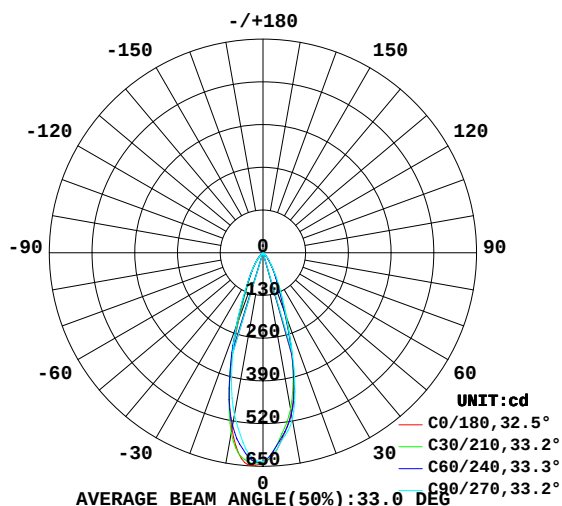


LUMINAIRE PHOTOMETRIC TEST REPORT

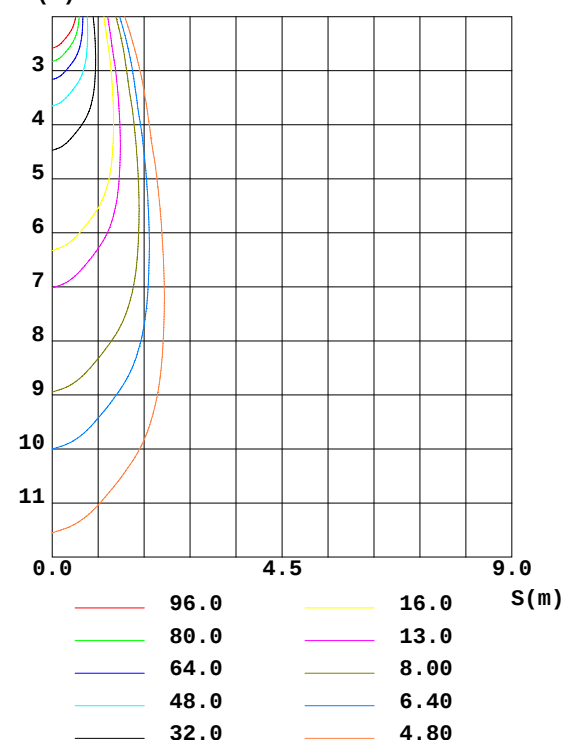
NAME:CL-Spot65-R 3000k-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 28.28 lm/W			
MODEL		I _{max} (cd)	648.2	S/MH(C0/180)	0.52
NOMINAL POWER(W)	8	LOR(%)	100.0	S/MH(C90/270)	0.53
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	251.13	η UP, DN(C0-180)	0.1, 48.5
NOMINAL FLUX(lm)	251.126	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1, 51.3
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	24	η down(%)	99.7	CIBSE SHR MAX	0.55

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:tang
Test Date:2022-04-09

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	495.4	489.0	514.9	496.6	544.7	548.8	501.2	511.5	0- 10	54.49	54.49	21.7, 21.7
20	200.0	198.7	203.8	205.6	214.5	228.7	237.9	226.6	10- 20	99.45	153.9	61.3, 61.3
30	64.84	67.14	71.04	78.14	78.23	76.39	76.59	66.85	20- 30	57.08	211.0	84, 84
40	21.28	20.93	23.97	27.63	28.34	26.88	24.16	20.39	30- 40	26.95	238.0	94.8, 94.8
50	4.123	4.345	5.230	6.306	7.427	7.229	5.826	4.959	40- 50	10.11	248.1	98.8, 98.8
60	0.5295	0.5781	0.7061	0.7294	0.9839	0.9929	0.7088	0.4859	50- 60	2.111	250.2	99.6, 99.6
70	0.0000	0	0	0	0	0.0190	0.0097	0.0001	60- 70	0.2300	250.4	99.7, 99.7
80	0	0	0	0	0	0	0	0	70- 80	0.0001	250.4	99.7, 99.7
90	0	0	0	0	0	0	0	0	80- 90	0	250.4	99.7, 99.7
100	0	0	0	0	0	0	0	0	90-100	0	250.4	99.7, 99.7
110	0	0	0	0	0	0	0	0	100-110	0	250.4	99.7, 99.7
120	0	0	0	0	0	0	0	0	110-120	0	250.4	99.7, 99.7
130	0	0	0	0	0	0	0	0	120-130	0	250.4	99.7, 99.7
140	0.0233	0.0542	0.0710	0.0354	0.0569	0.0307	0.0093	0.0448	130-140	0.0046	250.4	99.7, 99.7
150	0.3252	0.3657	0.3826	0.3280	0.3402	0.3021	0.2876	0.3258	140-150	0.1036	250.5	99.8, 99.8
160	0.7405	0.7786	0.7978	0.7408	0.7461	0.6962	0.6886	0.7221	150-160	0.2399	250.8	99.9, 99.9
170	1.052	1.078	1.095	1.059	1.076	1.031	1.000	1.034	160-170	0.2530	251.0	100, 100
180	1.199	1.182	1.180	1.180	1.203	1.187	1.180	1.182	170-180	0.1064	251.1	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

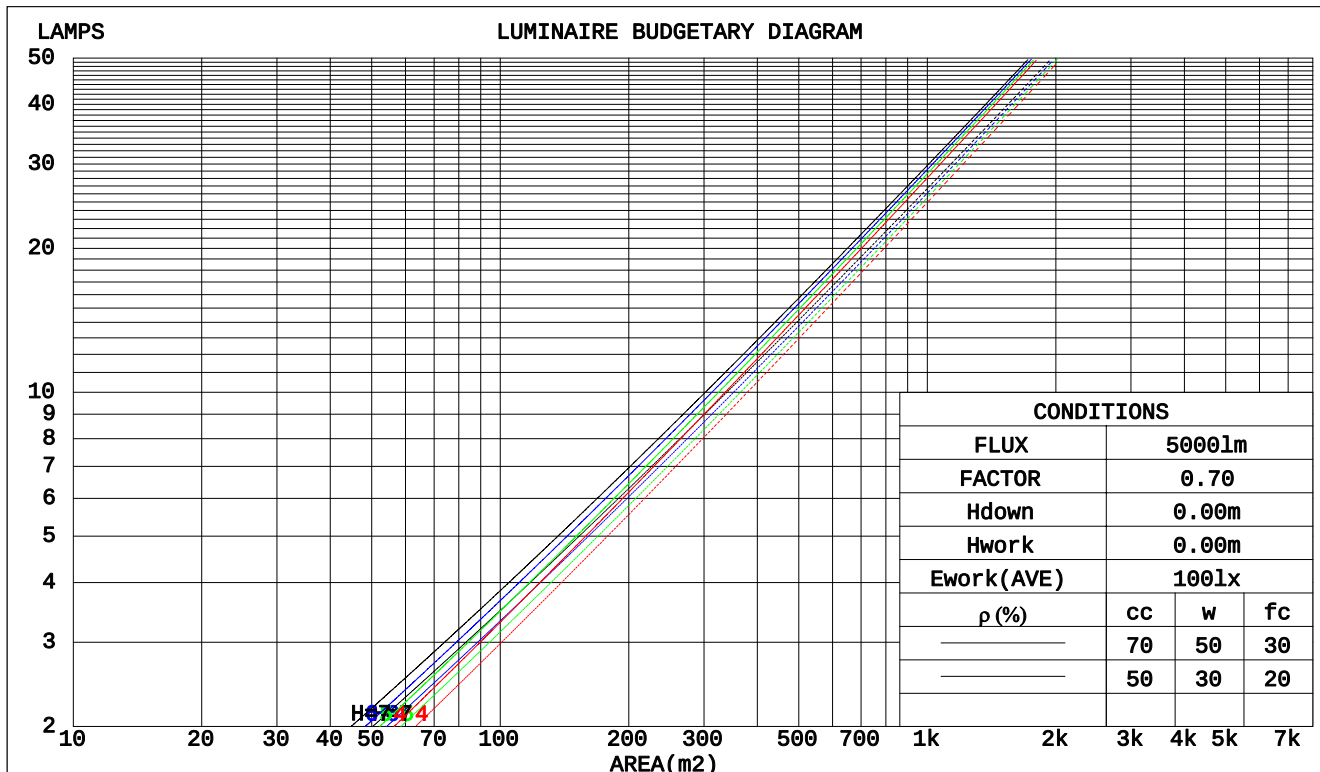
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.98	.97	.97	.95
2.0	1.05	1.02	.99	1.04	1.01	.98	1.00	.98	.96	.97	.95	.94	.95	.93	.92	.90
3.0	.00	.95	.92	.98	.94	.91	.96	.92	.90	.93	.91	.88	.91	.89	.87	.86
4.0	.94	.90	.86	.93	.89	.86	.91	.88	.85	.89	.86	.84	.88	.85	.83	.81
5.0	.90	.85	.81	.89	.84	.81	.87	.83	.80	.86	.82	.79	.84	.81	.79	.77
6.0	.86	.81	.77	.85	.80	.77	.83	.79	.76	.82	.78	.76	.81	.78	.75	.74
7.0	.82	.77	.73	.81	.76	.73	.80	.76	.73	.79	.75	.72	.78	.74	.72	.71
8.0	.78	.73	.70	.78	.73	.70	.77	.72	.69	.76	.72	.69	.75	.71	.69	.68
9.0	.75	.70	.67	.75	.70	.67	.74	.69	.66	.73	.69	.66	.72	.69	.66	.65
10.0	.72	.67	.64	.72	.67	.64	.71	.67	.64	.70	.66	.64	.70	.66	.63	.62



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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 Coeffcients(WEC)										
0.0																	
1.0	.156	.089	.028	.150	.085	.027	.137	.079	.025	.125	.072	.023	.115	.066	.021		
2.0	.148	.081	.025	.142	.078	.024	.132	.073	.023	.122	.068	.021	.113	.064	.020		
3.0	.140	.074	.022	.135	.072	.022	.126	.068	.021	.118	.065	.020	.110	.061	.019		
4.0	.132	.069	.020	.128	.067	.020	.121	.064	.019	.114	.061	.018	.107	.058	.018		
5.0	.126	.064	.019	.122	.063	.018	.116	.060	.018	.109	.058	.017	.104	.055	.017		
6.0	.120	.060	.017	.117	.059	.017	.111	.057	.017	.105	.055	.016	.100	.053	.016		
7.0	.114	.056	.016	.111	.056	.016	.106	.054	.015	.102	.052	.015	.097	.050	.015		
8.0	.109	.053	.015	.107	.053	.015	.102	.051	.015	.098	.050	.014	.094	.048	.014		
9.0	.104	.051	.014	.102	.050	.014	.098	.049	.014	.095	.047	.014	.091	.046	.013		
10.0	.100	.048	.013	.098	.047	.013	.095	.046	.013	.091	.045	.013	.088	.044	.013		

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	.112	.112	.112	.065	.065	.065	.021	.021	.021		
1.0	.172	.160	.149	.147	.137	.128	.101	.094	.088	.058	.055	.051	.019	.018	.017		
2.0	.155	.135	.118	.133	.116	.102	.091	.080	.071	.053	.047	.042	.017	.015	.014		
3.0	.142	.116	.095	.121	.100	.082	.083	.069	.058	.048	.040	.034	.015	.013	.011		
4.0	.130	.101	.078	.112	.087	.068	.077	.061	.048	.044	.035	.028	.014	.012	.009		
5.0	.121	.089	.065	.104	.077	.057	.071	.054	.040	.041	.031	.024	.013	.010	.008		
6.0	.113	.079	.055	.097	.068	.048	.067	.048	.034	.039	.028	.020	.013	.009	.007		
7.0	.106	.071	.047	.091	.062	.041	.063	.043	.029	.036	.025	.017	.012	.008	.006		
8.0	.100	.065	.041	.086	.056	.035	.059	.039	.025	.035	.023	.015	.011	.008	.005		
9.0	.094	.059	.036	.081	.051	.031	.056	.036	.022	.033	.021	.013	.011	.007	.004		
10.0	.090	.055	.032	.077	.048	.028	.054	.033	.020	.031	.020	.012	.010	.006	.004		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

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:

Uncorrected UGR Table

NAME: Spot65-R-3000k-RA90-30D						TYPE:					WEIGHT:				
DIM.:						SPEC.:					SERIAL No.:				
MFR.: VD						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	-1.3	-0.5	-1.1	-0.3	-0.2	-1.1	-0.3	-0.9	-0.2	0.0					
3H	-1.5	-0.7	-1.2	-0.5	-0.3	-1.3	-0.5	-1.0	-0.4	-0.2					
4H	-1.5	-0.8	-1.3	-0.6	-0.4	-1.4	-0.7	-1.1	-0.5	-0.2					
6H	-1.6	-1.0	-1.3	-0.7	-0.5	-1.5	-0.8	-1.2	-0.6	-0.3					
8H	-1.7	-1.0	-1.4	-0.8	-0.5	-1.5	-0.9	-1.2	-0.6	-0.4					
12H	-1.7	-1.1	-1.4	-0.8	-0.6	-1.5	-0.9	-1.2	-0.7	-0.4					
4H 2H	-1.5	-0.8	-1.3	-0.6	-0.4	-1.4	-0.7	-1.1	-0.4	-0.2					
3H	-1.7	-1.1	-1.4	-0.8	-0.6	-1.5	-0.9	-1.2	-0.7	-0.4					
4H	-1.8	-1.3	-1.5	-1.0	-0.6	-1.6	-1.1	-1.3	-0.8	-0.5					
6H	-1.9	-1.4	-1.5	-1.1	-0.7	-1.7	-1.2	-1.4	-0.9	-0.6					
8H	-2.0	-1.5	-1.6	-1.2	-0.8	-1.8	-1.3	-1.4	-1.0	-0.6					
12H	-2.0	-1.6	-1.6	-1.2	-0.8	-1.8	-1.4	-1.4	-1.1	-0.7					
8H 4H	-2.0	-1.5	-1.6	-1.2	-0.8	-1.8	-1.3	-1.4	-1.0	-0.6					
6H	-2.1	-1.7	-1.6	-1.3	-0.9	-1.9	-1.5	-1.5	-1.1	-0.7					
8H	-2.1	-1.8	-1.7	-1.4	-0.9	-2.0	-1.6	-1.5	-1.2	-0.8					
12H	-2.2	-1.9	-1.7	-1.5	-1.0	-2.0	-1.7	-1.5	-1.3	-0.8					
12H 4H	-2.0	-1.6	-1.6	-1.2	-0.8	-1.8	-1.4	-1.4	-1.1	-0.7					
6H	-2.1	-1.8	-1.7	-1.4	-0.9	-2.0	-1.6	-1.5	-1.2	-0.8					
8H	-2.2	-1.9	-1.7	-1.5	-1.0	-2.0	-1.7	-1.5	-1.3	-0.8					
Variations with the observer position at spacings:															
S = 1.0H	+ 3.0 / -14.3					+ 3.3 / -12.9									
1.5H	+ 4.9 / -10.0					+ 5.2 / -10.1									
2.0H	+ 7.1 / -14.2					+ 7.0 / -14.9									

CIE Pub.117 Corrected 251.1 lm Total Lamp Luminous Flux.(8log(F/F0) = -4.8)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

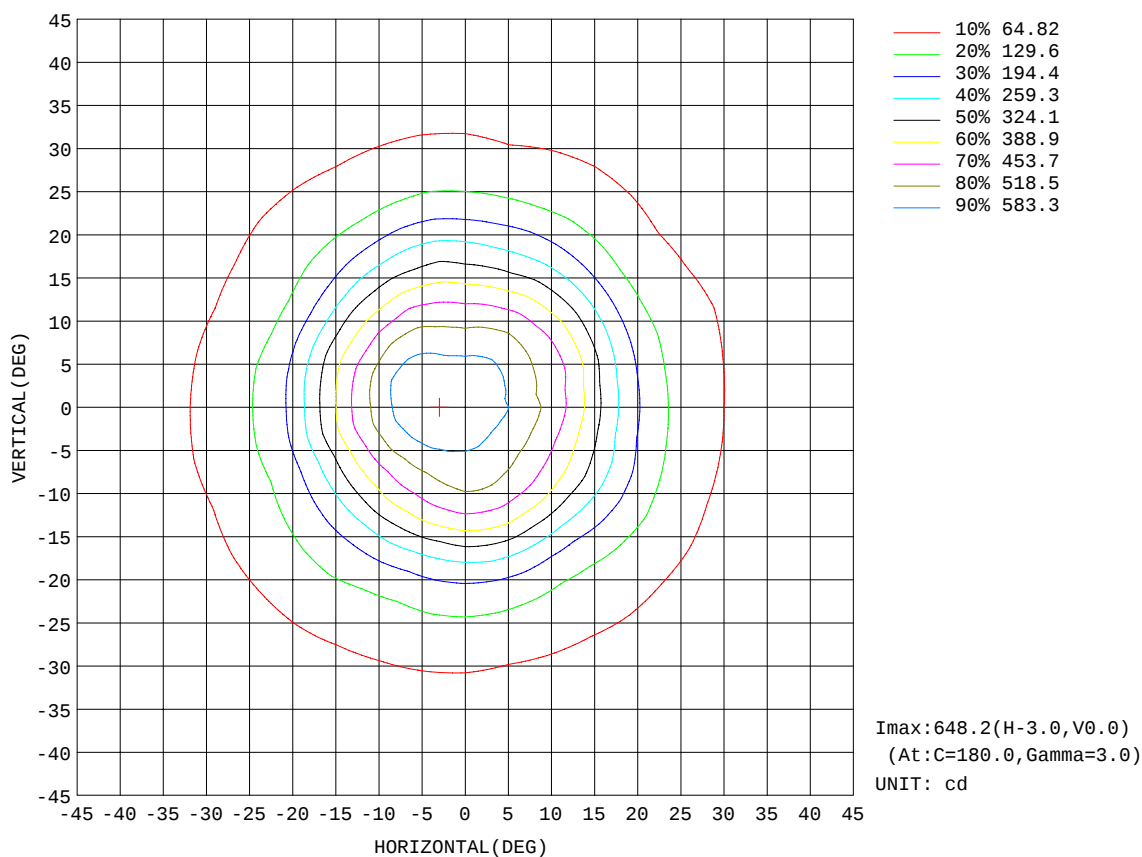
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	81	78	75
0.80	96	90	86	95	90	86	94	89	86	82
1.00	100	95	91	99	94	91	98	94	90	86
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	94
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHR _{NOM} = 1.25										

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

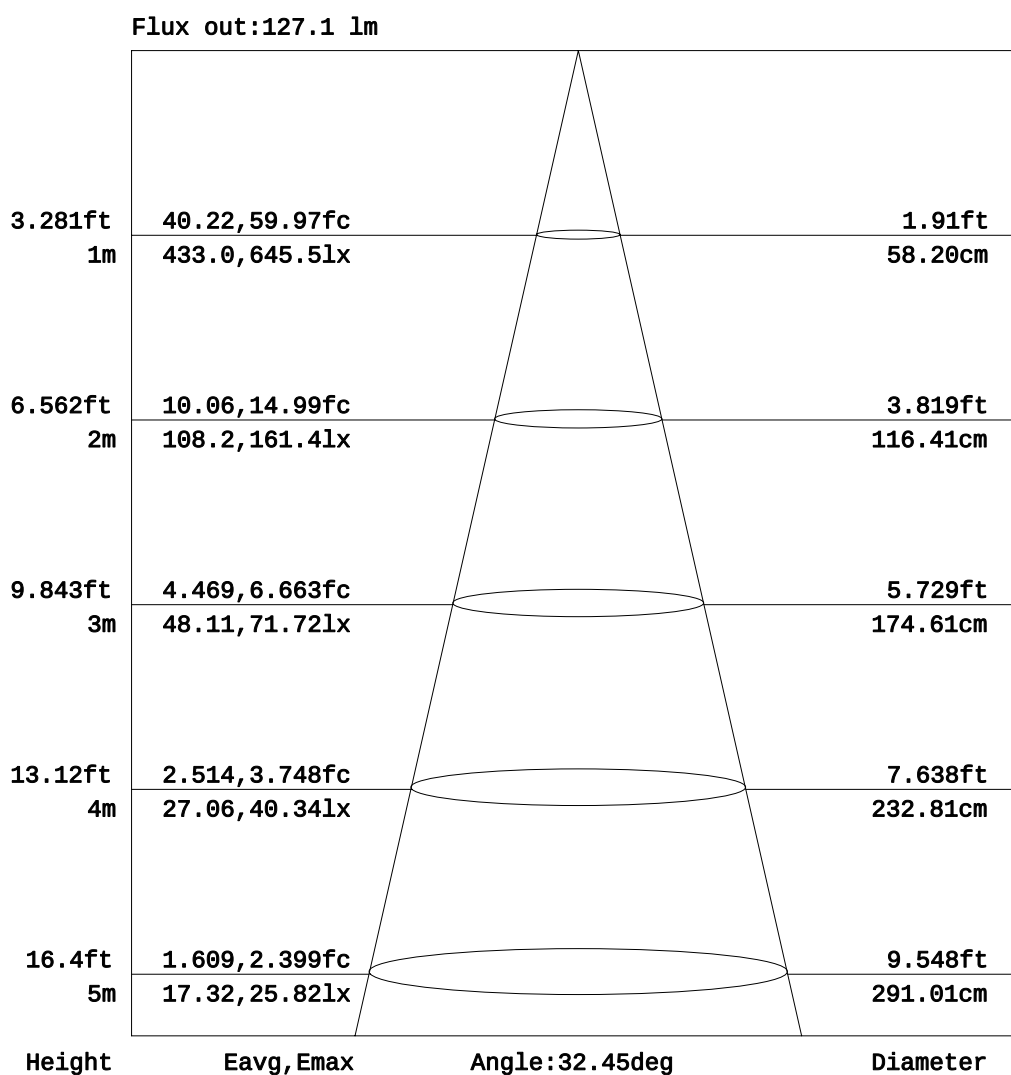


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



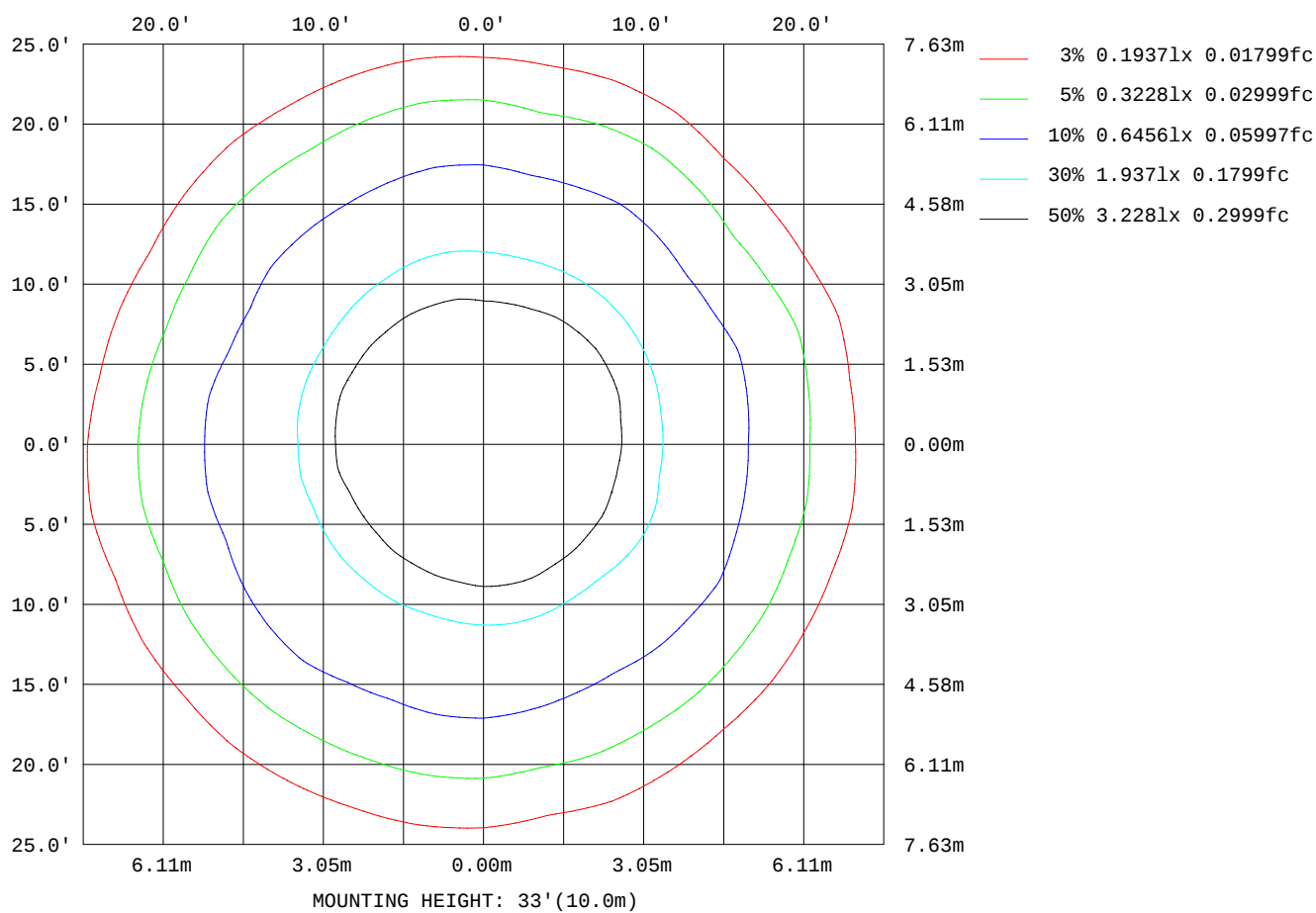
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	251.126	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	22	23	24	25	25	26	28	30	32	35	39	41	40	40	40	42	45	53	47
60	11	10	11	11	12	11	12	11	13	14	16	17	17	15	14	16	18	21	20
65	4	2	3	2	4	3	3	1	2	2	5	4	5	2	2	2	5	6	5
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	53	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:tang
Test Date:2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	251.126	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	22	23	24	25	25	26	28	30	32	35	39	41	40	40	40	42	45	53	47
60	11	10	11	11	12	11	12	11	13	14	16	17	17	15	14	16	18	21	20
65	4	2	3	2	4	3	3	1	2	2	5	4	5	2	2	2	5	6	5
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	53	1000	1500	200	500
65 to 90	6	1000	1500	200	500

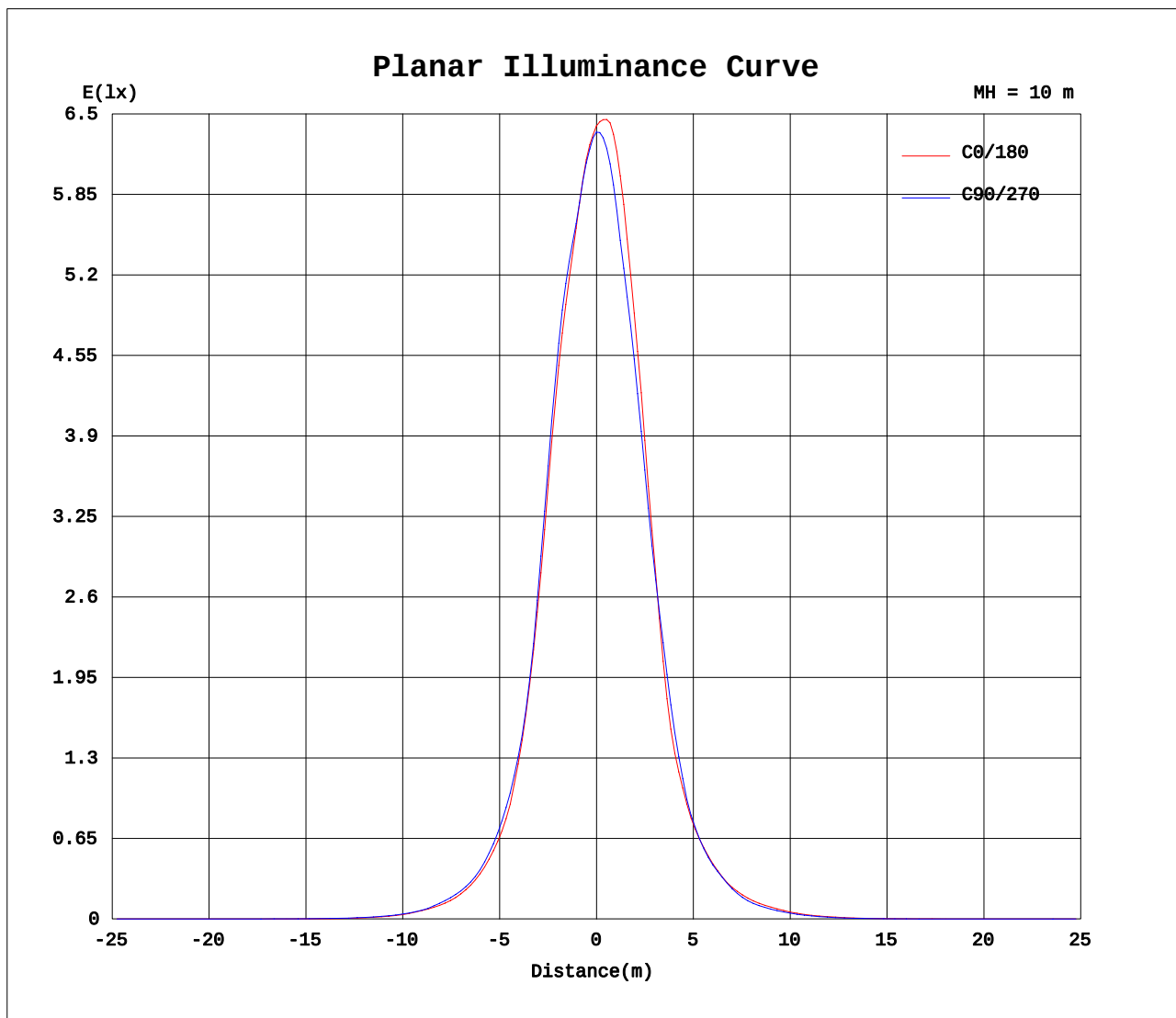
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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:tang
Test Date:2022-04-09

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: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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	640	640	638	638	637	637	636	636	636	635	635	635	634	634	634	633	633	632	640
5	585	579	572	570	568	573	576	581	582	585	586	592	596	605	613	623	629	635	641
10	495	488	482	483	485	493	499	509	514	515	506	500	492	495	499	514	525	541	545
15	349	343	345	352	349	353	354	366	366	366	355	354	351	355	352	357	364	387	388
20	200	198	211	214	205	192	192	201	204	204	201	197	202	203	208	206	204	214	214
25	109	111	115	121	115	110	106	111	117	121	121	115	118	127	127	123	118	124	125
30	64.8	65.0	65.0	68.2	66.7	67.6	65.2	66.0	66.1	71.0	71.9	70.8	72.4	78.3	77.9	77.1	73.7	78.7	78.2
35	37.0	38.2	36.8	36.8	37.5	37.3	38.6	39.7	38.7	41.3	42.3	42.4	43.5	44.8	44.3	45.1	44.5	47.4	46.6
40	21.3	21.5	20.6	20.9	21.0	20.9	21.8	22.6	22.5	24.0	24.9	24.7	26.9	27.8	27.4	28.7	27.6	29.1	28.3
45	10.3	10.1	9.18	9.43	9.82	10.2	10.4	10.5	10.8	11.5	12.3	12.7	13.2	13.6	13.8	14.6	14.8	16.1	16.0
50	4.12	4.04	3.81	3.95	4.12	4.57	4.61	4.67	4.81	5.23	5.61	5.86	6.10	6.21	6.40	6.87	7.36	7.94	7.43
55	1.26	1.31	1.40	1.43	1.44	1.50	1.63	1.71	1.85	2.04	2.25	2.36	2.30	2.28	2.31	2.43	2.57	3.03	2.71
60	0.53	0.51	0.57	0.55	0.59	0.57	0.59	0.55	0.63	0.71	0.82	0.87	0.85	0.74	0.71	0.79	0.92	1.05	0.98
65	0.17	0.09	0.12	0.10	0.17	0.12	0.14	0.04	0.07	0.08	0.19	0.18	0.19	0.09	0.10	0.09	0.22	0.27	0.23
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	0.02	0.07	0.02	0.07	0.03	0.08	0.03	0.08	0.03	0.07	0.02	0.06	0.02	0.06	0.01	0.05	0.00	0.04	0.06
145	0.15	0.20	0.16	0.20	0.16	0.20	0.16	0.21	0.16	0.20	0.16	0.19	0.15	0.18	0.13	0.17	0.12	0.17	0.18
150	0.33	0.38	0.33	0.39	0.34	0.39	0.34	0.38	0.33	0.38	0.33	0.37	0.33	0.35	0.30	0.34	0.29	0.33	0.34
155	0.53	0.58	0.54	0.59	0.54	0.60	0.54	0.59	0.55	0.59	0.54	0.57	0.51	0.55	0.50	0.54	0.48	0.52	0.54
160	0.74	0.79	0.75	0.80	0.75	0.81	0.75	0.80	0.75	0.80	0.75	0.78	0.73	0.76	0.72	0.75	0.70	0.73	0.75
165	0.93	0.98	0.92	0.98	0.92	0.97	0.93	0.98	0.92	0.97	0.93	0.97	0.92	0.95	0.90	0.94	0.88	0.93	0.93
170	1.05	1.10	1.06	1.10	1.05	1.10	1.05	1.10	1.06	1.10	1.05	1.09	1.04	1.09	1.03	1.07	1.02	1.07	1.08
175	1.15	1.19	1.15	1.19	1.14	1.18	1.13	1.18	1.13	1.18	1.13	1.18	1.14	1.17	1.13	1.17	1.13	1.18	1.19
180	1.20	1.20	1.19	1.19	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.19	1.18	1.18	1.18	1.18	1.18	1.19	1.20

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-09

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-RA90-30D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	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 (°)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	640	638	638	637	637	636	636	636	635	635	635	634	634	634	633	633	632		
5	642	639	632	626	618	613	605	602	600	602	601	602	598	595	588	584	576		
10	552	560	557	554	544	533	517	507	501	506	511	517	513	510	504	500	492		
15	395	403	395	394	390	392	386	382	368	366	369	380	382	386	378	372	353		
20	222	223	220	224	233	238	246	247	238	230	231	232	229	224	216	208	201		
25	125	116	114	122	122	124	129	134	130	125	122	126	119	111	110	114	111		
30	77.3	71.3	71.8	76.6	76.2	74.1	76.1	77.6	76.6	70.1	73.0	74.5	70.4	63.3	65.3	71.3	67.2		
35	44.2	43.5	42.8	45.2	45.6	45.2	46.1	47.0	44.7	41.9	43.6	43.1	38.1	36.8	37.3	39.6	37.2		
40	26.6	26.4	25.1	26.5	27.3	25.7	25.3	24.3	24.2	24.2	24.3	22.8	20.2	20.6	20.0	21.3	20.8		
45	14.3	14.4	13.8	15.5	16.0	14.4	14.2	12.6	13.5	13.8	13.4	13.2	11.0	11.1	9.85	10.6	10.1		
50	6.98	6.99	6.68	7.15	7.31	6.62	6.07	5.84	5.83	5.91	5.69	5.43	5.02	4.90	4.41	4.32	4.01		
55	2.58	2.57	2.53	2.56	2.48	2.33	2.12	2.16	1.96	1.95	1.84	1.74	1.66	1.64	1.37	1.15	1.11		
60	1.00	0.98	0.99	1.01	0.98	0.89	0.84	0.75	0.71	0.64	0.63	0.54	0.52	0.45	0.46	0.41	0.47		
65	0.24	0.19	0.28	0.30	0.35	0.28	0.30	0.22	0.26	0.20	0.23	0.15	0.15	0.08	0.13	0.09	0.14		
70	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.00	0.01	0.00	0.01	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	0.01	0.05	0.00	0.05	0.01	0.06	0.01	0.06	0.01	0.06	0.02	0.06	0.02	0.07	0.03	0.08	0.04		
145	0.13	0.17	0.11	0.16	0.12	0.17	0.13	0.17	0.13	0.17	0.14	0.18	0.14	0.18	0.15	0.20	0.16		
150	0.29	0.33	0.28	0.32	0.28	0.32	0.28	0.33	0.29	0.33	0.29	0.34	0.30	0.35	0.32	0.36	0.33		
155	0.49	0.52	0.47	0.51	0.47	0.51	0.48	0.52	0.48	0.53	0.50	0.53	0.50	0.55	0.51	0.56	0.53		
160	0.69	0.73	0.68	0.72	0.67	0.72	0.67	0.72	0.69	0.73	0.69	0.74	0.69	0.75	0.71	0.77	0.72		
165	0.87	0.91	0.86	0.90	0.86	0.91	0.86	0.91	0.86	0.92	0.87	0.92	0.88	0.93	0.89	0.94	0.90		
170	1.01	1.06	1.00	1.06	1.00	1.05	1.00	1.05	1.00	1.05	1.00	1.05	1.01	1.06	1.02	1.07	1.02		
175	1.13	1.16	1.11	1.16	1.11	1.16	1.11	1.16	1.12	1.15	1.10	1.15	1.10	1.16	1.12	1.17	1.12		
180	1.19	1.20	1.18	1.19	1.18	1.19	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.19	1.18		

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