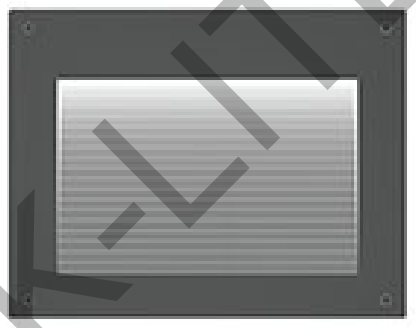


Light Output Ratio:	50.4%	
Luminaire Power:	11.95 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 August 2022

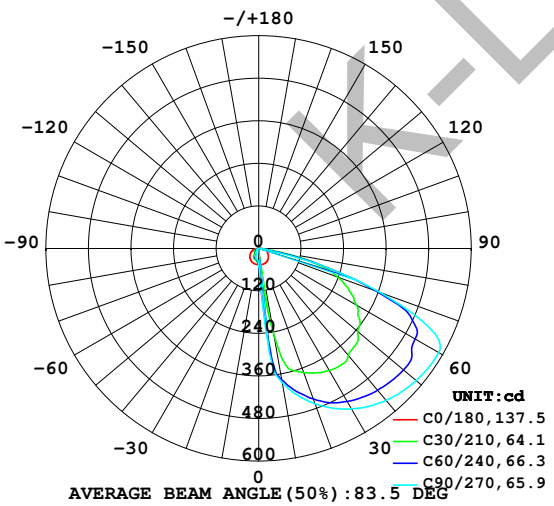
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

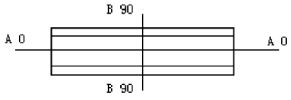
Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 76.31 lm/W	
MODEL	KL-2735	Imax(cd)	598.0	S/MH(C0/180)	1.35
NOMINAL POWER(W)	12	LOR(%)	50.4	S/MH(C90/270)	0.68
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	912.17	η UP,DN(C0-180)	0.0,48.1
NOMINAL FLUX(lm)	1809	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,2.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	50.4	CIBSE SHR MAX	1.00

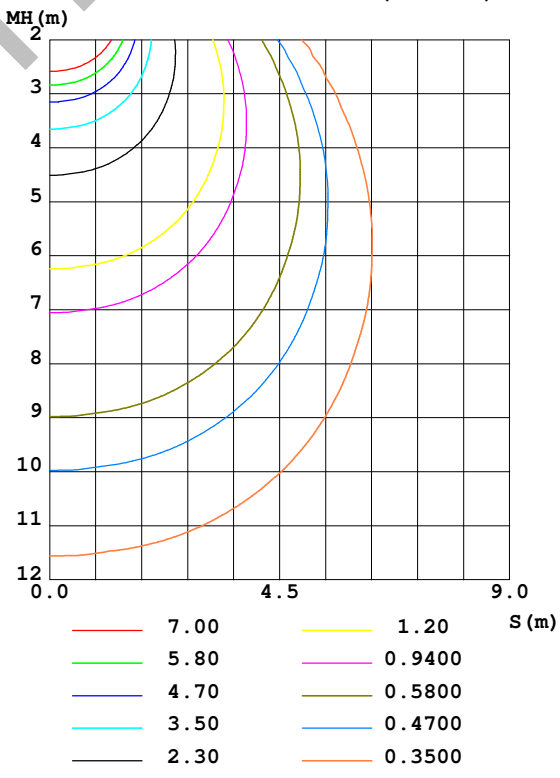
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):83.5 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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	46.60	351.4	383.3	346.0	45.68	33.23	31.05	33.46	0- 10	10.84	10.84	1.19,0.60
20	46.37	417.4	466.4	404.0	44.57	30.84	24.21	31.02	10- 20	51.71	62.54	6.86,3.46
30	44.63	451.9	522.4	436.9	42.06	21.01	16.13	21.89	20- 30	96.52	159.1	17.4,8.79
40	41.10	472.1	559.4	448.2	38.26	16.73	11.92	16.87	30- 40	138.3	297.4	32.6,16.4
50	36.37	457.9	579.7	428.9	33.04	13.12	8.725	13.15	40- 50	169.0	466.3	51.1,25.8
60	30.35	418.0	586.6	395.2	26.70	9.807	5.832	9.932	50- 60	185.2	651.5	71.4,36
70	24.90	328.6	365.4	303.9	19.84	6.689	3.384	6.792	60- 70	173.5	825.0	90.4,45.6
80	13.82	53.67	25.93	48.24	12.42	3.356	1.360	3.537	70- 80	80.46	905.5	99.3,50.1
90	0	0.0001	0	0	0	0	0	0	80- 90	6.659	912.2	100,50.4
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		

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 August 2022

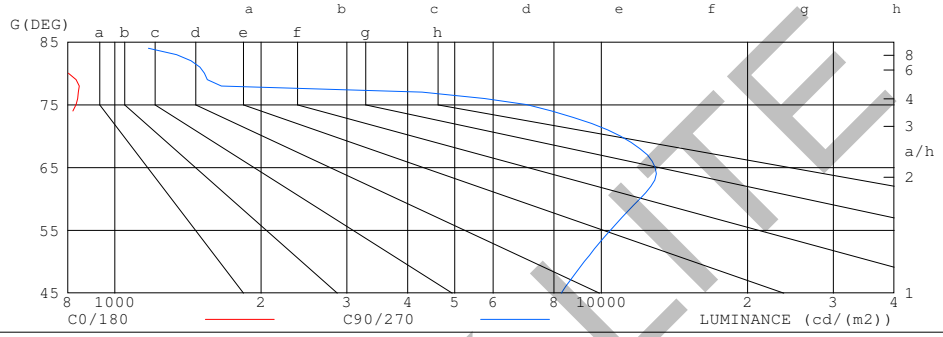
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	758	751
80	803	1529
75	833	7027
70	735	10939
65	667	12912
60	613	12013
55	589	10452
50	571	9235
45	555	8276

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:

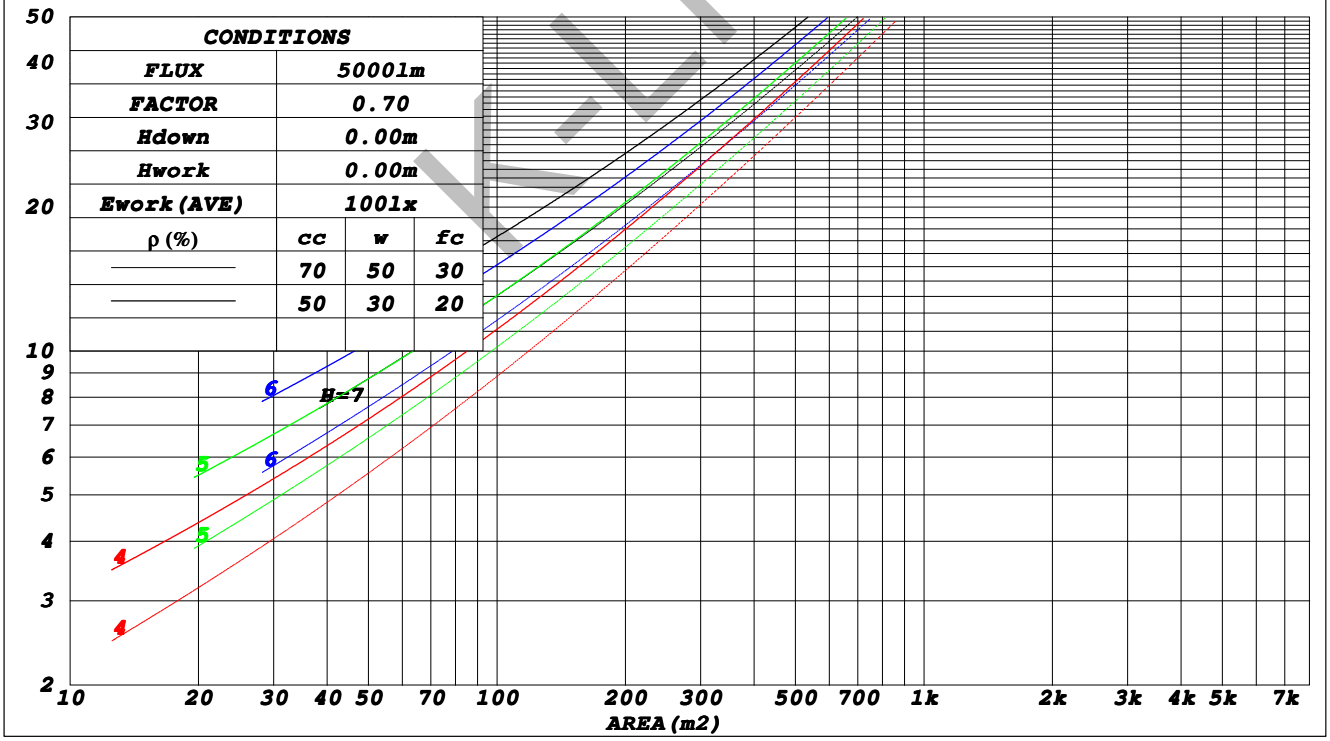
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	.60	.60	.60	.59	.59	.59	.56	.56	.56	.54	.54	.54	.51	.51	.51	.50
1.0	.52	.49	.47	.51	.48	.47	.48	.47	.45	.46	.45	.44	.45	.43	.42	.41
2.0	.44	.40	.37	.43	.40	.37	.41	.38	.36	.40	.37	.35	.38	.36	.34	.33
3.0	.38	.33	.30	.37	.33	.29	.35	.32	.29	.34	.31	.28	.33	.30	.28	.27
4.0	.33	.28	.24	.32	.28	.24	.31	.27	.24	.30	.26	.23	.28	.25	.23	.22
5.0	.29	.24	.20	.28	.23	.20	.27	.23	.20	.26	.22	.19	.25	.22	.19	.18
6.0	.25	.21	.17	.25	.20	.17	.24	.20	.17	.23	.19	.17	.22	.19	.16	.15
7.0	.23	.18	.15	.22	.18	.14	.22	.17	.14	.21	.17	.14	.20	.17	.14	.13
8.0	.20	.16	.13	.20	.16	.13	.19	.15	.13	.19	.15	.12	.18	.15	.12	.11
9.0	.19	.14	.11	.18	.14	.11	.18	.14	.11	.17	.14	.11	.17	.13	.11	.10
10.0	.17	.13	.10	.17	.13	.10	.16	.12	.10	.16	.12	.10	.15	.12	.10	.09

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.168	.096	.030	.165	.094	.030	.158	.091	.029	.152	.088	.028	.146	.085	.027	
2.0	.162	.089	.027	.159	.087	.027	.153	.085	.026	.147	.082	.026	.142	.080	.025	
3.0	.150	.080	.024	.147	.079	.024	.142	.077	.023	.137	.075	.023	.132	.073	.023	
4.0	.138	.072	.021	.136	.071	.021	.131	.069	.021	.126	.068	.020	.122	.066	.020	
5.0	.127	.065	.019	.125	.064	.019	.121	.063	.019	.117	.062	.018	.113	.060	.018	
6.0	.117	.059	.017	.115	.058	.017	.112	.057	.017	.108	.056	.016	.105	.055	.016	
7.0	.109	.054	.015	.107	.053	.015	.103	.052	.015	.100	.051	.015	.097	.051	.015	
8.0	.101	.049	.014	.099	.049	.014	.096	.048	.014	.093	.047	.014	.091	.047	.014	
9.0	.094	.046	.013	.093	.045	.013	.090	.045	.013	.087	.044	.013	.085	.043	.012	
10.0	.088	.042	.012	.087	.042	.012	.084	.041	.012	.082	.041	.012	.080	.040	.012	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.096	.096	.096	.082	.082	.082	.056	.056	.056	.032	.032	.032	.010	.010	.010	
1.0	.092	.079	.067	.079	.067	.057	.054	.046	.040	.031	.027	.023	.010	.009	.007	
2.0	.089	.066	.048	.076	.057	.041	.052	.040	.029	.030	.023	.017	.010	.007	.005	
3.0	.086	.058	.035	.073	.050	.031	.050	.035	.022	.029	.020	.013	.009	.007	.004	
4.0	.082	.051	.028	.071	.044	.024	.049	.031	.017	.028	.018	.010	.009	.006	.003	
5.0	.079	.046	.022	.068	.040	.019	.047	.028	.014	.027	.016	.008	.009	.005	.003	
6.0	.075	.042	.018	.064	.036	.016	.044	.025	.011	.026	.015	.007	.008	.005	.002	
7.0	.071	.039	.016	.061	.033	.014	.042	.023	.010	.025	.014	.006	.008	.005	.002	
8.0	.068	.036	.014	.059	.031	.012	.041	.022	.008	.024	.013	.005	.008	.004	.002	
9.0	.065	.033	.012	.056	.029	.010	.039	.020	.007	.023	.012	.004	.007	.004	.001	
10.0	.062	.031	.011	.053	.027	.009	.037	.019	.007	.022	.011	.004	.007	.004	.001	

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	17.9	19.6	18.2	19.8	20.0	23.4	25.1	23.7	25.3	25.5
3H	18.9	20.4	19.2	20.7	20.9	25.6	27.1	25.9	27.4	27.6
4H	19.1	20.6	19.4	20.9	21.1	25.9	27.4	26.3	27.7	28.0
6H	19.1	20.5	19.5	20.8	21.1	25.9	27.3	26.2	27.6	27.9
8H	19.1	20.5	19.5	20.8	21.1	25.9	27.2	26.2	27.5	27.8
12H	19.1	20.4	19.4	20.7	21.0	25.8	27.1	26.2	27.4	27.7
4H 2H	20.3	21.8	20.6	22.1	22.3	23.9	25.4	24.2	25.6	25.9
3H	21.7	23.0	22.1	23.3	23.6	26.2	27.5	26.6	27.8	28.1
4H	22.1	23.3	22.5	23.6	24.0	26.7	27.8	27.0	28.2	28.5
6H	22.2	23.3	22.6	23.6	24.0	26.6	27.7	27.0	28.0	28.4
8H	22.2	23.2	22.6	23.6	23.9	26.6	27.6	27.0	28.0	28.3
12H	22.2	23.1	22.6	23.5	23.9	26.6	27.5	27.0	27.9	28.3
8H 4H	22.9	23.9	23.3	24.3	24.7	26.7	27.7	27.2	28.1	28.5
6H	23.1	23.9	23.6	24.3	24.8	26.8	27.6	27.2	28.0	28.4
8H	23.1	23.8	23.6	24.2	24.7	26.7	27.5	27.2	27.9	28.3
12H	23.1	23.7	23.6	24.2	24.6	26.7	27.3	27.2	27.8	28.3
12H 4H	22.9	23.8	23.3	24.2	24.6	26.7	27.6	27.1	28.0	28.4
6H	23.1	23.8	23.6	24.2	24.7	26.7	27.5	27.2	27.9	28.3
8H	23.1	23.7	23.6	24.2	24.6	26.7	27.3	27.2	27.8	28.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.4 / - 0.7					+ 0.2 / - 0.5				
2.0H	+ 0.6 / - 1.1					+ 0.9 / - 0.9				

CIE Pub.117, 1809 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.1)
Area: 0.1 m2

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
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) x RCR = 5*									
k = 0.60	*26*	*19*	*15*	*25*	*19*	*15*	*24*	*19*	*15*	*11*
0.80	*31*	*24*	*20*	*30*	*24*	*20*	*29*	*23*	*20*	*16*
1.00	*35*	*29*	*25*	*35*	*29*	*25*	*33*	*30*	*24*	*20*
1.25	*39*	*33*	*29*	*38*	*33*	*29*	*37*	*32*	*28*	*24*
1.50	*42*	*36*	*32*	*41*	*36*	*32*	*39*	*35*	*32*	*27*
2.00	*46*	*41*	*38*	*45*	*41*	*37*	*43*	*39*	*36*	*32*
2.50	*48*	*44*	*41*	*47*	*43*	*40*	*45*	*42*	*39*	*35*
3.00	*50*	*47*	*44*	*49*	*46*	*43*	*47*	*44*	*42*	*37*
4.00	*53*	*50*	*47*	*52*	*49*	*46*	*49*	*47*	*45*	*40*
5.00	*54*	*52*	*49*	*53*	*51*	*49*	*51*	*49*	*47*	*42*
ROOM INDEX	*UF(total)*									*Direct*
According to DIN EN 13032-2 2004				*Suspended*					*SHRNOM = 1.25*	

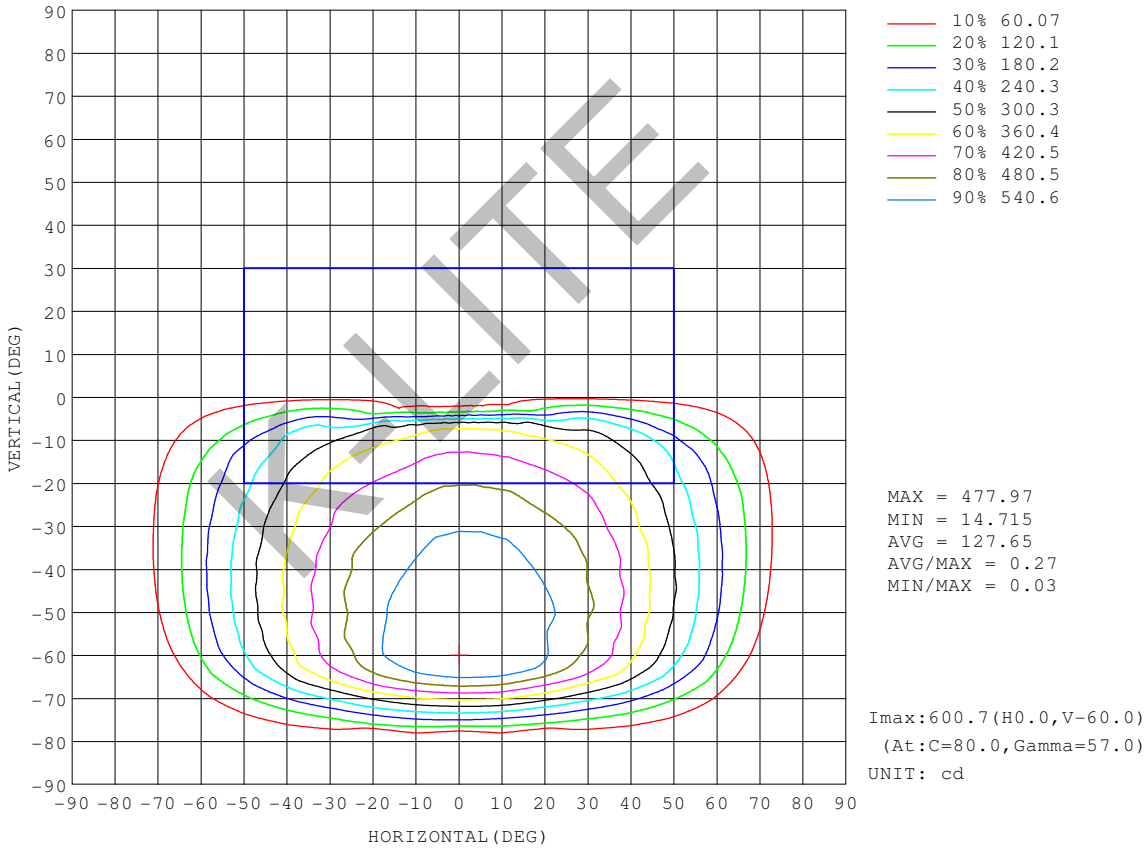
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:



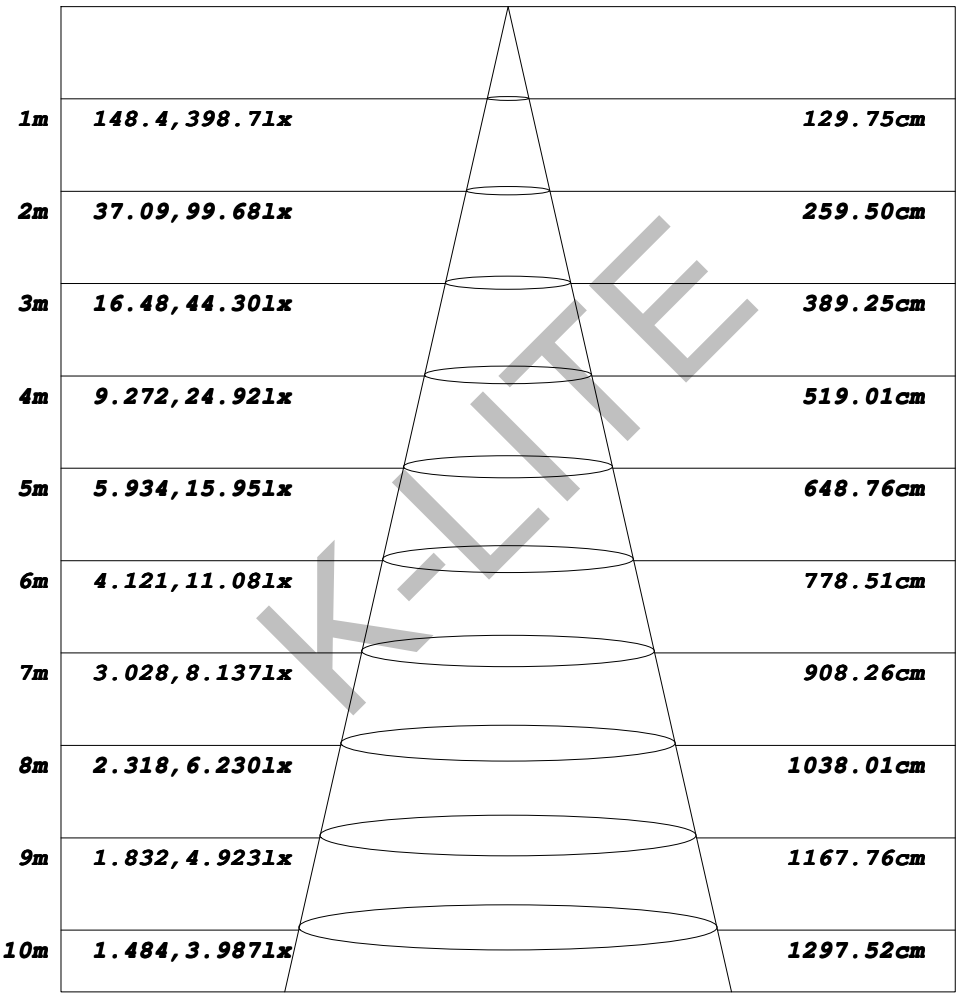
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 August 2022

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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:196.6 lm



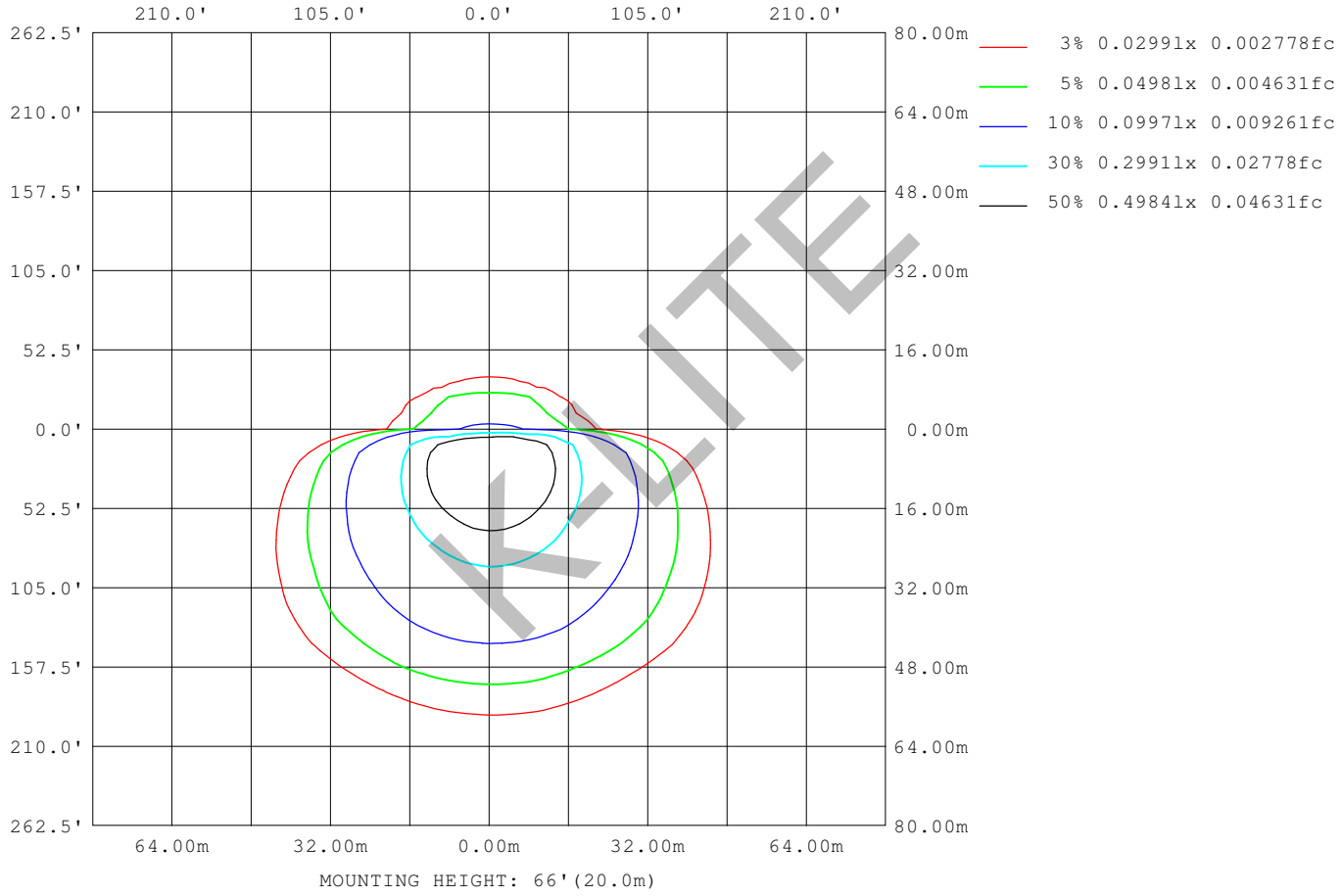
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
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:26 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

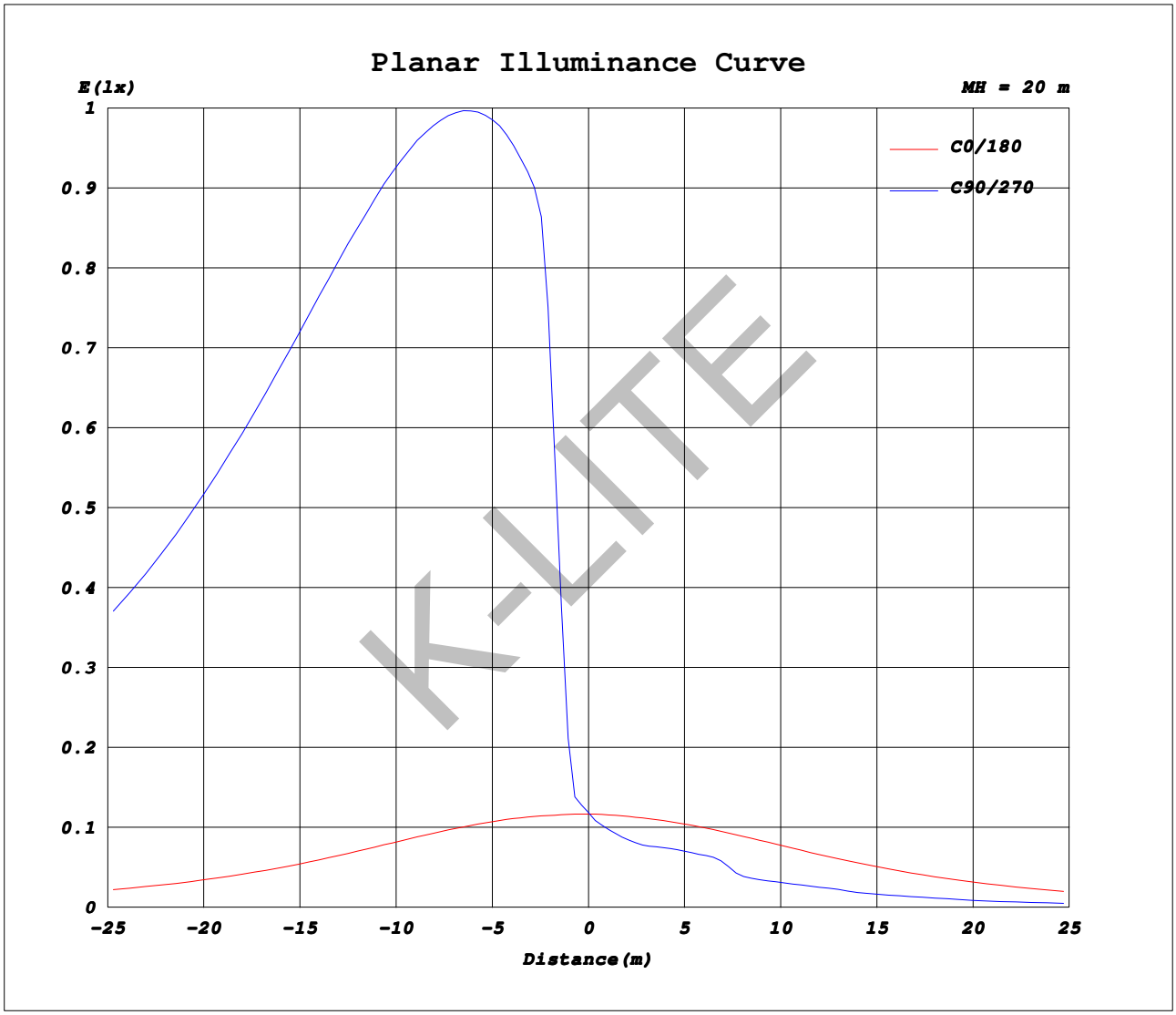
Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	606
L_0~180(75)av	727
L_0~180(85)av	730
L_90~270(65)av	6359
L_90~270(75)av	3478
L_90~270(85)av	399
L_45(65)av	4545
L_45(75)av	3643
L_45(85)av	590

Standard: GB/T 29293-2012

K-LITE

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3
5	46.3	48.6	54.5	70.5	119	144	198	204	235	224	235	206	194	137	100	65.1	51.6	48.2	46.0
10	46.6	56.1	134	246	338	365	376	377	392	383	394	389	379	365	327	221	106	50.6	45.7
15	46.7	87.4	267	355	380	403	418	421	440	430	440	432	415	394	369	345	228	63.8	45.3
20	46.4	150	336	373	402	433	452	456	477	466	476	465	441	418	390	361	320	107	44.6
25	45.8	220	345	387	421	452	480	486	508	497	506	491	463	438	408	373	329	164	43.5
30	44.6	272	350	398	435	469	498	510	534	522	531	511	482	455	419	381	328	216	42.1
35	43.0	278	345	403	446	483	512	530	555	544	550	526	496	467	427	383	317	251	40.3
40	41.1	269	333	394	451	493	522	543	571	559	565	538	507	475	422	368	309	244	38.3
45	38.9	249	322	386	436	498	529	552	582	571	576	547	514	469	414	361	289	220	35.8
50	36.4	230	300	365	433	483	533	557	591	580	581	552	517	459	399	340	273	199	33.0
55	33.5	203	274	347	410	479	528	556	597	585	584	552	496	444	386	315	248	175	29.9
60	30.3	172	246	319	383	453	510	548	597	587	582	550	492	431	360	288	219	145	26.7
65	27.9	137	210	282	353	423	478	519	547	533	534	506	462	400	326	258	183	117	23.3
70	24.9	104	169	238	302	355	352	358	378	365	369	361	346	328	280	214	145	84.2	19.8
75	21.3	66.7	117	175	189	188	177	171	177	178	183	177	172	178	173	152	98.2	53.4	16.3
80	13.8	25.8	43.8	58.8	59.3	48.0	26.2	25.9	26.7	25.9	26.9	26.6	26.1	43.7	52.8	47.7	35.1	21.4	12.4
85	6.55	7.52	8.56	9.37	8.89	8.83	8.30	7.63	7.00	6.39	6.72	7.55	7.92	8.48	8.59	9.05	8.11	7.26	6.18
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.64V I:0.0530A P:11.953W PF:0.9771 Freq:49.99Hz Lamp Flux:1809x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4845
MFR.: K-LITE	SUR.:	Shielding Angle:

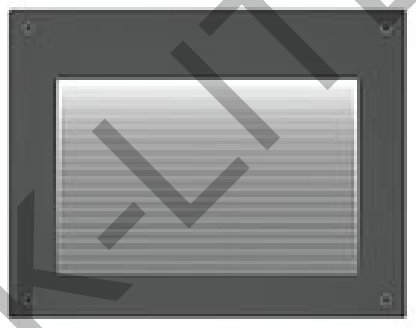
Table--2 UNIT: cd

γ (DEG) \ C(DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3	46.3		
5	43.9	42.1	40.4	39.0	37.9	37.0	35.4	36.0	34.8	36.0	36.5	37.1	38.1	39.3	40.8	42.4	44.3		
10	41.8	38.4	35.6	33.9	32.6	32.0	31.3	31.9	31.0	32.0	32.1	32.1	32.8	34.2	36.2	39.0	42.6		
15	39.7	35.3	32.8	32.0	31.9	31.3	30.1	30.7	29.8	30.7	31.1	31.5	32.0	32.2	33.2	36.1	40.8		
20	37.5	33.1	31.9	31.3	30.4	29.6	27.2	26.0	24.2	26.2	28.3	29.8	30.6	31.4	32.1	33.7	38.9		
25	35.3	31.8	31.0	29.7	25.8	19.9	18.2	18.2	17.6	18.3	18.8	20.3	26.6	29.9	31.3	32.0	36.8		
30	33.3	30.9	29.4	23.1	18.9	18.0	16.8	16.7	16.1	16.8	17.4	18.2	19.1	24.7	29.6	31.0	34.5		
35	31.4	29.5	25.4	18.7	17.6	16.6	15.1	14.2	13.3	14.3	15.7	16.8	17.8	18.8	26.8	29.6	32.4		
40	29.6	27.5	18.8	17.4	16.1	14.2	12.8	12.4	11.9	12.5	13.3	14.4	16.3	17.4	19.1	27.6	30.1		
45	27.9	24.0	17.3	15.9	13.8	12.8	11.5	10.7	9.94	10.8	12.0	12.9	13.9	16.0	17.4	25.1	28.1		
50	25.8	17.6	15.8	13.7	12.6	10.9	9.78	9.25	8.72	9.35	10.1	11.0	12.6	13.7	15.9	18.3	26.0		
55	23.2	15.8	13.5	12.3	10.8	9.77	8.19	7.58	7.06	7.68	8.58	9.87	10.8	12.4	13.6	15.9	23.5		
60	20.2	14.0	12.2	10.5	9.09	8.17	7.12	6.31	5.83	6.45	7.45	8.25	9.32	10.5	12.2	14.1	20.6		
65	14.7	12.0	10.3	8.79	7.73	6.71	5.81	5.09	4.54	5.20	6.08	6.79	7.92	8.88	10.4	12.0	17.1		
70	12.5	10.2	8.51	7.17	6.20	5.36	4.42	3.79	3.38	3.89	4.69	5.44	6.30	7.28	8.65	10.5	12.7		
75	10.4	8.27	6.70	5.56	4.66	3.86	3.23	2.77	2.39	2.87	3.40	4.00	4.77	5.69	6.88	8.59	10.6		
80	8.28	5.97	4.61	3.68	3.03	2.50	2.01	1.63	1.36	1.70	2.17	2.60	3.19	3.89	4.84	6.31	8.58		
85	4.65	3.04	2.19	1.69	1.34	1.07	0.84	0.68	0.57	0.73	0.94	1.19	1.48	1.87	2.44	3.41	5.18		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:26 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:



Light Output Ratio:	53.7%	
Luminaire Power:	12.06 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 August 2022

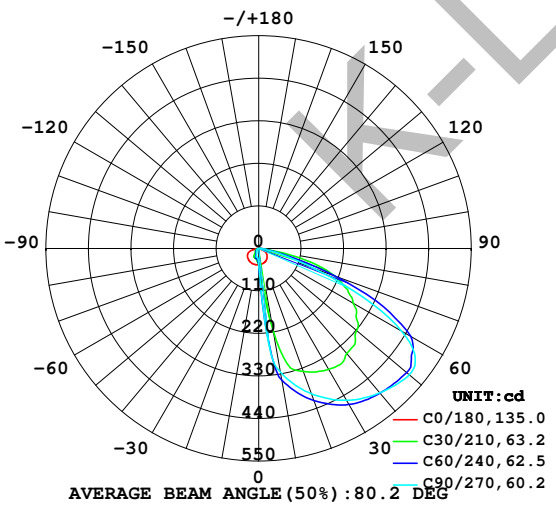
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.852m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

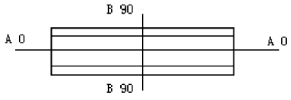
Test:U:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 64.62 lm/W	
MODEL	KL-2735	Imax(cd)	564.2	S/MH(C0/180)	1.47
NOMINAL POWER(W)	12	LOR(%)	53.7	S/MH(C90/270)	0.51
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	779.18	η UP,DN(C0-180)	0.0,51.4
NOMINAL FLUX(lm)	1450	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,2.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	53.7	CIBSE SHR MAX	1.00

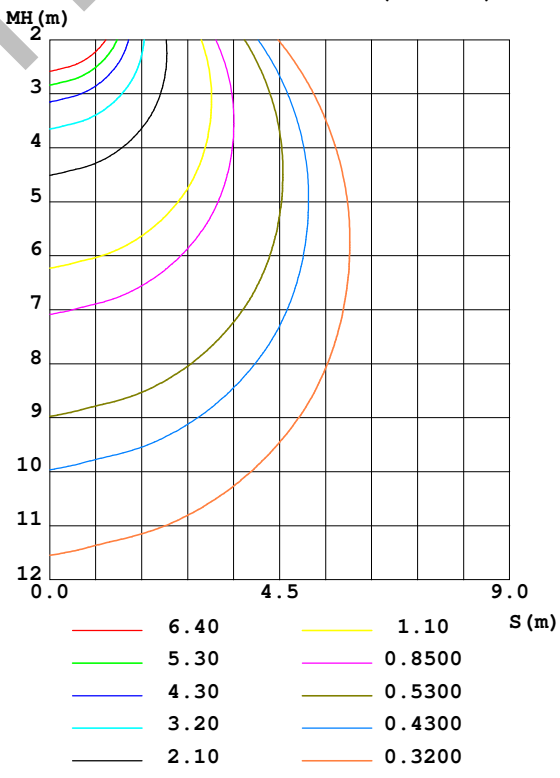
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):80.2 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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	41.39	301.9	324.4	315.6	42.87	27.40	24.09	28.24	0- 10	10.03	10.03	1.29,0.69
20	40.09	372.2	400.0	383.8	43.03	25.64	17.08	26.59	10- 20	47.13	57.15	7.34,3.94
30	37.75	403.3	453.1	420.7	41.91	16.78	11.56	16.37	20- 30	88.39	145.5	18.7,10
40	33.70	421.5	487.4	436.9	40.07	12.51	8.506	13.29	30- 40	127.3	272.8	35,18.8
50	28.68	405.8	508.5	421.2	37.51	9.604	6.162	10.55	40- 50	156.6	429.4	55.1,29.6
60	22.69	372.7	426.9	384.7	33.58	7.002	3.962	7.917	50- 60	168.7	598.1	76.8,41.2
70	16.23	239.0	153.5	180.0	25.99	4.619	2.333	5.350	60- 70	129.9	728.0	93.4,50.2
80	10.00	38.19	20.54	24.43	9.600	2.248	0.9087	2.658	70- 80	45.80	773.8	99.3,53.4
90	0	0.0002	0	0	0	0	0	0	80- 90	5.390	779.2	100,53.7
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		

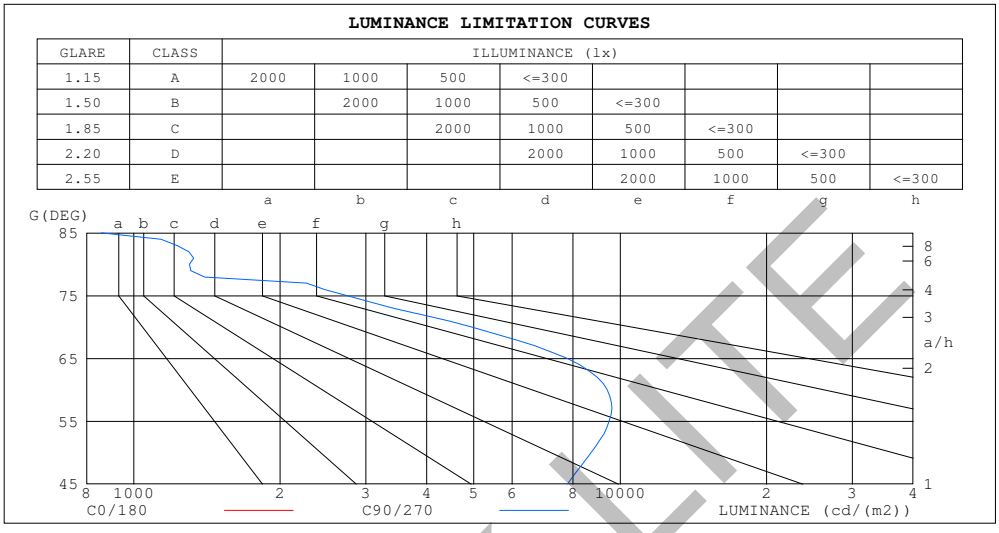
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	614	858
80	575	1303
75	508	2743
70	474	4946
65	459	7777
60	453	9407
55	449	9496
50	445	8716
45	441	7790

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:

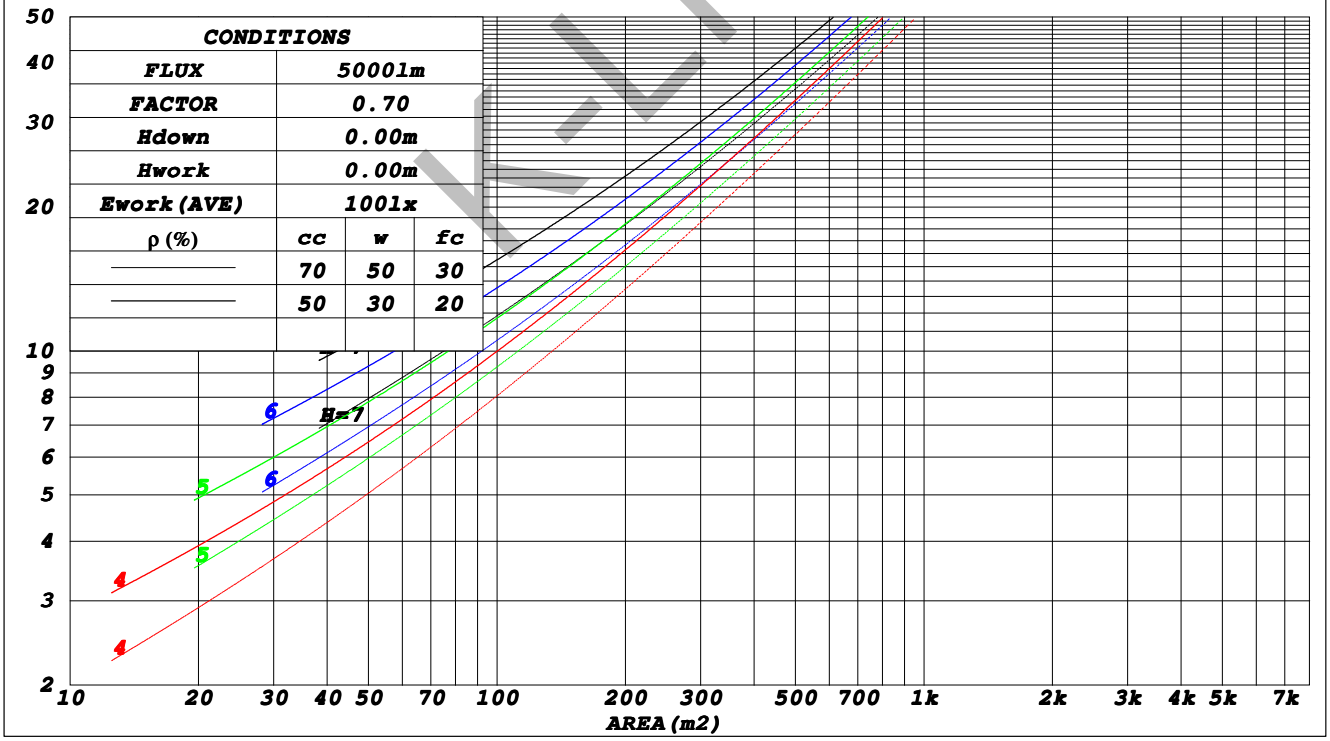
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	.64	.64	.64	.62	.62	.62	.60	.60	.60	.57	.57	.57	.55	.55	.55	.54
1.0	.56	.53	.51	.54	.52	.50	.52	.50	.49	.50	.49	.47	.48	.47	.46	.45
2.0	.48	.44	.41	.47	.43	.40	.45	.42	.39	.43	.41	.38	.41	.39	.38	.36
3.0	.41	.37	.33	.40	.36	.33	.39	.35	.32	.37	.34	.31	.36	.33	.31	.30
4.0	.36	.31	.27	.35	.31	.27	.34	.30	.26	.33	.29	.26	.31	.28	.26	.24
5.0	.32	.26	.23	.31	.26	.22	.30	.26	.22	.29	.25	.22	.28	.24	.22	.20
6.0	.28	.23	.19	.27	.23	.19	.26	.22	.19	.26	.22	.19	.25	.21	.19	.17
7.0	.25	.20	.16	.25	.20	.16	.24	.19	.16	.23	.19	.16	.22	.19	.16	.15
8.0	.23	.18	.14	.22	.18	.14	.21	.17	.14	.21	.17	.14	.20	.17	.14	.13
9.0	.20	.16	.13	.20	.16	.13	.19	.15	.12	.19	.15	.12	.18	.15	.12	.11
10.0	.19	.14	.11	.18	.14	.11	.18	.14	.11	.17	.14	.11	.17	.13	.11	.10

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.169	.096	.030	.165	.094	.030	.158	.091	.029	.152	.087	.028	.146	.084	.027	
2.0	.164	.090	.028	.160	.088	.027	.154	.086	.027	.148	.083	.026	.143	.081	.025	
3.0	.153	.082	.024	.150	.081	.024	.145	.078	.024	.140	.076	.023	.135	.075	.023	
4.0	.142	.074	.022	.140	.073	.022	.135	.071	.021	.130	.070	.021	.126	.068	.021	
5.0	.132	.067	.019	.129	.066	.019	.125	.065	.019	.121	.064	.019	.117	.062	.019	
6.0	.122	.061	.018	.120	.061	.017	.116	.059	.017	.112	.058	.017	.109	.057	.017	
7.0	.114	.056	.016	.112	.056	.016	.108	.055	.016	.105	.054	.016	.102	.053	.016	
8.0	.106	.052	.015	.104	.051	.014	.101	.050	.014	.098	.050	.014	.095	.049	.014	
9.0	.099	.048	.013	.098	.048	.013	.095	.047	.013	.092	.046	.013	.089	.045	.013	
10.0	.093	.045	.012	.092	.044	.012	.089	.044	.012	.086	.043	.012	.084	.042	.012	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.102	.102	.102	.087	.087	.087	.060	.060	.060	.034	.034	.034	.011	.011	.011	
1.0	.097	.084	.072	.083	.072	.062	.057	.050	.043	.033	.029	.025	.010	.009	.008	
2.0	.093	.071	.052	.080	.061	.045	.055	.042	.031	.032	.025	.018	.010	.008	.006	
3.0	.090	.061	.039	.077	.053	.034	.053	.037	.024	.031	.022	.014	.010	.007	.005	
4.0	.086	.054	.030	.074	.047	.026	.051	.033	.018	.029	.019	.011	.009	.006	.004	
5.0	.083	.049	.024	.071	.042	.021	.049	.030	.015	.028	.017	.009	.009	.006	.003	
6.0	.079	.045	.020	.068	.039	.017	.047	.027	.012	.027	.016	.007	.009	.005	.002	
7.0	.075	.041	.017	.065	.036	.015	.045	.025	.010	.026	.015	.006	.008	.005	.002	
8.0	.072	.038	.015	.062	.033	.013	.043	.023	.009	.025	.014	.005	.008	.004	.002	
9.0	.068	.035	.013	.059	.031	.011	.041	.022	.008	.024	.013	.005	.008	.004	.002	
10.0	.065	.033	.012	.056	.029	.010	.039	.020	.007	.023	.012	.004	.007	.004	.001	

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	18.2	19.9	18.5	20.1	20.3	23.4	25.0	23.7	25.2	25.5
3H	19.1	20.6	19.4	20.9	21.1	24.4	25.9	24.7	26.1	26.4
4H	19.3	20.7	19.6	21.0	21.3	24.5	25.9	24.8	26.2	26.4
6H	19.3	20.6	19.6	20.9	21.2	24.4	25.7	24.7	26.0	26.3
8H	19.3	20.6	19.6	20.8	21.1	24.4	25.7	24.7	25.9	26.2
12H	19.2	20.5	19.6	20.8	21.1	24.3	25.6	24.7	25.9	26.2
4H 2H	20.6	22.0	20.9	22.3	22.5	23.9	25.3	24.2	25.6	25.8
3H	21.9	23.1	22.2	23.4	23.7	25.0	26.3	25.4	26.6	26.9
4H	22.3	23.4	22.6	23.7	24.1	25.2	26.3	25.5	26.6	27.0
6H	22.3	23.3	22.7	23.7	24.1	25.1	26.1	25.5	26.5	26.9
8H	22.3	23.2	22.7	23.6	24.0	25.1	26.0	25.5	26.4	26.8
12H	22.3	23.1	22.7	23.5	23.9	25.1	25.9	25.5	26.3	26.7
8H 4H	22.7	23.7	23.1	24.0	24.4	25.3	26.2	25.7	26.6	27.0
6H	22.9	23.7	23.4	24.1	24.5	25.3	26.0	25.7	26.4	26.9
8H	22.9	23.6	23.4	24.0	24.5	25.3	25.9	25.7	26.4	26.8
12H	22.9	23.5	23.4	23.9	24.4	25.2	25.8	25.7	26.3	26.8
12H 4H	22.7	23.5	23.1	23.9	24.3	25.2	26.1	25.7	26.5	26.9
6H	22.9	23.6	23.4	24.0	24.5	25.3	25.9	25.7	26.4	26.8
8H	22.9	23.5	23.4	23.9	24.4	25.3	25.8	25.7	26.3	26.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.3					+ 0.1 / - 0.2				
1.5H	+ 0.3 / - 0.5					+ 0.5 / - 0.5				
2.0H	+ 0.9 / - 1.7					+ 0.8 / - 1.8				

CIE Pub.117, 1450 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.3)
Area: 0.1 m2

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
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) x RCR = 5*									
k = 0.60	*28*	*21*	*17*	*27*	*21*	*17*	*26*	*20*	*17*	*13*
0.80	*33*	*27*	*22*	*33*	*26*	*22*	*32*	*26*	*22*	*18*
1.00	*39*	*32*	*28*	*38*	*32*	*28*	*37*	*33*	*27*	*23*
1.25	*43*	*37*	*32*	*42*	*36*	*32*	*40*	*35*	*32*	*28*
1.50	*46*	*40*	*36*	*45*	*40*	*36*	*43*	*39*	*35*	*31*
2.00	*50*	*45*	*41*	*49*	*44*	*41*	*47*	*43*	*40*	*36*
2.50	*52*	*48*	*44*	*51*	*47*	*44*	*49*	*46*	*43*	*38*
3.00	*54*	*51*	*47*	*53*	*50*	*47*	*51*	*48*	*46*	*41*
4.00	*57*	*54*	*51*	*55*	*53*	*50*	*53*	*51*	*49*	*44*
5.00	*58*	*56*	*53*	*57*	*54*	*52*	*54*	*53*	*51*	*46*
ROOM INDEX	*UF(total)*									*Direct*
According to DIN EN 13032-2 2004				*Suspended*					*SHRNOM = 1.25*	

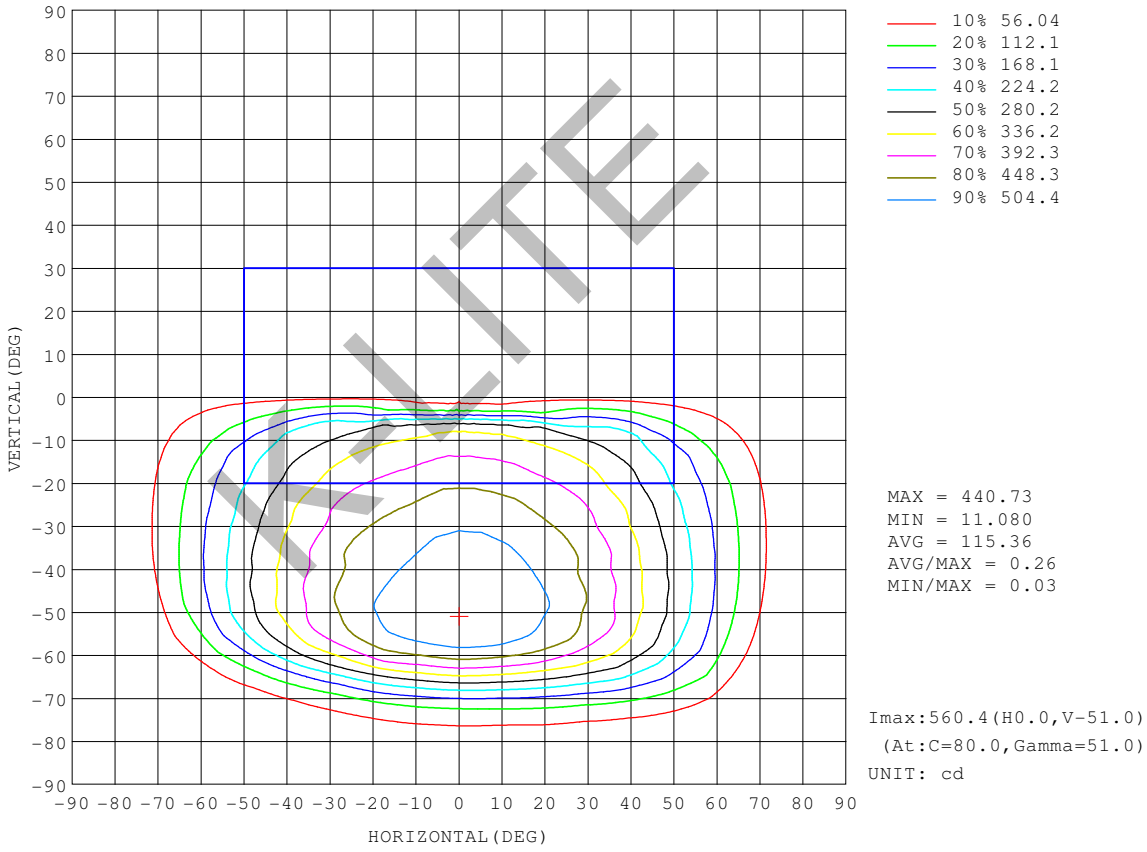
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:



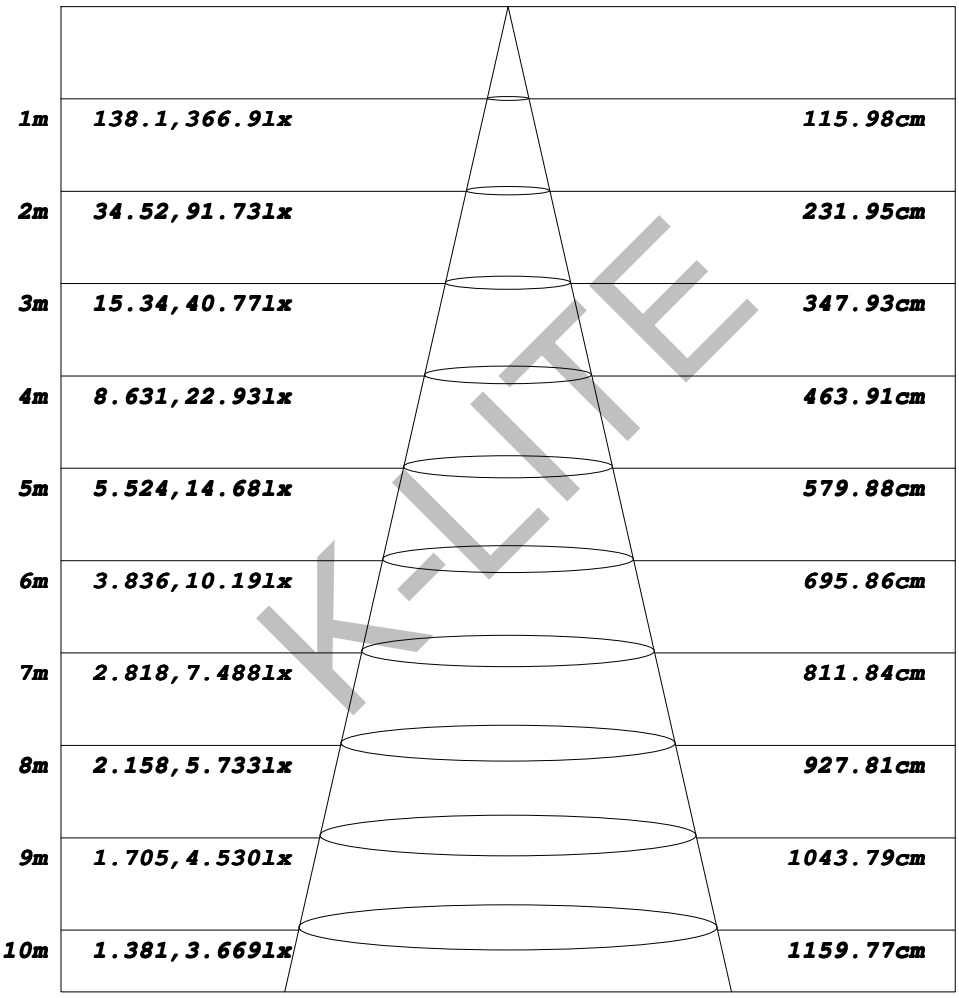
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 August 2022

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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:156.6 lm



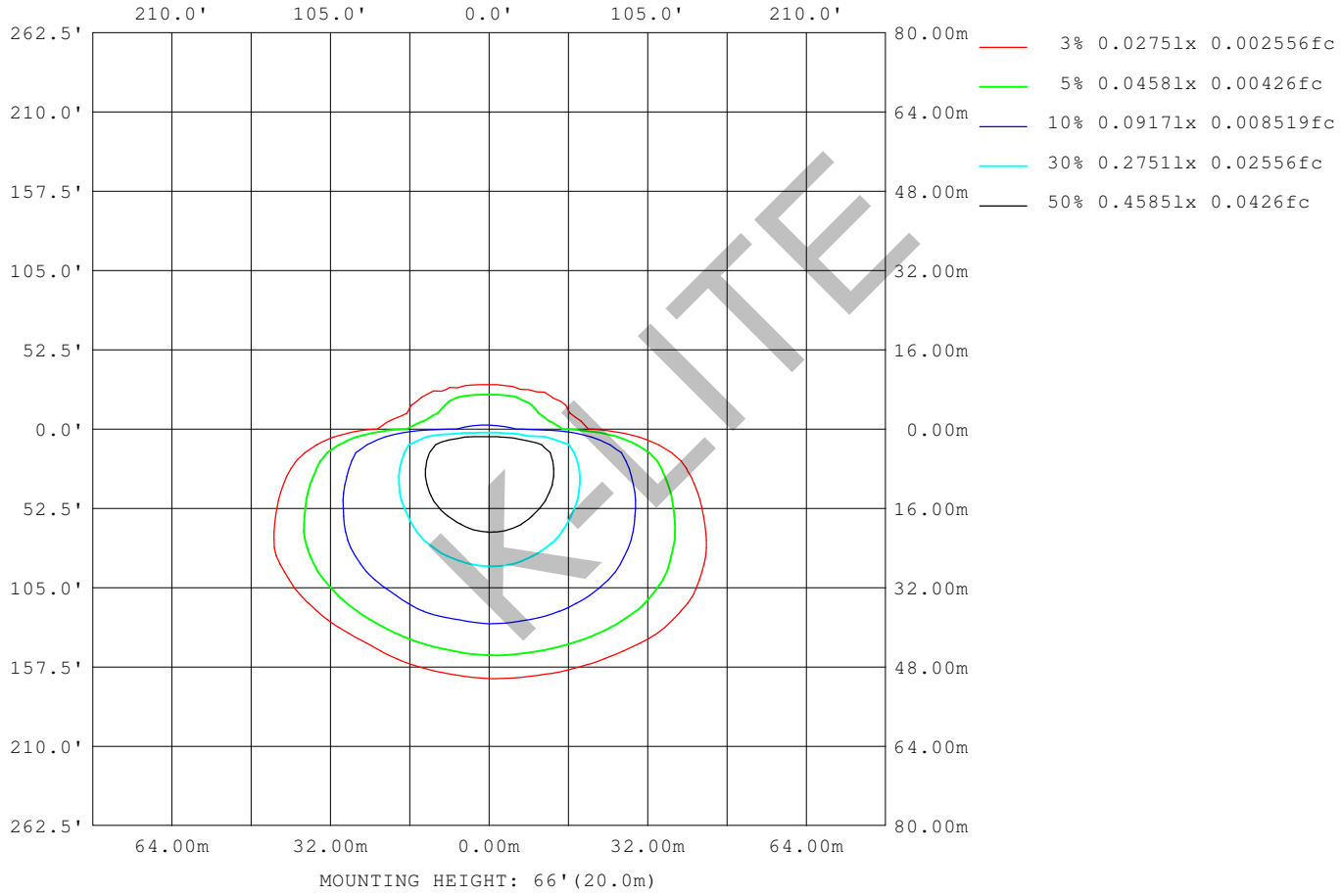
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
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:25 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:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	593
L_0~180(75)av	606
L_0~180(85)av	568
L_90~270(65)av	3566
L_90~270(75)av	1276
L_90~270(85)av	410
L_45(65)av	3906
L_45(75)av	1796
L_45(85)av	523

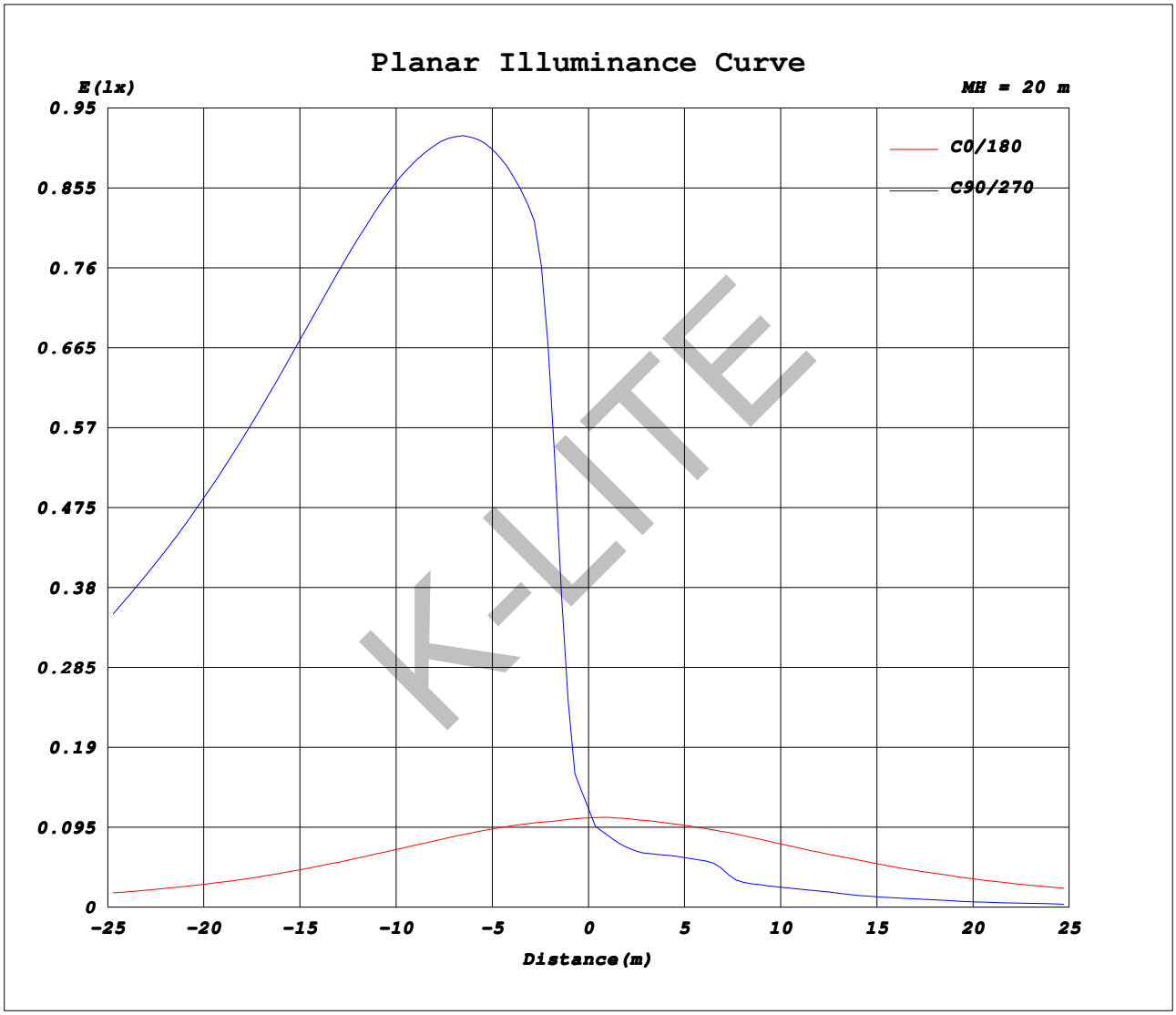
Standard: GB/T 29293-2012

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:25 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
5	41.7	46.9	59.1	80.7	121	135	188	193	224	196	226	182	191	148	126	85.3	63.1	49.6	43.0
10	41.4	56.0	119	215	291	312	346	343	362	324	364	325	349	334	297	229	136	64.7	42.9
15	40.9	77.3	219	319	348	349	386	385	408	366	410	363	385	370	346	324	242	99.0	42.9
20	40.1	111	289	339	368	376	418	420	445	400	446	393	414	398	370	344	304	150	43.0
25	39.0	159	308	352	384	393	444	449	476	429	477	417	438	420	388	358	313	207	42.6
30	37.8	204	312	361	398	408	466	473	503	453	502	437	460	439	402	368	309	239	41.9
35	36.0	226	308	367	408	422	479	492	524	472	521	453	477	454	413	368	305	249	41.3
40	33.7	231	296	355	412	431	488	506	541	487	536	465	489	464	410	360	301	239	40.1
45	31.3	210	281	351	400	433	494	517	555	500	548	475	497	462	404	355	283	219	38.8
50	28.7	192	265	331	390	421	499	524	564	508	556	482	503	452	391	338	269	198	37.5
55	25.8	168	241	308	374	412	482	507	549	494	541	475	482	442	380	313	247	175	35.8
60	22.7	140	214	282	351	394	454	455	474	427	465	421	439	415	355	287	218	146	33.6
65	19.4	112	179	254	317	336	357	334	336	298	324	295	317	328	303	257	182	119	30.7
70	16.2	82.4	142	210	247	231	214	187	176	154	167	152	160	171	189	193	144	85.8	26.0
75	13.2	51.8	96.3	142	137	107	90.3	79.8	76.5	64.4	70.6	58.6	58.5	55.5	58.7	76.8	86.7	52.8	18.2
80	10.00	20.4	35.7	49.8	43.9	32.7	22.3	21.8	22.9	20.5	23.1	20.6	21.8	26.0	22.9	19.1	16.5	17.5	9.60
85	5.36	6.33	7.33	8.61	8.51	8.06	8.18	7.82	7.65	6.79	7.59	7.19	7.83	8.01	7.65	7.67	6.47	5.60	4.54
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.63V I:0.0535A P:12.057W PF:0.9777 Freq:49.99Hz Lamp Flux:1450x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4837
MFR.: K-LITE	SUR.:	Shielding Angle:

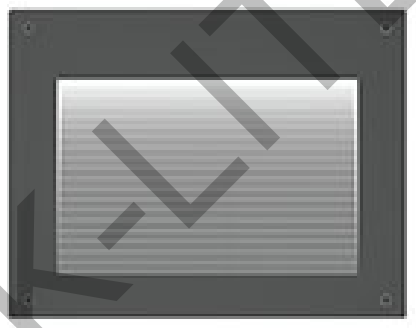
Table--2 UNIT: cd

γ (DEG) \ C(DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		
5	40.0	38.1	36.3	34.6	31.3	32.3	30.3	31.2	27.4	31.2	28.3	32.2	33.2	34.5	36.0	37.8	39.7		
10	38.0	34.3	31.2	28.9	26.0	27.1	26.1	27.1	24.1	27.2	24.5	27.3	27.7	28.8	30.7	33.8	37.4		
15	36.0	31.0	27.9	27.0	25.4	26.8	25.5	26.4	23.3	26.4	24.0	27.0	27.3	27.3	27.8	30.3	35.1		
20	33.8	28.4	27.0	26.8	24.6	25.6	22.6	21.2	17.1	20.8	20.6	25.6	26.3	26.9	27.2	27.9	32.6		
25	31.5	26.8	26.5	25.4	20.5	15.8	14.2	14.4	12.7	14.4	13.3	15.7	20.0	25.6	26.7	26.9	30.4		
30	29.2	26.0	25.1	19.6	14.1	14.1	13.0	13.0	11.6	13.1	12.3	14.3	15.2	17.5	25.4	26.3	28.4		
35	27.0	25.0	22.3	14.6	12.9	12.9	11.5	10.9	9.57	10.9	10.8	13.1	14.1	15.0	19.8	25.2	26.5		
40	24.9	23.2	14.8	13.4	11.7	10.9	9.89	9.69	8.51	9.76	9.43	11.2	12.7	13.8	15.2	23.4	25.1		
45	23.1	20.9	13.3	12.1	9.97	9.82	8.74	8.19	7.01	8.22	8.33	10.19	11.2	12.5	14.0	18.7	23.7		
50	21.4	14.4	12.0	10.3	8.95	8.26	7.40	7.14	6.16	7.22	7.16	8.69	10.09	11.0	12.8	14.1	22.0		
55	19.3	12.0	10.2	9.17	7.55	7.33	6.26	5.82	4.98	5.91	5.97	7.75	8.69	9.85	11.0	12.7	19.7		
60	16.7	10.5	9.01	7.71	6.33	6.05	5.26	4.75	3.96	4.82	5.15	6.53	7.35	8.48	9.90	11.4	16.7		
65	13.3	8.82	7.52	6.36	5.31	4.91	4.25	3.80	3.10	3.87	4.20	5.36	6.23	7.10	8.40	9.75	11.9		
70	9.33	7.54	6.16	5.12	4.15	3.88	3.19	2.85	2.33	2.92	3.17	4.26	4.92	5.78	6.94	8.28	10.14		
75	7.58	5.97	4.75	3.92	3.11	2.75	2.32	2.04	1.59	2.09	2.34	3.05	3.74	4.45	5.44	6.70	8.52		
80	5.94	4.22	3.22	2.54	1.97	1.75	1.39	1.17	0.91	1.21	1.42	1.97	2.40	2.92	3.71	4.83	6.77		
85	3.39	2.09	1.47	1.11	0.82	0.71	0.56	0.47	0.35	0.50	0.60	0.83	1.05	1.33	1.76	2.47	3.89		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:25 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:



Light Output Ratio:	51.3%	
Luminaire Power:	24.4 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

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

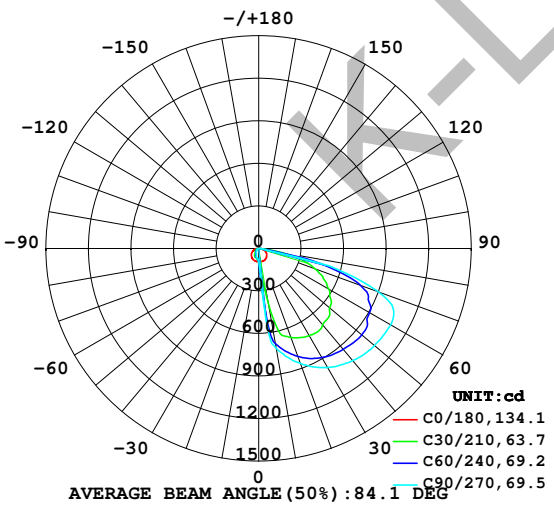
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

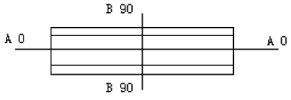
Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 70.00 lm/W	
MODEL	KL-2777	Imax(cd)	1076	S/MH(C0/180)	1.35
NOMINAL POWER(W)	24	LOR(%)	51.3	S/MH(C90/270)	0.67
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1708.0	η UP,DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	3330	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,2.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	51.3	CIBSE SHR MAX	1.00

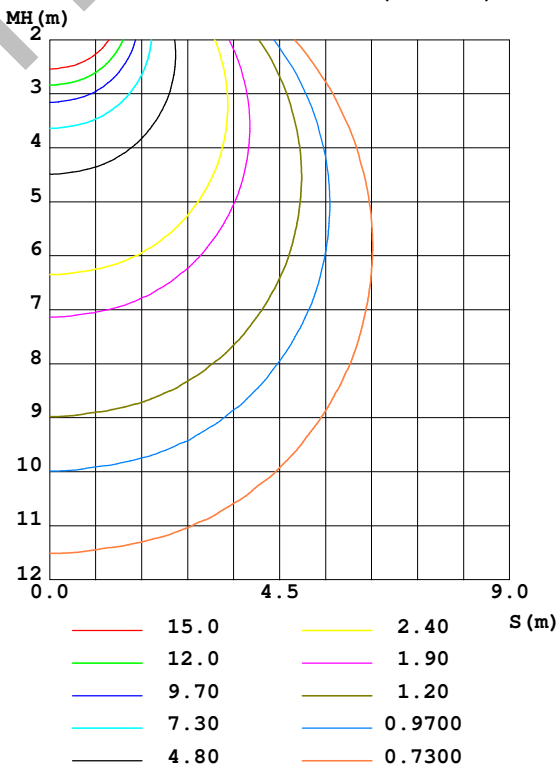
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):84.1 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [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	95.45	620.6	713.5	598.6	94.14	70.34	67.89	70.91	0- 10	19.46	19.46	1.14,0.58
20	95.02	745.9	864.1	729.4	91.76	64.94	49.71	65.60	10- 20	93.74	113.2	6.63,3.4
30	91.51	806.3	969.9	785.2	86.88	44.23	37.51	45.36	20- 30	175.0	288.2	16.9,8.65
40	85.14	841.2	1032	813.4	78.80	36.61	27.34	37.50	30- 40	250.8	539.0	31.6,16.2
50	75.54	814.9	1067	776.1	68.62	27.90	19.75	28.91	40- 50	306.1	845.1	49.5,25.4
60	62.10	742.1	1076	703.2	55.55	20.22	12.65	21.31	50- 60	334.0	1179	69,35.4
70	45.93	607.3	902.2	565.6	40.67	13.61	7.460	14.42	60- 70	324.7	1504	88,45.2
80	27.29	166.3	50.61	131.1	24.58	6.820	2.994	7.343	70- 80	189.7	1694	99.2,50.9
90	0	0	0.0010	0.0024	0	0	0	0	80- 90	14.50	1708	100,51.3
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

K-LITE

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

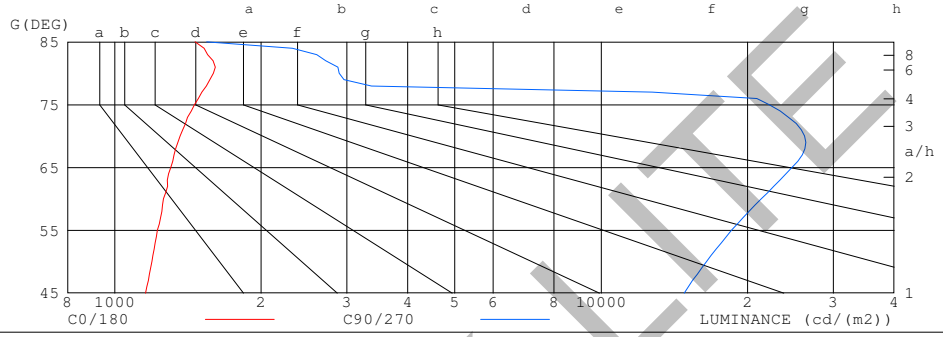
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1464	1545
80	1594	2893
75	1460	22146
70	1362	26181
65	1303	24697
60	1260	21356
55	1223	18554
50	1192	16470
45	1158	14812

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

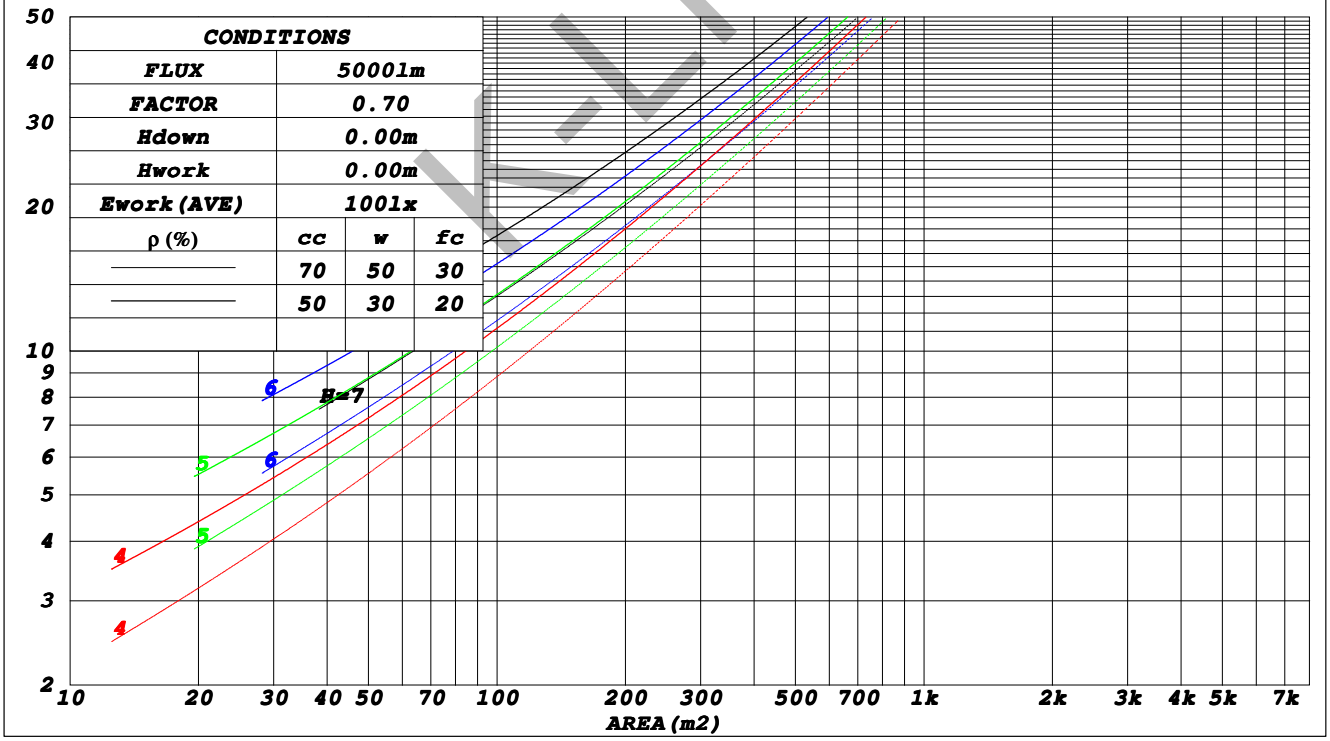
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	.61	.61	.61	.60	.60	.60	.57	.57	.57	.55	.55	.55	.52	.52	.52	.51
1.0	.52	.50	.48	.51	.49	.47	.49	.47	.45	.47	.45	.44	.45	.44	.43	.41
2.0	.44	.40	.37	.43	.40	.37	.41	.38	.36	.40	.37	.35	.38	.36	.34	.33
3.0	.38	.33	.29	.37	.33	.29	.36	.32	.29	.34	.31	.28	.33	.30	.28	.26
4.0	.33	.28	.24	.32	.27	.24	.31	.27	.23	.30	.26	.23	.28	.25	.23	.21
5.0	.29	.24	.20	.28	.23	.20	.27	.23	.19	.26	.22	.19	.25	.22	.19	.18
6.0	.26	.20	.17	.25	.20	.17	.24	.20	.17	.23	.19	.16	.22	.19	.16	.15
7.0	.23	.18	.14	.22	.18	.14	.22	.17	.14	.21	.17	.14	.20	.17	.14	.13
8.0	.21	.16	.13	.20	.16	.12	.19	.15	.12	.19	.15	.12	.18	.15	.12	.11
9.0	.19	.14	.11	.18	.14	.11	.18	.14	.11	.17	.13	.11	.17	.13	.11	.10
10.0	.17	.13	.10	.17	.13	.10	.16	.12	.10	.16	.12	.10	.15	.12	.10	.09

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.177	.101	.032	.174	.099	.031	.167	.096	.031	.160	.093	.030	.155	.090	.029	
2.0	.169	.093	.028	.166	.091	.028	.160	.089	.028	.154	.086	.027	.149	.084	.027	
3.0	.156	.083	.025	.153	.082	.025	.148	.080	.024	.143	.078	.024	.138	.076	.024	
4.0	.143	.074	.022	.140	.073	.022	.135	.072	.021	.131	.070	.021	.127	.069	.021	
5.0	.131	.067	.019	.129	.066	.019	.124	.065	.019	.120	.064	.019	.117	.062	.019	
6.0	.121	.060	.017	.119	.060	.017	.115	.059	.017	.111	.058	.017	.108	.057	.017	
7.0	.112	.055	.016	.110	.055	.016	.106	.054	.015	.103	.053	.015	.100	.052	.015	
8.0	.103	.051	.014	.102	.050	.014	.099	.049	.014	.096	.049	.014	.093	.048	.014	
9.0	.096	.047	.013	.095	.046	.013	.092	.046	.013	.090	.045	.013	.087	.044	.013	
10.0	.090	.043	.012	.089	.043	.012	.086	.042	.012	.084	.042	.012	.082	.041	.012	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.098	.098	.098	.083	.083	.083	.057	.057	.057	.033	.033	.033	.010	.010	.010	
1.0	.094	.080	.067	.080	.069	.058	.055	.047	.040	.032	.027	.023	.010	.009	.008	
2.0	.091	.068	.048	.078	.058	.041	.053	.040	.029	.031	.023	.017	.010	.008	.006	
3.0	.088	.059	.036	.075	.051	.031	.052	.035	.022	.030	.021	.013	.010	.007	.004	
4.0	.084	.052	.028	.072	.045	.024	.050	.031	.017	.029	.018	.010	.009	.006	.003	
5.0	.080	.047	.022	.069	.041	.019	.048	.028	.014	.028	.017	.008	.009	.005	.003	
6.0	.077	.043	.018	.066	.037	.016	.045	.026	.011	.026	.015	.007	.009	.005	.002	
7.0	.073	.039	.016	.063	.034	.014	.043	.024	.010	.025	.014	.006	.008	.005	.002	
8.0	.070	.036	.014	.060	.032	.012	.041	.022	.008	.024	.013	.005	.008	.004	.002	
9.0	.066	.034	.012	.057	.029	.011	.040	.021	.007	.023	.012	.004	.007	.004	.001	
10.0	.063	.032	.011	.054	.028	.009	.038	.019	.007	.022	.011	.004	.007	.004	.001	

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H	y = 2H	17.6	19.3	17.9	19.5	19.8	23.1	24.8	23.4	25.0	25.2
	3H	18.6	20.2	18.9	20.5	20.7	26.0	27.6	26.3	27.8	28.1
	4H	18.9	20.4	19.2	20.6	20.9	26.9	28.4	27.3	28.7	29.0
	6H	18.9	20.3	19.3	20.6	20.9	27.0	28.4	27.3	28.7	29.0
	8H	18.9	20.3	19.2	20.5	20.8	26.9	28.3	27.3	28.6	28.9
	12H	18.8	20.2	19.2	20.5	20.8	26.9	28.2	27.2	28.5	28.8
4H	2H	20.0	21.6	20.4	21.8	22.1	23.6	25.1	23.9	25.4	25.6
	3H	21.5	22.8	21.8	23.1	23.4	26.7	28.0	27.1	28.3	28.7
	4H	21.9	23.1	22.3	23.4	23.8	27.8	29.0	28.2	29.3	29.7
	6H	22.0	23.1	22.4	23.5	23.8	27.9	28.9	28.3	29.3	29.7
	8H	22.0	23.0	22.4	23.4	23.8	27.8	28.8	28.3	29.2	29.6
	12H	22.0	22.9	22.4	23.3	23.7	27.8	28.7	28.2	29.1	29.5
8H	4H	23.2	24.2	23.6	24.6	25.0	27.9	28.9	28.4	29.3	29.7
	6H	23.5	24.3	23.9	24.7	25.2	28.1	28.9	28.5	29.3	29.7
	8H	23.5	24.2	23.9	24.6	25.1	28.0	28.8	28.5	29.2	29.7
	12H	23.5	24.1	23.9	24.5	25.0	28.0	28.6	28.5	29.1	29.6
12H	4H	23.2	24.1	23.7	24.5	24.9	27.9	28.8	28.3	29.2	29.6
	6H	23.5	24.2	24.0	24.7	25.1	28.0	28.8	28.5	29.2	29.7
	8H	23.5	24.1	24.0	24.6	25.1	28.0	28.7	28.5	29.1	29.6

Variations with the observer position at spacings:		
S = 1.0H	+ 0.1 / - 0.2	+ 0.2 / - 0.3
1.5H	+ 0.5 / - 0.7	+ 0.8 / - 0.6
2.0H	+ 0.5 / - 1.0	+ 0.7 / - 0.6

CIE Pub.117, 3330 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.2)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

K-LITE

UTILIZATION FACTORS TABLE

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
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) x RCR = 5									
k = 0.60	26	19	15	25	19	15	25	19	15	11
0.80	31	24	20	30	24	20	29	24	20	16
1.00	35	29	25	35	29	24	34	30	24	20
1.25	39	33	29	39	33	29	37	32	28	24
1.50	42	36	32	41	36	32	40	35	31	27
2.00	46	41	37	45	41	37	44	40	36	32
2.50	49	44	41	48	44	40	46	42	39	35
3.00	51	47	44	50	46	43	48	45	42	37
4.00	53	50	47	52	49	47	50	48	45	41
5.00	55	52	50	54	51	49	51	49	48	43
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended					SHRNOM = 1.25	

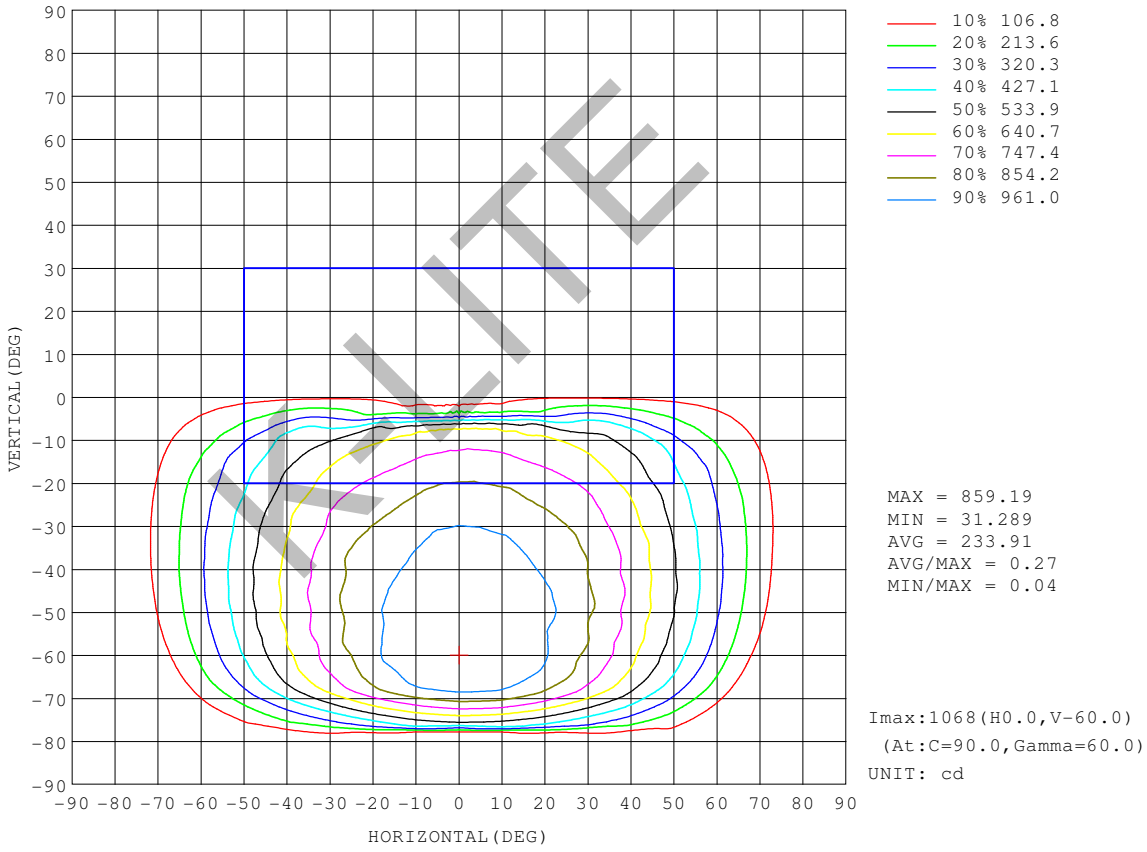
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:



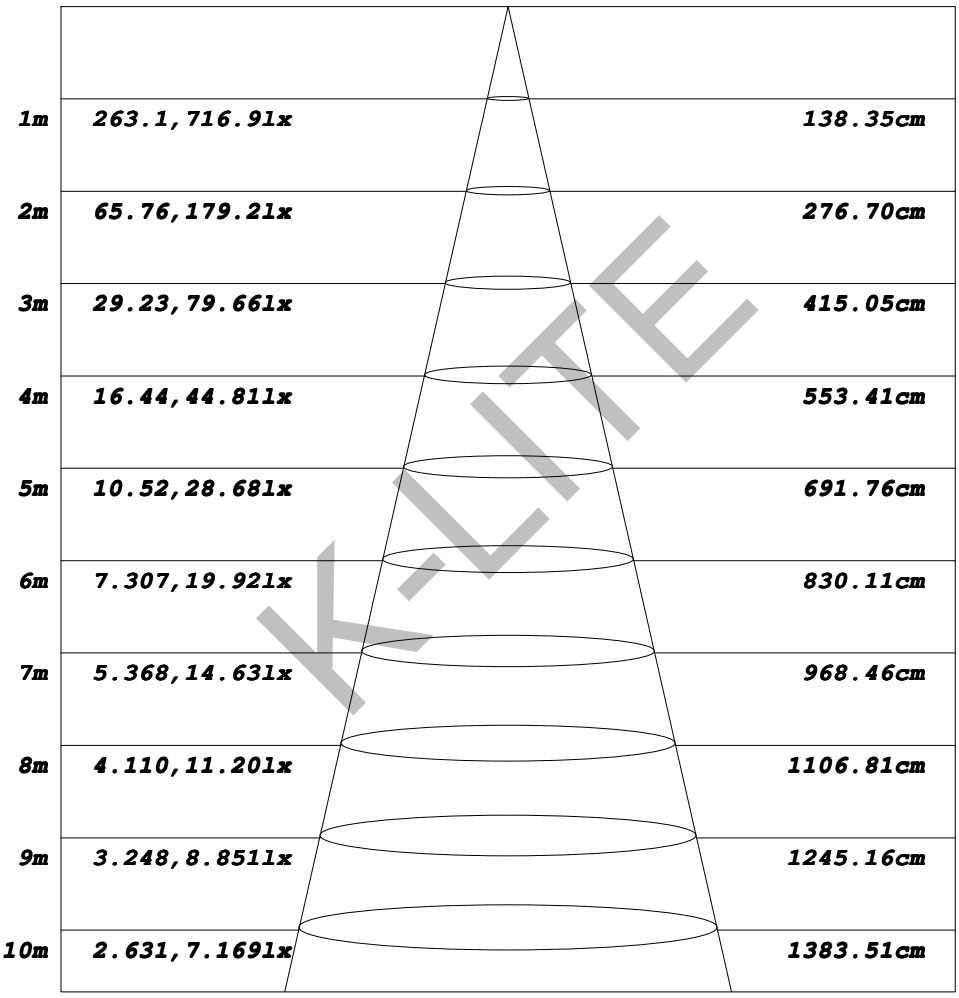
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:405.2 lm



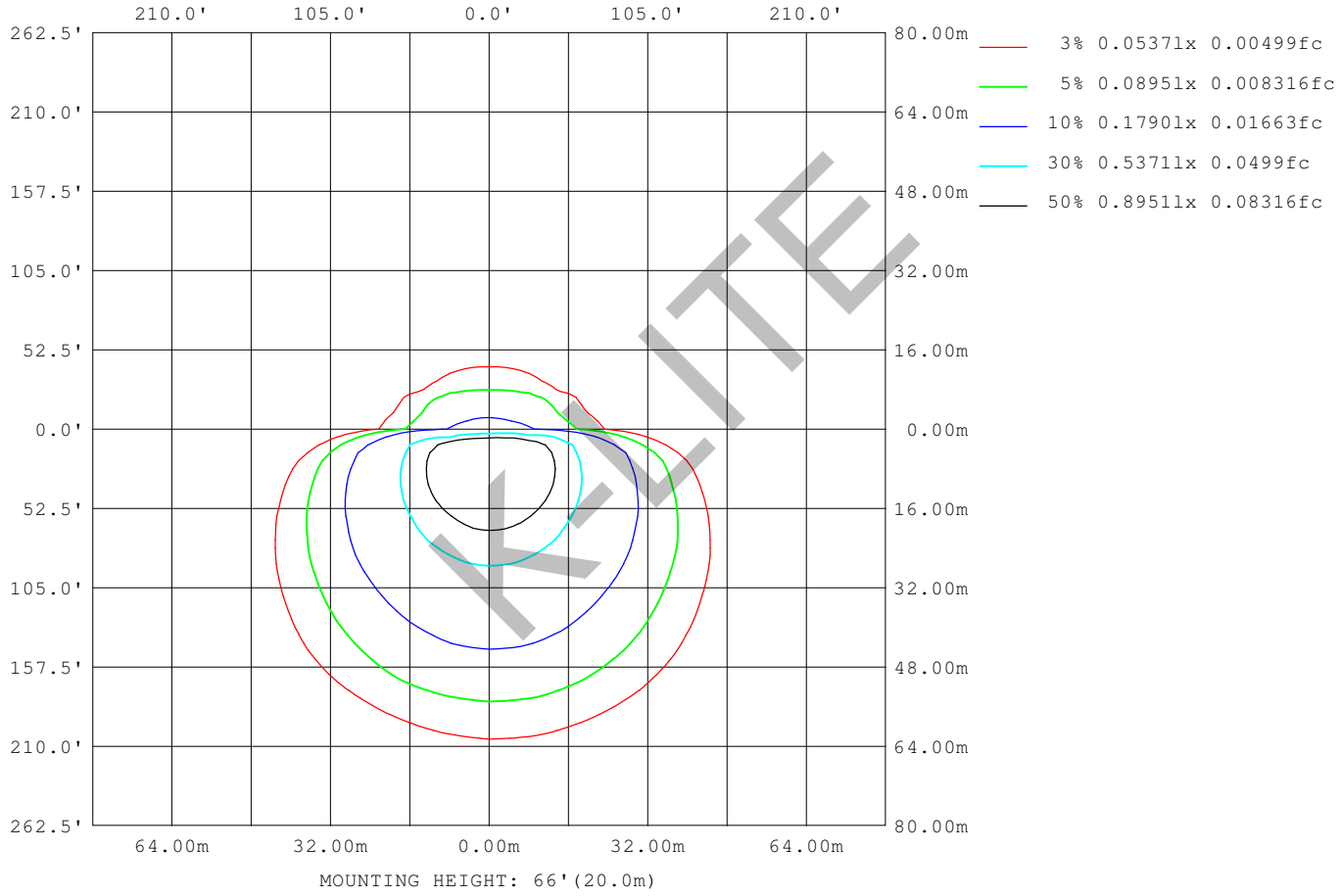
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	1212
L_0~180(75)av	1354
L_0~180(85)av	1469
L_90~270(65)av	12560
L_90~270(75)av	11257
L_90~270(85)av	850
L_45(65)av	8130
L_45(75)av	8483
L_45(85)av	1175

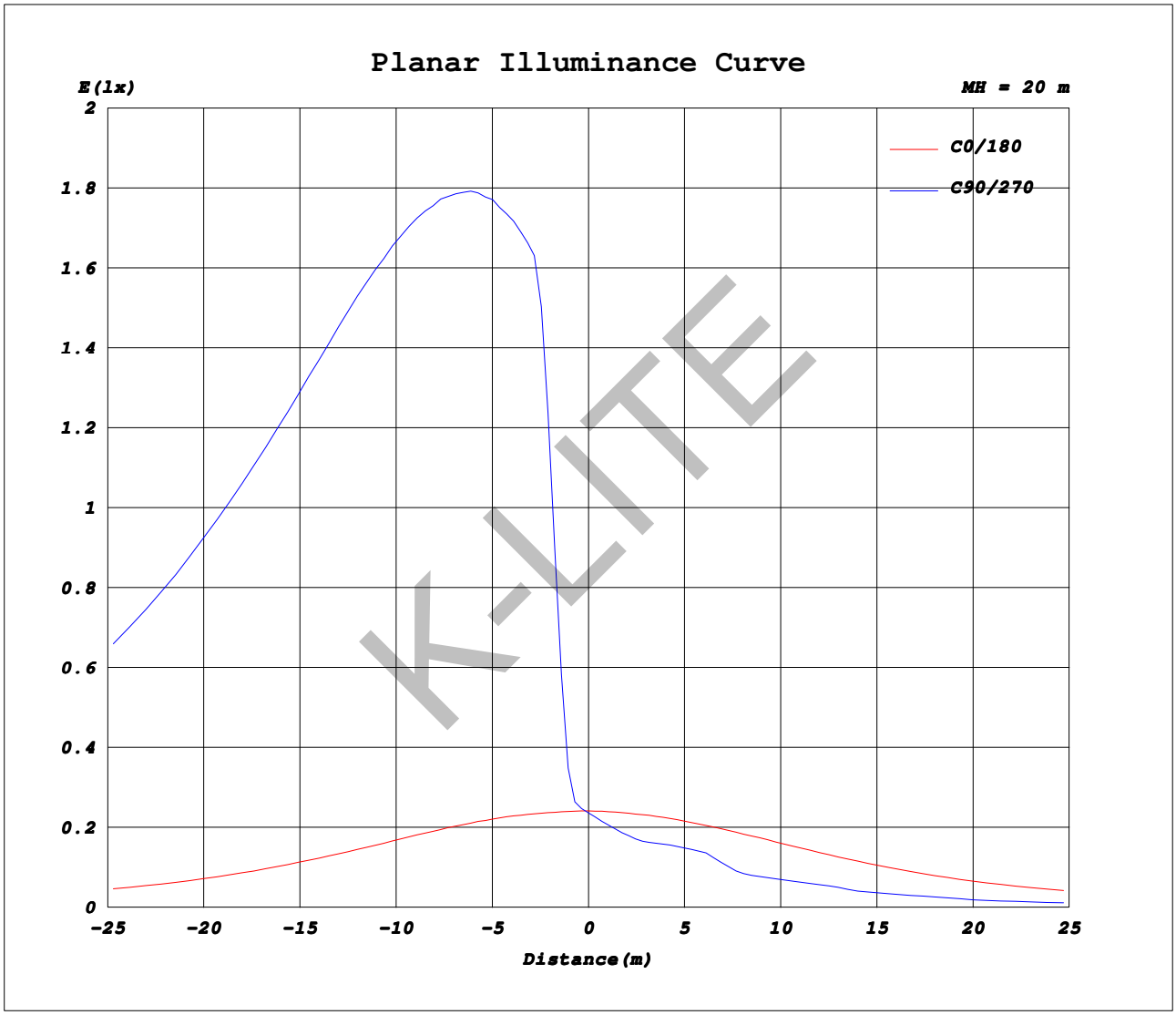
Standard: GB/T 29293-2012

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
5	95.1	99.1	105	123	198	225	299	328	375	367	374	319	288	211	184	119	103	98.6	94.8
10	95.5	107	200	393	579	662	682	701	710	713	705	697	678	651	546	354	178	102	94.1
15	95.4	140	425	633	682	728	752	779	790	795	784	771	744	712	668	617	368	118	93.1
20	95.0	232	599	668	717	775	810	840	854	864	850	835	796	755	704	653	561	172	91.8
25	93.6	346	618	694	751	810	857	891	909	923	906	884	832	788	733	673	594	271	89.7
30	91.5	447	623	712	774	839	889	936	954	970	950	921	864	817	754	688	598	367	86.9
35	88.7	495	612	720	791	865	914	970	989	1005	983	948	889	841	768	693	577	442	83.3
40	85.1	479	594	703	801	882	929	994	1015	1032	1010	964	908	855	772	665	558	445	78.8
45	80.7	445	573	694	776	889	942	1008	1035	1055	1029	980	920	857	741	654	530	403	74.0
50	75.5	409	537	653	770	860	948	1016	1048	1067	1039	986	922	823	730	612	493	370	68.6
55	69.1	360	488	620	729	851	937	1011	1056	1072	1040	982	887	811	690	573	446	322	62.3
60	62.1	308	435	569	679	806	902	1000	1056	1076	1038	980	875	766	641	523	398	270	55.5
65	54.3	243	372	504	624	752	852	974	1030	1052	1012	928	822	713	587	463	337	214	48.2
70	45.9	187	301	425	542	673	764	852	892	902	863	829	732	629	503	387	266	158	40.7
75	37.2	122	212	319	416	480	512	556	570	578	551	508	459	430	374	287	184	104	32.8
80	27.3	50.0	84.7	141	180	153	88.7	50.7	50.4	50.6	50.6	50.6	92.1	126	136	120	76.5	45.6	24.6
85	12.6	14.6	16.5	18.2	17.0	16.7	16.4	14.6	15.0	13.6	14.8	14.8	16.7	17.7	17.8	19.1	17.4	15.5	13.0
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.65V I:0.1090A P:24.402W PF:0.9706 Freq:50.00Hz Lamp Flux:3330x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:NW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4882
MFR.: K-LITE	SUR.:	Shielding Angle:

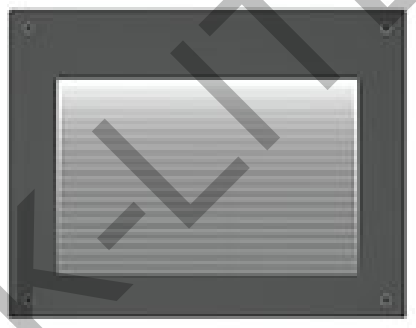
Table--2 UNIT: cd

γ (DEG) \ C(DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4		
5	91.2	88.0	85.0	82.2	80.0	78.3	76.8	76.5	76.3	76.4	77.2	78.6	80.3	82.7	85.4	88.4	91.7		
10	87.2	81.2	75.5	71.8	68.9	67.7	67.6	67.4	67.9	67.4	68.0	68.0	69.4	72.4	76.4	82.1	88.6		
15	83.2	74.8	69.1	67.3	66.9	66.0	65.5	65.0	65.1	65.1	65.7	66.5	67.5	68.0	70.1	76.2	85.2		
20	79.1	69.8	67.0	65.8	64.1	61.6	55.5	51.8	49.7	52.1	55.0	62.1	64.6	66.6	67.9	71.3	81.5		
25	74.4	66.5	65.3	62.2	51.6	42.9	41.2	40.3	40.5	40.4	41.6	43.5	52.7	63.0	66.3	67.7	77.5		
30	70.1	64.6	61.5	47.0	41.4	39.7	38.5	37.4	37.5	37.5	38.9	40.2	42.0	48.7	62.7	65.9	73.3		
35	65.4	61.6	51.0	40.5	38.8	36.9	34.4	30.7	30.2	30.9	35.0	37.4	39.5	41.3	53.8	63.3	69.2		
40	61.2	57.0	40.2	37.7	35.5	30.2	28.8	27.4	27.3	27.7	29.4	30.9	36.3	38.7	41.6	59.0	64.5		
45	57.4	48.0	37.2	34.4	29.6	27.8	25.8	23.2	22.2	23.6	26.5	28.4	30.5	35.5	38.4	51.8	60.6		
50	53.0	36.9	34.0	28.9	26.9	22.9	21.5	20.0	19.7	20.5	22.1	23.8	27.9	29.9	35.3	38.9	56.3		
55	47.6	33.2	28.3	26.0	22.5	20.6	17.7	16.2	15.8	16.6	18.4	21.4	23.5	27.2	29.6	34.9	51.0		
60	41.0	29.6	25.4	21.6	18.8	17.0	15.4	13.4	12.6	13.8	16.0	17.8	19.8	22.8	26.7	31.2	44.6		
65	30.0	24.6	21.0	17.9	15.9	13.8	12.4	10.7	9.98	11.1	13.0	14.5	16.9	18.9	22.4	26.1	34.4		
70	25.3	21.0	17.2	14.7	12.5	10.9	9.39	7.94	7.46	8.28	9.91	11.6	13.3	15.5	18.4	22.7	27.5		
75	20.9	16.7	13.6	11.2	9.45	7.86	6.68	5.74	5.20	6.02	7.28	8.42	10.1	12.0	14.6	18.1	22.9		
80	16.6	12.2	9.41	7.49	6.14	5.07	4.19	3.37	2.99	3.61	4.55	5.53	6.63	8.05	10.08	13.1	17.9		
85	9.86	6.47	4.57	3.47	2.72	2.15	1.75	1.41	1.24	1.58	2.02	2.48	3.04	3.78	4.86	6.73	10.00		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:



Light Output Ratio:	47.3%	
Luminaire Power:	24.46 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

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

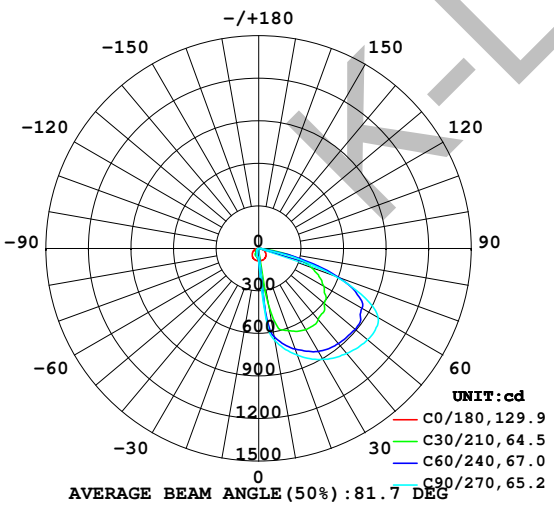
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

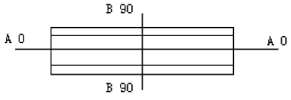
Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 61.84 lm/W	
MODEL	KL-2777	Imax(cd)	1006	S/MH(C0/180)	1.34
NOMINAL POWER(W)	24	LOR(%)	47.3	S/MH(C90/270)	0.65
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	1512.4	η UP,DN(C0-180)	0.0,45.0
NOMINAL FLUX(lm)	3198	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,2.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	47.3	CIBSE SHR MAX	1.00

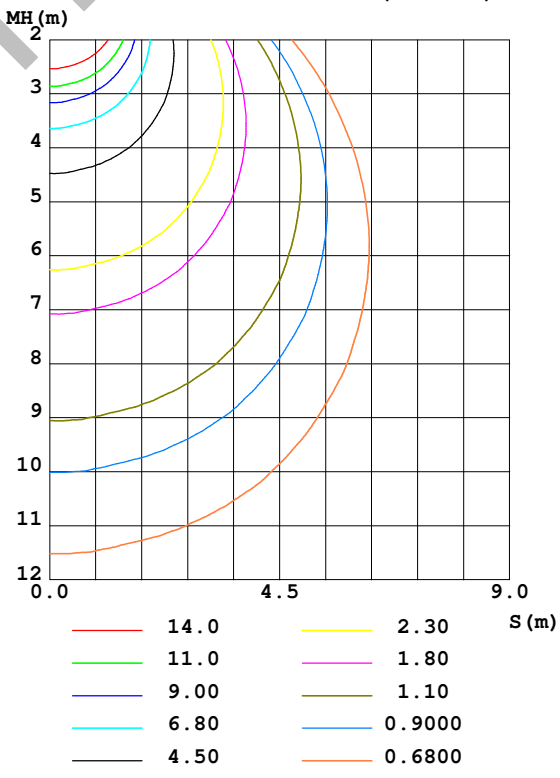
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):81.7 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [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	88.40	580.8	659.0	563.5	87.67	61.14	57.57	61.62	0- 10	18.67	18.67	1.23,0.58
20	87.59	699.1	801.5	679.1	84.98	55.24	41.44	56.21	10- 20	87.19	105.9	7,3.31
30	84.17	755.1	903.7	736.3	79.87	35.41	29.35	37.49	20- 30	162.5	268.3	17.7,8.39
40	77.87	785.9	966.7	752.1	71.57	28.36	21.65	30.29	30- 40	232.7	501.1	33.1,15.7
50	68.59	759.2	1002	718.1	60.72	21.63	15.69	23.95	40- 50	283.9	785.0	51.9,24.5
60	55.65	692.9	973.2	658.5	47.55	15.54	10.16	18.20	50- 60	309.3	1094	72.4,34.2
70	41.19	546.7	576.2	442.8	33.24	10.20	5.932	12.51	60- 70	278.0	1372	90.7,42.9
80	25.27	139.9	41.49	41.13	18.59	4.935	2.431	6.590	70- 80	128.3	1501	99.2,46.9
90	0	0	0	0.0009	0	0.0010	0.0020	0.0015	80- 90	11.75	1512	100,47.3
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

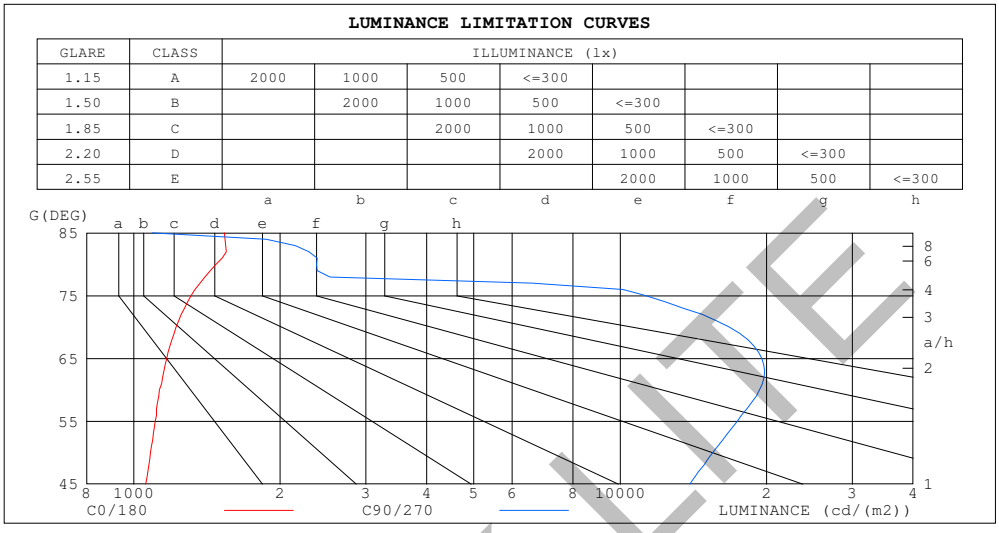
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1536	1092
80	1477	2375
75	1312	11274
70	1222	16750
65	1169	19542
60	1129	19351
55	1108	17421
50	1083	15502
45	1057	13905

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

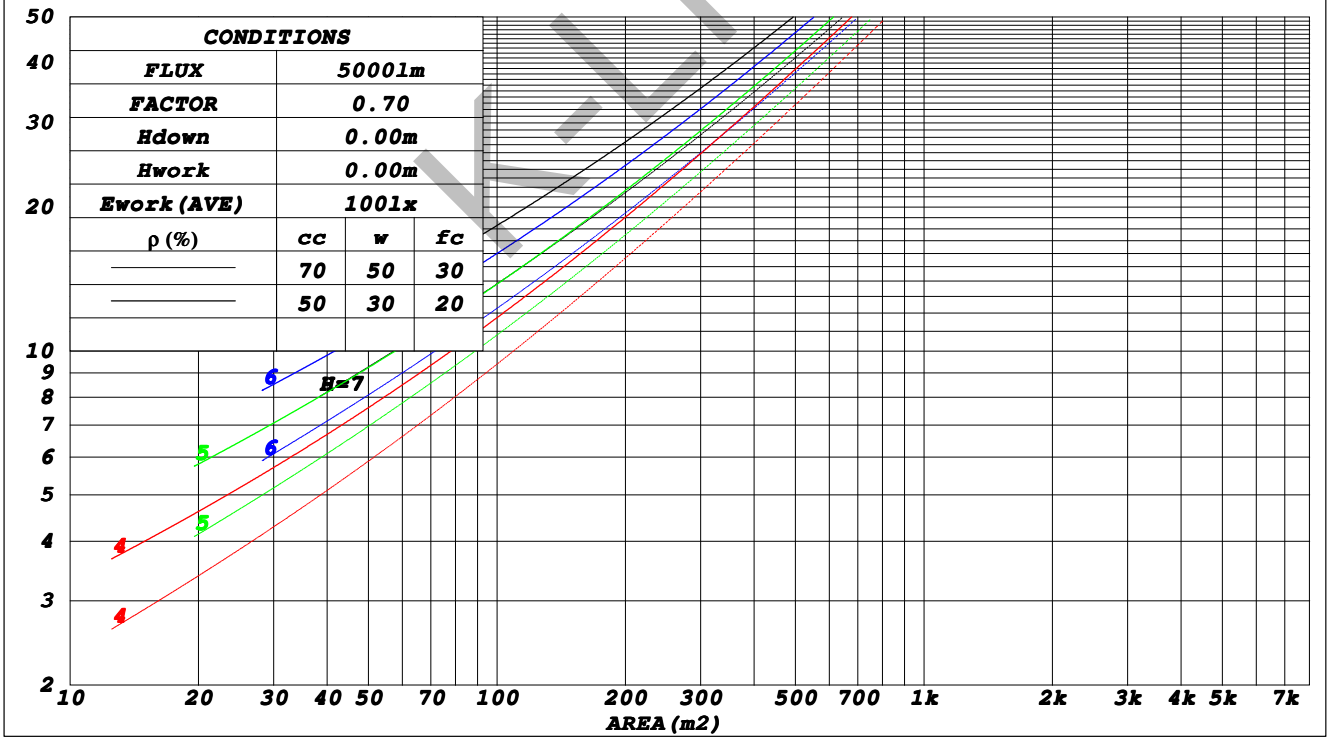
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	.56	.56	.56	.55	.55	.55	.53	.53	.53	.50	.50	.50	.48	.48	.48	.47
1.0	.49	.46	.44	.48	.46	.44	.45	.44	.42	.44	.42	.41	.42	.41	.40	.39
2.0	.41	.38	.35	.41	.37	.35	.39	.36	.34	.37	.35	.33	.36	.34	.32	.31
3.0	.36	.31	.28	.35	.31	.28	.33	.30	.27	.32	.29	.27	.31	.28	.26	.25
4.0	.31	.26	.23	.30	.26	.23	.29	.25	.22	.28	.25	.22	.27	.24	.22	.21
5.0	.27	.22	.19	.27	.22	.19	.26	.22	.19	.25	.21	.18	.24	.21	.18	.17
6.0	.24	.19	.16	.24	.19	.16	.23	.19	.16	.22	.18	.16	.21	.18	.16	.14
7.0	.21	.17	.14	.21	.17	.14	.20	.16	.14	.20	.16	.14	.19	.16	.13	.12
8.0	.19	.15	.12	.19	.15	.12	.18	.15	.12	.18	.14	.12	.17	.14	.12	.11
9.0	.18	.13	.11	.17	.13	.11	.17	.13	.10	.16	.13	.10	.16	.13	.10	.09
10.0	.16	.12	.09	.16	.12	.09	.15	.12	.09	.15	.12	.09	.14	.11	.09	.08

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.157	.089	.028	.153	.087	.028	.147	.084	.027	.141	.081	.026	.136	.079	.025	
2.0	.151	.083	.025	.148	.081	.025	.142	.079	.025	.137	.077	.024	.132	.075	.024	
3.0	.140	.074	.022	.137	.073	.022	.132	.072	.022	.128	.070	.021	.123	.068	.021	
4.0	.129	.067	.020	.127	.066	.020	.122	.065	.019	.118	.063	.019	.114	.062	.019	
5.0	.119	.060	.018	.117	.060	.017	.113	.059	.017	.109	.057	.017	.105	.056	.017	
6.0	.110	.055	.016	.108	.054	.016	.104	.053	.016	.101	.052	.015	.098	.051	.015	
7.0	.102	.050	.014	.100	.050	.014	.097	.049	.014	.094	.048	.014	.091	.047	.014	
8.0	.094	.046	.013	.093	.046	.013	.090	.045	.013	.087	.044	.013	.085	.044	.013	
9.0	.088	.043	.012	.087	.042	.012	.084	.042	.012	.082	.041	.012	.079	.040	.012	
10.0	.083	.040	.011	.081	.039	.011	.079	.039	.011	.077	.038	.011	.075	.038	.011	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.090	.090	.090	.077	.077	.077	.053	.053	.053	.030	.030	.030	.010	.010	.010	
1.0	.086	.074	.063	.074	.063	.054	.050	.044	.037	.029	.025	.022	.009	.008	.007	
2.0	.083	.062	.045	.071	.054	.039	.049	.037	.027	.028	.022	.016	.009	.007	.005	
3.0	.080	.054	.033	.069	.047	.029	.047	.032	.020	.027	.019	.012	.009	.006	.004	
4.0	.077	.048	.026	.066	.041	.023	.045	.029	.016	.026	.017	.009	.008	.006	.003	
5.0	.074	.043	.021	.063	.037	.018	.044	.026	.013	.025	.015	.008	.008	.005	.003	
6.0	.070	.039	.017	.060	.034	.015	.042	.024	.011	.024	.014	.006	.008	.005	.002	
7.0	.067	.036	.015	.058	.031	.013	.040	.022	.009	.023	.013	.005	.007	.004	.002	
8.0	.064	.033	.013	.055	.029	.011	.038	.020	.008	.022	.012	.005	.007	.004	.002	
9.0	.061	.031	.011	.052	.027	.010	.036	.019	.007	.021	.011	.004	.007	.004	.001	
10.0	.058	.029	.010	.050	.025	.009	.035	.018	.006	.020	.011	.004	.007	.003	.001	

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H	y = 2H	17.7	19.3	18.0	19.6	19.8	23.1	24.7	23.3	25.0	25.2
	3H	18.7	20.3	19.0	20.5	20.7	25.1	26.6	25.4	26.9	27.1
	4H	19.0	20.4	19.3	20.7	21.0	25.5	27.0	25.8	27.3	27.5
	6H	19.0	20.4	19.4	20.7	21.0	25.5	26.9	25.8	27.2	27.5
	8H	19.0	20.3	19.4	20.6	20.9	25.4	26.8	25.8	27.1	27.4
	12H	19.0	20.3	19.3	20.6	20.9	25.4	26.7	25.8	27.0	27.3
4H	2H	20.1	21.6	20.4	21.8	22.1	23.6	25.0	23.9	25.3	25.6
	3H	21.5	22.8	21.9	23.1	23.4	25.8	27.1	26.2	27.4	27.7
	4H	22.0	23.2	22.4	23.5	23.8	26.4	27.6	26.8	27.9	28.2
	6H	22.2	23.2	22.6	23.6	23.9	26.4	27.4	26.8	27.8	28.2
	8H	22.1	23.1	22.6	23.5	23.9	26.4	27.3	26.8	27.7	28.1
	12H	22.1	23.0	22.6	23.4	23.8	26.3	27.2	26.8	27.6	28.0
8H	4H	23.0	24.0	23.4	24.4	24.8	26.6	27.5	27.0	27.9	28.3
	6H	23.4	24.2	23.8	24.6	25.0	26.6	27.4	27.1	27.8	28.3
	8H	23.4	24.1	23.8	24.5	25.0	26.6	27.3	27.1	27.7	28.2
	12H	23.4	24.0	23.8	24.4	24.9	26.6	27.2	27.1	27.6	28.1
12H	4H	23.0	23.9	23.4	24.3	24.7	26.6	27.4	27.0	27.8	28.2
	6H	23.4	24.1	23.8	24.5	25.0	26.6	27.3	27.1	27.8	28.2
	8H	23.4	24.0	23.9	24.5	24.9	26.6	27.2	27.1	27.7	28.1

Variations with the observer position at spacings:		
S = 1.0H	+ 0.2 / - 0.2	+ 0.2 / - 0.2
1.5H	+ 0.4 / - 0.6	+ 0.2 / - 0.4
2.0H	+ 0.6 / - 1.1	+ 0.8 / - 0.9

CIE Pub.117, 3198 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.0)
Area: 0.1 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

K-LITE

UTILIZATION FACTORS TABLE

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
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) x RCR = 5*									
k = 0.60	*24*	*18*	*14*	*24*	*18*	*14*	*23*	*18*	*14*	*11*
0.80	*29*	*23*	*19*	*28*	*23*	*19*	*27*	*22*	*19*	*15*
1.00	*33*	*27*	*23*	*33*	*27*	*23*	*31*	*28*	*23*	*19*
1.25	*37*	*31*	*27*	*36*	*31*	*27*	*35*	*30*	*27*	*23*
1.50	*40*	*34*	*31*	*39*	*34*	*30*	*37*	*33*	*30*	*26*
2.00	*43*	*39*	*35*	*42*	*38*	*35*	*41*	*37*	*34*	*30*
2.50	*46*	*41*	*38*	*45*	*41*	*38*	*43*	*40*	*37*	*33*
3.00	*47*	*44*	*41*	*46*	*43*	*40*	*44*	*42*	*39*	*35*
4.00	*50*	*47*	*44*	*48*	*46*	*44*	*46*	*44*	*42*	*38*
5.00	*51*	*49*	*46*	*50*	*48*	*46*	*48*	*46*	*44*	*40*
ROOM INDEX	*UF(total)*									*Direct*
According to DIN EN 13032-2 2004				*Suspended*					*SHRNOM = 1.25*	

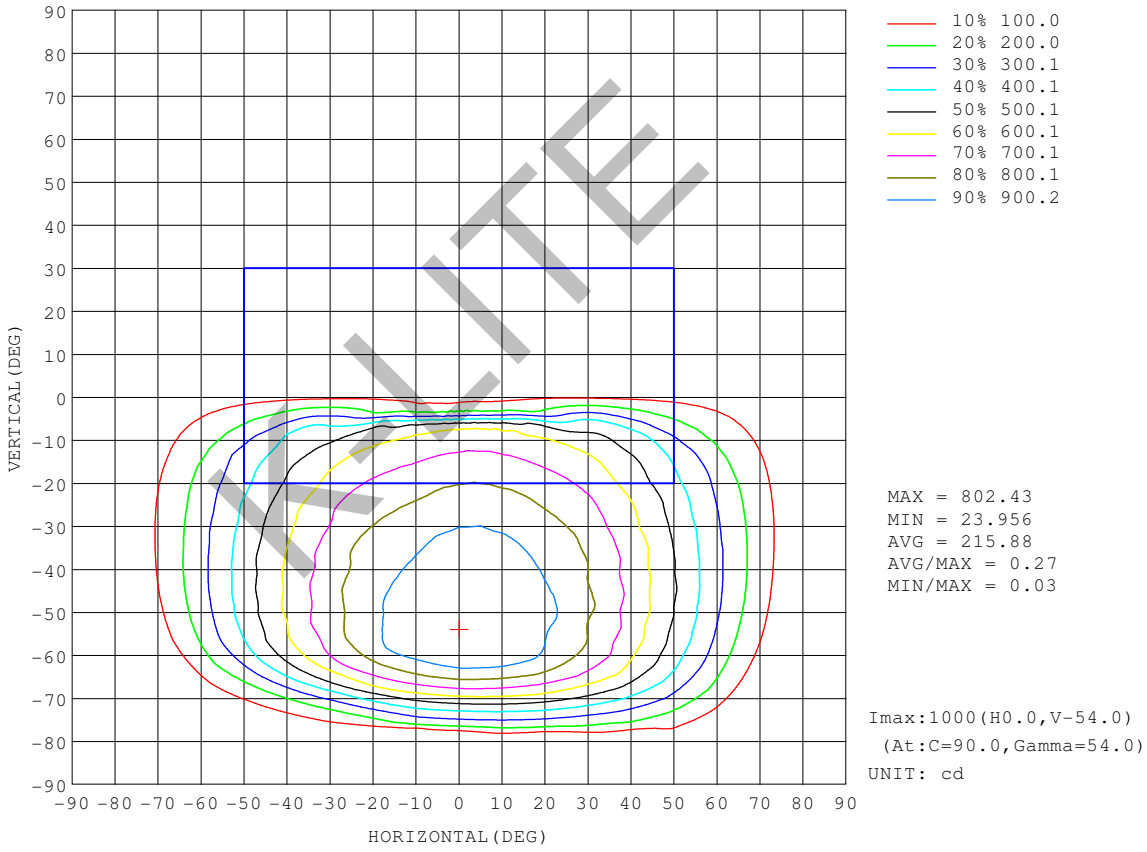
K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:



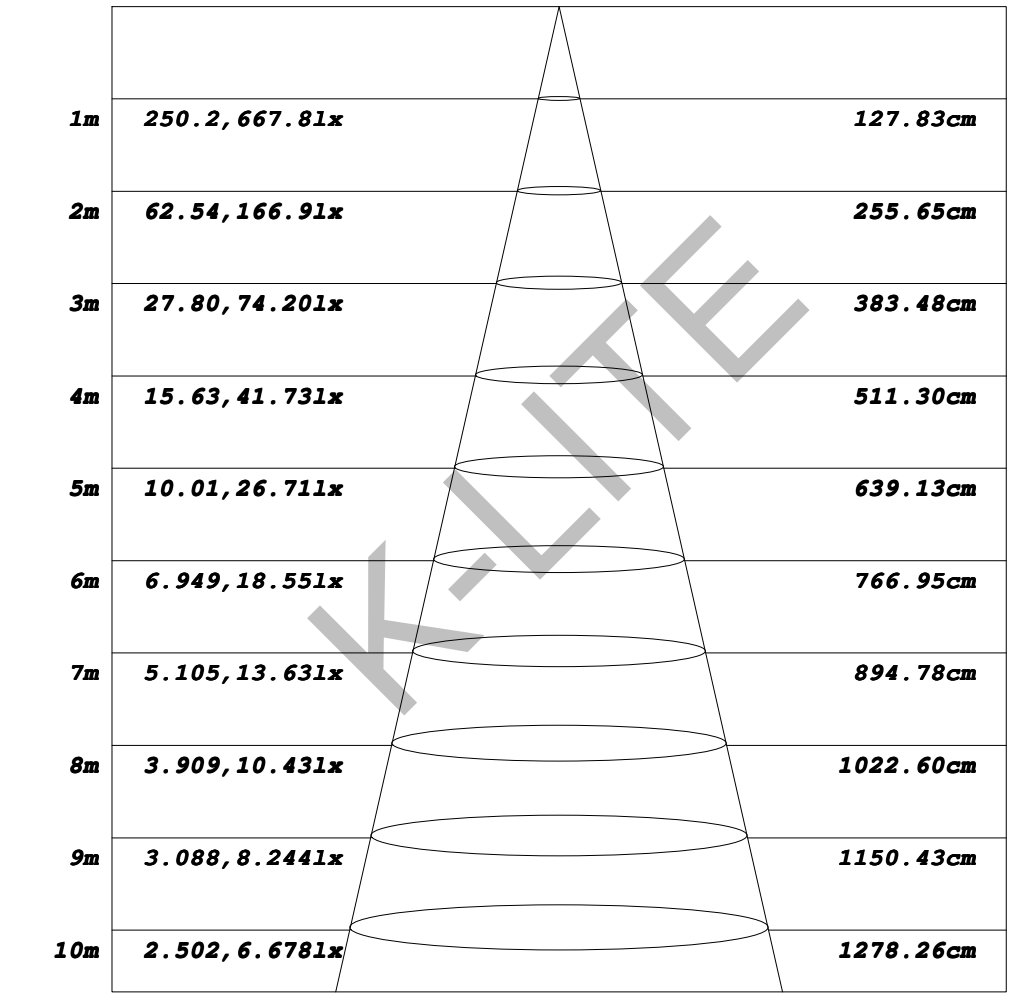
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 September 2022

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:10.000m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:331.4 lm



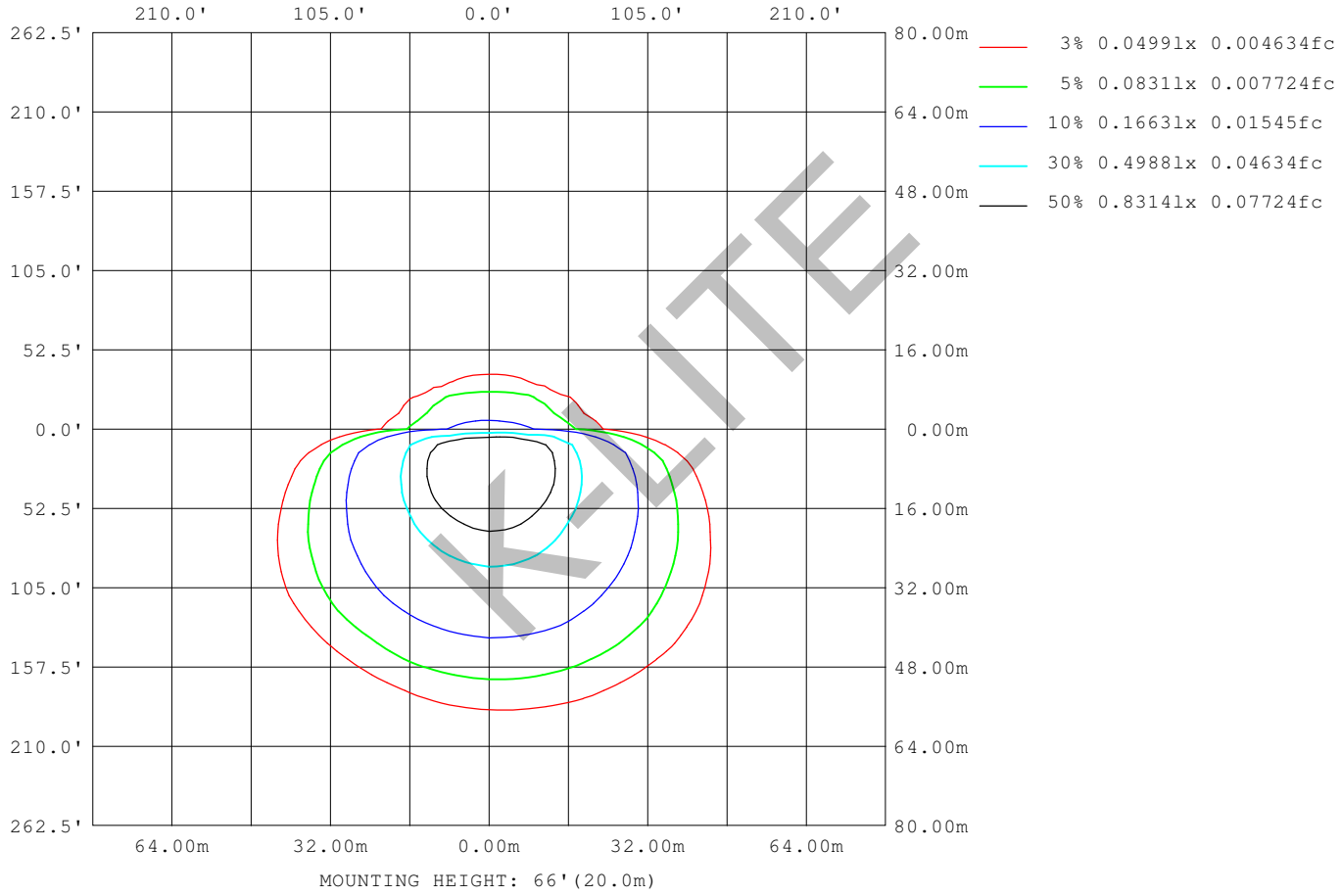
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LED Avg.L Report

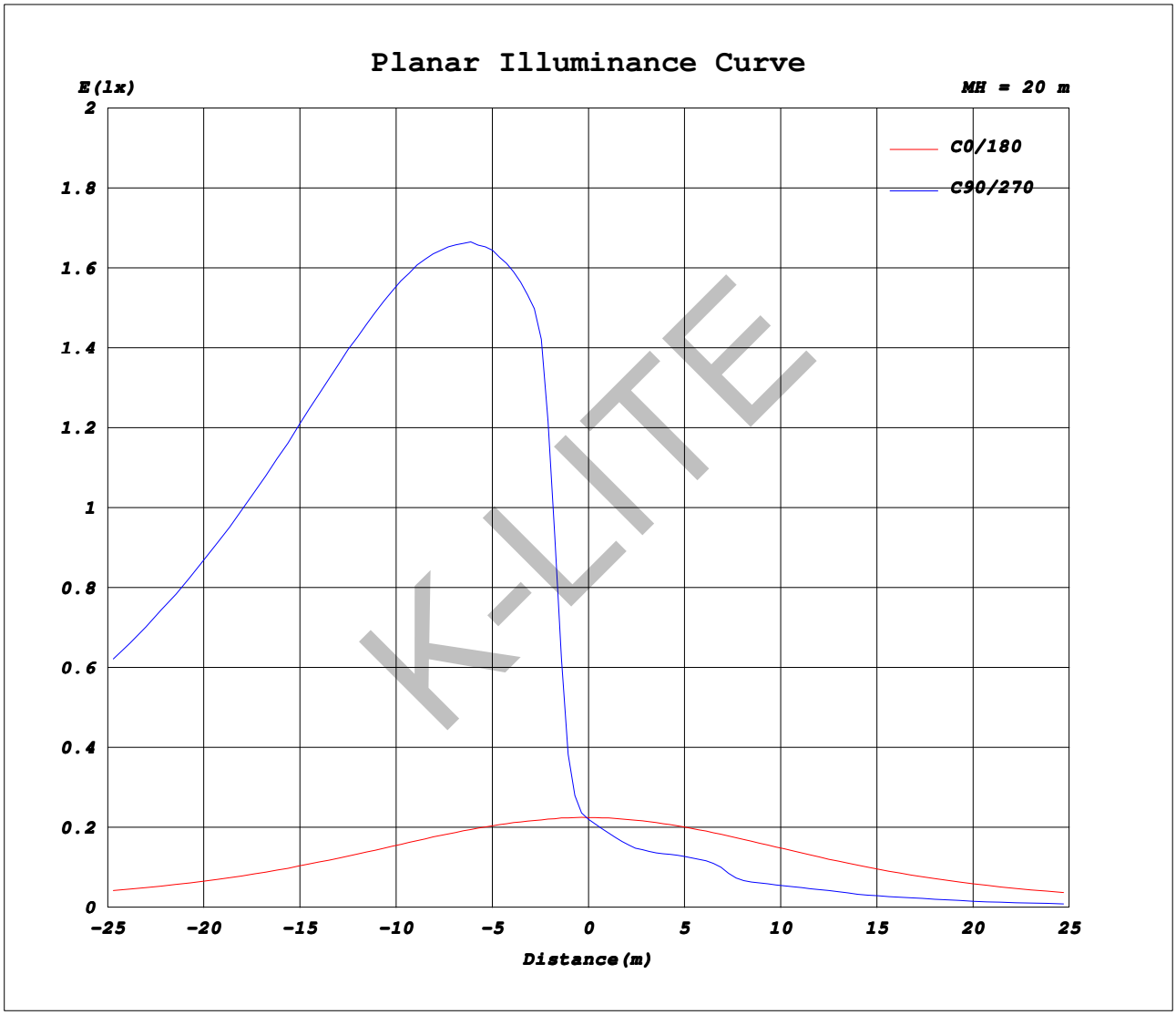
Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	1054
L_0~180(75)av	1148
L_0~180(85)av	1245
L_90~270(65)av	9923
L_90~270(75)av	5751
L_90~270(85)av	608
L_45(65)av	7465
L_45(75)av	5647
L_45(85)av	973

Standard: GB/T 29293-2012

K-LITE

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
5	88.7	96.0	112	138	211	244	315	343	387	379	382	335	302	229	197	127	105	93.3	88.3
10	88.4	109	214	400	548	614	632	649	654	659	648	640	619	598	529	372	193	105	87.7
15	88.2	138	421	594	636	675	702	726	733	738	724	712	685	657	615	574	388	134	86.7
20	87.6	223	553	618	673	725	756	789	796	801	787	769	732	703	655	604	532	199	85.0
25	86.3	331	570	645	702	763	800	837	850	857	837	810	773	740	687	627	551	296	82.9
30	84.2	429	576	663	724	786	839	877	894	904	879	848	806	768	705	640	543	373	79.9
35	81.8	456	574	667	740	809	863	910	929	941	913	878	834	788	718	638	529	423	76.0
40	77.9	441	551	654	749	823	875	935	954	967	936	900	852	800	704	617	519	408	71.6
45	73.7	411	534	642	724	830	882	953	974	989	952	916	862	784	695	604	485	371	66.4
50	68.6	375	495	605	717	802	889	964	988	1002	962	924	867	772	665	570	457	334	60.7
55	62.6	331	451	576	677	796	880	957	987	1005	960	922	832	743	646	528	416	292	54.4
60	55.7	285	404	529	634	753	842	927	962	973	929	904	811	717	600	480	361	240	47.5
65	48.7	227	348	469	583	699	769	835	829	831	795	762	716	647	530	424	300	192	40.4
70	41.2	174	283	397	503	591	599	612	589	576	548	518	488	465	421	340	235	137	33.2
75	33.5	117	203	299	365	374	352	335	311	293	277	226	202	193	195	206	151	82.9	25.9
80	25.3	54.8	94.2	146	161	118	78.0	42.4	41.9	41.5	40.9	39.8	38.3	39.2	43.0	42.7	35.3	26.2	18.6
85	13.2	15.5	17.5	19.4	17.9	17.0	15.6	12.8	11.7	9.57	8.37	8.89	9.69	11.0	11.2	11.8	10.8	9.90	8.50
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.65V I:0.1092A P:24.457W PF:0.9709 Freq:49.98Hz Lamp Flux:3198x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:WW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4883
MFR.: K-LITE	SUR.:	Shielding Angle:

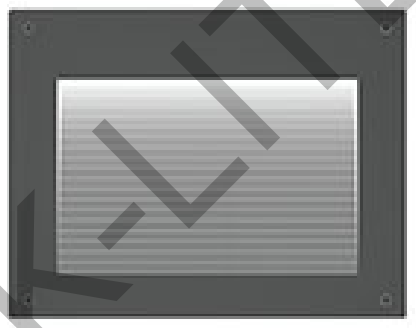
Table--2 UNIT: cd

γ (DEG) \ C(DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9		
5	84.2	80.4	77.0	74.2	71.5	69.7	68.2	67.4	67.1	67.4	68.2	70.0	71.8	74.5	77.4	80.9	84.6		
10	79.9	72.9	66.5	62.5	59.8	57.6	57.6	57.1	57.6	57.2	57.9	58.0	60.2	63.0	67.1	73.5	80.8		
15	75.3	65.6	59.3	57.0	56.8	56.2	56.0	55.4	55.5	55.5	56.3	56.6	57.5	57.8	60.4	66.9	77.0		
20	70.6	59.9	56.8	55.8	54.7	52.4	48.3	43.6	41.4	44.1	48.9	53.0	55.5	56.9	57.8	61.5	72.7		
25	65.5	56.2	55.3	52.5	43.0	34.3	32.7	31.9	32.0	32.2	33.1	35.1	45.2	54.0	56.7	58.0	68.5		
30	60.7	54.1	51.9	38.0	32.8	31.2	30.3	29.2	29.3	29.5	30.8	32.1	33.9	41.1	54.0	56.5	64.3		
35	56.1	51.5	41.9	31.8	30.3	28.7	27.0	24.6	24.2	25.1	27.8	29.8	31.7	33.6	46.5	54.5	60.4		
40	51.6	47.3	31.4	29.3	27.4	23.9	22.8	21.7	21.6	22.1	23.6	25.2	29.2	31.3	34.0	51.1	56.2		
45	47.9	38.9	28.7	26.3	23.2	21.7	20.3	18.5	17.9	19.1	21.3	23.2	25.1	28.9	31.6	45.0	52.8		
50	43.9	28.4	25.9	22.4	20.8	18.1	16.9	15.9	15.7	16.4	18.0	19.6	23.0	24.9	29.0	32.7	49.0		
55	38.9	25.3	21.8	19.8	17.4	16.1	14.0	12.8	12.6	13.4	15.3	17.8	19.6	22.7	24.9	29.1	44.6		
60	32.8	22.3	19.3	16.6	14.4	13.2	12.0	10.6	10.2	11.3	13.3	14.9	17.1	19.3	22.5	26.1	39.1		
65	22.9	18.7	16.0	13.6	12.1	10.7	9.68	8.47	8.05	9.11	10.8	12.2	14.5	16.3	19.1	22.3	30.6		
70	19.0	15.6	13.0	11.0	9.44	8.39	7.26	6.24	5.93	6.80	8.39	9.79	11.6	13.4	16.0	19.6	23.8		
75	15.7	12.3	10.0	8.32	7.09	5.95	5.26	4.53	4.22	4.99	6.07	7.32	8.70	10.5	12.7	16.1	20.0		
80	12.1	8.67	6.67	5.37	4.49	3.80	3.22	2.66	2.43	3.06	3.95	4.79	5.92	7.26	9.05	11.8	16.2		
85	6.34	4.15	2.98	2.30	1.88	1.56	1.33	1.12	1.03	1.35	1.82	2.35	2.94	3.71	4.84	6.68	10.2		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

K-LITE

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:05 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:10.000m [K=1.0000]
Remarks:



Light Output Ratio:	51.6%	
Luminaire Power:	11.83 W	
SHR Nominal:	0.00	Calculated using the TM5
SHR Maximum:	1.00	fine grid method.

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

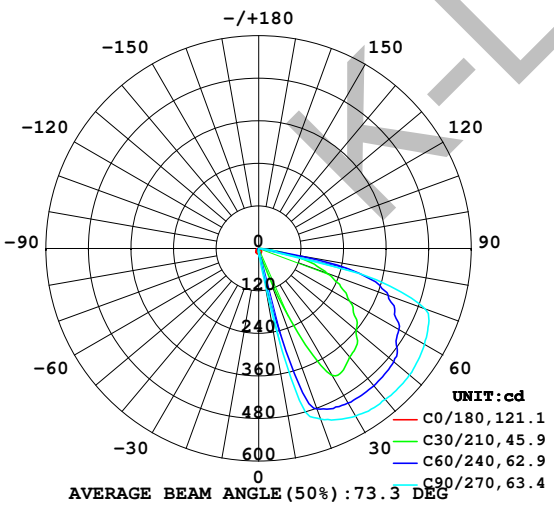
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.417
Humidity:65.0%
Test Distance:1.825m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

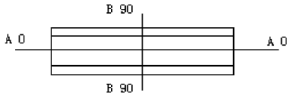
Test:U:230.46V I:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA		Eff: 68.43 lm/W	
MODEL	KL-2735	Imax(cd)	557.5	S/MH(C0/180)	1.33
NOMINAL POWER(W)	12	LOR(%)	51.6	S/MH(C90/270)	0.23
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	809.71	η UP,DN(C0-180)	0.0,51.2
NOMINAL FLUX(lm)	1569	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,0.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	51.6	CIBSE SHR MAX	1.00

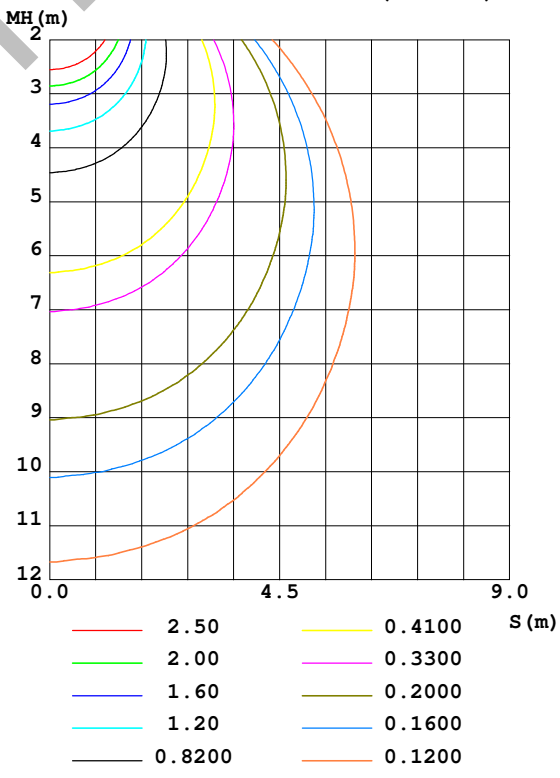
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):73.3 DEG



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



K-LITE

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	15.92	26.67	72.14	26.79	16.00	7.757	5.930	7.654	0- 10	1.680	1.680	0.21,0.11
20	15.39	361.4	511.9	375.3	15.49	5.346	3.936	5.432	10- 20	27.88	29.56	3.65,1.88
30	14.33	466.9	546.2	456.8	14.43	2.724	1.680	2.549	20- 30	79.45	109.0	13.5,6.95
40	12.84	469.0	555.9	449.7	12.83	1.639	1.296	1.798	30- 40	121.9	231.0	28.5,14.7
50	10.88	433.2	555.3	412.5	10.85	1.282	1.075	1.453	40- 50	150.9	381.9	47.2,24.3
60	8.205	379.6	540.3	360.9	8.257	1.002	0.7976	1.152	50- 60	166.0	547.9	67.7,34.9
70	5.029	296.4	500.0	278.0	5.023	0.7222	0.5599	0.8501	60- 70	159.0	706.9	87.3,45.1
80	2.069	114.7	51.30	33.92	1.994	0.3425	0.2257	0.4361	70- 80	97.16	804.1	99.3,51.2
90	0	0.0077	0.0104	0.0076	0	0.0118	0.0109	0.0065	80- 90	5.632	809.7	100,51.6
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		

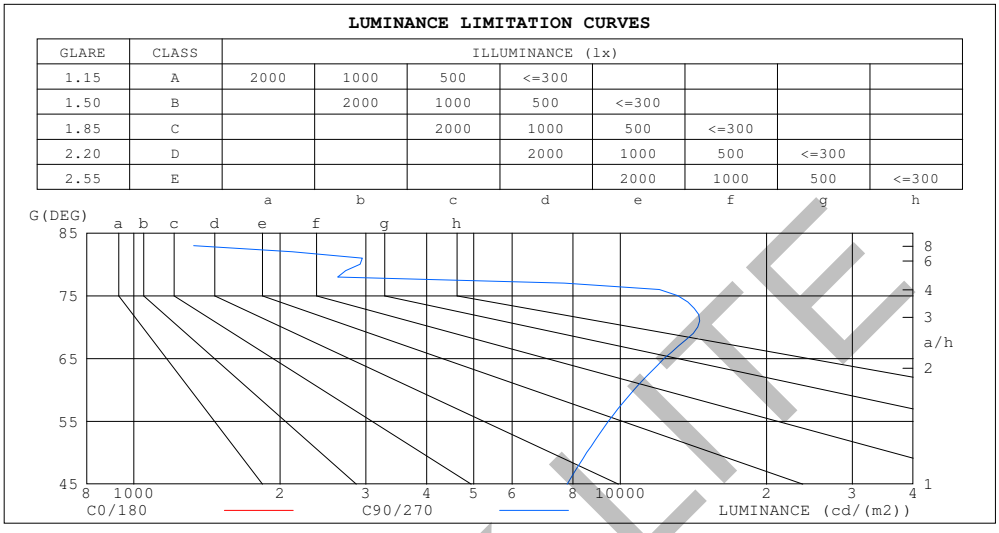
K-LITE

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	94	293
80	121	2919
75	135	13130
70	149	14447
65	159	12324
60	166	10680
55	170	9467
50	172	8538
45	171	7785

K-LITE

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:

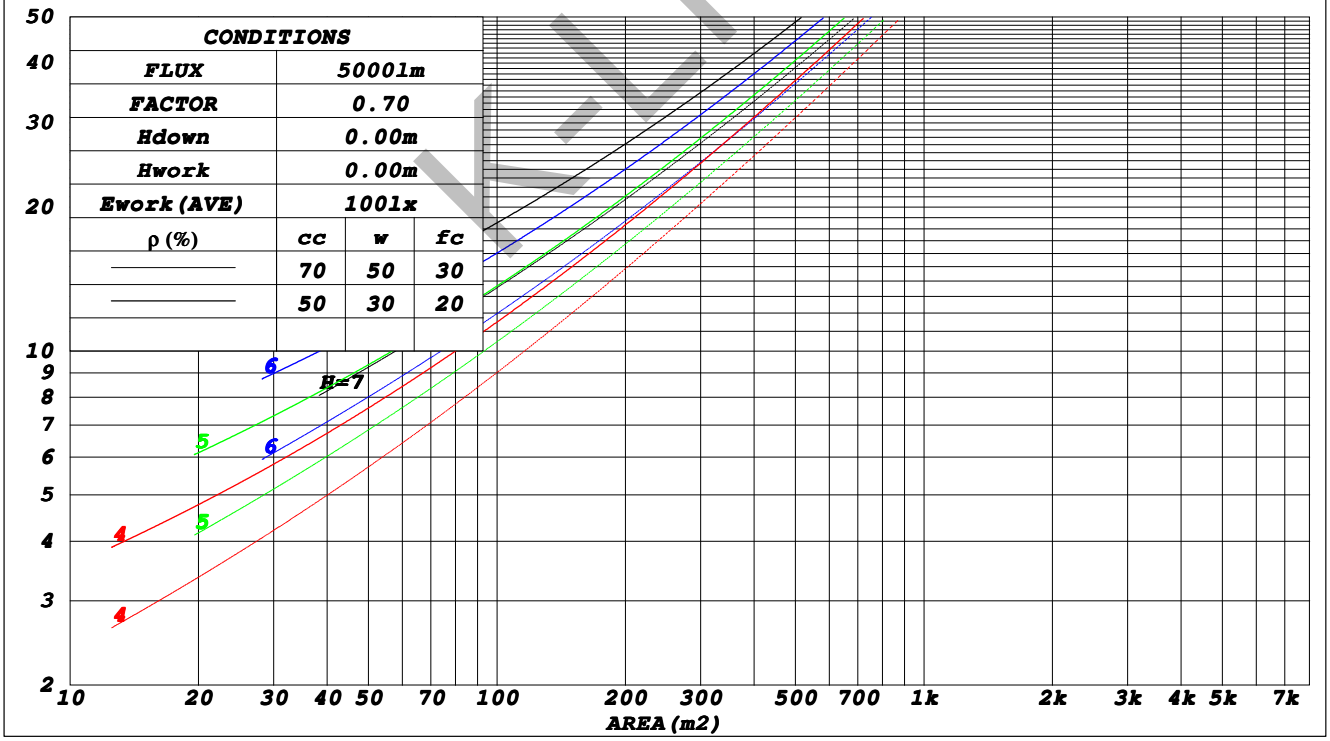
CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.46V I:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	.61	.61	.61	.60	.60	.60	.57	.57	.57	.55	.55	.55	.53	.53	.53	.52
1.0	.52	.50	.48	.51	.49	.47	.49	.47	.45	.47	.45	.44	.45	.44	.43	.41
2.0	.44	.40	.37	.43	.39	.36	.41	.38	.35	.39	.37	.34	.38	.36	.34	.32
3.0	.38	.33	.29	.37	.32	.28	.35	.31	.28	.34	.30	.27	.32	.29	.27	.26
4.0	.32	.27	.23	.32	.27	.23	.30	.26	.23	.29	.25	.22	.28	.25	.22	.21
5.0	.28	.23	.19	.28	.23	.19	.26	.22	.19	.25	.21	.18	.24	.21	.18	.17
6.0	.25	.20	.16	.24	.19	.16	.23	.19	.15	.22	.18	.15	.21	.18	.15	.14
7.0	.22	.17	.13	.22	.17	.13	.21	.16	.13	.20	.16	.13	.19	.16	.13	.12
8.0	.20	.15	.11	.19	.15	.11	.19	.14	.11	.18	.14	.11	.17	.14	.11	.10
9.0	.18	.13	.10	.17	.13	.10	.17	.13	.10	.16	.12	.10	.16	.12	.10	.09
10.0	.16	.12	.09	.16	.12	.09	.15	.11	.09	.15	.11	.08	.14	.11	.08	.07

LAMPS

LUMINAIRE BUDGETARY DIAGRAM



K-LITE

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Wall Exitance Coeffcients(WEC)												
0.0																
1.0	.183	.104	.033	.179	.102	.032	.172	.099	.032	.166	.096	.031	.160	.093	.030	
2.0	.175	.096	.029	.172	.094	.029	.165	.092	.029	.159	.089	.028	.154	.087	.027	
3.0	.161	.086	.026	.158	.085	.026	.153	.083	.025	.147	.081	.025	.143	.079	.024	
4.0	.148	.077	.023	.145	.076	.022	.140	.074	.022	.135	.073	.022	.131	.071	.022	
5.0	.135	.069	.020	.133	.068	.020	.128	.067	.020	.124	.066	.020	.120	.064	.019	
6.0	.124	.062	.018	.122	.062	.018	.118	.061	.018	.115	.060	.017	.111	.058	.017	
7.0	.115	.057	.016	.113	.056	.016	.109	.055	.016	.106	.054	.016	.103	.053	.016	
8.0	.106	.052	.015	.105	.052	.015	.102	.051	.014	.099	.050	.014	.096	.049	.014	
9.0	.099	.048	.013	.098	.048	.013	.095	.047	.013	.092	.046	.013	.090	.045	.013	
10.0	.093	.044	.012	.091	.044	.012	.089	.043	.012	.086	.043	.012	.084	.042	.012	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.098	.098	.098	.084	.084	.084	.057	.057	.057	.033	.033	.033	.011	.011	.011	
1.0	.095	.080	.068	.081	.069	.058	.055	.047	.040	.032	.027	.023	.010	.009	.008	
2.0	.092	.068	.048	.079	.058	.041	.054	.040	.029	.031	.024	.017	.010	.008	.005	
3.0	.089	.059	.035	.076	.051	.031	.052	.035	.021	.030	.021	.013	.010	.007	.004	
4.0	.086	.053	.027	.073	.045	.024	.051	.032	.017	.029	.019	.010	.009	.006	.003	
5.0	.082	.047	.022	.070	.041	.019	.048	.029	.013	.028	.017	.008	.009	.005	.003	
6.0	.078	.043	.018	.067	.037	.016	.046	.026	.011	.027	.015	.007	.009	.005	.002	
7.0	.075	.040	.015	.064	.034	.013	.044	.024	.010	.026	.014	.006	.008	.005	.002	
8.0	.071	.037	.013	.061	.032	.012	.042	.022	.008	.025	.013	.005	.008	.004	.002	
9.0	.068	.034	.012	.058	.030	.010	.040	.021	.007	.023	.012	.004	.008	.004	.001	
10.0	.064	.032	.011	.055	.028	.009	.038	.020	.007	.022	.012	.004	.007	.004	.001	

K-LITE

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	18.3	20.0	18.5	20.2	20.5	23.6	25.3	23.9	25.5	25.8
3H	19.1	20.8	19.5	21.0	21.3	26.6	28.3	27.0	28.5	28.8
4H	19.3	20.8	19.6	21.1	21.4	27.8	29.4	28.1	29.6	29.9
6H	19.2	20.7	19.6	21.0	21.3	27.9	29.4	28.3	29.6	29.9
8H	19.2	20.6	19.5	20.9	21.2	27.9	29.3	28.2	29.6	29.9
12H	19.1	20.5	19.5	20.8	21.1	27.8	29.2	28.2	29.5	29.8
4H 2H	20.6	22.1	20.9	22.4	22.6	24.0	25.6	24.4	25.9	26.1
3H	21.8	23.2	22.2	23.5	23.8	27.3	28.7	27.7	29.0	29.3
4H	22.2	23.4	22.6	23.8	24.1	28.7	30.0	29.1	30.3	30.7
6H	22.2	23.3	22.6	23.7	24.1	28.9	30.0	29.3	30.4	30.7
8H	22.2	23.2	22.6	23.6	24.0	28.9	29.9	29.3	30.3	30.7
12H	22.2	23.1	22.6	23.5	23.9	28.8	29.8	29.3	30.2	30.6
8H 4H	23.8	24.8	24.2	25.2	25.6	28.9	29.9	29.3	30.3	30.7
6H	24.0	24.9	24.5	25.3	25.7	29.2	30.0	29.6	30.4	30.9
8H	24.0	24.7	24.5	25.2	25.6	29.2	29.9	29.6	30.3	30.8
12H	24.0	24.6	24.4	25.1	25.5	29.1	29.8	29.6	30.2	30.7
12H 4H	23.8	24.8	24.3	25.2	25.6	28.9	29.8	29.3	30.2	30.6
6H	24.1	24.9	24.6	25.3	25.8	29.2	29.9	29.6	30.3	30.8
8H	24.1	24.8	24.6	25.2	25.7	29.2	29.8	29.6	30.3	30.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.3 / - 0.3				
1.5H	+ 0.5 / - 0.7					+ 0.7 / - 0.4				
2.0H	+ 0.6 / - 1.1					+ 0.5 / - 0.5				

CIE Pub.117, 1569 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.6)
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:

K-LITE

UTILIZATION FACTORS TABLE

Test:U:230.46V I:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
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) x RCR = 5*									
k = 0.60	*25*	*18*	*14*	*25*	*18*	*14*	*24*	*18*	*14*	*10*
0.80	*30*	*23*	*19*	*30*	*23*	*19*	*29*	*23*	*19*	*14*
1.00	*35*	*28*	*24*	*34*	*28*	*24*	*33*	*29*	*23*	*19*
1.25	*39*	*33*	*28*	*38*	*32*	*28*	*37*	*31*	*28*	*23*
1.50	*42*	*36*	*32*	*41*	*35*	*31*	*39*	*34*	*31*	*26*
2.00	*46*	*41*	*37*	*45*	*40*	*37*	*43*	*39*	*36*	*31*
2.50	*49*	*44*	*40*	*48*	*43*	*40*	*46*	*42*	*39*	*34*
3.00	*51*	*47*	*43*	*50*	*46*	*43*	*48*	*44*	*42*	*37*
4.00	*54*	*50*	*47*	*52*	*49*	*47*	*50*	*47*	*45*	*40*
5.00	*55*	*52*	*50*	*54*	*51*	*49*	*51*	*49*	*48*	*43*
ROOM INDEX	*UF(total)*									*Direct*
According to DIN EN 13032-2 2004				*Suspended*					*SHRNOM = 1.25*	

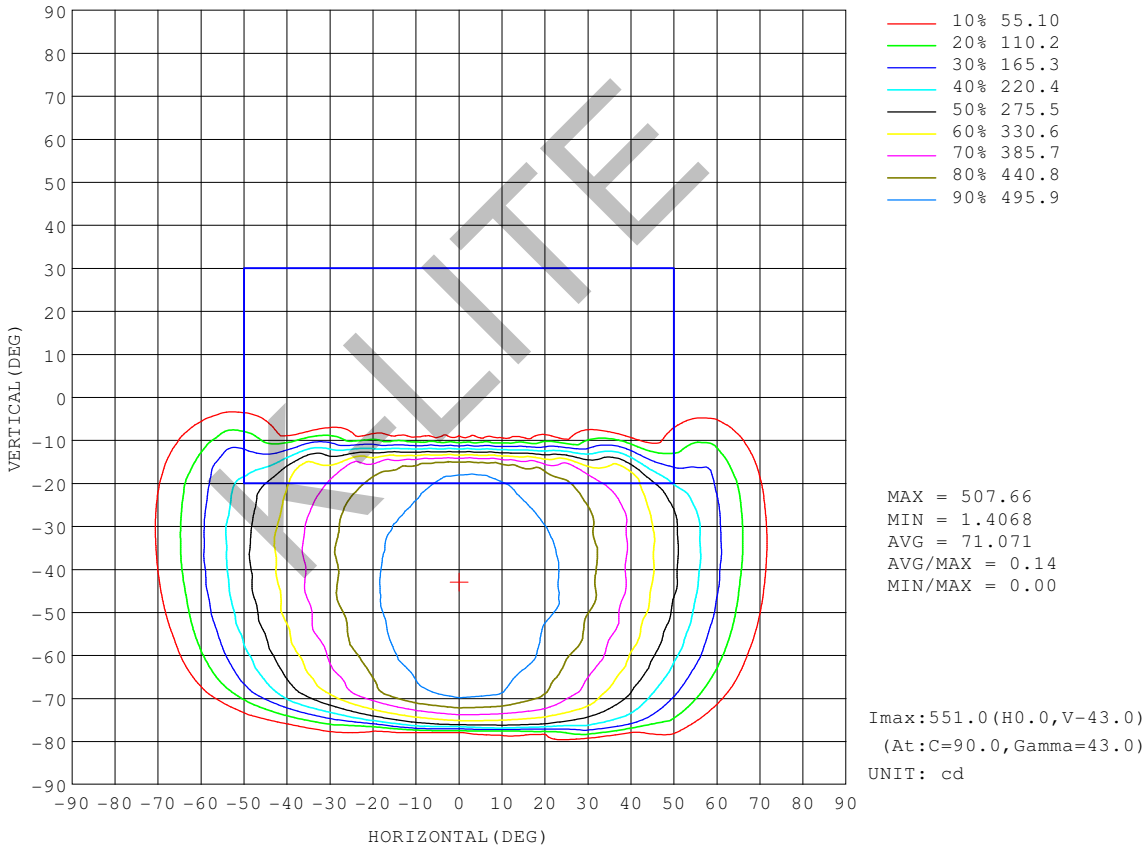
K-LITE

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:



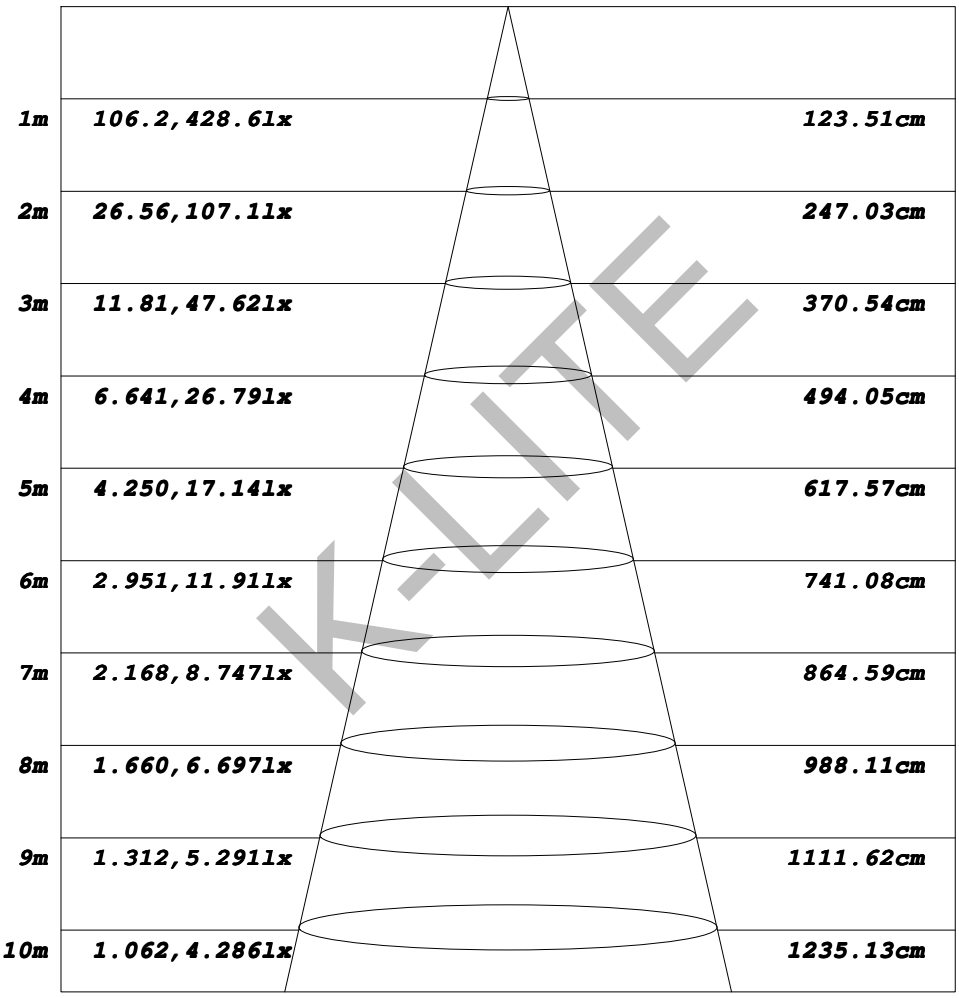
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:K-LITE
Test Date:04 May 2022

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

Flux out:130.3 lm



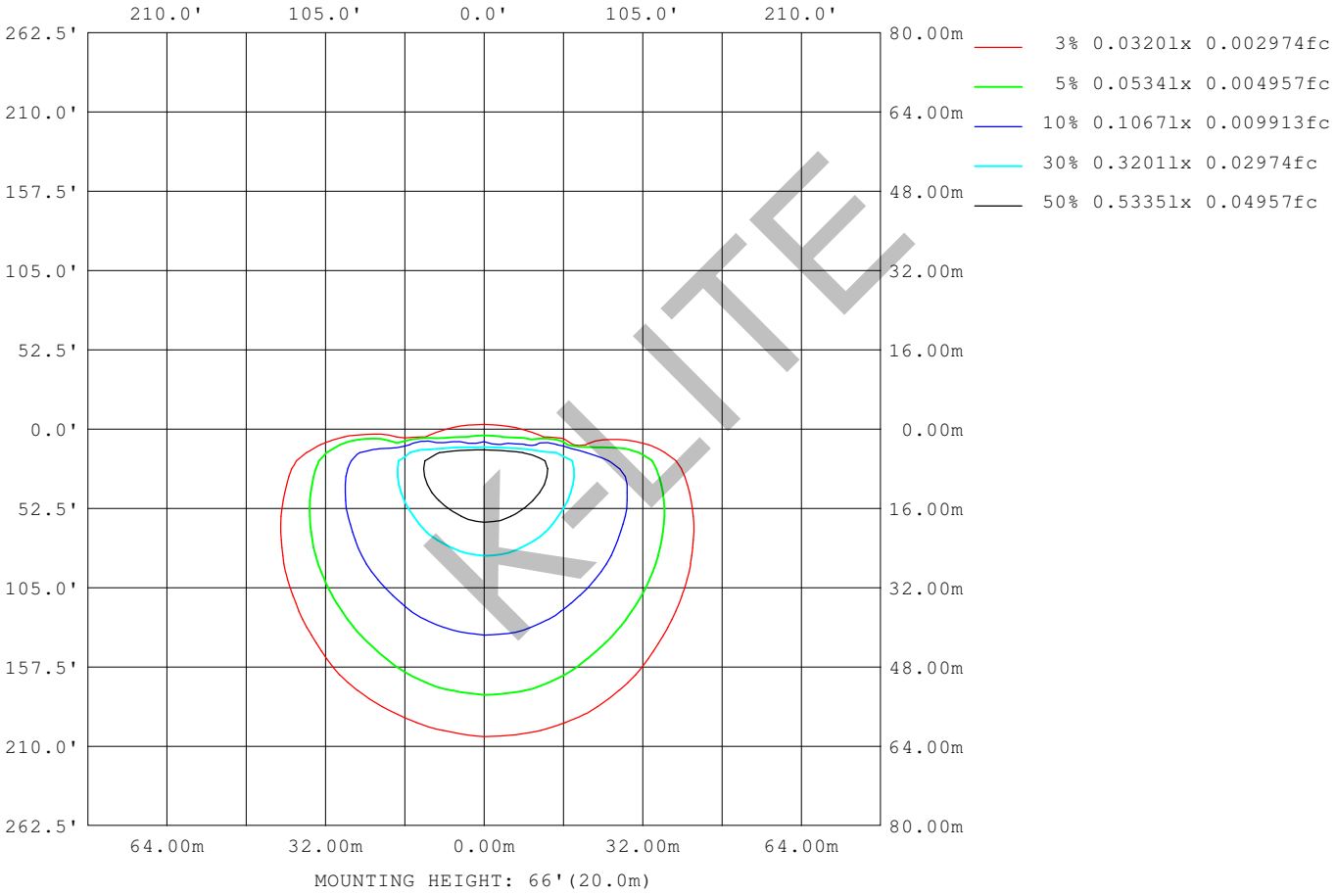
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
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:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

AvgL	cd/m2
L_0~180(65)av	157
L_0~180(75)av	132
L_0~180(85)av	79
L_90~270(65)av	6244
L_90~270(75)av	6651
L_90~270(85)av	154
L_45(65)av	3991
L_45(75)av	4312
L_45(85)av	272

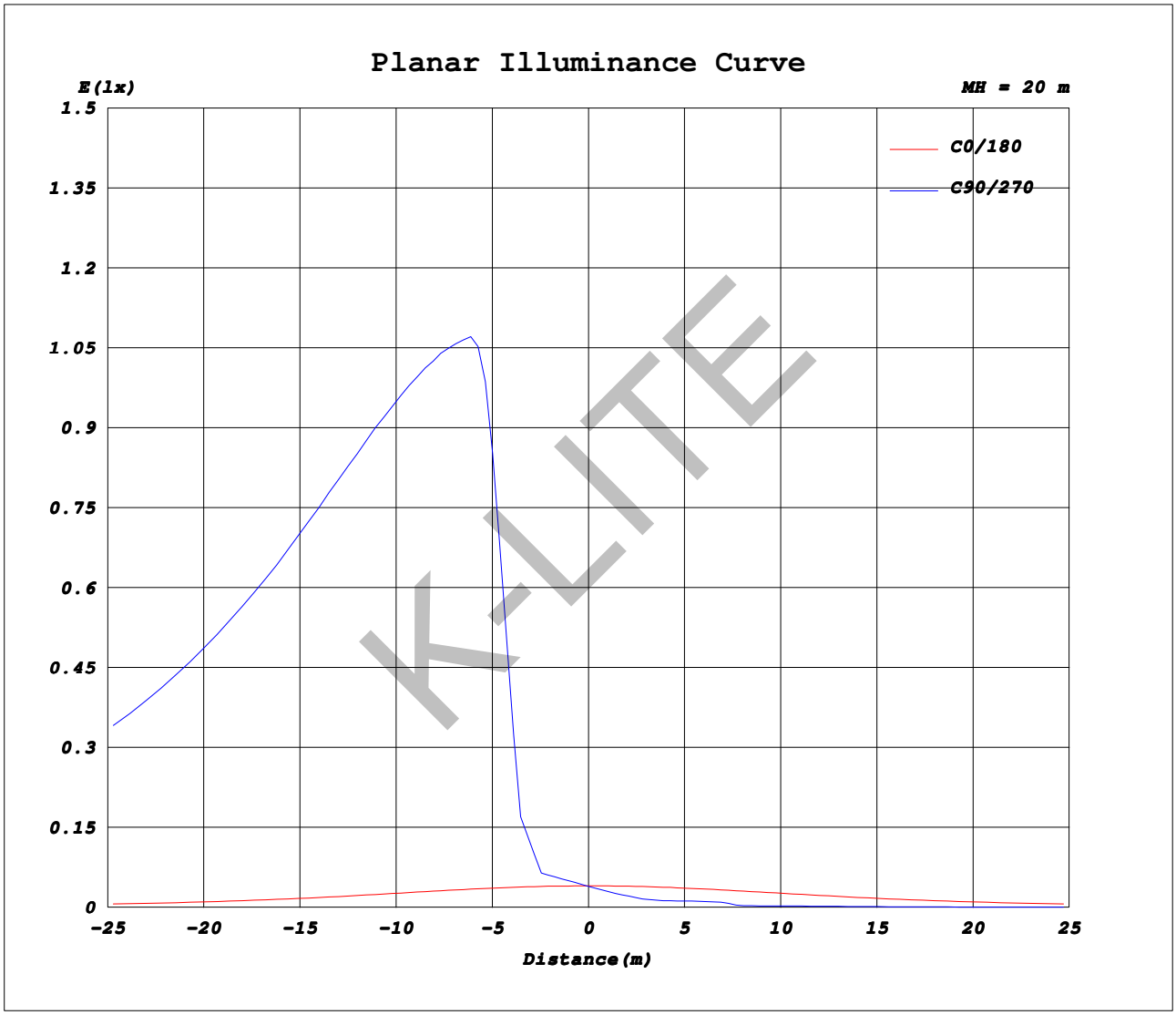
Standard: GB/T 29293-2012

K-LITE

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.46V I:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
5	16.0	17.2	18.5	19.6	20.7	21.6	22.3	23.0	23.3	23.6	23.3	23.0	22.4	21.7	20.7	19.7	18.6	17.4	16.1
10	15.9	18.4	20.9	23.3	25.4	27.9	31.9	69.3	69.5	72.1	71.5	72.8	33.4	28.1	25.5	23.5	21.0	18.5	16.0
15	15.7	19.5	23.3	27.1	58.0	173	300	382	431	443	433	386	309	188	72.1	27.3	23.4	19.6	15.8
20	15.4	20.4	25.7	77.6	284	439	482	502	505	512	501	493	467	440	312	105	25.7	20.5	15.5
25	14.9	21.3	31.8	264	444	472	498	522	523	532	520	506	480	464	435	301	48.7	21.3	15.0
30	14.3	21.9	114	413	451	483	503	535	537	546	533	515	490	473	441	405	166	21.9	14.4
35	13.6	22.4	245	418	455	487	506	540	544	553	538	518	495	475	440	392	295	22.3	13.7
40	12.8	22.7	339	399	452	486	506	536	546	556	541	519	492	472	428	382	332	32.5	12.8
45	12.0	31.7	329	390	427	480	502	534	548	557	539	516	488	461	408	371	307	88.7	11.9
50	10.9	80.9	303	360	413	453	498	527	545	555	536	511	483	437	388	340	286	157	10.8
55	9.63	140	270	330	382	440	475	516	540	549	527	504	455	420	364	307	254	188	9.63
60	8.20	163	236	296	350	410	457	506	529	540	517	493	441	393	330	273	219	154	8.26
65	6.65	127	193	256	314	376	424	479	517	527	503	465	408	358	295	237	173	119	6.66
70	5.03	89.0	146	206	264	329	389	455	487	500	474	439	373	309	247	189	132	80.7	5.02
75	3.46	51.4	96.0	149	202	270	316	345	344	344	316	285	247	230	184	130	79.9	42.2	3.36
80	2.07	17.5	39.1	74.5	117	112	104	45.6	49.4	51.3	49.2	42.2	33.1	25.8	41.9	33.8	15.2	5.37	1.99
85	0.80	1.60	2.66	4.84	8.16	5.75	2.57	2.65	2.70	2.59	2.47	2.28	2.03	1.82	1.76	1.74	1.44	1.01	0.58
90	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00

K-LITE

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.46V I:0.0536A P:11.832W PF:0.9583 Freq:50.00Hz Lamp Flux:1569x1 lm		
NAME: RADO	TYPE:PATH FINDERS	WEIGHT:
SPEC.:CW, NICHIA	DIM.: 244 x 96 x 191	SERIAL No.:4519
MFR.: K-LITE	SUR.:	Shielding Angle:

Table--2 UNIT: cd

γ (DEG) \ C(DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350
0	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
5	14.9	13.8	12.7	11.8	10.9	10.4	10.03	9.78	9.74	9.77	9.97	10.4	10.9	11.7	12.6	13.7	14.8
10	13.7	11.5	9.68	8.38	7.13	6.18	5.92	5.47	5.93	5.49	6.08	6.11	7.01	8.29	9.61	11.3	13.6
15	12.3	9.44	7.26	5.50	5.45	5.37	5.42	5.35	5.43	5.38	5.46	5.43	5.53	5.55	7.07	9.37	12.2
20	11.0	7.76	5.46	5.36	5.33	5.14	4.82	4.22	3.94	4.21	4.77	5.18	5.42	5.44	5.59	7.55	10.8
25	9.64	5.96	5.33	5.16	4.30	1.84	1.74	1.69	1.72	1.72	1.77	1.85	4.14	5.24	5.45	5.78	9.56
30	8.44	5.28	5.10	3.68	1.76	1.71	1.70	1.65	1.68	1.67	1.74	1.78	1.86	3.23	5.26	5.51	8.40
35	7.34	5.07	4.35	1.72	1.70	1.67	1.61	1.32	1.33	1.34	1.64	1.75	1.83	1.88	4.21	5.34	7.24
40	6.17	4.73	1.72	1.65	1.62	1.34	1.33	1.28	1.30	1.29	1.38	1.43	1.76	1.83	1.93	5.01	6.05
45	5.11	4.09	1.62	1.57	1.33	1.30	1.27	1.11	1.09	1.12	1.32	1.40	1.47	1.76	1.87	4.14	5.39
50	4.61	1.65	1.53	1.28	1.28	1.12	1.12	1.07	1.08	1.09	1.16	1.21	1.43	1.47	1.81	1.92	5.00
55	4.08	1.49	1.25	1.21	1.10	1.09	0.96	0.92	0.92	0.94	1.01	1.19	1.24	1.42	1.49	1.83	4.46
60	3.39	1.36	1.17	1.05	0.96	0.95	0.92	0.81	0.80	0.83	0.97	1.04	1.08	1.22	1.43	1.74	3.72
65	2.10	1.12	1.00	0.90	0.86	0.81	0.80	0.71	0.69	0.73	0.86	0.90	1.00	1.05	1.21	1.41	1.84
70	1.22	0.98	0.84	0.75	0.69	0.68	0.62	0.57	0.56	0.58	0.67	0.76	0.81	0.89	1.01	1.23	1.60
75	1.01	0.78	0.66	0.58	0.53	0.47	0.47	0.43	0.40	0.45	0.51	0.54	0.63	0.72	0.81	0.95	1.24
80	0.78	0.55	0.43	0.36	0.32	0.30	0.27	0.24	0.23	0.25	0.31	0.34	0.41	0.46	0.54	0.68	0.92
85	0.41	0.27	0.20	0.16	0.14	0.12	0.11	0.10	0.09	0.10	0.12	0.15	0.18	0.21	0.26	0.35	0.54
90	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

K-LITE

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: