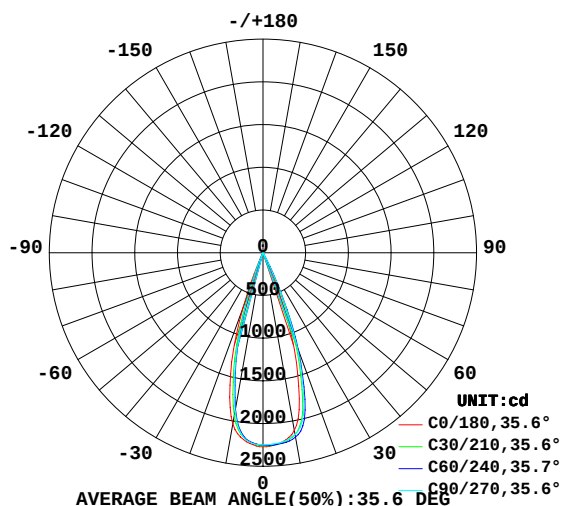


LUMINAIRE PHOTOMETRIC TEST REPORT

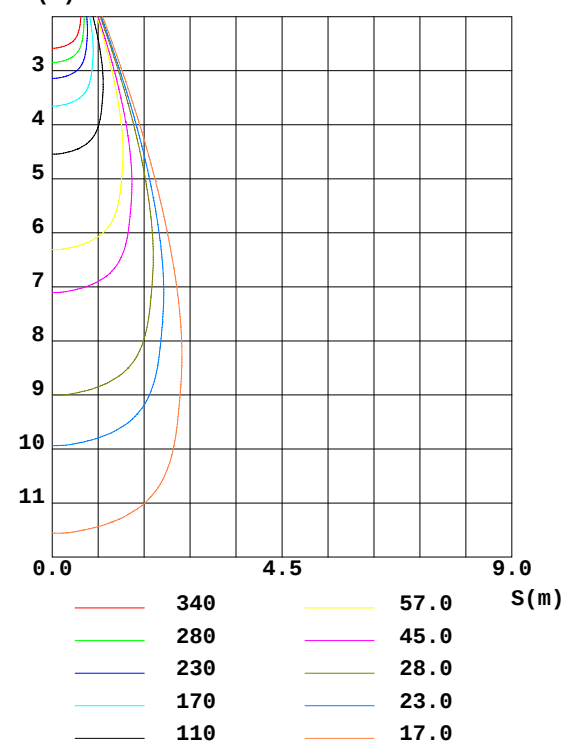
NAME:CL-Spot50-SQ-uls 10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 69.88 lm/W			
MODEL		Imax(cd)	2271	S/MH(C0/180)	0.54
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	0.59
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	721.21	η UP, DN(C0-180)	0.2, 58.0
NOMINAL FLUX(lm)	721.207	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 41.6
LAMPS INSIDE	1	η up(%)	0.4	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	24	η down(%)	99.6	CIBSE SHR MAX	0.50

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:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [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	2112	2180	2159	2087	2036	1883	1884	1999	0- 10	206.3	206.3	28.6, 28.6
20	851.1	1182	1166	914.0	675.4	369.4	361.4	578.1	10- 20	399.4	605.7	84, 84
30	13.39	31.63	28.58	16.04	10.57	8.241	8.403	9.603	20- 30	103.9	709.7	98.4, 98.4
40	4.054	4.962	4.854	4.172	3.836	3.575	3.672	3.674	30- 40	4.392	714.1	99, 99
50	2.281	2.672	2.563	2.269	2.122	1.970	2.033	2.069	40- 50	2.347	716.4	99.3, 99.3
60	1.139	1.447	1.371	1.158	0.9248	0.7154	0.7530	0.8622	50- 60	1.446	717.9	99.5, 99.5
70	0.0926	0.2570	0.2375	0.0873	0	0.0000	0.0001	0.0116	60- 70	0.5033	718.4	99.6, 99.6
80	0	0	0	0	0	0	0	0	70- 80	0.0115	718.4	99.6, 99.6
90	0	0	0	0	0	0	0	0	80- 90	0	718.4	99.6, 99.6
100	0	0	0	0	0	0	0	0	90-100	0	718.4	99.6, 99.6
110	0	0	0	0	0	0	0	0	100-110	0	718.4	99.6, 99.6
120	0	0	0	0	0	0	0	0	110-120	0	718.4	99.6, 99.6
130	0	0	0	0	0	0	0	0	120-130	0	718.4	99.6, 99.6
140	0.1047	0.0094	0.0200	0.0825	0.2394	0.3809	0.3661	0.2571	130-140	0.0299	718.4	99.6, 99.6
150	1.232	0.9518	0.9600	1.163	1.378	1.684	1.678	1.436	140-150	0.4104	718.8	99.7, 99.7
160	2.934	2.582	2.584	2.809	3.039	3.317	3.283	3.035	150-160	0.9562	719.8	99.8, 99.8
170	4.311	4.069	4.015	4.085	4.322	4.436	4.366	4.184	160-170	1.007	720.8	99.9, 99.9
180	5.023	4.961	4.913	4.865	5.032	4.970	4.913	4.867	170-180	0.4317	721.2	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

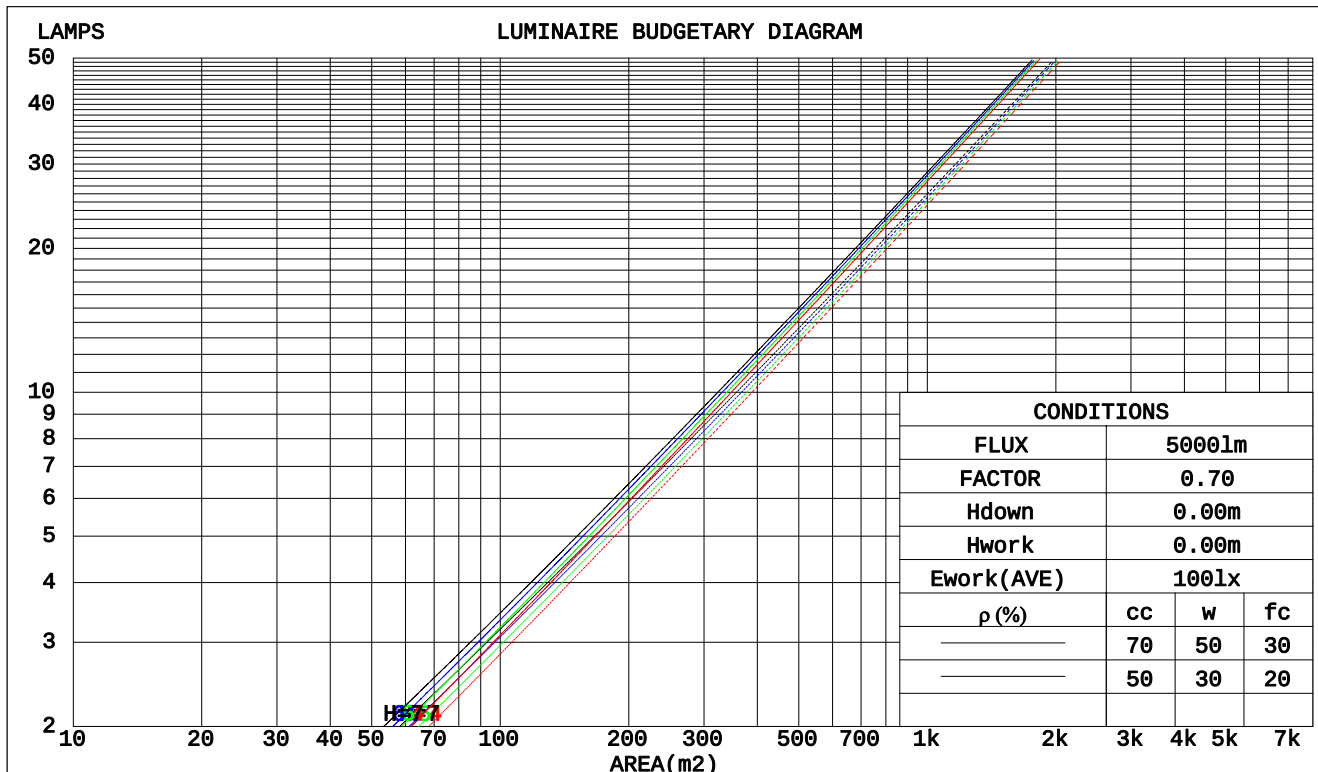
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	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	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.08	1.05	1.02	1.06	1.03	1.01	1.03	1.01	.99	.00	.98	.97	.97	.96	.95	.93
3.0	1.03	.99	.97	1.02	.98	.96	.99	.96	.94	.97	.95	.93	.95	.93	.91	.90
4.0	.99	.95	.92	.98	.94	.91	.96	.93	.90	.94	.91	.89	.92	.90	.88	.87
5.0	.95	.91	.88	.94	.91	.88	.93	.90	.87	.91	.88	.86	.90	.87	.86	.84
6.0	.92	.88	.85	.91	.87	.85	.90	.87	.84	.89	.86	.83	.87	.85	.83	.82
7.0	.89	.85	.82	.88	.84	.82	.87	.84	.81	.86	.83	.81	.85	.82	.80	.79
8.0	.86	.82	.79	.86	.82	.79	.85	.81	.79	.84	.81	.78	.83	.80	.78	.77
9.0	.84	.79	.77	.83	.79	.77	.82	.79	.76	.82	.78	.76	.81	.78	.76	.75
10.0	.81	.77	.74	.81	.77	.74	.80	.77	.74	.79	.76	.74	.79	.76	.74	.73



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	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	.137	.078	.025	.130	.074	.024	.118	.067	.022	.106	.061	.020	.095	.055	.018		
2.0	.127	.069	.021	.121	.067	.021	.111	.062	.019	.101	.057	.018	.092	.052	.016		
3.0	.118	.063	.019	.113	.061	.018	.105	.057	.017	.097	.053	.016	.089	.049	.015		
4.0	.111	.058	.017	.107	.056	.017	.099	.053	.016	.093	.050	.015	.086	.047	.014		
5.0	.104	.053	.015	.101	.052	.015	.095	.049	.015	.089	.047	.014	.083	.045	.013		
6.0	.099	.050	.014	.096	.049	.014	.091	.046	.014	.086	.044	.013	.081	.043	.013		
7.0	.094	.047	.013	.092	.046	.013	.087	.044	.013	.082	.042	.012	.078	.041	.012		
8.0	.090	.044	.012	.088	.043	.012	.084	.042	.012	.080	.040	.012	.076	.039	.011		
9.0	.086	.042	.012	.084	.041	.012	.080	.040	.011	.077	.039	.011	.074	.037	.011		
10.0	.083	.040	.011	.081	.039	.011	.078	.038	.011	.075	.037	.011	.072	.036	.010		

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	.147	.138	.130	.100	.095	.090	.058	.055	.052	.018	.018	.017	
2.0	.153	.136	.121	.131	.117	.105	.090	.081	.073	.052	.047	.043	.017	.015	.014	
3.0	.138	.116	.099	.119	.100	.086	.081	.070	.060	.047	.041	.035	.015	.013	.012	
4.0	.126	.101	.082	.108	.087	.071	.074	.061	.050	.043	.036	.030	.014	.012	.010	
5.0	.115	.089	.069	.099	.077	.060	.068	.054	.042	.040	.031	.025	.013	.010	.008	
6.0	.106	.079	.059	.092	.068	.051	.063	.048	.036	.037	.028	.022	.012	.009	.007	
7.0	.099	.071	.051	.085	.061	.044	.059	.043	.031	.034	.025	.019	.011	.008	.006	
8.0	.093	.064	.044	.080	.055	.038	.055	.039	.027	.032	.023	.016	.010	.008	.005	
9.0	.087	.058	.039	.075	.050	.034	.052	.035	.024	.030	.021	.014	.010	.007	.005	
10.0	.082	.053	.034	.071	.046	.030	.049	.033	.021	.029	.019	.013	.009	.006	.004	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: Spot50-SQ-10W-3000K-36D-90RA						TYPE:					WEIGHT:				
DIM.:						SPEC.:					SERIAL No.:				
MFR.:						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						-13.0	-12.4	-12.8	-12.2	-12.1	-12.0	-11.3	-11.8	-11.2	-11.0
3H						-13.0	-12.4	-12.8	-12.2	-12.0	-11.9	-11.3	-11.6	-11.1	-10.9
4H						-13.1	-12.5	-12.8	-12.3	-12.1	-11.9	-11.4	-11.7	-11.2	-10.9
6H						-13.2	-12.6	-12.9	-12.4	-12.2	-12.0	-11.5	-11.7	-11.3	-11.0
8H						-13.2	-12.7	-12.9	-12.5	-12.2	-12.1	-11.6	-11.8	-11.3	-11.0
12H						-13.3	-12.8	-13.0	-12.5	-12.2	-12.1	-11.6	-11.8	-11.4	-11.1
4H 2H						-12.8	-12.2	-12.5	-12.0	-11.8	-11.9	-11.3	-11.6	-11.1	-10.9
3H						-12.8	-12.3	-12.5	-12.0	-11.8	-11.8	-11.2	-11.4	-11.0	-10.7
4H						-12.9	-12.4	-12.6	-12.1	-11.8	-11.8	-11.4	-11.5	-11.1	-10.8
6H						-13.0	-12.6	-12.6	-12.3	-11.9	-12.0	-11.5	-11.6	-11.2	-10.9
8H						-13.1	-12.7	-12.7	-12.3	-11.9	-12.0	-11.6	-11.6	-11.3	-10.9
12H						-13.1	-12.8	-12.7	-12.4	-12.0	-12.1	-11.7	-11.7	-11.3	-10.9
8H 4H						-13.0	-12.7	-12.6	-12.3	-11.9	-12.0	-11.6	-11.6	-11.3	-10.9
6H						-13.2	-12.8	-12.7	-12.4	-12.0	-12.1	-11.8	-11.7	-11.4	-11.0
8H						-13.2	-12.9	-12.8	-12.5	-12.1	-12.2	-11.9	-11.7	-11.5	-11.0
12H						-13.3	-13.0	-12.8	-12.6	-12.1	-12.2	-12.0	-11.8	-11.6	-11.1
12H 4H						-13.1	-12.7	-12.7	-12.4	-12.0	-12.1	-11.7	-11.6	-11.3	-10.9
6H						-13.2	-12.9	-12.8	-12.5	-12.1	-12.2	-11.9	-11.7	-11.5	-11.0
8H						-13.3	-13.0	-12.8	-12.6	-12.1	-12.2	-12.0	-11.8	-11.6	-11.1
Variations with the observer position at spacings:															
S = 1.0H						+ 1.1 / - 1.6					+ 1.1 / - 1.7				
1.5H						+ 1.0 / - 0.9					+ 1.3 / - 1.0				
2.0H						+ 1.4 / - 2.0					+ 1.4 / - 1.6				

CIE Pub.117 Corrected 721.2 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.1)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

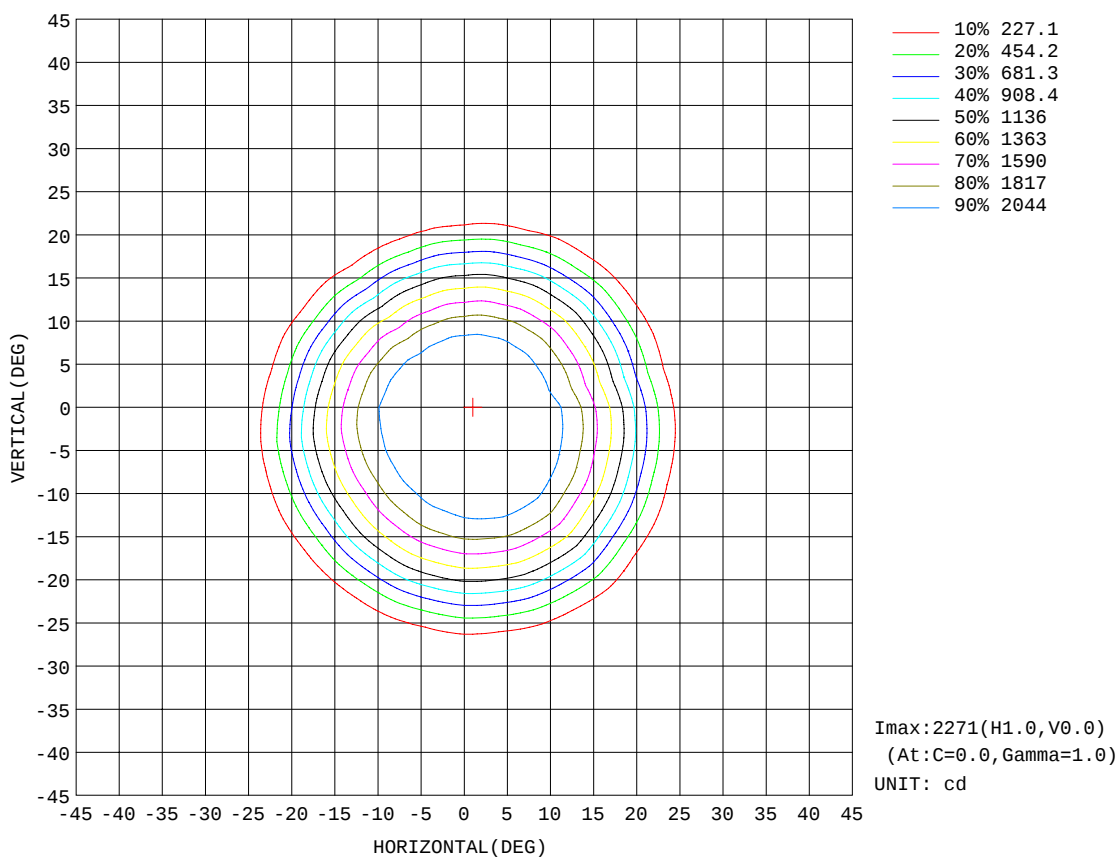
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	91	85	82	90	85	82	90	85	82	78
0.80	98	93	89	97	92	89	96	92	89	86
1.00	102	97	93	101	96	93	99	96	93	89
1.25	105	101	97	104	100	97	102	99	96	92
1.50	108	103	100	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	96
3.00	113	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	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:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

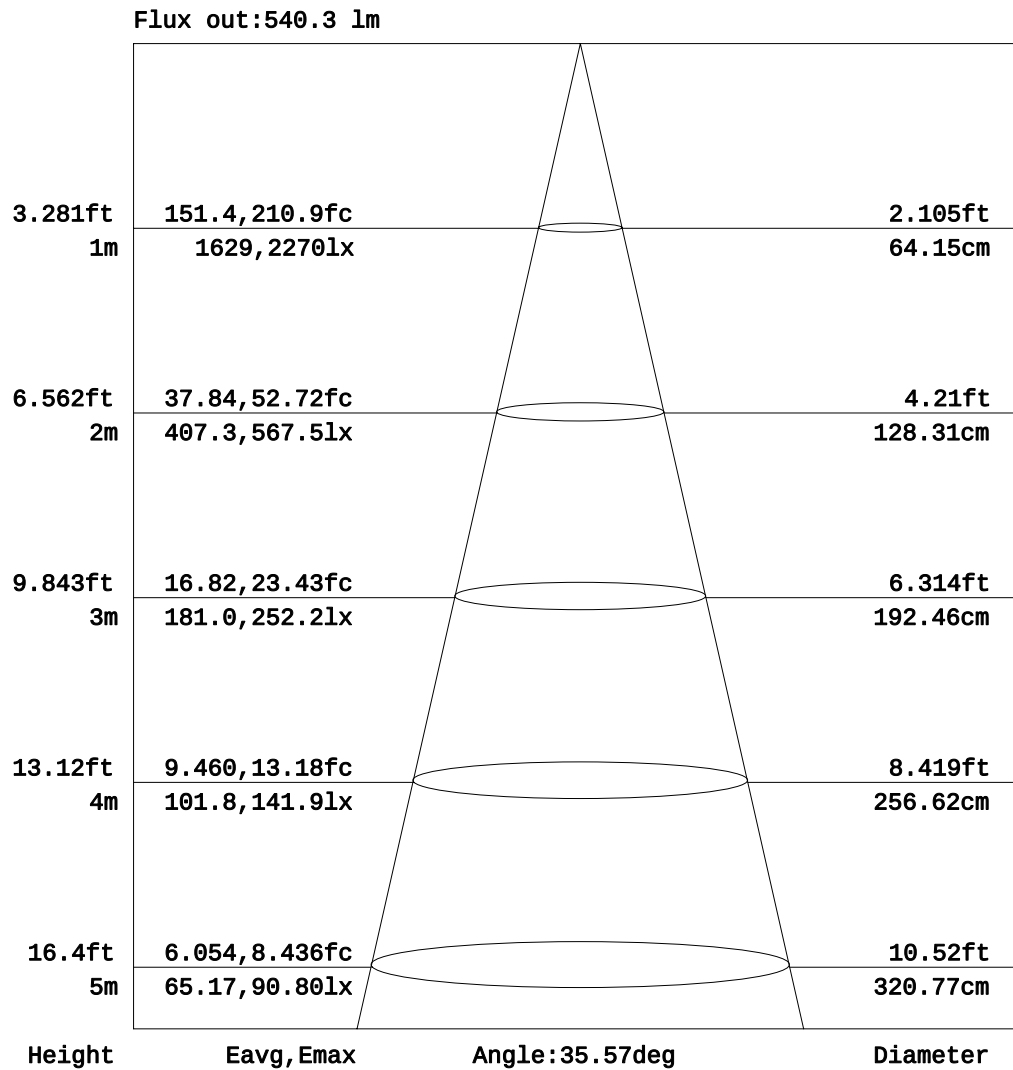


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

AAI Figure

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



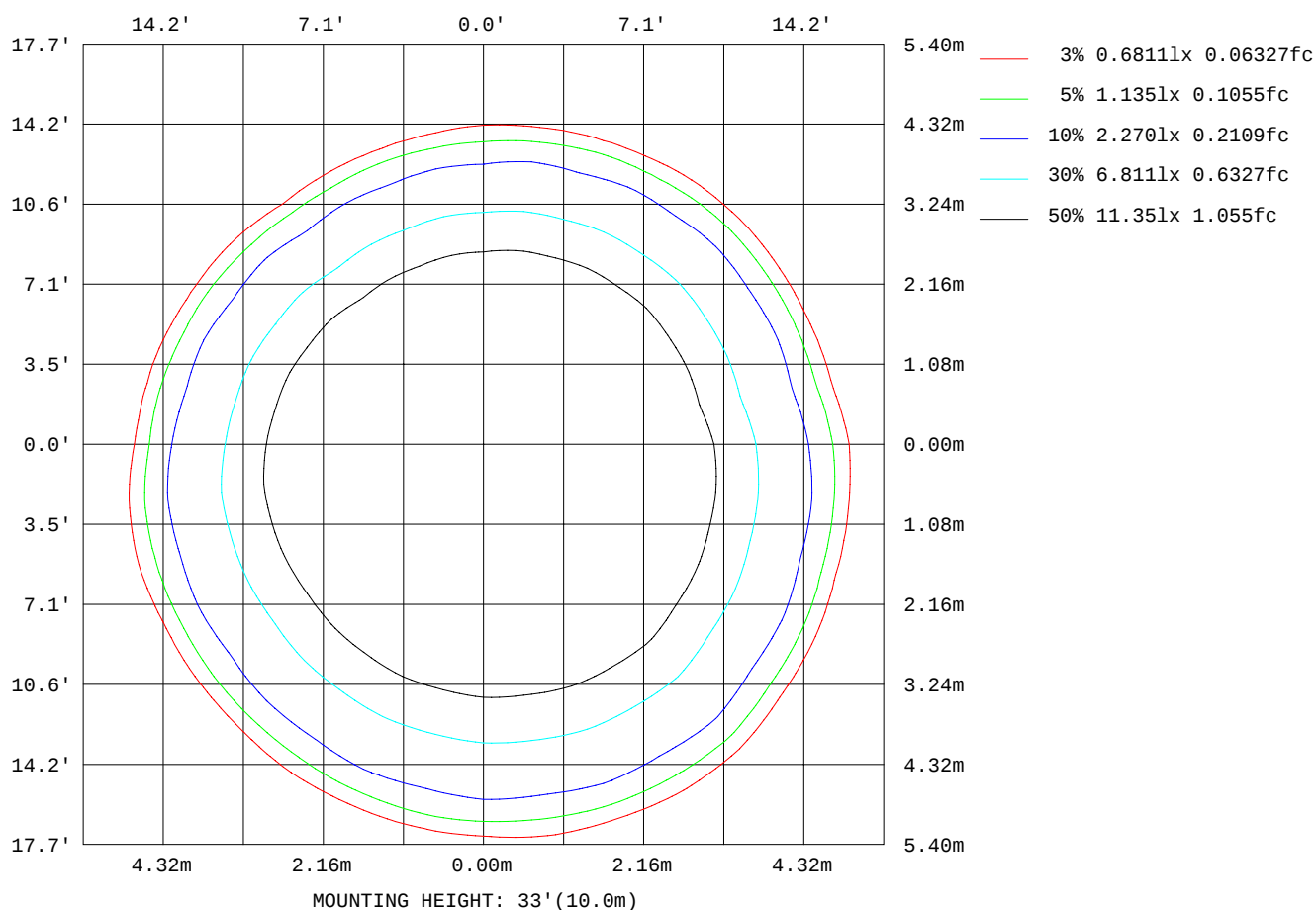
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	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	721.207	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	29	30	32	33	35	35	36	35	35	34	33	32	31	29	29	28	28	27	27
60	23	23	26	26	29	29	30	29	29	27	27	25	25	23	23	22	22	20	18
65	13	14	16	17	20	20	21	20	20	19	19	17	16	14	14	12	12	11	8
70	3	2	4	5	7	8	9	8	9	7	7	5	5	2	3	1	2	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	36	200	---	500
Category 2	65 to 90	21	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:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	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	721.207	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	29	30	32	33	35	35	36	35	35	34	33	32	31	29	29	28	28	27	27
60	23	23	26	26	29	29	30	29	29	27	27	25	25	23	23	22	22	20	18
65	13	14	16	17	20	20	21	20	20	19	19	17	16	14	14	12	12	11	8
70	3	2	4	5	7	8	9	8	9	7	7	5	5	2	3	1	2	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	36	1000	1500	200	500
65 to 90	21	1000	1500	200	500

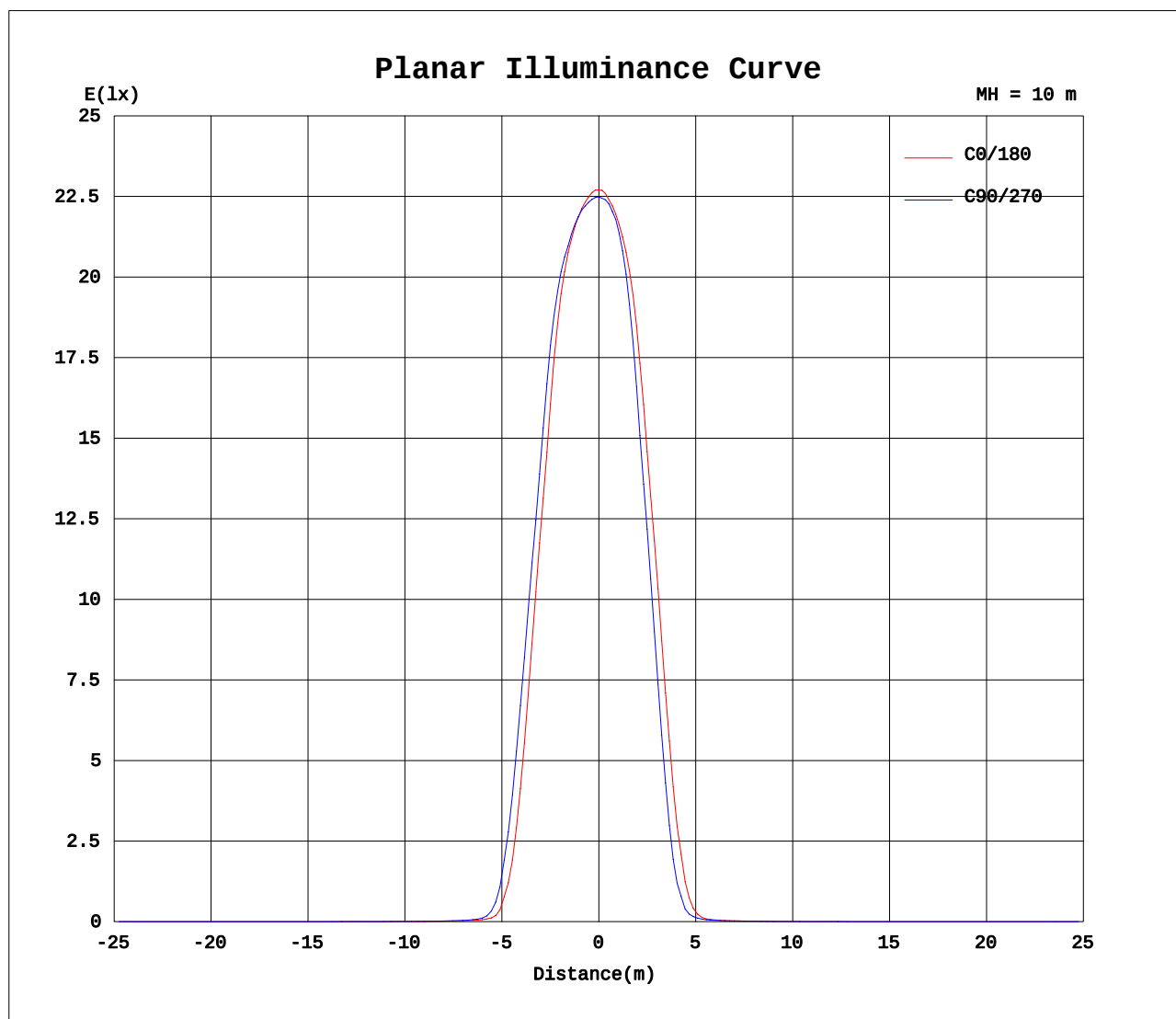
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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:Vando
Test Date:2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity:65.0%
Test Distance:7.000m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(°)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	2270	2266	2262	2259	2257	2255	2253	2252	2250	2249	2248	2248	2247	2246	2245	2244	2243	2243	2270
5	2239	2241	2237	2241	2244	2249	2245	2242	2239	2234	2229	2224	2216	2210	2204	2204	2202	2202	2220
10	2112	2131	2146	2162	2171	2189	2190	2189	2173	2159	2139	2130	2110	2097	2078	2068	2049	2040	2036
15	1616	1685	1727	1801	1846	1913	1904	1909	1874	1853	1799	1767	1700	1656	1597	1575	1541	1521	1466
20	851	936	992	1079	1135	1228	1220	1223	1189	1166	1111	1074	999	950	878	848	804	774	675
25	163	199	234	306	333	415	411	418	387	375	325	311	252	222	192	176	158	141	98.9
30	13.4	15.8	18.0	23.1	27.3	36.0	34.6	34.8	30.5	28.6	23.8	21.7	18.5	17.0	15.1	14.9	13.6	12.6	10.6
35	6.15	6.55	6.93	7.50	7.94	8.56	8.62	8.64	8.30	8.04	7.62	7.30	6.86	6.60	6.29	6.17	6.00	5.92	5.66
40	4.05	4.23	4.44	4.66	4.85	5.07	5.08	5.09	4.96	4.85	4.67	4.53	4.39	4.23	4.12	4.03	3.98	3.92	3.84
45	3.04	3.10	3.24	3.34	3.48	3.59	3.62	3.57	3.54	3.42	3.36	3.25	3.17	3.07	3.01	2.93	2.93	2.87	2.83
50	2.28	2.31	2.42	2.51	2.64	2.70	2.74	2.67	2.64	2.56	2.52	2.42	2.37	2.27	2.26	2.19	2.20	2.13	2.12
55	1.67	1.73	1.83	1.88	2.00	2.03	2.06	2.00	2.02	1.93	1.91	1.82	1.79	1.69	1.67	1.60	1.63	1.55	1.53
60	1.14	1.17	1.29	1.32	1.43	1.46	1.49	1.44	1.46	1.37	1.35	1.25	1.24	1.16	1.16	1.09	1.09	1.01	0.92
65	0.56	0.59	0.68	0.73	0.83	0.84	0.87	0.84	0.86	0.78	0.79	0.71	0.68	0.60	0.59	0.51	0.52	0.45	0.35
70	0.09	0.07	0.15	0.16	0.24	0.28	0.31	0.28	0.30	0.24	0.24	0.16	0.17	0.08	0.09	0.03	0.07	0.01	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	0.10	0.12	0.05	0.06	0.00	0.01	0.00	0.01	0.00	0.03	0.00	0.05	0.03	0.09	0.07	0.14	0.10	0.17	0.24
145	0.56	0.55	0.46	0.45	0.37	0.35	0.31	0.34	0.32	0.38	0.36	0.43	0.43	0.50	0.51	0.58	0.56	0.63	0.71
150	1.23	1.19	1.10	1.06	0.97	0.93	0.89	0.92	0.91	0.96	0.97	1.04	1.06	1.15	1.18	1.24	1.25	1.32	1.38
155	2.05	1.99	1.89	1.85	1.74	1.68	1.65	1.68	1.67	1.72	1.74	1.81	1.85	1.94	1.98	2.05	2.07	2.14	2.19
160	2.93	2.88	2.77	2.72	2.62	2.55	2.51	2.53	2.53	2.58	2.60	2.67	2.71	2.79	2.83	2.91	2.92	3.00	3.04
165	3.71	3.68	3.57	3.53	3.43	3.38	3.33	3.36	3.34	3.39	3.39	3.45	3.46	3.53	3.54	3.61	3.60	3.66	3.75
170	4.31	4.29	4.20	4.18	4.09	4.05	3.99	4.01	3.98	4.01	3.99	4.04	4.03	4.09	4.08	4.15	4.14	4.22	4.32
175	4.78	4.80	4.71	4.72	4.61	4.61	4.54	4.57	4.53	4.57	4.53	4.57	4.54	4.60	4.56	4.63	4.63	4.71	4.81
180	5.02	5.02	5.00	5.00	4.96	4.96	4.93	4.93	4.91	4.91	4.89	4.89	4.87	4.87	4.86	4.86	4.88	4.90	5.03

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot50-SQ-10W-3000K-36D-90RA	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	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	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	2266	2262	2259	2257	2255	2253	2252	2250	2249	2248	2248	2247	2246	2245	2244	2243	2243		
5	2210	2205	2199	2199	2186	2194	2196	2199	2204	2207	2202	2201	2198	2204	2203	2204	2202		
10	1998	1976	1938	1913	1853	1857	1850	1876	1884	1921	1936	1971	1987	2012	2022	2036	2048		
15	1401	1355	1283	1237	1145	1152	1139	1171	1181	1236	1266	1327	1358	1413	1433	1468	1490		
20	590	539	455	412	327	345	321	361	361	413	437	505	543	614	638	684	708		
25	74.1	59.7	44.2	37.1	28.2	28.5	28.0	31.1	32.5	38.0	41.3	50.4	58.1	75.4	83.9	97.4	120		
30	9.72	9.30	8.80	8.47	8.01	8.01	8.07	8.32	8.40	8.70	8.87	9.24	9.37	9.84	9.96	10.3	10.8		
35	5.43	5.29	5.18	5.10	4.93	4.94	5.00	5.06	5.08	5.15	5.22	5.23	5.24	5.36	5.40	5.45	5.56		
40	3.77	3.71	3.66	3.59	3.56	3.57	3.60	3.63	3.67	3.68	3.68	3.66	3.68	3.67	3.71	3.71	3.74		
45	2.79	2.74	2.74	2.70	2.71	2.68	2.74	2.75	2.79	2.80	2.81	2.74	2.78	2.76	2.79	2.78	2.82		
50	2.09	2.03	2.03	1.97	1.97	1.93	1.99	1.99	2.03	2.05	2.08	2.04	2.07	2.06	2.10	2.09	2.13		
55	1.49	1.43	1.41	1.32	1.31	1.25	1.31	1.30	1.35	1.37	1.42	1.40	1.45	1.47	1.51	1.48	1.52		
60	0.90	0.81	0.78	0.71	0.72	0.68	0.73	0.71	0.75	0.75	0.80	0.78	0.85	0.87	0.95	0.95	1.02		
65	0.36	0.29	0.29	0.20	0.18	0.14	0.18	0.16	0.22	0.23	0.29	0.30	0.38	0.36	0.44	0.42	0.47		
70	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.05	0.01	0.06		
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	0.03	0.00	0.06	0.04	0.08	0.04	0.08	0.03	0.06	0.01	0.04	0.00	0.01	0.00	0.00	0.00		
140	0.23	0.30	0.30	0.38	0.38	0.43	0.39	0.42	0.37	0.38	0.32	0.32	0.25	0.26	0.20	0.23	0.17		
145	0.72	0.81	0.84	0.92	0.97	1.01	0.98	0.99	0.93	0.93	0.85	0.84	0.76	0.74	0.67	0.69	0.62		
150	1.41	1.50	1.55	1.65	1.72	1.75	1.73	1.74	1.68	1.65	1.58	1.54	1.45	1.42	1.35	1.34	1.28		
155	2.23	2.34	2.39	2.48	2.56	2.60	2.57	2.57	2.51	2.48	2.39	2.35	2.26	2.22	2.15	2.14	2.07		
160	3.07	3.16	3.20	3.29	3.35	3.37	3.34	3.35	3.28	3.27	3.18	3.14	3.05	3.02	2.95	2.95	2.89		
165	3.75	3.83	3.83	3.91	3.94	3.98	3.93	3.95	3.88	3.87	3.78	3.76	3.66	3.65	3.59	3.60	3.53		
170	4.31	4.36	4.36	4.44	4.44	4.47	4.43	4.44	4.37	4.36	4.28	4.27	4.19	4.18	4.11	4.14	4.08		
175	4.78	4.84	4.80	4.85	4.82	4.87	4.81	4.84	4.77	4.79	4.71	4.72	4.65	4.66	4.60	4.66	4.60		
180	5.01	5.01	4.98	4.98	4.96	4.96	4.95	4.94	4.91	4.91	4.89	4.89	4.87	4.87	4.86	4.88	4.89		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Vando
Test Date: 2021-03-08

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.262
Humidity: 65.0%
Test Distance: 7.000m [K=1.0000]
Remarks: