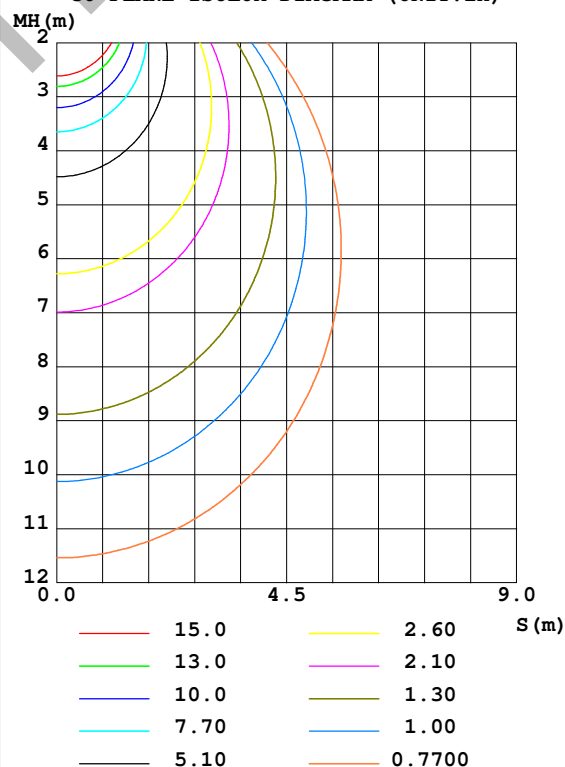
Test:U:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 47.12 lm/W
MODEL	KL-2745	I _{max} (cd)	102.0	S/MH (C0/180)	1.26	
NOMINAL POWER (W)	6	LOR (%)	32.8	S/MH (C90/270)	1.19	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	285.75	η UP, DN (C0-180)	0.0, 17.2	
NOMINAL FLUX (lm)	871.02	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 15.6	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	32.8	CIBSE SHR MAX	1.35	

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:

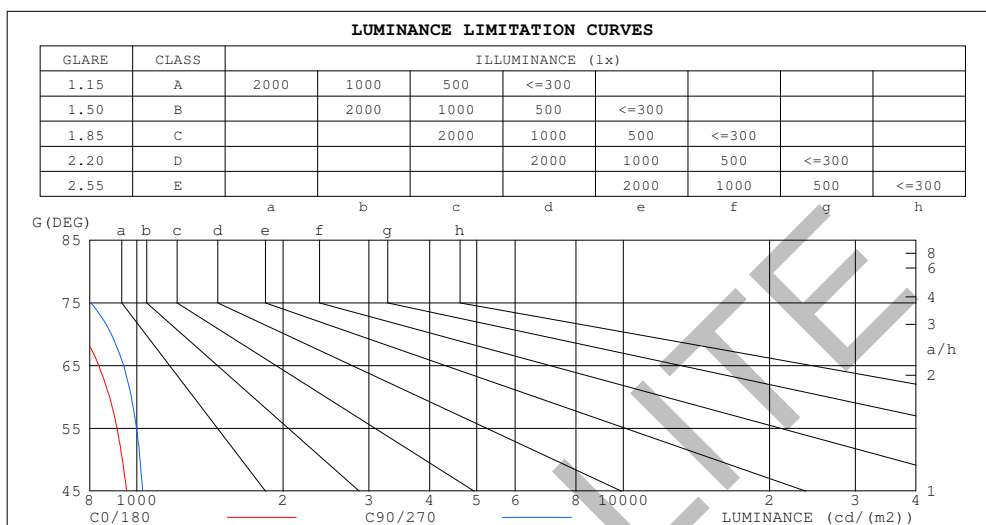
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	99.23	100.9	101.7	101.1	99.52	97.80	97.08	97.64	0- 10	9.573	9.573	3.35, 1.1
20	93.64	96.68	98.22	97.13	94.18	91.23	89.79	90.87	10- 20	27.40	36.98	12.9, 4.25
30	84.89	88.79	90.78	89.41	85.60	81.76	80.05	81.30	20- 30	41.49	78.47	27.5, 9.01
40	73.22	77.50	79.75	78.29	74.08	70.16	68.26	69.55	30- 40	49.99	128.5	45, 14.7
50	59.27	63.35	65.62	64.29	60.46	56.63	54.76	55.89	40- 50	51.84	180.3	63.1, 20.7
60	43.39	46.90	48.95	47.96	44.81	41.60	39.91	40.71	50- 60	46.80	227.1	79.5, 26.1
70	26.13	28.79	30.47	29.96	27.73	25.44	24.03	24.43	60- 70	35.42	262.5	91.9, 30.1
80	8.551	10.57	11.72	11.63	10.09	9.339	8.414	8.418	70- 80	19.34	281.9	98.6, 32.4
90	0	0.0027	0.0057	0.0026	0	0.0006	0	0.0100	80- 90	3.879	285.8	100, 32.8
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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	214	443
80	499	672
75	667	805
70	774	887
65	835	940
60	879	974
55	910	999
50	934	1016
45	953	1028

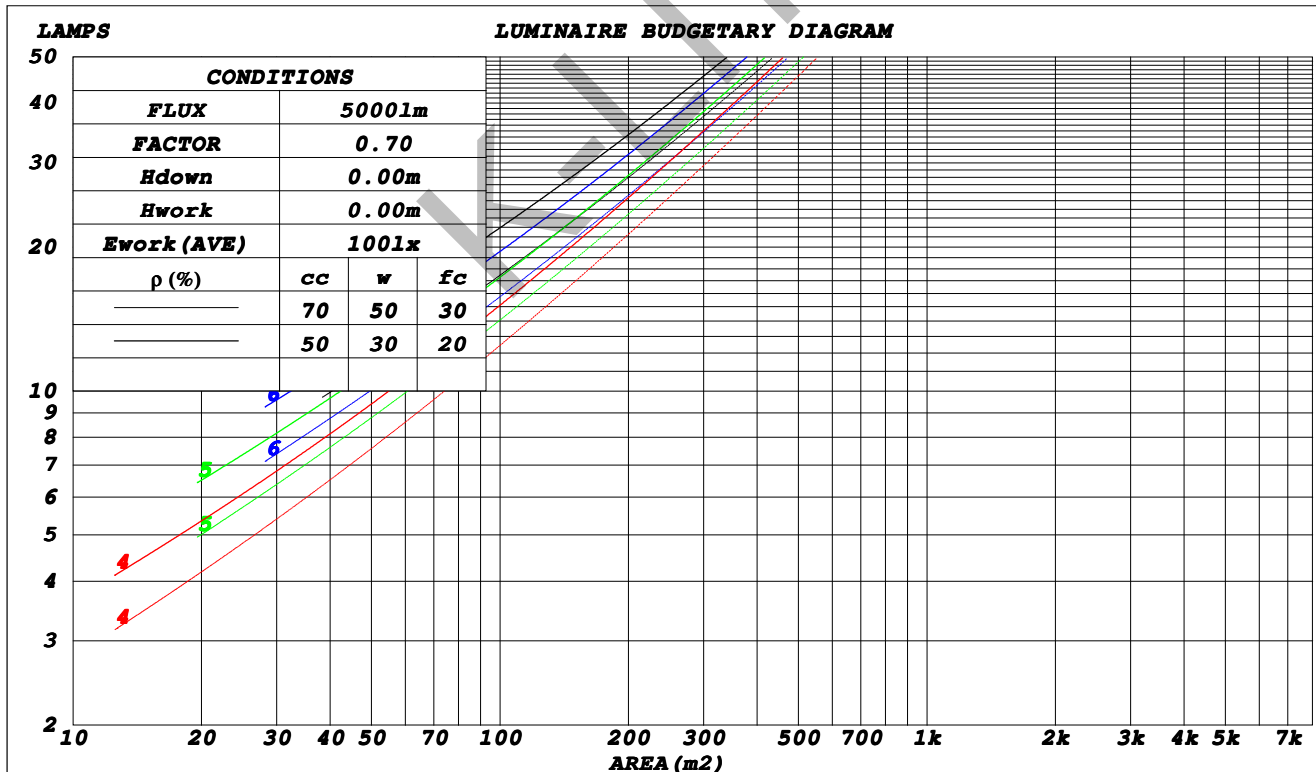
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 01 September 2022

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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
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	.39	.39	.39	.38	.38	.38	.36	.36	.36	.35	.35	.35	.33	.33	.33	.33
1.0	.34	.33	.32	.33	.32	.31	.32	.31	.30	.31	.30	.29	.30	.29	.28	.28
2.0	.30	.28	.26	.29	.27	.25	.28	.26	.25	.27	.25	.24	.26	.25	.24	.23
3.0	.26	.23	.21	.26	.23	.21	.25	.23	.21	.24	.22	.20	.23	.21	.20	.19
4.0	.23	.20	.18	.23	.20	.18	.22	.20	.18	.21	.19	.17	.20	.19	.17	.16
5.0	.21	.18	.16	.20	.18	.15	.20	.17	.15	.19	.17	.15	.18	.16	.15	.14
6.0	.19	.16	.14	.18	.16	.13	.18	.15	.13	.17	.15	.13	.17	.15	.13	.12
7.0	.17	.14	.12	.17	.14	.12	.16	.14	.12	.16	.13	.12	.15	.13	.12	.11
8.0	.15	.13	.11	.15	.12	.11	.15	.12	.11	.14	.12	.10	.14	.12	.10	.10
9.0	.14	.11	.10	.14	.11	.10	.14	.11	.10	.13	.11	.09	.13	.11	.09	.09
10.0	.13	.10	.09	.13	.10	.09	.13	.10	.09	.12	.10	.09	.12	.10	.09	.08



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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
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	.100	.057	.018	.097	.055	.018	.093	.053	.017	.089	.051	.016	.085	.049	.016			
2.0	.095	.052	.016	.093	.051	.016	.089	.049	.015	.085	.048	.015	.082	.046	.015			
3.0	.088	.047	.014	.086	.046	.014	.083	.045	.014	.080	.044	.013	.077	.042	.013			
4.0	.081	.042	.012	.080	.042	.012	.077	.041	.012	.074	.040	.012	.071	.039	.012			
5.0	.075	.038	.011	.074	.038	.011	.071	.037	.011	.069	.036	.011	.066	.035	.011			
6.0	.070	.035	.010	.069	.035	.010	.066	.034	.010	.064	.033	.010	.062	.033	.010			
7.0	.065	.032	.009	.064	.032	.009	.062	.031	.009	.060	.031	.009	.058	.030	.009			
8.0	.061	.030	.008	.060	.029	.008	.058	.029	.008	.056	.028	.008	.054	.028	.008			
9.0	.057	.028	.008	.056	.027	.008	.054	.027	.008	.053	.026	.008	.051	.026	.008			
10.0	.054	.026	.007	.053	.025	.007	.051	.025	.007	.050	.025	.007	.048	.024	.007			

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	.062	.062	.062	.053	.053	.053	.036	.036	.036	.021	.021	.021	.007	.007	.007	
1.0	.059	.051	.044	.050	.044	.038	.035	.030	.026	.020	.018	.015	.006	.006	.005	
2.0	.056	.043	.032	.048	.037	.028	.033	.026	.019	.019	.015	.011	.006	.005	.004	
3.0	.054	.037	.024	.046	.032	.021	.032	.022	.015	.018	.013	.009	.006	.004	.003	
4.0	.051	.033	.019	.044	.029	.017	.030	.020	.012	.018	.012	.007	.006	.004	.002	
5.0	.049	.030	.016	.042	.026	.014	.029	.018	.010	.017	.011	.006	.005	.003	.002	
6.0	.047	.027	.013	.040	.023	.011	.028	.016	.008	.016	.010	.005	.005	.003	.002	
7.0	.044	.025	.011	.038	.021	.010	.026	.015	.007	.015	.009	.004	.005	.003	.001	
8.0	.042	.023	.009	.036	.020	.008	.025	.014	.006	.015	.008	.003	.005	.003	.001	
9.0	.040	.021	.008	.035	.018	.007	.024	.013	.005	.014	.008	.003	.005	.003	.001	
10.0	.038	.020	.007	.033	.017	.006	.023	.012	.005	.013	.007	.003	.004	.002	.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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm										
NAME: SUDO MINI - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:WW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:4862		
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	13.2	14.7	13.5	14.9	15.1	13.6	15.1	13.9	15.3	15.5
3H	14.7	16.1	15.0	16.3	16.5	15.2	16.6	15.5	16.8	17.0
4H	15.2	16.5	15.5	16.7	17.0	15.7	17.1	16.1	17.3	17.6
6H	15.4	16.7	15.8	17.0	17.2	16.1	17.4	16.4	17.6	17.9
8H	15.5	16.7	15.8	17.0	17.2	16.2	17.4	16.5	17.7	18.0
12H	15.4	16.6	15.8	16.9	17.2	16.2	17.4	16.6	17.7	18.0
4H 2H	13.9	15.2	14.2	15.5	15.7	14.2	15.5	14.5	15.8	16.0
3H	15.5	16.7	15.9	17.0	17.3	15.9	17.1	16.3	17.4	17.7
4H	16.1	17.2	16.5	17.5	17.8	16.6	17.7	17.0	18.0	18.3
6H	16.5	17.4	16.9	17.8	18.1	17.1	18.0	17.5	18.4	18.8
8H	16.5	17.4	16.9	17.8	18.2	17.2	18.1	17.6	18.5	18.9
12H	16.5	17.3	17.0	17.7	18.1	17.3	18.1	17.7	18.5	18.9
8H 4H	16.4	17.3	16.8	17.6	18.0	16.8	17.7	17.2	18.1	18.5
6H	16.9	17.6	17.3	18.0	18.4	17.4	18.2	17.9	18.6	19.0
8H	17.0	17.6	17.4	18.0	18.5	17.6	18.3	18.1	18.7	19.2
12H	17.0	17.5	17.5	18.0	18.5	17.7	18.3	18.2	18.7	19.2
12H 4H	16.4	17.2	16.8	17.6	18.0	16.8	17.6	17.2	18.0	18.4
6H	16.9	17.5	17.4	18.0	18.4	17.5	18.1	17.9	18.5	19.0
8H	17.0	17.6	17.5	18.0	18.5	17.7	18.2	18.2	18.7	19.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:

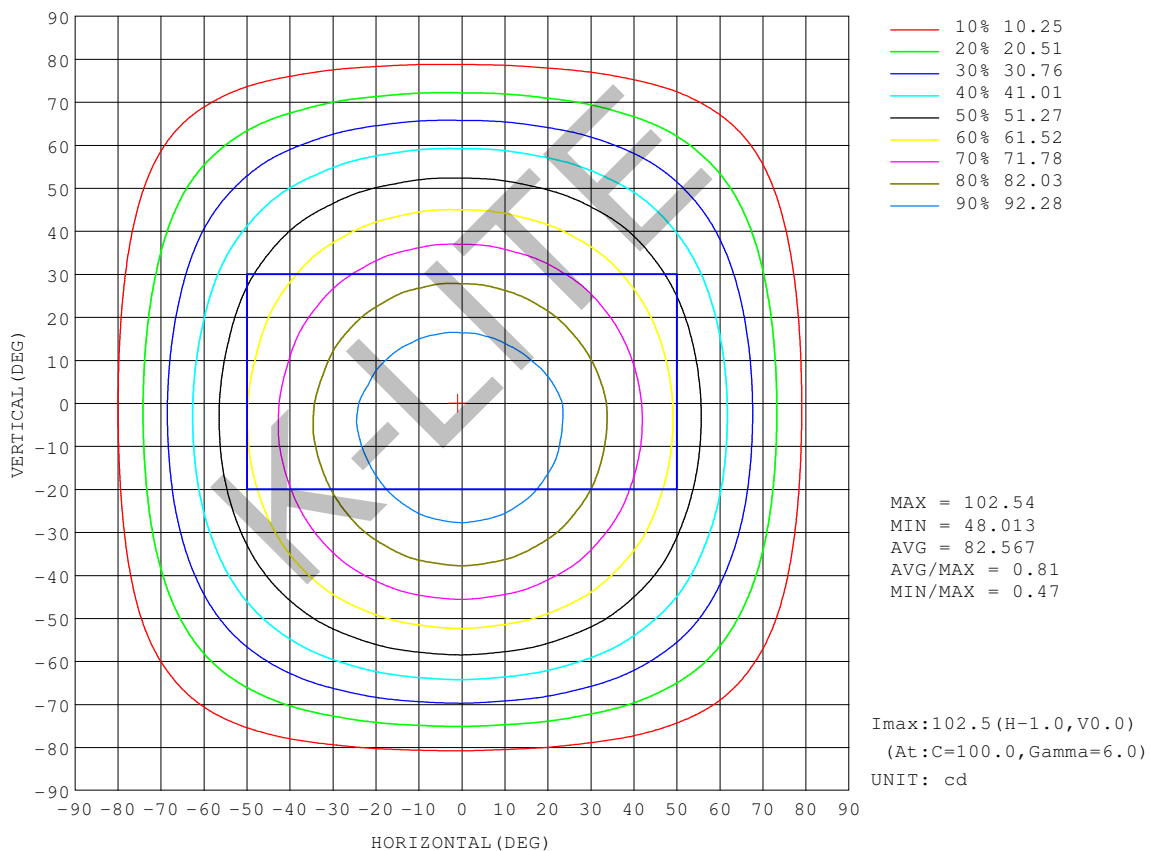
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	19	15	13	19	15	13	18	15	13	11
0.80	22	18	16	22	18	16	21	18	16	14
1.00	25	21	19	25	21	19	24	22	19	16
1.25	27	24	22	27	24	21	26	23	21	19
1.50	29	26	23	28	25	23	27	25	23	21
2.00	31	28	26	31	28	26	30	27	26	23
2.50	33	30	28	32	30	28	31	29	27	24
3.00	34	31	30	33	31	29	32	30	29	26
4.00	35	33	32	34	33	31	33	31	30	27
5.00	36	34	33	35	34	32	33	32	31	28
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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:

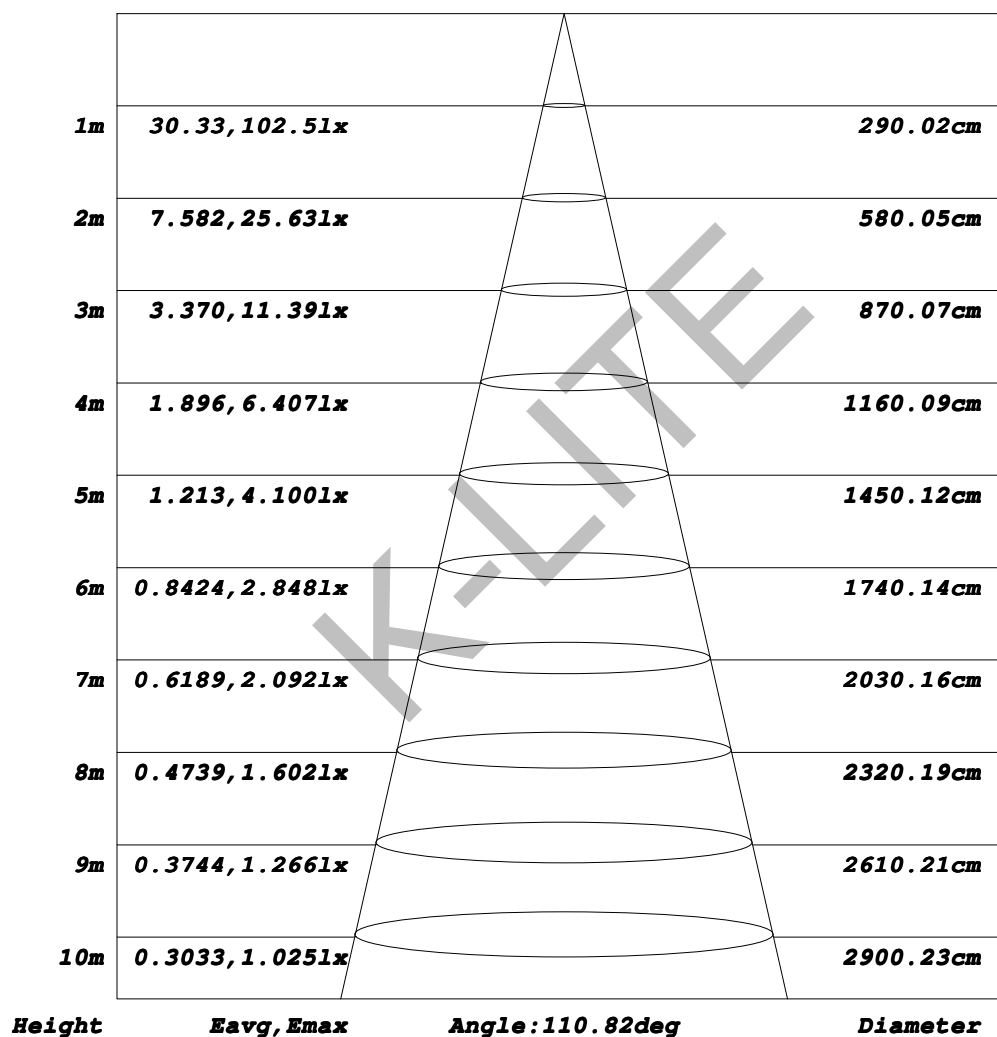


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:01 September 2022

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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:

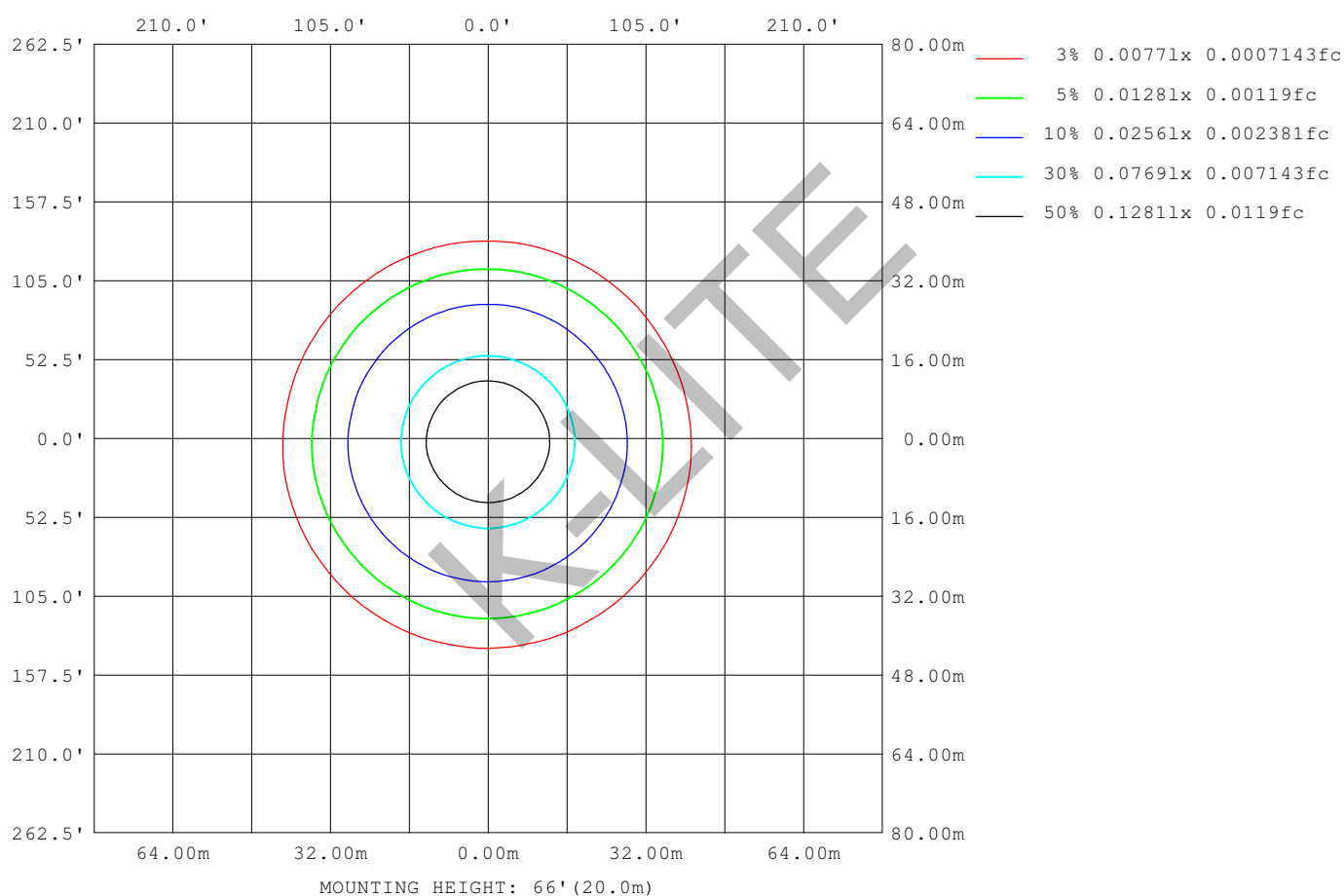
Flux out:209.4 lm


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:

ISOLUX DIAGRAM

Test:U:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
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:230.62V I:0.0269A P:6.0647W PF:0.9776 Freq:50.00Hz Lamp Flux:871.02x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4862
MFR.: K-LITE	SUR.:	Shielding Angle:

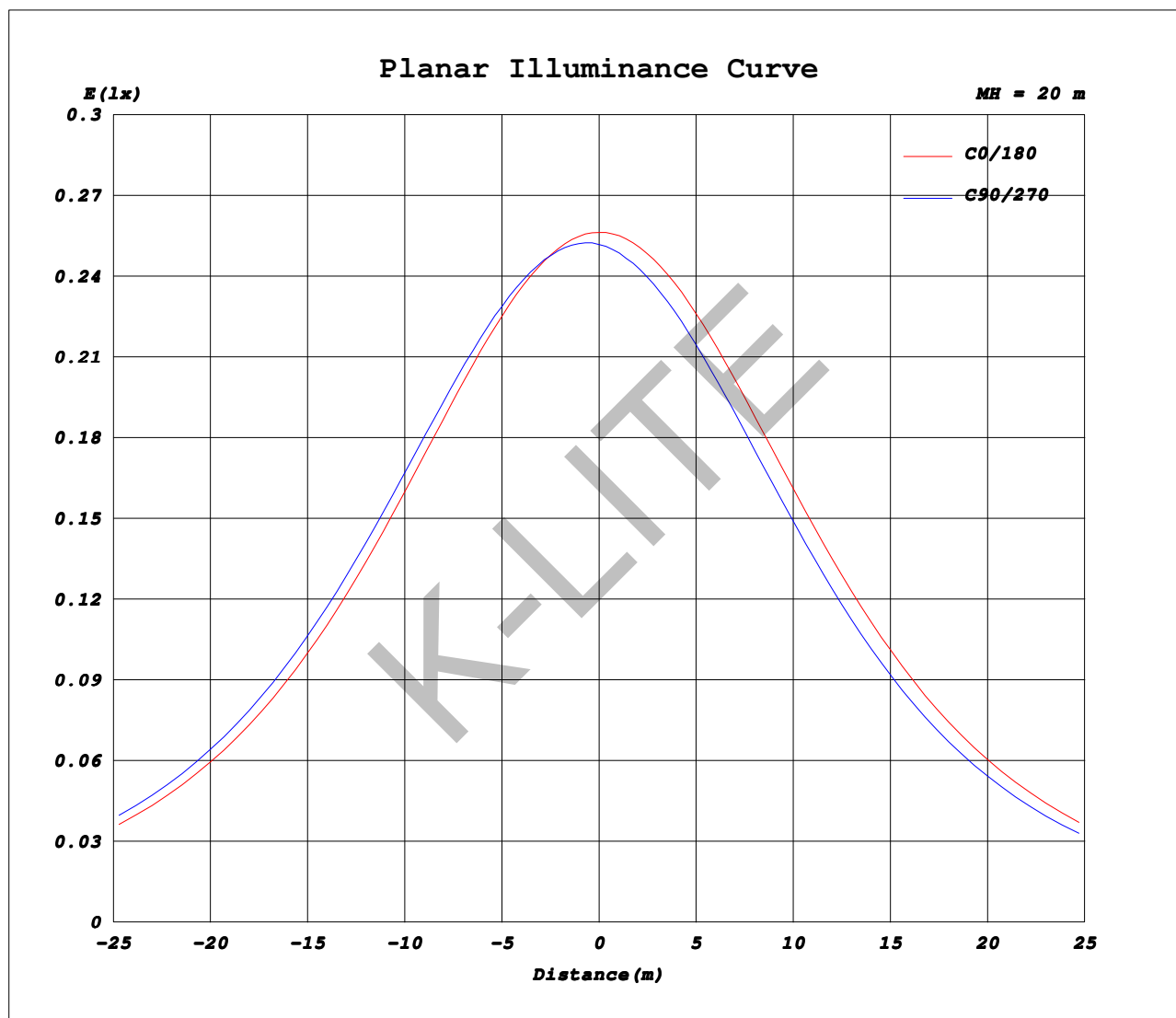
AvgL	cd/m2
L_0~180 (65) av	843
L_0~180 (75) av	691
L_0~180 (85) av	274
L_90~270 (65) av	852
L_90~270 (75) av	713
L_90~270 (85) av	352
L_45 (65) av	848
L_45 (75) av	711
L_45 (85) av	348

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:

```

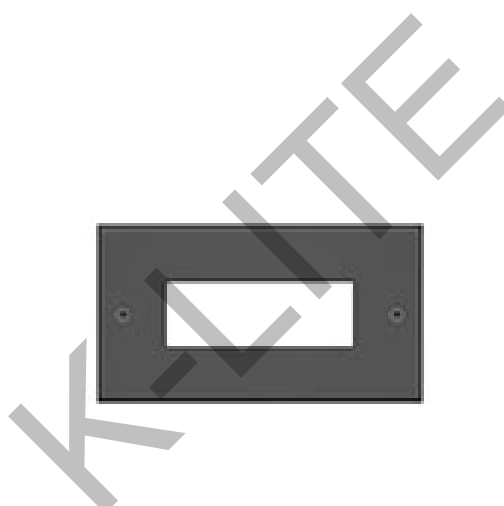
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

```

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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:

```



Light Output Ratio:	28.2%	
Luminaire Power:	6.269 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	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

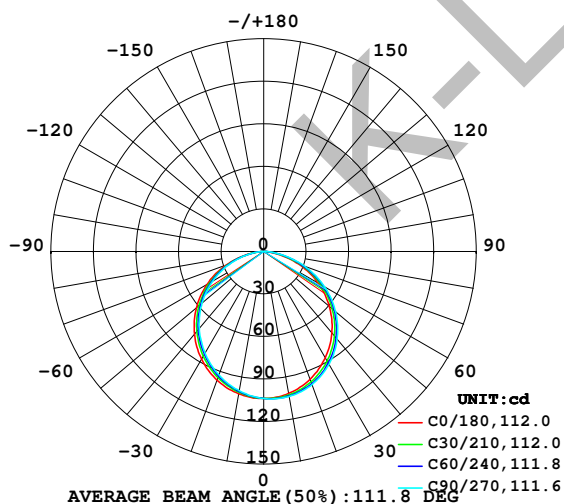
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity: 65.0%
Test Distance: 1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

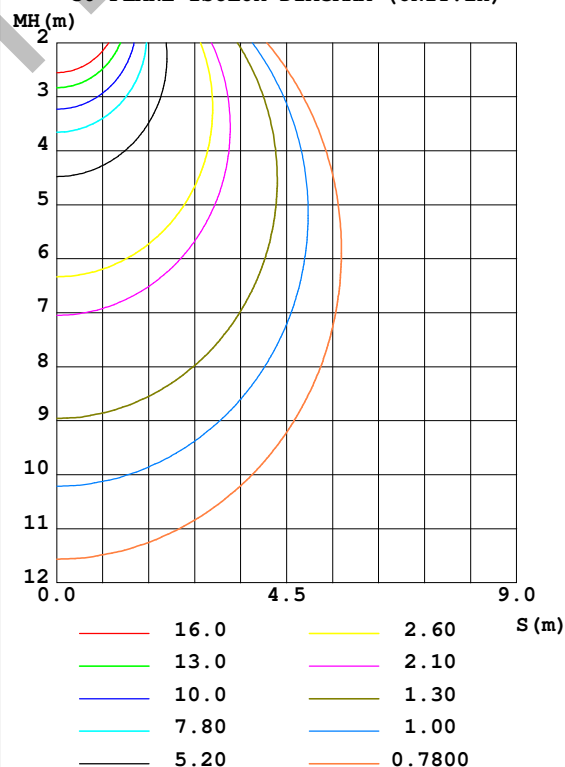
Test:U:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 46.63 lm/W
MODEL	KL-2745	I _{max} (cd)	104.3	S/MH (C0/180)	1.26	
NOMINAL POWER (W)	6	LOR (%)	28.2	S/MH (C90/270)	1.20	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	292.29	η UP, DN (C0-180)	0.0, 14.7	
NOMINAL FLUX (lm)	1036.8	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 13.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	28.2	CIBSE SHR MAX	1.35	

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:

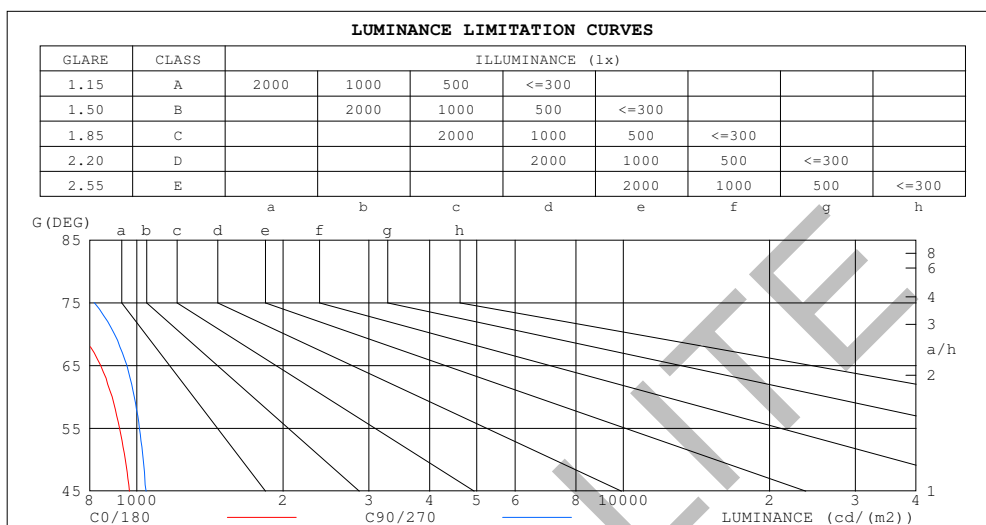
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	101.7	103.2	103.8	103.3	102.0	100.6	99.75	100.3	0- 10	9.812	9.812	3.36, 0.95
20	95.91	98.59	99.97	99.01	96.52	94.03	92.64	93.53	10- 20	28.08	37.89	13, 3.65
30	86.81	90.30	92.03	90.91	87.66	84.51	82.86	83.83	20- 30	42.50	80.39	27.5, 7.75
40	74.90	78.68	80.70	79.50	76.12	72.63	70.74	71.74	30- 40	51.19	131.6	45, 12.7
50	60.54	64.17	66.34	65.20	62.10	58.68	56.84	57.62	40- 50	53.06	184.6	63.2, 17.8
60	44.24	47.45	49.45	48.78	46.09	43.16	41.38	41.89	50- 60	47.88	232.5	79.6, 22.4
70	26.23	29.04	30.79	30.58	28.29	26.38	24.88	24.95	60- 70	36.19	268.7	91.9, 25.9
80	8.195	10.54	11.87	12.08	10.07	9.726	8.618	8.347	70- 80	19.63	288.3	98.7, 27.8
90	0	0.0062	0.0015	0.0384	0	0.0036	0.0091	0.0011	80- 90	3.942	292.3	100, 28.2
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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:



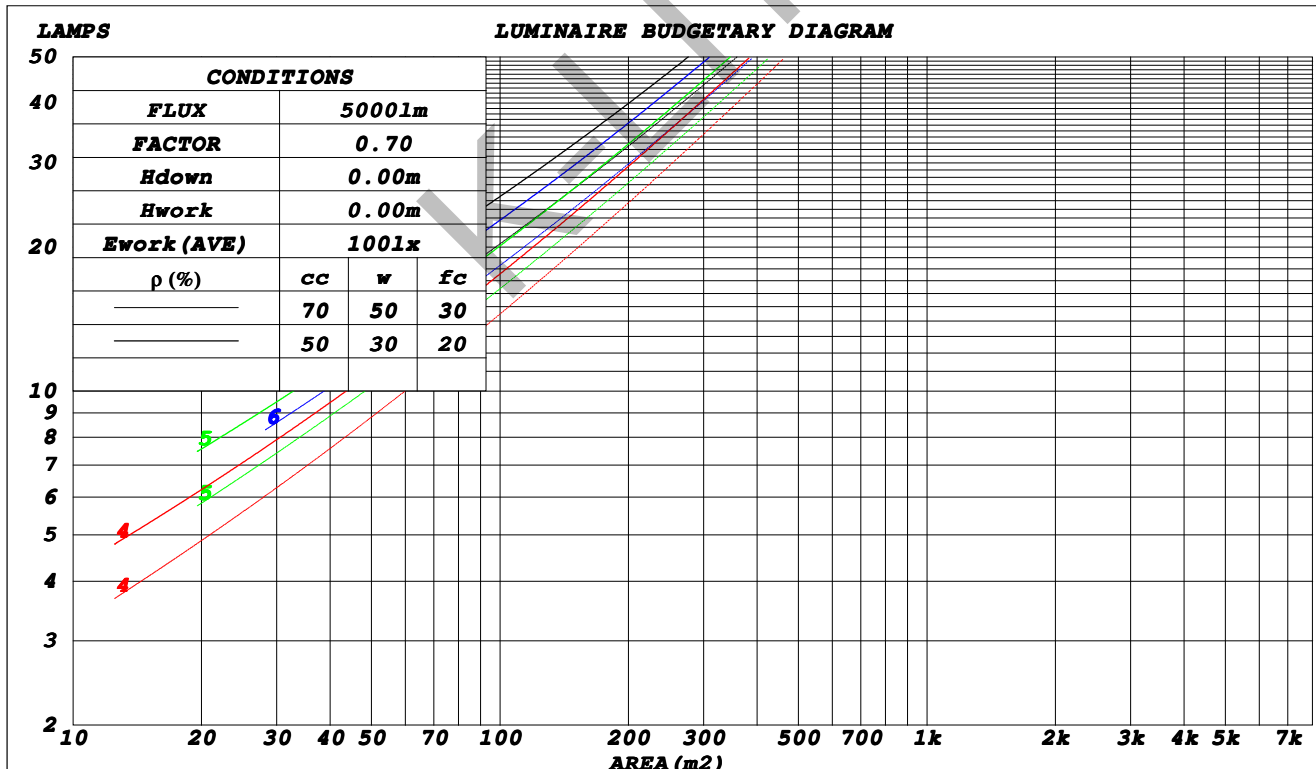
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: K-LITE
Test Date: 02 September 2022

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
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	.34	.34	.34	.33	.33	.33	.31	.31	.31	.30	.30	.30	.29	.29	.29	.28
1.0	.29	.28	.27	.29	.28	.27	.28	.27	.26	.26	.26	.25	.25	.25	.24	.24
2.0	.26	.24	.22	.25	.23	.22	.24	.23	.21	.23	.22	.21	.22	.21	.20	.20
3.0	.22	.20	.18	.22	.20	.18	.21	.19	.18	.20	.19	.18	.20	.18	.17	.17
4.0	.20	.17	.16	.20	.17	.15	.19	.17	.15	.18	.16	.15	.18	.16	.15	.14
5.0	.18	.15	.13	.17	.15	.13	.17	.15	.13	.16	.14	.13	.16	.14	.13	.12
6.0	.16	.13	.12	.16	.13	.12	.15	.13	.11	.15	.13	.11	.14	.13	.11	.11
7.0	.14	.12	.10	.14	.12	.10	.14	.12	.10	.13	.12	.10	.13	.11	.10	.09
8.0	.13	.11	.09	.13	.11	.09	.13	.11	.09	.12	.10	.09	.12	.10	.09	.08
9.0	.12	.10	.08	.12	.10	.08	.12	.10	.08	.11	.09	.08	.11	.09	.08	.08
10.0	.11	.09	.07	.11	.09	.07	.11	.09	.07	.10	.09	.07	.10	.09	.07	.07



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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
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	.085	.049	.015	.083	.048	.015	.080	.046	.015	.076	.044	.014	.073	.042	.014		
2.0	.081	.044	.014	.079	.044	.013	.076	.042	.013	.073	.041	.013	.070	.040	.013		
3.0	.075	.040	.012	.074	.040	.012	.071	.038	.012	.068	.037	.011	.066	.036	.011		
4.0	.070	.036	.011	.068	.036	.011	.066	.035	.010	.063	.034	.010	.061	.033	.010		
5.0	.065	.033	.010	.063	.033	.009	.061	.032	.009	.059	.031	.009	.057	.030	.009		
6.0	.060	.030	.009	.059	.030	.009	.057	.029	.008	.055	.029	.008	.053	.028	.008		
7.0	.056	.028	.008	.055	.027	.008	.053	.027	.008	.051	.026	.008	.050	.026	.008		
8.0	.052	.026	.007	.051	.025	.007	.050	.025	.007	.048	.024	.007	.047	.024	.007		
9.0	.049	.024	.007	.048	.023	.007	.047	.023	.007	.045	.023	.007	.044	.022	.006		
10.0	.046	.022	.006	.045	.022	.006	.044	.022	.006	.043	.021	.006	.042	.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	.054	.054	.054	.046	.046	.046	.031	.031	.031	.018	.018	.018	.006	.006	.006		
1.0	.051	.044	.038	.043	.038	.033	.030	.026	.023	.017	.015	.013	.005	.005	.004		
2.0	.048	.037	.028	.041	.032	.024	.028	.022	.017	.016	.013	.010	.005	.004	.003		
3.0	.046	.032	.021	.040	.028	.018	.027	.019	.013	.016	.011	.008	.005	.004	.002		
4.0	.044	.028	.017	.038	.025	.014	.026	.017	.010	.015	.010	.006	.005	.003	.002		
5.0	.042	.026	.013	.036	.022	.012	.025	.015	.008	.014	.009	.005	.005	.003	.002		
6.0	.040	.023	.011	.034	.020	.010	.024	.014	.007	.014	.008	.004	.004	.003	.001		
7.0	.038	.021	.009	.033	.018	.008	.023	.013	.006	.013	.008	.003	.004	.002	.001		
8.0	.036	.020	.008	.031	.017	.007	.022	.012	.005	.013	.007	.003	.004	.002	.001		
9.0	.035	.018	.007	.030	.016	.006	.021	.011	.004	.012	.007	.003	.004	.002	.001		
10.0	.033	.017	.006	.028	.015	.006	.020	.010	.004	.012	.006	.002	.004	.002	.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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm										
NAME: SUDO MINI - OPEN FRAME					TYPE:PATH FINDERS			WEIGHT:		
SPEC.:NW, NICHIA					DIM.: 130 x 87 x 76			SERIAL No.:4867		
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	12.6	14.2	12.9	14.4	14.6	13.0	14.5	13.3	14.7	15.0
3H	14.0	15.4	14.3	15.7	15.9	14.6	16.0	14.9	16.2	16.4
4H	14.5	15.9	14.8	16.1	16.4	15.2	16.5	15.5	16.7	17.0
6H	14.8	16.0	15.1	16.3	16.6	15.5	16.8	15.9	17.1	17.3
8H	14.8	16.0	15.1	16.3	16.6	15.6	16.8	16.0	17.1	17.4
12H	14.8	15.9	15.1	16.2	16.5	15.7	16.8	16.0	17.1	17.4
4H 2H	13.3	14.6	13.6	14.9	15.1	13.6	14.9	13.9	15.2	15.4
3H	14.9	16.0	15.2	16.3	16.6	15.3	16.5	15.7	16.8	17.1
4H	15.5	16.5	15.8	16.8	17.2	16.0	17.1	16.4	17.4	17.7
6H	15.8	16.7	16.2	17.1	17.5	16.5	17.5	16.9	17.8	18.2
8H	15.9	16.7	16.3	17.1	17.5	16.6	17.5	17.1	17.9	18.3
12H	15.8	16.6	16.3	17.0	17.4	16.7	17.5	17.1	17.9	18.3
8H 4H	15.7	16.6	16.1	17.0	17.4	16.2	17.1	16.6	17.5	17.9
6H	16.2	16.9	16.6	17.3	17.7	16.8	17.6	17.3	18.0	18.4
8H	16.3	16.9	16.7	17.4	17.8	17.0	17.7	17.5	18.1	18.6
12H	16.3	16.9	16.8	17.3	17.8	17.1	17.7	17.6	18.1	18.6
12H 4H	15.7	16.5	16.2	16.9	17.3	16.2	17.0	16.6	17.4	17.8
6H	16.2	16.9	16.7	17.3	17.7	16.9	17.5	17.3	17.9	18.4
8H	16.4	16.9	16.8	17.4	17.8	17.1	17.6	17.6	18.1	18.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.3				

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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:

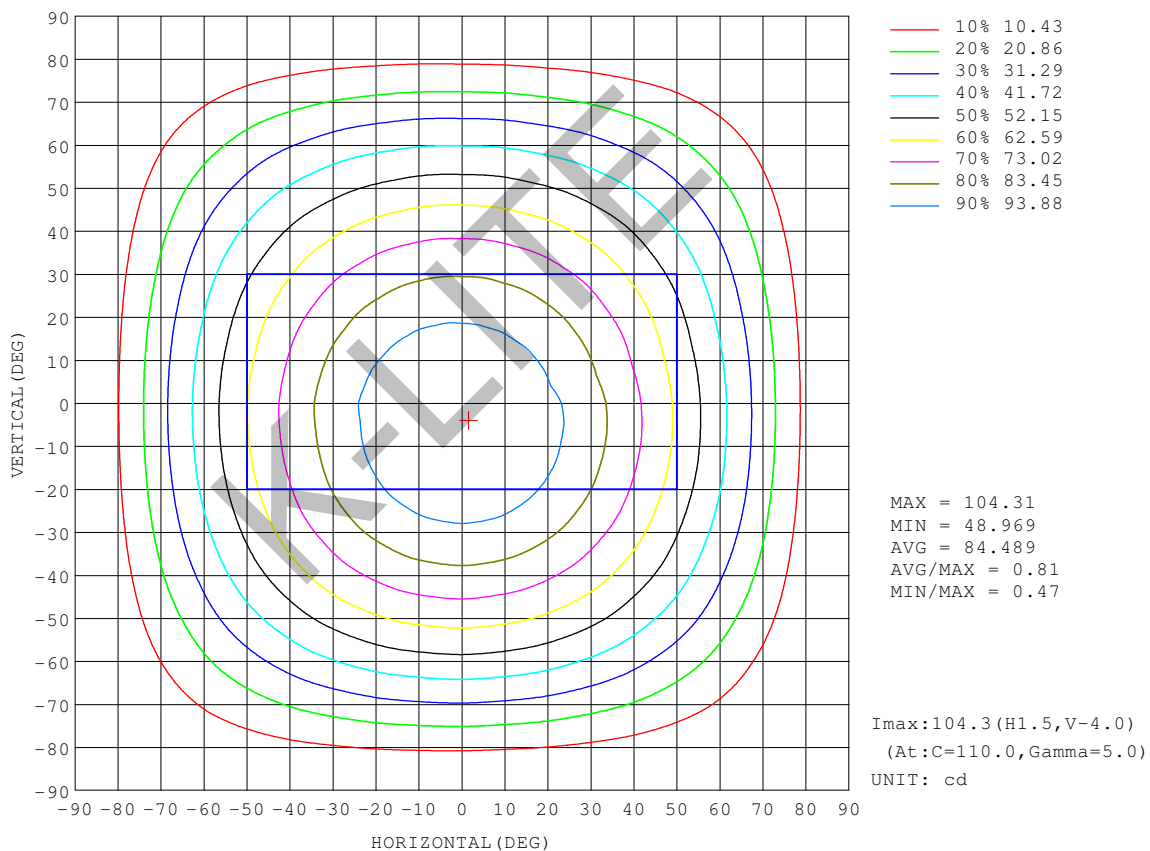
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	16	13	11	16	13	11	16	13	11	9
0.80	19	16	14	19	16	14	18	16	14	12
1.00	22	18	16	21	18	16	21	19	16	14
1.25	24	21	19	23	20	18	22	20	18	16
1.50	25	22	20	24	22	20	24	21	20	18
2.00	27	24	23	26	24	22	25	24	22	20
2.50	28	26	24	27	25	24	26	25	23	21
3.00	29	27	25	28	27	25	27	26	25	22
4.00	30	28	27	29	28	27	28	27	26	24
5.00	31	29	28	30	29	28	29	28	27	24
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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:



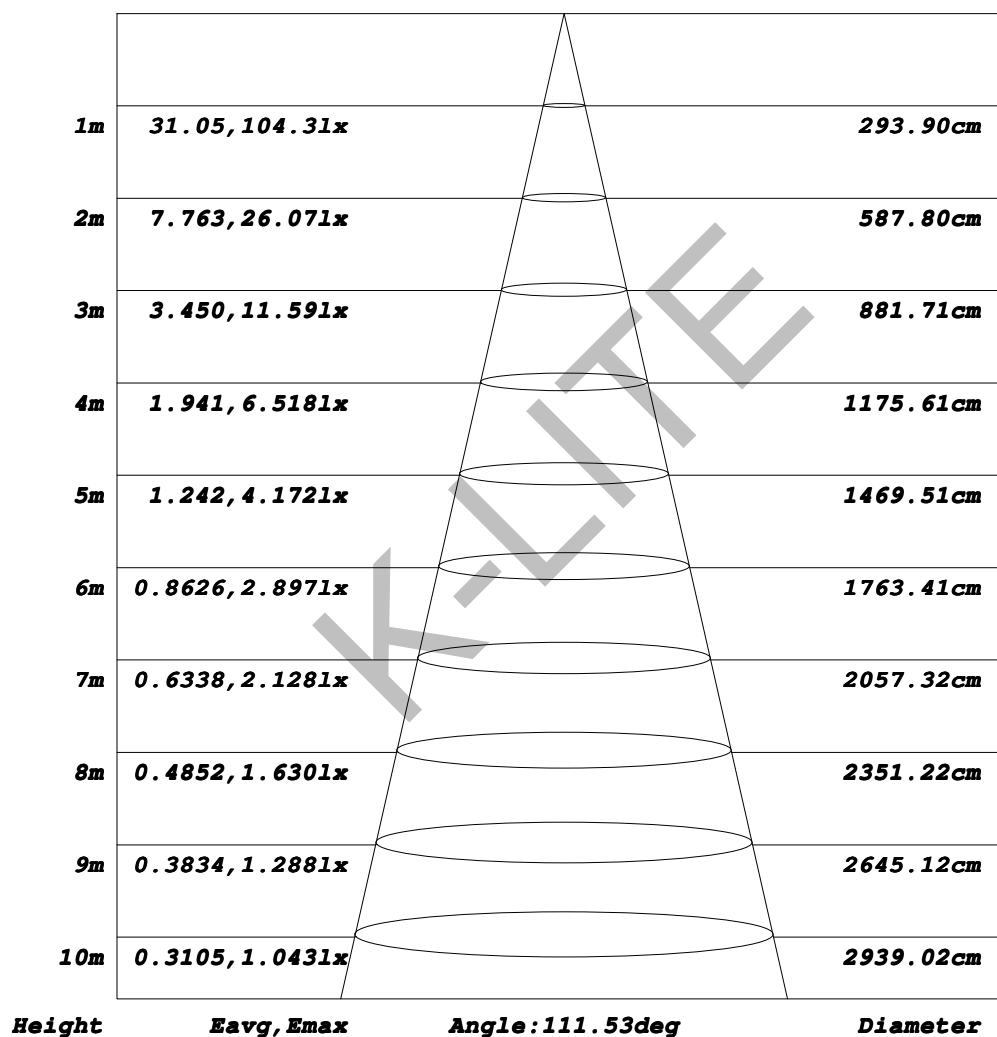
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:02 September 2022

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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:214.4 lm



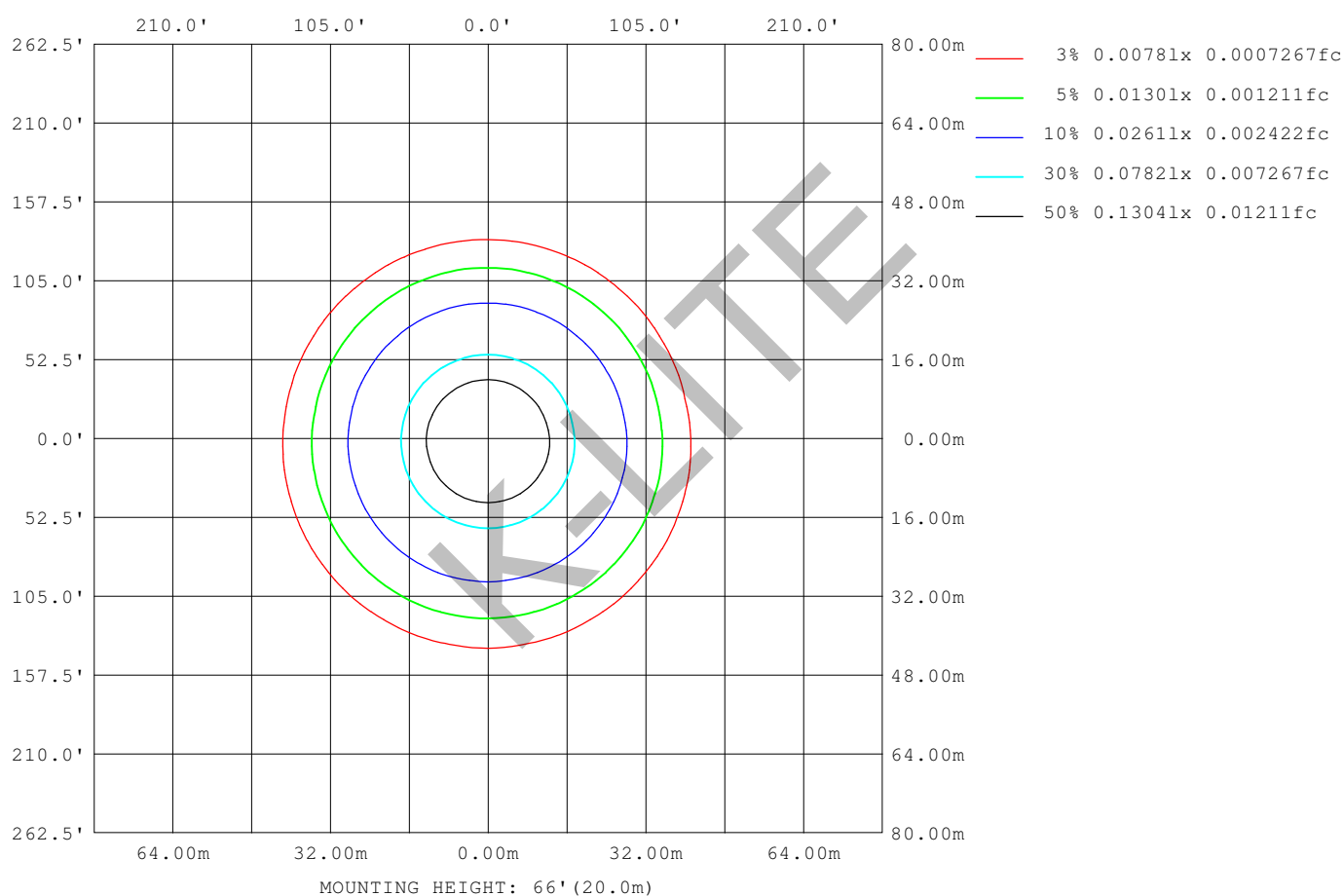
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: K-LITE
 Test Date: 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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
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:230.55V I:0.0278A P:6.2686W PF:0.9793 Freq:49.99Hz Lamp Flux:1036.8x1 lm		
NAME: SUDO MINI - OPEN FRAME	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 130 x 87 x 76	SERIAL No.:4867
MFR.: K-LITE	SUR.:	Shielding Angle:

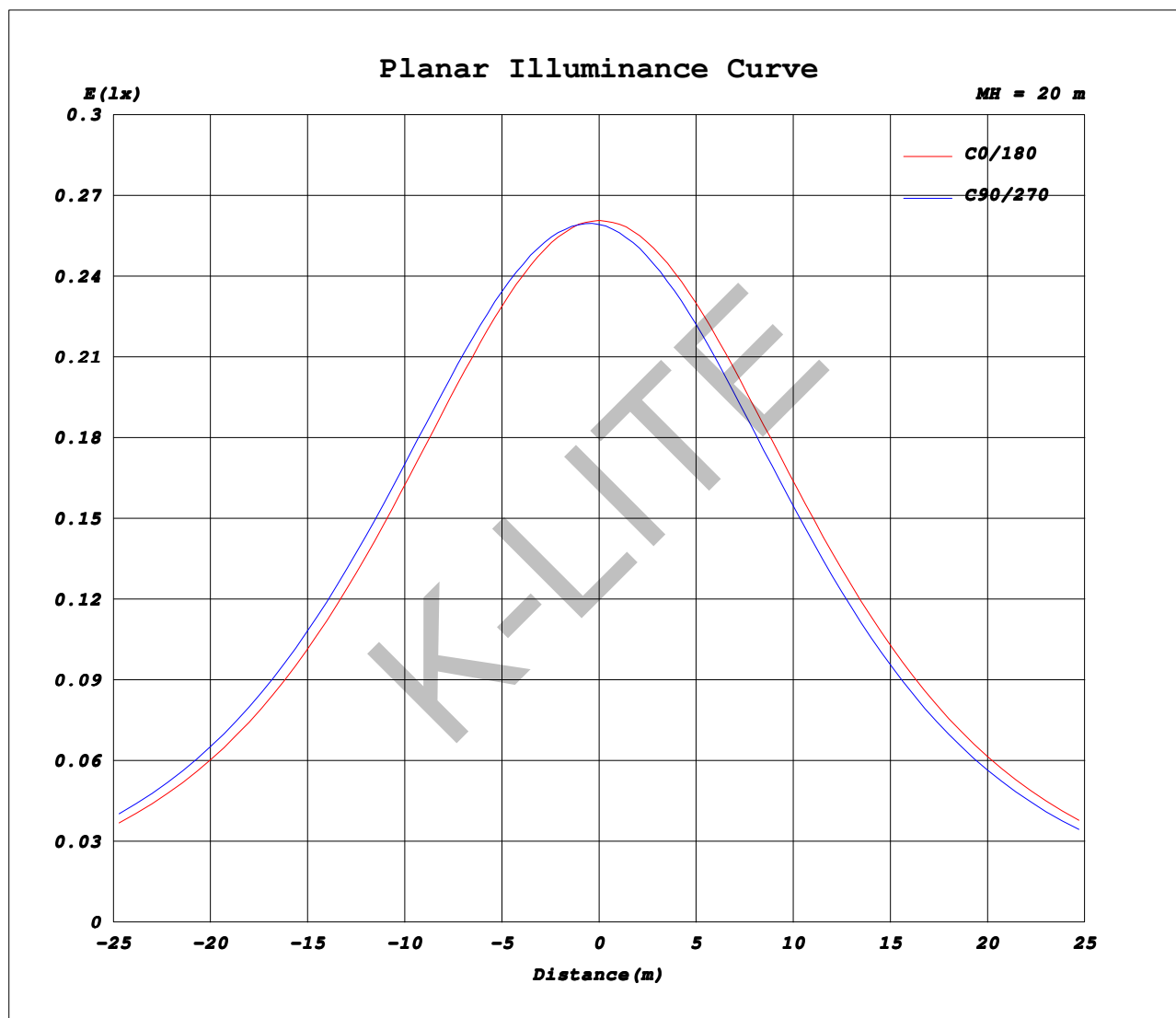
AvgL	cd/m2
L_0~180 (65) av	861
L_0~180 (75) av	693
L_0~180 (85) av	262
L_90~270 (65) av	870
L_90~270 (75) av	728
L_90~270 (85) av	359
L_45 (65) av	868
L_45 (75) av	725
L_45 (85) av	357

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:

```