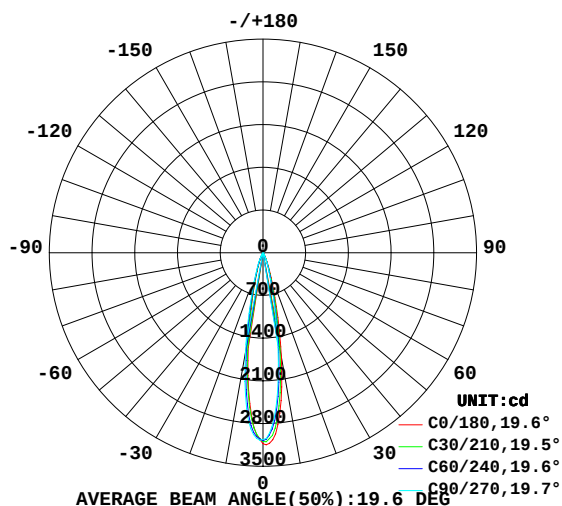


LUMINAIRE PHOTOMETRIC TEST REPORT

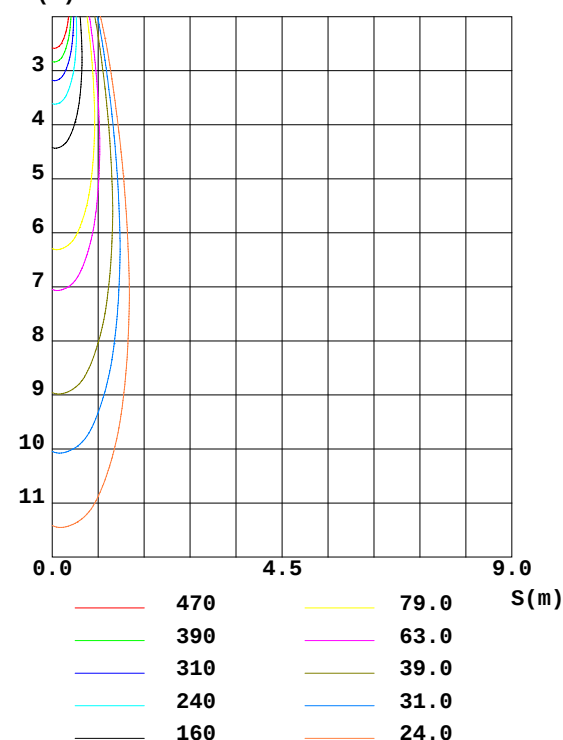
NAME:CL-Spot35-uls 3000k-RA90-20D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 71.33 lm/W			
MODEL		I _{max} (cd)	3148	S/MH(C0/180)	0.36
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH(C90/270)	0.32
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	479.37	η UP, DN(C0-180)	0.2, 47.5
NOMINAL FLUX(lm)	479.369	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 52.2
LAMPS INSIDE	1	η up(%)	0.4	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	24	η down(%)	99.6	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-15

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	1737	1508	1343	1304	1328	1475	1658	1735	0- 10	213.3	213.3	44.5, 44.5
20	306.8	257.2	231.3	222.3	229.4	264.4	302.3	314.4	10- 20	185.6	398.9	83.2, 83.2
30	53.36	47.34	42.62	40.11	40.04	44.02	50.71	53.21	20- 30	57.10	456.0	95.1, 95.1
40	12.93	12.14	11.65	11.14	11.38	11.75	12.56	12.26	30- 40	14.09	470.1	98.1, 98.1
50	3.643	3.027	2.629	2.554	2.642	2.709	3.083	3.322	40- 50	5.491	475.6	99.2, 99.2
60	1.152	0.9510	0.8159	0.8448	0.9854	0.9389	0.9680	1.000	50- 60	1.395	477.0	99.5, 99.5
70	0.4539	0.3419	0.2011	0.1699	0.1866	0.2470	0.3357	0.3607	60- 70	0.6258	477.6	99.6, 99.6
80	0	0	0	0	0	0	0	0	70- 80	0.0255	477.6	99.6, 99.6
90	0	0	0	0	0	0	0	0	80- 90	0	477.6	99.6, 99.6
100	0	0	0	0	0	0	0	0	90-100	0	477.6	99.6, 99.6
110	0	0	0	0	0	0	0	0	100-110	0	477.6	99.6, 99.6
120	0	0	0	0	0	0	0	0	110-120	0	477.6	99.6, 99.6
130	0	0	0	0	0	0	0	0	120-130	0	477.6	99.6, 99.6
140	0	0.0214	0.0711	0.0472	0.1042	0.0496	0.0047	0.0261	130-140	0.0034	477.6	99.6, 99.6
150	0.5370	0.6395	0.7562	0.7597	0.7988	0.6586	0.5562	0.5571	140-150	0.1662	477.8	99.7, 99.7
160	1.938	2.055	2.172	2.185	2.172	1.989	1.844	1.827	150-160	0.5855	478.4	99.8, 99.8
170	2.935	2.914	2.848	2.879	2.951	2.820	2.765	2.784	160-170	0.7075	479.1	99.9, 99.9
180	3.006	2.921	2.883	2.893	3.016	2.898	2.865	2.883	170-180	0.2754	479.4	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

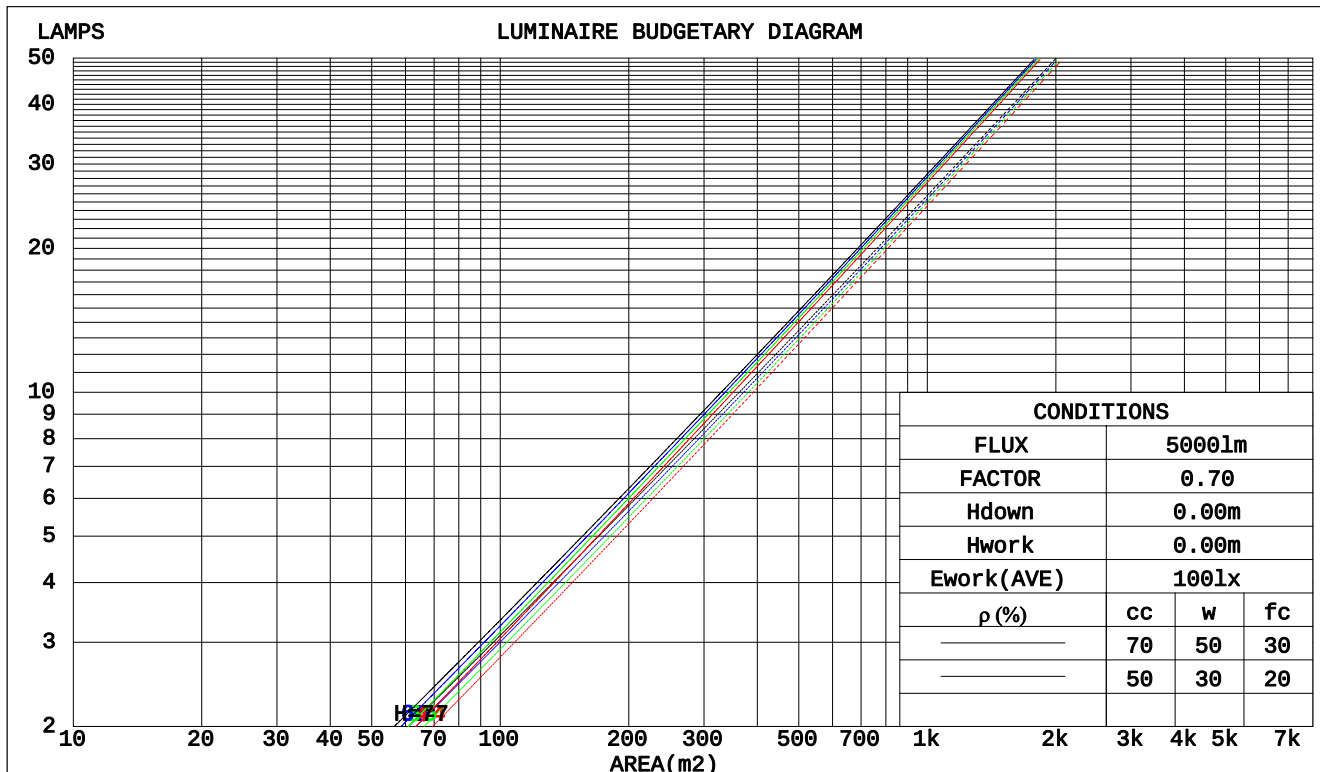
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-15

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: spot35-3000k-Ra90-20D-5W	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	1.13	1.11	1.10	1.11	1.09	1.08	1.07	1.06	1.05	1.03	1.02	1.01	.00	.99	.98	.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	.96	.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	.91	.88	.85	.91	.87	.85	.90	.86	.84	.89	.86	.84	.88	.85	.83	.82
8.0	.89	.85	.83	.88	.85	.82	.88	.84	.82	.87	.84	.82	.86	.83	.81	.80
9.0	.87	.83	.80	.86	.83	.80	.86	.82	.80	.85	.82	.80	.84	.82	.80	.79
10.0	.85	.81	.79	.84	.81	.78	.84	.80	.78	.83	.80	.78	.82	.80	.78	.77



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-15

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: spot35-3000k-Ra90-20D-5W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION 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 Coefficients(WEC)										
0.0																	
1.0	.131	.074	.024	.124	.071	.022	.111	.064	.020	.100	.058	.018	.089	.052	.017		
2.0	.120	.066	.020	.115	.063	.020	.105	.058	.018	.095	.053	.017	.086	.049	.015		
3.0	.112	.059	.018	.107	.057	.017	.099	.053	.016	.091	.050	.015	.083	.046	.014		
4.0	.104	.054	.016	.100	.053	.016	.093	.049	.015	.087	.046	.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	.090	.045	.013	.084	.043	.013	.079	.041	.012	.075	.039	.012		
7.0	.087	.043	.012	.085	.042	.012	.080	.041	.012	.076	.039	.011	.072	.037	.011		
8.0	.083	.041	.011	.081	.040	.011	.077	.038	.011	.073	.037	.011	.070	.036	.010		
9.0	.079	.038	.011	.077	.038	.011	.074	.036	.010	.070	.035	.010	.067	.034	.010		
10.0	.076	.036	.010	.074	.036	.010	.071	.035	.010	.068	.034	.010	.065	.033	.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	.171	.161	.151	.146	.138	.130	.100	.095	.090	.058	.055	.052	.018	.018	.017		
2.0	.152	.136	.122	.130	.117	.105	.089	.081	.073	.052	.047	.043	.017	.015	.014		
3.0	.137	.116	.099	.117	.100	.086	.081	.070	.061	.047	.041	.036	.015	.013	.012		
4.0	.124	.101	.083	.106	.087	.072	.073	.061	.051	.042	.035	.030	.014	.012	.010		
5.0	.113	.088	.070	.097	.076	.061	.067	.053	.043	.039	.031	.025	.012	.010	.008		
6.0	.104	.078	.059	.089	.068	.052	.062	.047	.037	.036	.028	.022	.012	.009	.007		
7.0	.096	.070	.051	.083	.060	.045	.057	.042	.032	.033	.025	.019	.011	.008	.006		
8.0	.090	.063	.045	.077	.055	.039	.053	.038	.028	.031	.023	.016	.010	.007	.005		
9.0	.084	.057	.039	.072	.050	.034	.050	.035	.024	.029	.021	.014	.009	.007	.005		
10.0	.079	.052	.035	.068	.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:tang
Test Date:2022-04-15

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: spot35-3000k-Ra90-20D-5W						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	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	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	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise					Viewed endwise				
x = 2H y = 2H						-6.3	-5.7	-6.1	-5.5	-5.4	-7.0	-6.4	-6.8	-6.3	-6.1
3H						-6.3	-5.8	-6.1	-5.6	-5.4	-7.1	-6.6	-6.9	-6.4	-6.2
4H						-6.4	-5.9	-6.1	-5.7	-5.4	-7.2	-6.7	-6.9	-6.4	-6.2
6H						-6.5	-6.0	-6.2	-5.7	-5.5	-7.3	-6.8	-7.0	-6.5	-6.3
8H						-6.5	-6.0	-6.2	-5.8	-5.5	-7.3	-6.8	-7.0	-6.6	-6.3
12H						-6.6	-6.1	-6.3	-5.8	-5.6	-7.4	-6.9	-7.1	-6.6	-6.4
4H 2H						-6.4	-5.9	-6.2	-5.7	-5.5	-7.2	-6.6	-6.9	-6.4	-6.2
3H						-6.5	-6.0	-6.2	-5.8	-5.5	-7.3	-6.8	-7.0	-6.5	-6.3
4H						-6.6	-6.2	-6.3	-5.9	-5.6	-7.4	-6.9	-7.0	-6.6	-6.3
6H						-6.7	-6.3	-6.3	-6.0	-5.6	-7.5	-7.1	-7.1	-6.7	-6.4
8H						-6.8	-6.4	-6.4	-6.0	-5.7	-7.5	-7.2	-7.1	-6.8	-6.4
12H						-6.8	-6.5	-6.4	-6.1	-5.7	-7.6	-7.3	-7.2	-6.9	-6.5
8H 4H						-6.8	-6.4	-6.4	-6.0	-5.7	-7.5	-7.2	-7.1	-6.8	-6.4
6H						-6.9	-6.6	-6.4	-6.2	-5.8	-7.6	-7.3	-7.2	-6.9	-6.5
8H						-6.9	-6.7	-6.5	-6.3	-5.8	-7.7	-7.4	-7.3	-7.0	-6.6
12H						-7.0	-6.8	-6.5	-6.3	-5.9	-7.8	-7.5	-7.3	-7.1	-6.6
12H 4H						-6.8	-6.5	-6.4	-6.1	-5.7	-7.6	-7.2	-7.2	-6.9	-6.5
6H						-6.9	-6.7	-6.5	-6.3	-5.8	-7.7	-7.4	-7.3	-7.0	-6.6
8H						-7.0	-6.8	-6.5	-6.3	-5.9	-7.8	-7.5	-7.3	-7.1	-6.6
Variations with the observer position at spacings:															
S = 1.0H						+ 2.5 / - 6.5					+ 2.2 / - 6.8				
1.5H						+ 3.8 / - 6.6					+ 3.8 / - 6.5				
2.0H						+ 6.1 / - 5.2					+ 5.8 / - 4.3				

CIE Pub.117 Corrected 479.4 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.6)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:tang
Test Date:2022-04-15

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: spot35-3000k-Ra90-20D-5W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

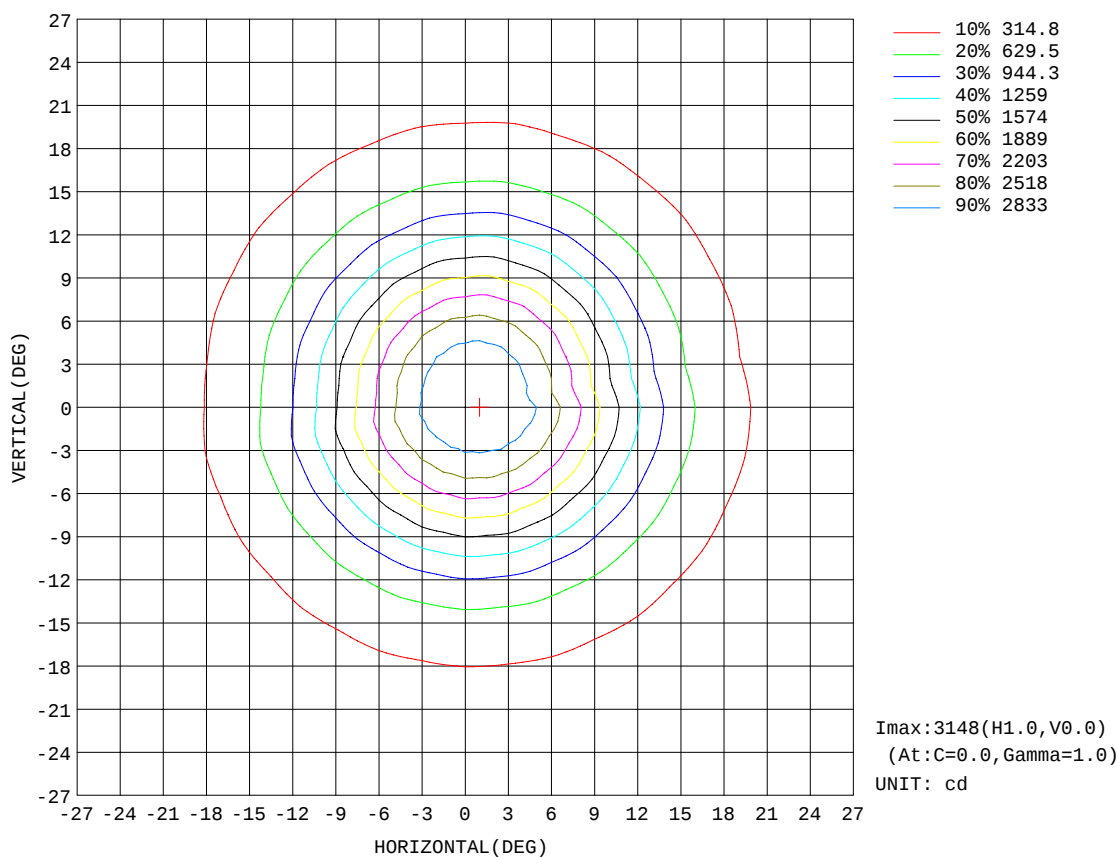
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	90	85	81	90	84	81	89	84	81	78
0.80	97	92	89	97	92	89	96	91	88	85
1.00	101	96	93	100	96	93	99	95	92	88
1.25	105	100	97	104	100	97	102	98	96	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	110	106	103	108	105	102	105	103	100	95
2.50	111	108	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	112	113	112	110	109	108	107	100
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:tang
Test Date:2022-04-15

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: spot35-3000k-Ra90-20D-5W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

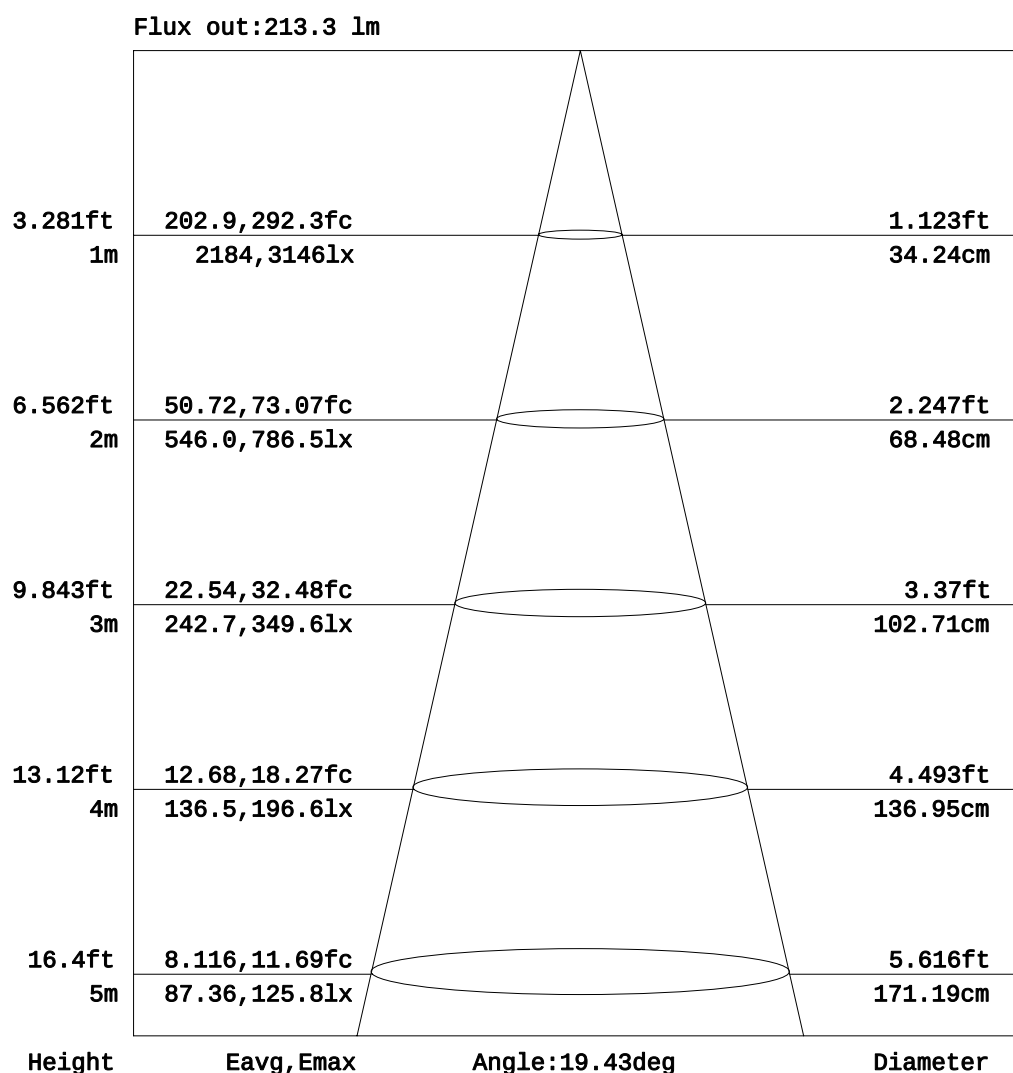


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-15

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: spot35-3000k-Ra90-20D-5W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



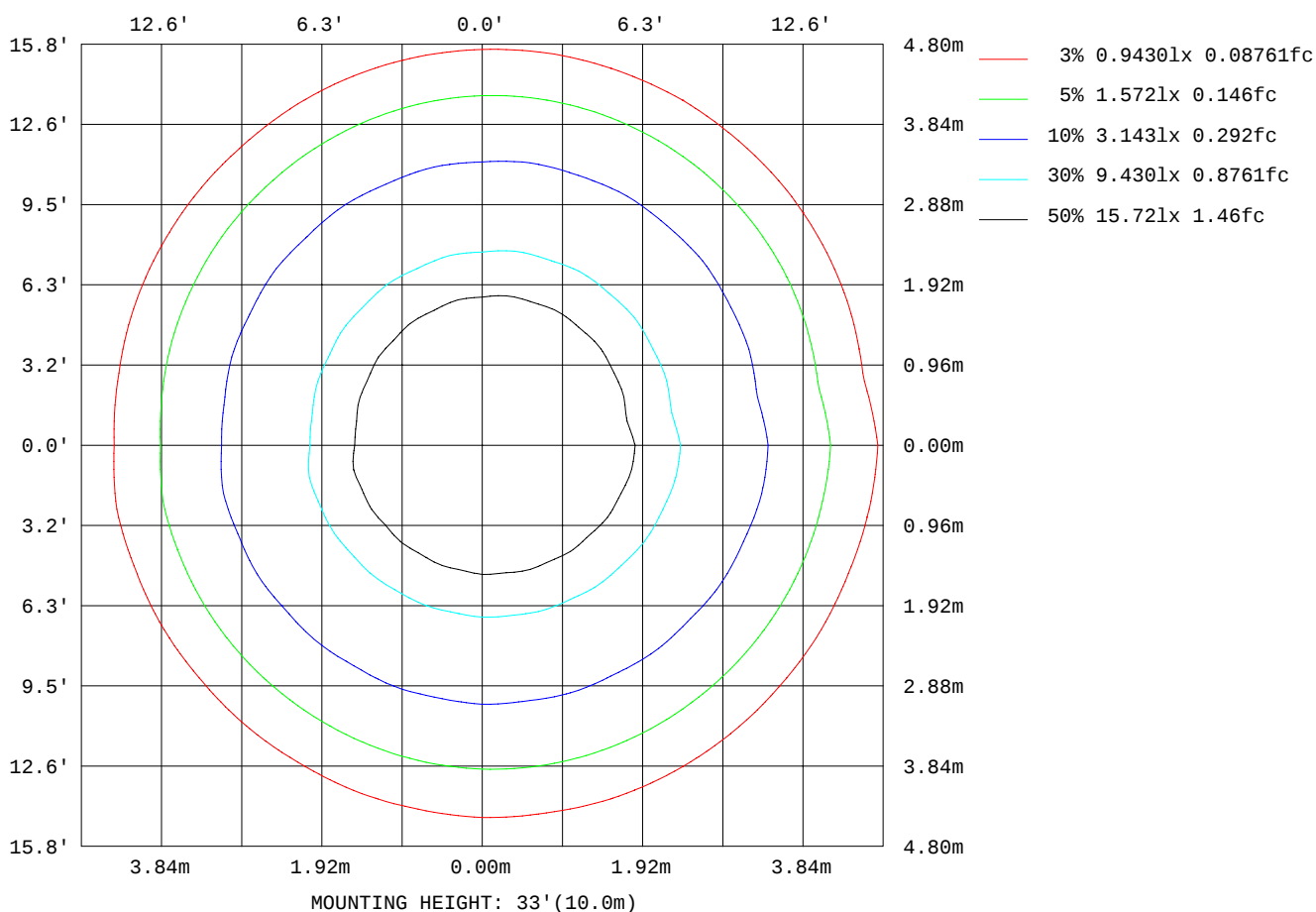
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-15

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: spot35-3000k-Ra90-20D-5W	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:2022-04-15

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: spot35-3000k-Ra90-20D-5W	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	479.369	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	30	28	26	24	24	24	24	23	23	22	22	21	22	22	22	22	24	24	25
60	23	21	21	19	19	19	20	18	18	16	17	16	17	17	17	16	18	18	20
65	18	17	17	15	16	15	17	15	15	13	14	12	13	12	14	12	14	14	15
70	13	12	11	9	10	10	11	10	8	6	6	5	5	5	5	5	6	7	5
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	30	200	---	500
Category 2	65 to 90	18	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:2022-04-15

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: spot35-3000k-Ra90-20D-5W	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	479.369	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	30	28	26	24	24	24	24	23	23	22	22	21	22	22	22	22	24	24	25
60	23	21	21	19	19	19	20	18	18	16	17	16	17	17	17	16	18	18	20
65	18	17	17	15	16	15	17	15	15	13	14	12	13	12	14	12	14	14	15
70	13	12	11	9	10	10	11	10	8	6	6	5	5	5	5	5	6	7	5
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	30	1000	1500	200	500
65 to 90	18	1000	1500	200	500

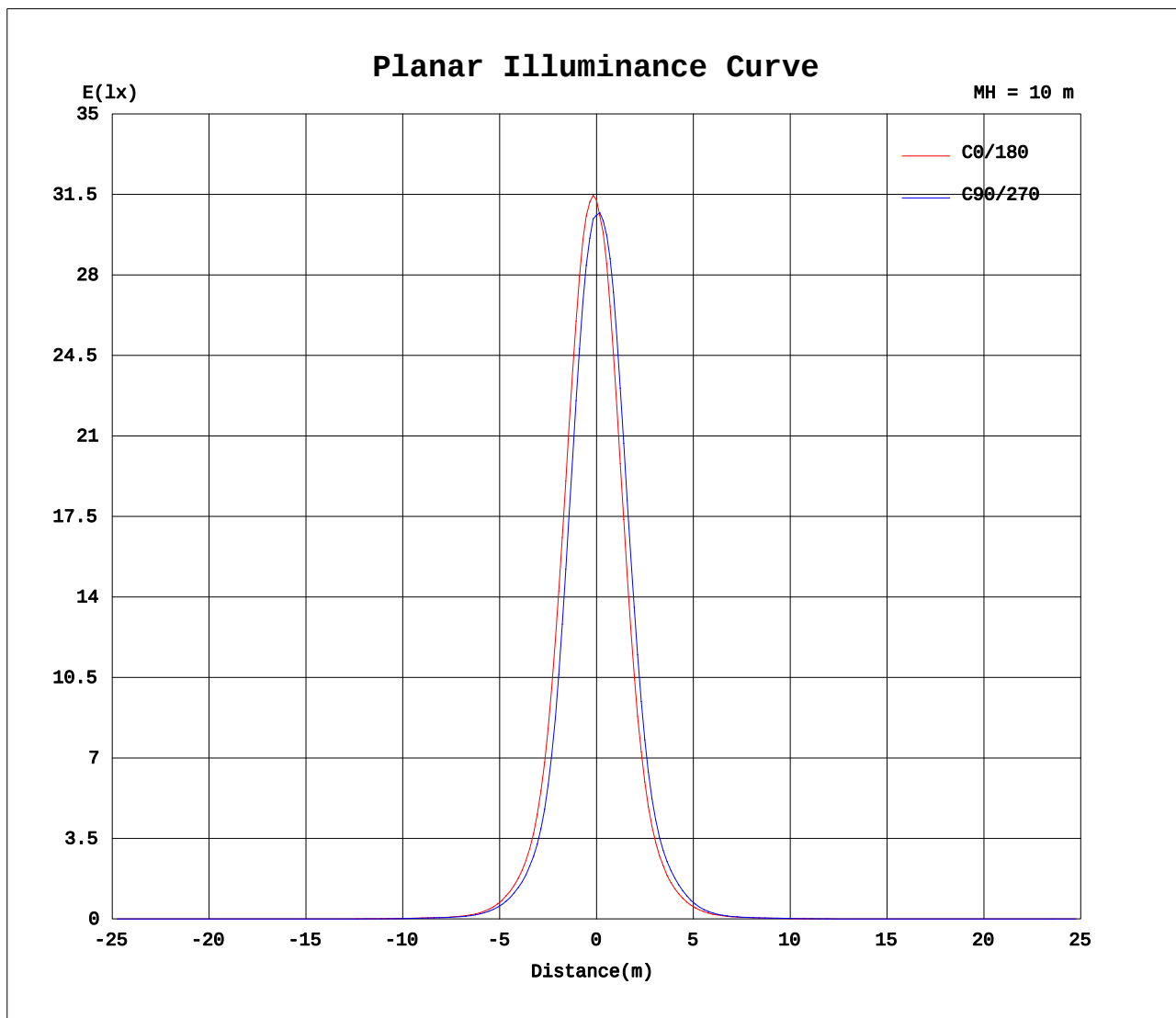
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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:2022-04-15

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: 2022-04-15

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: spot35-3000k-Ra90-20D-5W	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	3128	3110	3105	3092	3090	3082	3080	3077	3075	3059	3073	3063	3073	3065	3077	3066	3079	3064	3128
5	2825	2805	2737	2718	2654	2640	2576	2567	2510	2507	2461	2473	2438	2467	2443	2481	2473	2525	2483
10	1737	1712	1632	1603	1521	1495	1424	1408	1358	1343	1309	1310	1291	1306	1303	1334	1346	1391	1328
15	755	736	687	666	622	604	568	559	532	531	513	518	507	521	519	539	542	569	543
20	307	301	282	278	262	253	245	240	235	231	227	223	222	221	223	225	229	235	229
25	136	130	124	121	116	115	111	110	106	104	101	101	98.3	98.6	97.3	99.4	99.4	103	99.6
30	53.4	52.3	49.7	48.9	47.0	47.7	46.3	45.2	43.0	42.6	41.1	41.7	40.8	40.7	39.6	40.6	40.7	42.1	40.0
35	22.4	22.4	21.4	20.9	20.6	21.2	20.8	20.3	19.5	19.5	19.0	19.5	19.2	18.7	18.2	18.5	18.8	19.1	18.5
40	12.9	12.9	12.5	12.2	12.1	12.2	12.0	11.8	11.6	11.6	11.4	11.5	11.4	11.2	11.0	11.1	11.2	11.4	11.4
45	8.30	8.15	7.90	7.72	7.50	7.32	7.02	6.91	6.76	6.67	6.48	6.46	6.37	6.45	6.44	6.52	6.52	6.69	6.47
50	3.64	3.59	3.35	3.28	3.07	2.98	2.80	2.79	2.65	2.63	2.53	2.54	2.49	2.56	2.55	2.62	2.65	2.77	2.64
55	1.70	1.58	1.50	1.40	1.39	1.35	1.38	1.30	1.31	1.24	1.25	1.21	1.25	1.24	1.29	1.26	1.35	1.35	1.41
60	1.15	1.06	1.04	0.94	0.96	0.94	1.02	0.92	0.90	0.82	0.85	0.81	0.87	0.83	0.86	0.82	0.90	0.91	0.99
65	0.77	0.70	0.72	0.65	0.68	0.63	0.71	0.63	0.62	0.54	0.57	0.52	0.56	0.52	0.57	0.52	0.60	0.61	0.65
70	0.45	0.40	0.39	0.32	0.35	0.33	0.39	0.33	0.27	0.20	0.20	0.19	0.18	0.16	0.18	0.18	0.21	0.25	0.19
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	0.02	0.00	0.03	0.00	0.04	0.01	0.06	0.01	0.07	0.02	0.07	0.02	0.07	0.02	0.06	0.01	0.05	0.10
145	0.16	0.21	0.17	0.22	0.20	0.25	0.22	0.27	0.24	0.30	0.26	0.31	0.27	0.31	0.26	0.30	0.24	0.27	0.35
150	0.54	0.59	0.57	0.63	0.61	0.67	0.65	0.71	0.70	0.76	0.73	0.78	0.75	0.78	0.74	0.76	0.71	0.72	0.80
155	1.17	1.22	1.22	1.28	1.27	1.33	1.33	1.39	1.39	1.44	1.43	1.46	1.44	1.47	1.43	1.45	1.39	1.40	1.46
160	1.94	1.99	1.98	2.03	2.03	2.08	2.08	2.14	2.13	2.17	2.17	2.20	2.17	2.20	2.17	2.18	2.13	2.14	2.17
165	2.59	2.65	2.61	2.66	2.63	2.69	2.66	2.71	2.68	2.74	2.70	2.74	2.70	2.74	2.69	2.73	2.68	2.70	2.71
170	2.93	2.98	2.93	2.92	2.91	2.92	2.90	2.88	2.89	2.85	2.88	2.88	2.89	2.87	2.89	2.84	2.90	2.91	2.95
175	3.00	3.00	2.96	2.94	2.93	2.92	2.90	2.89	2.89	2.88	2.89	2.89	2.90	2.89	2.89	2.88	2.91	2.94	2.98
180	3.01	3.01	2.96	2.95	2.92	2.92	2.91	2.89	2.88	2.88	2.89	2.89	2.89	2.89	2.89	2.90	2.93	2.95	3.02

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-15

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: spot35-3000k-Ra90-20D-5W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(°) γ (°)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	3110	3105	3092	3090	3082	3080	3077	3075	3059	3073	3063	3073	3065	3077	3066	3079	3064		
5	2477	2529	2536	2598	2614	2677	2693	2750	2757	2801	2794	2824	2802	2814	2775	2775	2720		
10	1341	1388	1399	1466	1484	1558	1576	1647	1658	1719	1714	1755	1726	1745	1694	1692	1624		
15	547	574	581	612	621	655	665	701	710	742	744	768	754	764	737	732	695		
20	236	244	252	260	268	283	286	302	302	315	311	319	312	317	303	302	283		
25	101	106	108	114	117	123	129	132	137	139	141	141	140	138	135	130	122		
30	40.0	41.1	41.3	43.4	44.6	47.6	48.2	50.0	50.7	53.1	53.7	55.1	53.4	53.0	51.0	50.5	47.9		
35	18.4	18.5	18.2	18.7	19.3	20.4	20.3	20.6	20.9	21.6	22.1	22.6	21.5	20.9	20.5	20.8	20.3		
40	11.4	11.5	11.3	11.6	11.9	12.3	12.2	12.4	12.6	12.7	12.8	12.8	12.4	12.1	12.1	12.3	12.1		
45	6.43	6.54	6.54	6.76	6.87	7.06	7.20	7.48	7.60	7.69	7.71	7.81	7.78	7.80	7.71	7.78	7.64		
50	2.61	2.65	2.61	2.71	2.71	2.81	2.88	3.07	3.08	3.21	3.16	3.27	3.27	3.37	3.31	3.40	3.29		
55	1.41	1.35	1.36	1.33	1.36	1.33	1.40	1.41	1.45	1.42	1.47	1.47	1.51	1.48	1.50	1.50	1.54		
60	1.00	0.92	0.94	0.90	0.98	0.99	0.99	0.94	0.97	0.94	1.02	1.03	1.04	0.96	0.98	0.97	1.04		
65	0.69	0.61	0.62	0.59	0.67	0.65	0.68	0.62	0.65	0.62	0.68	0.65	0.70	0.64	0.67	0.64	0.71		
70	0.15	0.18	0.19	0.20	0.29	0.30	0.35	0.30	0.34	0.31	0.36	0.33	0.38	0.34	0.36	0.33	0.38		
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	0.05	0.09	0.04	0.08	0.02	0.06	0.02	0.06	0.00	0.05	0.00	0.05	0.00	0.05	0.00	0.05	0.01		
145	0.28	0.31	0.25	0.28	0.23	0.26	0.21	0.24	0.19	0.23	0.17	0.22	0.17	0.22	0.18	0.24	0.20		
150	0.73	0.74	0.68	0.69	0.63	0.64	0.58	0.61	0.56	0.58	0.54	0.57	0.54	0.57	0.54	0.60	0.58		
155	1.39	1.38	1.32	1.31	1.24	1.25	1.19	1.20	1.15	1.15	1.12	1.14	1.11	1.15	1.13	1.18	1.17		
160	2.08	2.09	2.02	2.02	1.96	1.95	1.89	1.89	1.84	1.85	1.81	1.84	1.81	1.85	1.83	1.88	1.87		
165	2.63	2.64	2.58	2.59	2.52	2.54	2.48	2.50	2.44	2.46	2.42	2.45	2.42	2.46	2.43	2.49	2.46		
170	2.87	2.88	2.82	2.84	2.80	2.83	2.78	2.82	2.77	2.80	2.75	2.80	2.76	2.81	2.77	2.84	2.79		
175	2.91	2.92	2.85	2.88	2.83	2.87	2.82	2.87	2.83	2.86	2.84	2.87	2.84	2.88	2.86	2.91	2.88		
180	2.98	2.98	2.91	2.92	2.88	2.88	2.87	2.87	2.86	2.87	2.87	2.88	2.88	2.89	2.90	2.93	2.94		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: tang
Test Date: 2022-04-15

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: