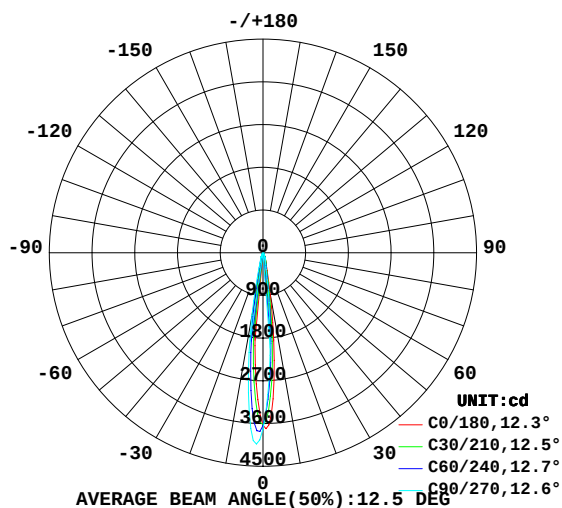


LUMINAIRE PHOTOMETRIC TEST REPORT

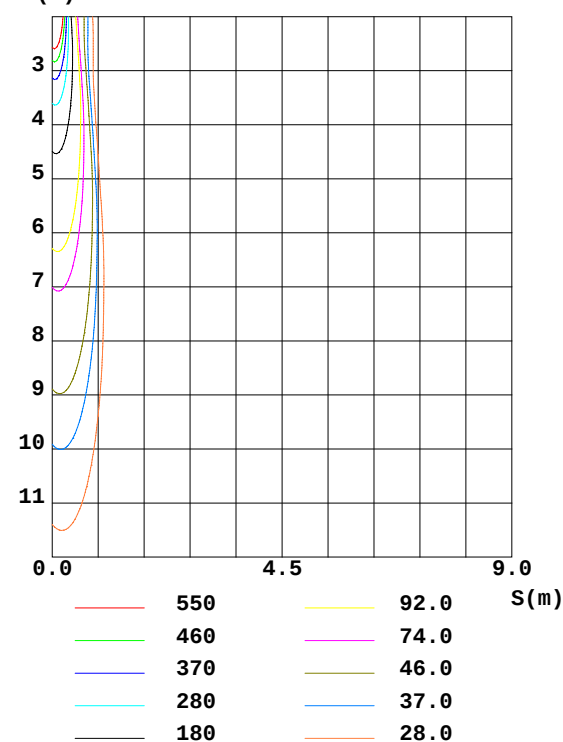
NAME:CL-Spot65-R-uls 3000k-RA90-10D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 37.19 lm/W			
MODEL		Imax(cd)	4117	S/MH(C0/180)	0.24
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.17
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	330.28	η UP, DN(C0-180)	0.2, 42.6
NOMINAL FLUX(lm)	330.283	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 57.1
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	24	η down(%)	99.7	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:0
 Test Date:2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
 Humidity:65.0%
 Test Distance:7.100m [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	862.2	563.3	444.8	434.0	498.2	825.7	1343	1281	0- 10	176.2	176.2	53.3, 53.3
20	162.9	157.2	137.6	119.2	123.3	126.7	151.1	159.7	10- 20	81.03	257.2	77.9, 77.9
30	59.02	61.75	50.64	43.66	46.99	53.43	57.29	56.42	20- 30	41.47	298.7	90.4, 90.4
40	22.45	22.66	19.63	16.82	15.78	16.85	17.37	19.03	30- 40	20.25	319.0	96.6, 96.6
50	6.338	5.729	4.675	4.222	3.193	4.024	4.175	5.068	40- 50	8.242	327.2	99.1, 99.1
60	0.8183	0.8451	0.6544	0.5520	0.4567	0.4293	0.5480	0.6674	50- 60	1.775	329.0	99.6, 99.6
70	0	0	0	0	0	0	0.0001	0	60- 70	0.1936	329.2	99.7, 99.7
80	0	0	0	0	0	0	0	0	70- 80	0.0000	329.2	99.7, 99.7
90	0	0	0	0	0	0	0	0	80- 90	0	329.2	99.7, 99.7
100	0	0	0	0	0	0	0	0	90-100	0	329.2	99.7, 99.7
110	0	0	0	0	0	0	0	0	100-110	0	329.2	99.7, 99.7
120	0	0	0	0	0	0	0	0	110-120	0	329.2	99.7, 99.7
130	0	0	0	0	0	0	0	0	120-130	0	329.2	99.7, 99.7
140	0	0.0048	0.0237	0.0119	0.0567	0.0214	0	0.0071	130-140	0.0010	329.2	99.7, 99.7
150	0.2118	0.3516	0.5011	0.4673	0.4352	0.3022	0.2215	0.2220	140-150	0.0718	329.2	99.7, 99.7
160	1.372	1.538	1.657	1.637	1.539	1.312	1.155	1.166	150-160	0.3787	329.6	99.8, 99.8
170	1.996	1.934	1.887	1.927	1.991	1.904	1.854	1.854	160-170	0.4879	330.1	99.9, 99.9
180	1.803	1.694	1.704	1.753	1.784	1.706	1.737	1.772	170-180	0.1782	330.3	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

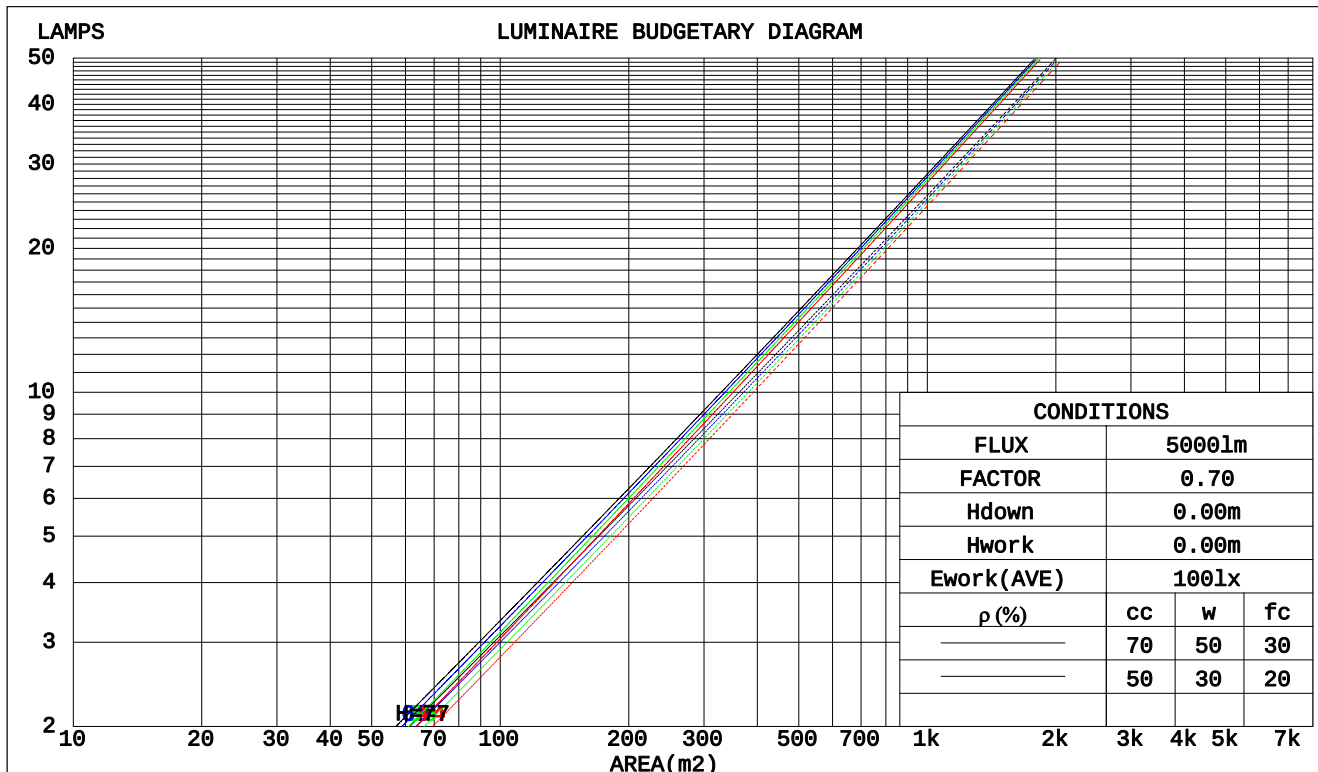
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.13	1.11	1.10	1.11	1.09	1.08	1.07	1.06	1.05	1.03	1.02	1.01	.00	.99	.99	.97
2.0	1.08	1.05	1.03	1.07	1.04	1.02	1.03	1.01	.00	1.00	.99	.97	.98	.97	.95	.94
3.0	1.04	1.01	.98	1.03	.00	.97	1.00	.98	.95	.98	.96	.94	.96	.94	.93	.91
4.0	1.00	.97	.94	.99	.96	.93	.97	.94	.92	.95	.93	.91	.94	.92	.90	.89
5.0	.97	.93	.90	.96	.93	.90	.95	.91	.89	.93	.90	.88	.92	.89	.88	.87
6.0	.94	.90	.87	.93	.90	.87	.92	.89	.87	.91	.88	.86	.90	.87	.85	.84
7.0	.92	.88	.85	.91	.87	.85	.90	.87	.84	.89	.86	.84	.88	.85	.84	.83
8.0	.89	.85	.83	.89	.85	.83	.88	.85	.82	.87	.84	.82	.86	.84	.82	.81
9.0	.87	.83	.81	.87	.83	.81	.86	.83	.81	.85	.82	.80	.85	.82	.80	.79
10.0	.85	.82	.79	.85	.81	.79	.84	.81	.79	.84	.81	.79	.83	.80	.78	.78



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:0
Test Date:2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.130	.074	.023	.123	.070	.022	.111	.064	.020	.099	.057	.018	.089	.051	.017		
2.0	.120	.066	.020	.115	.063	.020	.105	.058	.018	.095	.053	.017	.086	.049	.015		
3.0	.112	.060	.018	.107	.057	.017	.099	.054	.016	.091	.050	.015	.083	.046	.014		
4.0	.104	.054	.016	.101	.053	.016	.093	.050	.015	.087	.047	.014	.080	.044	.013		
5.0	.098	.050	.014	.095	.049	.014	.088	.046	.014	.083	.044	.013	.077	.041	.012		
6.0	.092	.046	.013	.089	.045	.013	.084	.043	.013	.079	.041	.012	.075	.039	.012		
7.0	.087	.043	.012	.085	.042	.012	.080	.040	.012	.076	.039	.011	.072	.037	.011		
8.0	.083	.040	.011	.080	.040	.011	.076	.038	.011	.073	.037	.011	.069	.035	.010		
9.0	.078	.038	.011	.077	.037	.010	.073	.036	.010	.070	.035	.010	.067	.034	.010		
10.0	.075	.036	.010	.073	.035	.010	.070	.034	.010	.067	.033	.009	.064	.032	.009		

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fC}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.170	.160	.151	.146	.138	.130	.100	.095	.090	.057	.055	.052	.018	.018	.017	
2.0	.152	.135	.121	.130	.117	.105	.089	.081	.073	.051	.047	.043	.017	.015	.014	
3.0	.137	.116	.099	.117	.100	.086	.080	.069	.060	.046	.041	.036	.015	.013	.012	
4.0	.124	.100	.083	.106	.087	.072	.073	.060	.050	.042	.035	.030	.014	.012	.010	
5.0	.113	.088	.070	.097	.076	.060	.067	.053	.043	.039	.031	.025	.012	.010	.008	
6.0	.104	.078	.059	.089	.067	.052	.062	.047	.037	.036	.028	.022	.012	.009	.007	
7.0	.096	.070	.051	.082	.060	.045	.057	.042	.032	.033	.025	.019	.011	.008	.006	
8.0	.089	.063	.045	.077	.054	.039	.053	.038	.028	.031	.023	.016	.010	.007	.005	
9.0	.083	.057	.039	.072	.049	.034	.050	.035	.024	.029	.021	.014	.009	.007	.005	
10.0	.078	.052	.035	.067	.045	.030	.047	.032	.022	.027	.019	.013	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:0
Test Date:2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: Spot65-R-3000K-RA90-8W-10D.						TYPE:					WEIGHT:				
DIM.:						SPEC.:					SERIAL No.:				
MFR.: 0						SUR.:					PROTECTION 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	-1.7	-1.1	-1.5	-0.9	-0.8	-2.8	-2.2	-2.6	-2.0	-1.9					
3H	-1.8	-1.3	-1.6	-1.1	-0.9	-2.9	-2.3	-2.7	-2.2	-2.0					
4H	-1.9	-1.4	-1.7	-1.2	-0.9	-3.0	-2.4	-2.7	-2.2	-2.0					
6H	-2.0	-1.5	-1.7	-1.3	-1.0	-3.1	-2.6	-2.8	-2.3	-2.1					
8H	-2.0	-1.5	-1.7	-1.3	-1.0	-3.1	-2.6	-2.8	-2.4	-2.1					
12H	-2.1	-1.6	-1.8	-1.3	-1.1	-3.2	-2.7	-2.9	-2.4	-2.2					
4H 2H	-1.9	-1.4	-1.6	-1.1	-0.9	-3.0	-2.4	-2.7	-2.2	-2.0					
3H	-2.1	-1.6	-1.8	-1.3	-1.1	-3.1	-2.7	-2.8	-2.4	-2.1					
4H	-2.2	-1.7	-1.8	-1.4	-1.1	-3.2	-2.8	-2.9	-2.5	-2.2					
6H	-2.3	-1.9	-1.9	-1.5	-1.2	-3.3	-2.9	-3.0	-2.6	-2.3					
8H	-2.3	-2.0	-1.9	-1.6	-1.2	-3.4	-3.0	-3.0	-2.7	-2.3					
12H	-2.4	-2.0	-2.0	-1.7	-1.3	-3.4	-3.1	-3.0	-2.7	-2.3					
8H 4H	-2.3	-2.0	-1.9	-1.6	-1.2	-3.4	-3.0	-3.0	-2.7	-2.3					
6H	-2.4	-2.1	-2.0	-1.7	-1.3	-3.5	-3.2	-3.1	-2.8	-2.4					
8H	-2.5	-2.2	-2.1	-1.8	-1.4	-3.6	-3.3	-3.1	-2.9	-2.4					
12H	-2.6	-2.3	-2.1	-1.9	-1.4	-3.6	-3.4	-3.2	-3.0	-2.5					
12H 4H	-2.4	-2.0	-2.0	-1.7	-1.3	-3.4	-3.1	-3.0	-2.7	-2.3					
6H	-2.5	-2.2	-2.1	-1.8	-1.4	-3.6	-3.3	-3.1	-2.9	-2.4					
8H	-2.6	-2.3	-2.1	-1.9	-1.4	-3.6	-3.4	-3.2	-3.0	-2.5					
Variations with the observer position at spacings:															
S = 1.0H	+ 2.4 / -11.0					+ 2.5 / -11.9									
1.5H	+ 3.7 / - 7.3					+ 3.8 / - 8.5									
2.0H	+ 6.1 / -12.9					+ 6.3 / -14.4									

CIE Pub.117 Corrected 330.3 lm Total Lamp Luminous Flux.(8log(F/F0) = -3.8)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:0
Test Date:2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

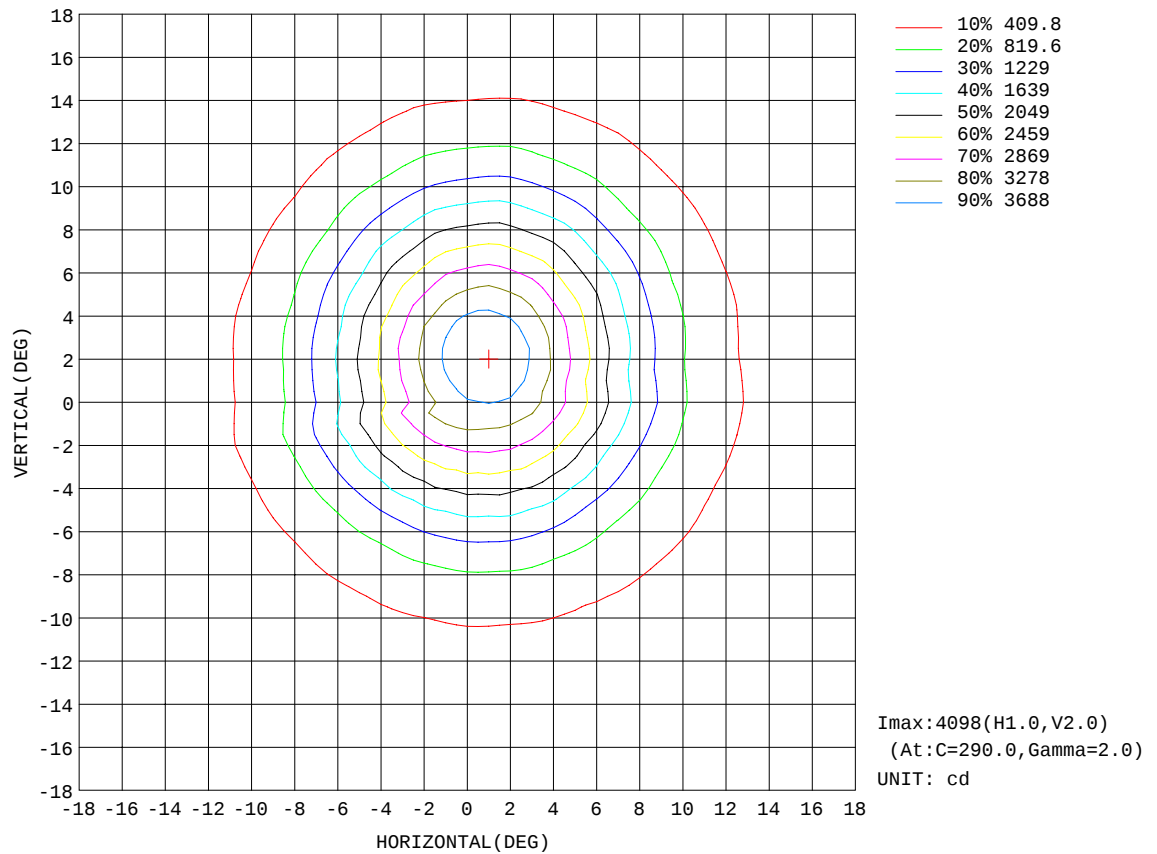
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	89	83	80	88	83	80	76
0.80	97	91	88	96	91	88	95	90	87	84
1.00	101	95	92	100	95	92	98	95	91	87
1.25	104	100	96	103	99	96	101	98	95	91
1.50	107	103	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	102	105	102	100	95
2.50	111	107	104	109	106	104	106	104	102	96
3.00	112	109	107	110	108	105	107	105	103	97
4.00	114	112	110	112	110	108	108	107	105	98
5.00	115	113	112	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

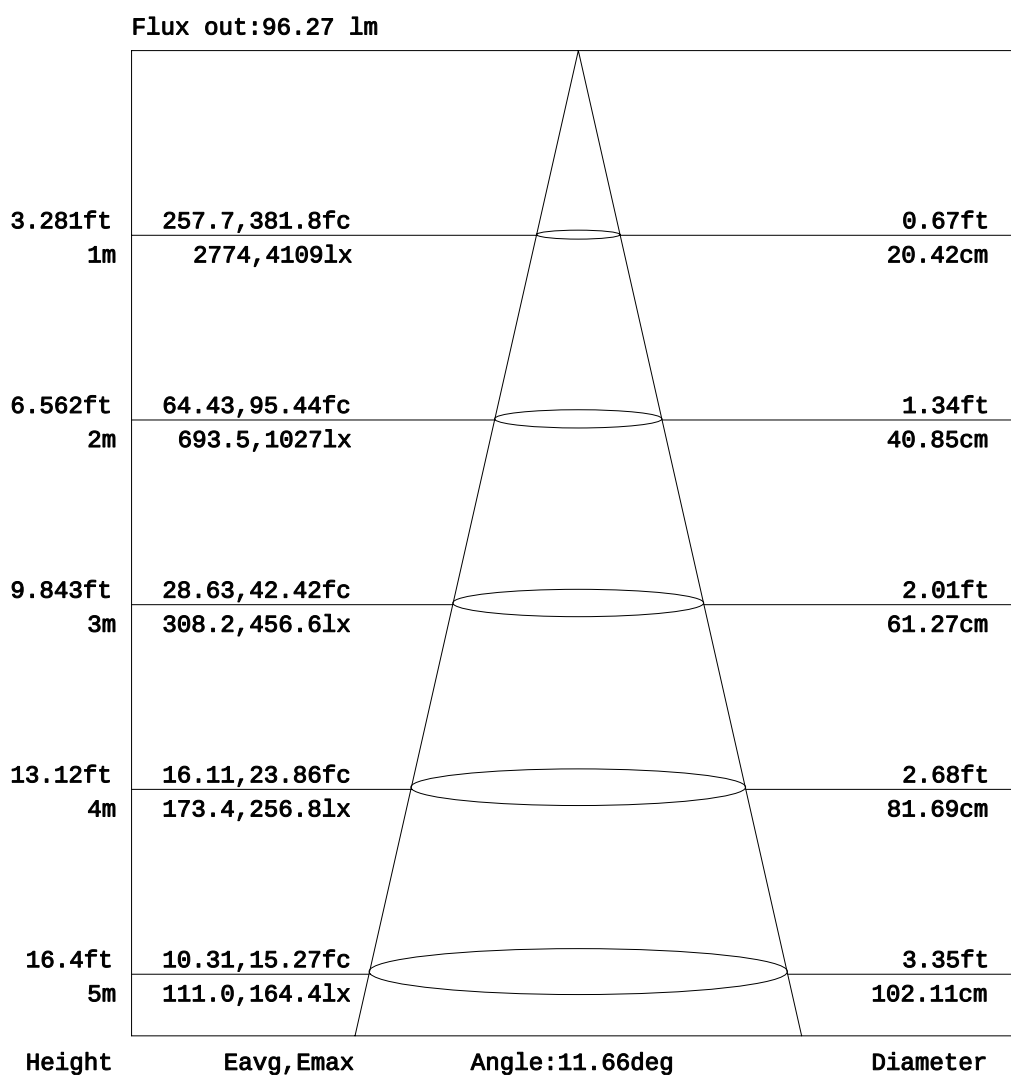


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

AAI Figure

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:



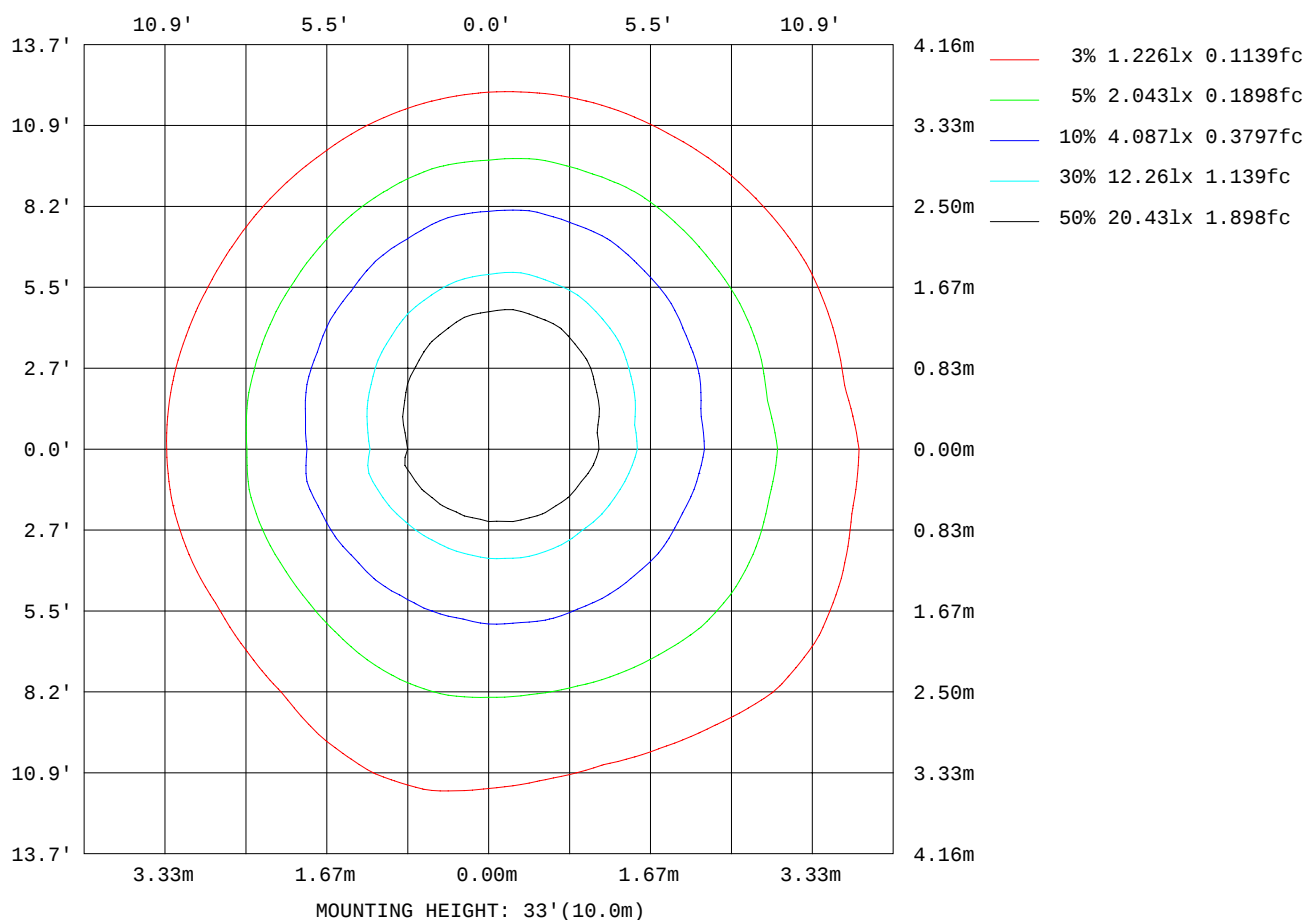
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	330.283	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G	C plane(deg)																		
deg	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	39	39	40	43	45	39	32	30	28	29	34	33	27	26	24	21	21	22	21
60	16	17	18	18	18	16	14	12	12	13	14	13	13	11	11	10	10	9	9
65	6	4	5	5	6	4	3	1	2	2	3	2	3	1	2	2	3	2	1
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	45	200	---	500
Category 2	65 to 90	6	200	---	500
Category 3	75 to 90	0	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:0
Test Date:2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	330.283	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.1	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	39	39	40	43	45	39	32	30	28	29	34	33	27	26	24	21	21	22	21
60	16	17	18	18	18	16	14	12	12	13	14	13	13	11	11	10	10	9	9
65	6	4	5	5	6	4	3	1	2	2	3	2	3	1	2	2	3	2	1
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	45	1000	1500	200	500
65 to 90	6	1000	1500	200	500

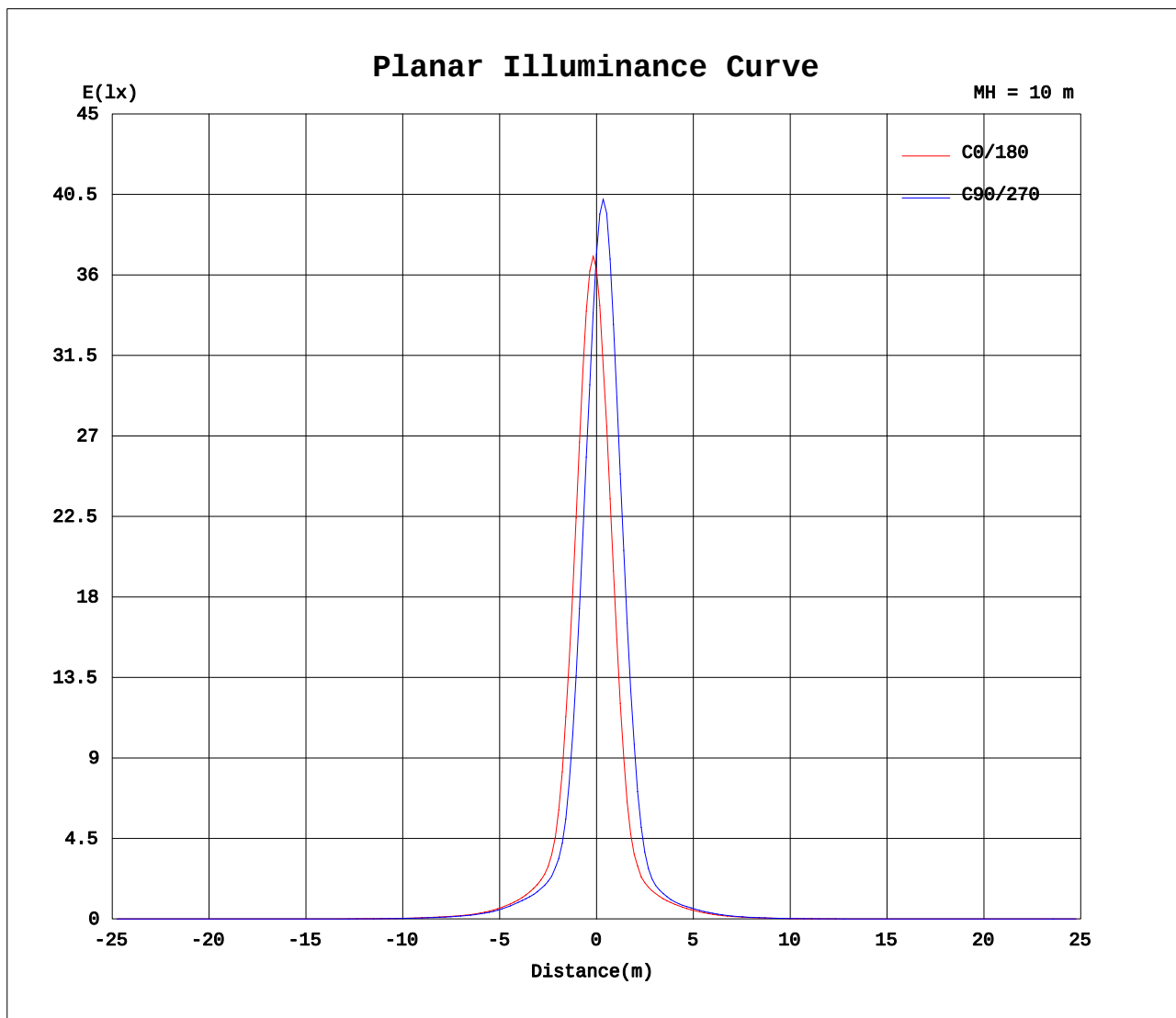
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

The luminaire satisfies the specified luminance criteria for
Negative Software with Type I & II Screen(Good to Moderate treatment).

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:0
Test Date:2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.100m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°) γ (°)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	3635	3617	3622	3621	3624	3644	3643	3679	3669	3714	3704	3759	3742	3791	3773	3806	3787	3803	3635
5	2697	2572	2380	2297	2131	2063	1924	1877	1771	1757	1689	1727	1702	1785	1796	1913	1955	2095	1969
10	862	784	689	649	578	548	503	485	451	445	424	426	419	435	433	460	476	532	498
15	278	267	263	257	250	237	225	214	210	210	212	209	203	195	190	190	194	199	199
20	163	161	166	168	164	151	141	134	132	138	143	141	132	122	116	117	118	122	123
25	101	102	106	111	108	100	89.5	84.2	82.9	87.7	91.3	90.5	82.3	75.0	71.9	73.6	76.8	79.9	79.4
30	59.0	59.1	61.6	65.8	64.3	59.2	52.3	49.7	48.4	50.6	53.3	53.1	48.1	44.5	42.8	44.4	46.4	48.3	47.0
35	35.4	35.5	36.6	38.5	38.0	35.3	32.6	31.7	30.3	31.0	32.2	32.1	29.5	27.8	26.6	27.0	27.1	27.5	26.5
40	22.5	22.8	22.8	23.3	23.5	21.8	20.7	20.4	19.6	19.6	20.3	19.9	17.3	16.9	16.8	16.8	16.7	16.5	15.8
45	13.1	13.3	12.8	13.2	12.5	11.9	11.4	11.7	11.2	11.0	10.5	9.98	8.84	9.04	9.17	9.00	9.51	9.69	8.08
50	6.34	6.65	6.23	5.95	5.99	5.47	4.76	4.95	4.68	4.67	4.87	4.51	3.81	4.24	4.21	3.77	3.69	3.74	3.19
55	2.22	2.26	2.27	2.47	2.58	2.25	1.81	1.71	1.62	1.65	1.93	1.87	1.55	1.49	1.36	1.20	1.22	1.25	1.19
60	0.82	0.84	0.89	0.90	0.90	0.79	0.71	0.62	0.62	0.65	0.71	0.67	0.64	0.56	0.54	0.48	0.51	0.47	0.46
65	0.25	0.16	0.21	0.23	0.25	0.17	0.13	0.03	0.08	0.07	0.14	0.10	0.11	0.03	0.09	0.07	0.12	0.08	0.06
70	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
75	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
80	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
85	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
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
95	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
100	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
105	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
110	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
115	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
120	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
125	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
130	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
135	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
140	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.03	0.00	0.03	0.06
145	0.02	0.08	0.03	0.09	0.05	0.10	0.07	0.13	0.09	0.14	0.10	0.15	0.11	0.15	0.10	0.14	0.09	0.12	0.16
150	0.21	0.27	0.26	0.33	0.32	0.39	0.38	0.45	0.43	0.50	0.48	0.52	0.48	0.50	0.44	0.45	0.39	0.40	0.44
155	0.70	0.77	0.80	0.87	0.89	0.97	0.98	1.05	1.05	1.11	1.09	1.13	1.10	1.11	1.06	1.06	0.98	0.97	0.96
160	1.37	1.45	1.44	1.51	1.50	1.57	1.56	1.62	1.60	1.66	1.62	1.68	1.63	1.66	1.62	1.63	1.57	1.58	1.54
165	1.81	1.87	1.84	1.89	1.85	1.91	1.86	1.88	1.87	1.86	1.87	1.90	1.87	1.90	1.88	1.90	1.87	1.91	1.91
170	2.00	1.98	1.98	1.95	1.94	1.93	1.91	1.91	1.89	1.89	1.87	1.90	1.90	1.92	1.93	1.94	1.95	1.95	1.99
175	1.99	1.92	1.92	1.84	1.85	1.77	1.79	1.73	1.77	1.71	1.77	1.74	1.80	1.78	1.85	1.83	1.90	1.88	1.84
180	1.80	1.78	1.75	1.72	1.70	1.69	1.68	1.68	1.69	1.70	1.71	1.72	1.74	1.74	1.76	1.76	1.80	1.81	1.78

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.100m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot65-R-3000K-RA90-8W-10D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(°)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
γ (°)																			
0	3617	3622	3621	3624	3644	3643	3679	3669	3714	3704	3759	3742	3791	3773	3806	3787	3803		
5	2045	2224	2340	2557	2687	2916	3054	3243	3363	3483	3468	3478	3348	3233	3048	2917	2695		
10	537	617	664	782	870	1029	1155	1284	1343	1445	1412	1422	1325	1238	1114	999	864		
15	203	205	210	217	230	251	275	319	315	336	333	340	321	323	295	296	269		
20	123	122	122	126	128	134	140	146	151	154	156	157	159	160	161	158	154		
25	78.1	79.4	80.1	83.1	84.8	86.1	87.7	90.9	93.3	96.1	95.5	95.6	96.1	99.1	100	99.4	95.3		
30	46.1	47.1	48.8	52.7	54.1	54.3	53.8	55.0	57.3	59.6	58.2	56.9	55.6	57.2	58.6	58.9	56.3		
35	26.1	27.0	27.7	29.5	30.0	30.4	29.8	30.6	31.4	32.9	32.7	32.1	31.6	32.5	32.3	33.4	32.5		
40	15.7	16.5	16.4	16.9	16.8	17.3	17.2	17.3	17.4	18.4	18.6	19.0	19.2	18.9	19.2	20.2	19.9		
45	7.88	8.31	8.39	9.36	9.32	9.02	9.31	9.21	9.09	10.4	10.9	10.5	10.3	10.2	10.6	11.8	11.6		
50	3.28	3.47	3.49	4.03	4.02	4.03	4.28	4.44	4.17	4.75	5.12	5.29	5.21	4.93	4.73	5.21	5.27		
55	1.25	1.17	1.14	1.36	1.35	1.39	1.64	1.67	1.48	1.65	1.81	1.74	1.64	1.71	1.83	2.05	2.02		
60	0.48	0.42	0.45	0.41	0.45	0.41	0.49	0.48	0.55	0.53	0.62	0.61	0.68	0.66	0.66	0.63	0.69		
65	0.09	0.07	0.12	0.10	0.15	0.09	0.11	0.12	0.20	0.19	0.25	0.19	0.22	0.18	0.24	0.22	0.24		
70	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		
75	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		
80	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		
85	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		
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		
95	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		
100	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		
105	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		
110	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		
115	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		
120	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		
125	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		
130	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		
135	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		
140	0.00	0.05	0.00	0.04	0.00	0.04	0.00	0.03	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.00		
145	0.11	0.15	0.09	0.14	0.08	0.12	0.07	0.10	0.06	0.10	0.05	0.09	0.04	0.09	0.04	0.08	0.03		
150	0.37	0.38	0.32	0.34	0.27	0.30	0.25	0.28	0.22	0.25	0.20	0.25	0.20	0.24	0.21	0.26	0.23		
155	0.88	0.86	0.78	0.78	0.70	0.70	0.65	0.66	0.60	0.62	0.58	0.60	0.57	0.63	0.61	0.67	0.66		
160	1.45	1.44	1.35	1.35	1.27	1.28	1.21	1.22	1.16	1.18	1.13	1.16	1.14	1.19	1.18	1.24	1.24		
165	1.83	1.84	1.76	1.78	1.71	1.73	1.67	1.69	1.62	1.66	1.61	1.65	1.61	1.67	1.64	1.70	1.67		
170	1.98	1.94	1.92	1.91	1.90	1.89	1.87	1.90	1.85	1.85	1.84	1.84	1.85	1.86	1.87	1.87	1.89		
175	1.89	1.83	1.86	1.82	1.86	1.82	1.84	1.84	1.85	1.84	1.84	1.84	1.86	1.85	1.87	1.87	1.88		
180	1.77	1.76	1.72	1.71	1.70	1.70	1.71	1.71	1.74	1.74	1.76	1.76	1.77	1.77	1.80	1.79	1.84		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
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γ Range: 0 - 180DEG
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Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
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Remarks: