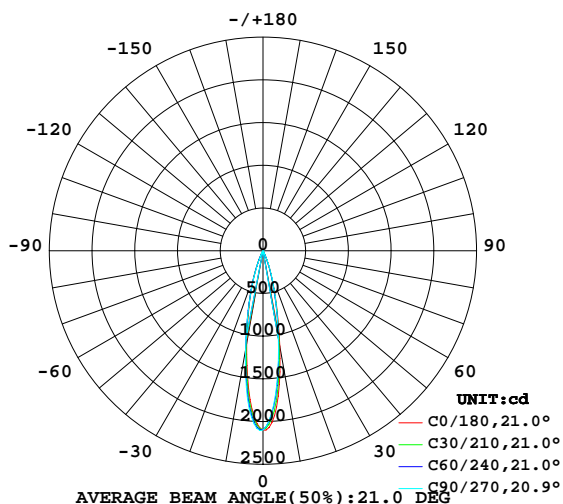


## LUMINAIRE PHOTOMETRIC TEST REPORT

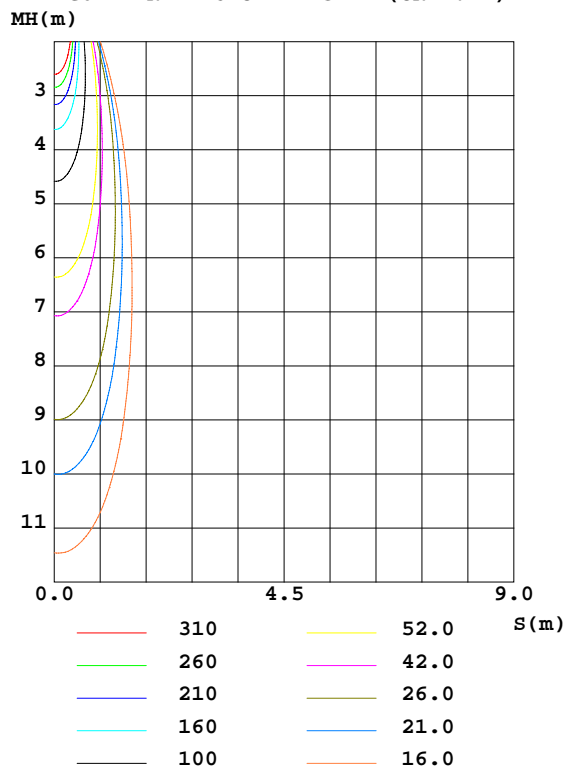
NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD Avenue Lighting	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	ML4135-BLK	Imax(cd)	2110	S/MH(C0/180)	0.36
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH(C90/270)	0.34
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	364.90	$\eta$ UP, DN(C0-180)	0.2, 48.4
NOMINAL FLUX(lm)	364.898	CIE CLASS	DIRECT	$\eta$ UP, DN(C180-360)	0.2, 51.2
LAMPS INSIDE	1	$\eta$ up(%)	0.4	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	24	$\eta$ 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: 2022-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\%lum, lamp$
10	1135	1066	1044	1072	1102	1157	1183	1155	0- 10	147.5	147.5	40.4,40.4
20	243.2	230.2	243.0	275.8	288.4	292.2	277.9	244.4	10- 20	162.2	309.6	84.9,84.9
30	18.71	17.02	18.45	20.69	20.78	20.40	19.39	17.97	20- 30	42.74	352.4	96.6,96.6
40	6.708	5.407	6.296	6.358	6.200	6.757	6.394	6.016	30- 40	7.126	359.5	98.5,98.5
50	1.819	1.661	1.782	1.897	1.947	1.963	1.772	1.715	40- 50	2.618	362.1	99.2,99.2
60	0.7370	0.7008	0.7495	0.8094	0.8671	0.8421	0.7745	0.6888	50- 60	1.095	363.2	99.5,99.5
70	0.0711	0.0708	0.0846	0.1204	0.1175	0.1179	0.1088	0.0566	60- 70	0.3677	363.6	99.6,99.6
80	0	0	0	0	0	0	0	0	70- 80	0.0173	363.6	99.6,99.6
90	0	0	0	0	0	0	0	0	80- 90	0	363.6	99.6,99.6
100	0	0	0	0	0	0	0	0	90-100	0	363.6	99.6,99.6
110	0	0	0	0	0	0	0	0	100-110	0	363.6	99.6,99.6
120	0	0	0	0	0	0	0	0	110-120	0	363.6	99.6,99.6
130	0	0	0	0	0	0	0	0	120-130	0	363.6	99.6,99.6
140	0.0375	0.0237	0.0191	0.0096	0.0144	0.0025	0	0.0166	130-140	0.0010	363.6	99.6,99.6
150	0.5277	0.5568	0.5577	0.4979	0.5012	0.4509	0.4383	0.4957	140-150	0.1241	363.7	99.7,99.7
160	1.537	1.576	1.587	1.519	1.469	1.404	1.387	1.444	150-160	0.4385	364.2	99.8,99.8
170	2.208	2.197	2.199	2.150	2.143	2.074	2.062	2.109	160-170	0.5203	364.7	99.9,99.9
180	2.312	2.260	2.251	2.260	2.312	2.263	2.246	2.258	170-180	0.2102	364.9	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

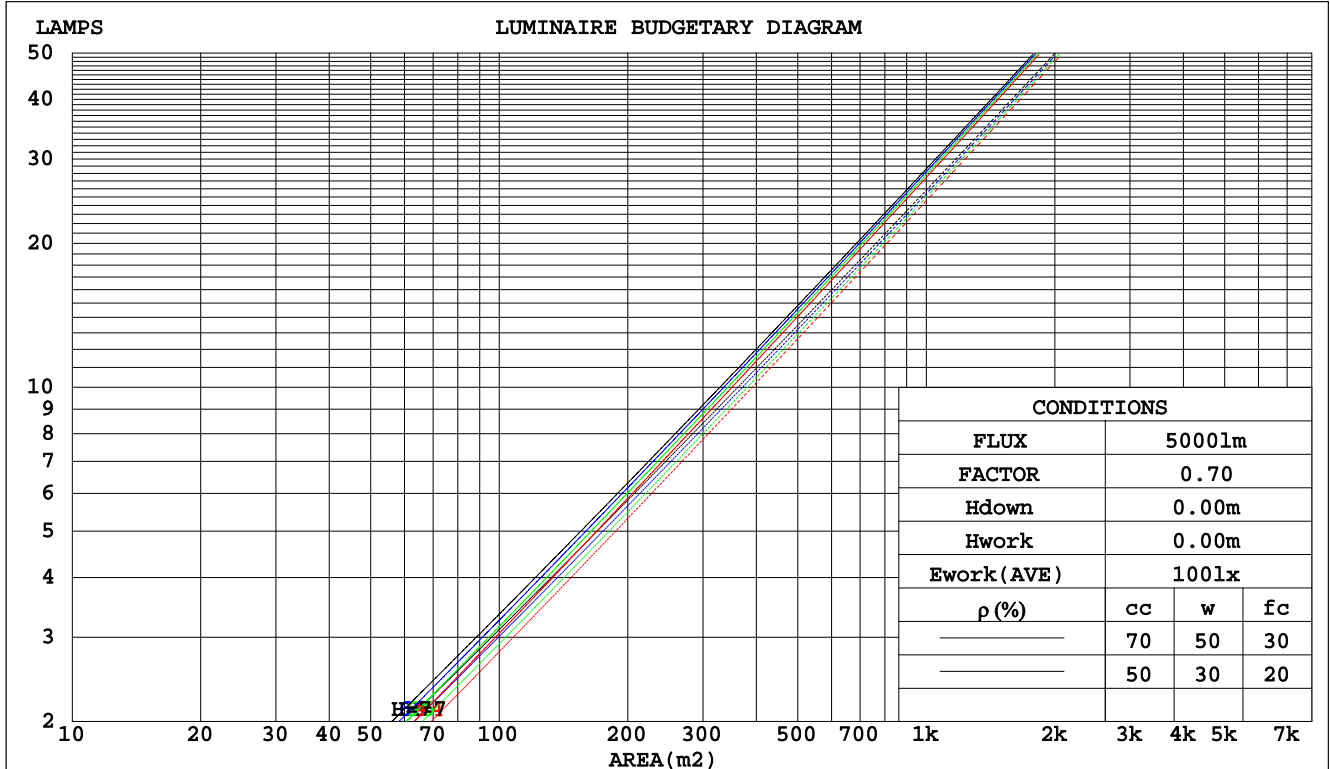
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:tang  
Test Date:2022-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-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-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc																
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	1.06	1.04	1.02	1.03	1.01	.99	1.00	.99	.97	.98	.96	.95	.94
3.0	1.04	1.00	.98	1.03	.99	.97	1.00	.97	.95	.98	.96	.94	.96	.94	.92	.91
4.0	1.00	.96	.94	.99	.96	.93	.97	.94	.92	.95	.93	.91	.93	.91	.90	.89
5.0	.97	.93	.90	.96	.92	.90	.94	.91	.89	.93	.90	.88	.91	.89	.87	.86
6.0	.94	.90	.87	.93	.89	.87	.92	.89	.86	.91	.88	.86	.89	.87	.85	.84
7.0	.91	.87	.84	.90	.87	.84	.89	.86	.84	.88	.86	.83	.87	.85	.83	.82
8.0	.89	.85	.82	.88	.84	.82	.87	.84	.82	.86	.83	.81	.85	.83	.81	.80
9.0	.86	.82	.80	.86	.82	.80	.85	.82	.80	.84	.81	.79	.84	.81	.79	.78
10.0	.84	.80	.78	.84	.80	.78	.83	.80	.78	.82	.80	.77	.82	.79	.77	.76



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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

WEC AND CCEC

NAME: spot35-SQ-s-3000k-RA90-15D	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	.075	.024	.125	.071	.023	.112	.064	.021	.101	.058	.019	.090	.052	.017	
2.0	.121	.066	.020	.116	.064	.020	.105	.059	.018	.096	.054	.017	.087	.049	.015	
3.0	.112	.060	.018	.108	.058	.017	.099	.054	.016	.091	.050	.015	.084	.046	.014	
4.0	.105	.055	.016	.101	.053	.016	.094	.050	.015	.087	.047	.014	.081	.044	.013	
5.0	.099	.050	.015	.095	.049	.014	.089	.046	.014	.083	.044	.013	.078	.042	.013	
6.0	.093	.047	.013	.090	.046	.013	.085	.044	.013	.080	.042	.012	.075	.040	.012	
7.0	.088	.044	.012	.086	.043	.012	.081	.041	.012	.077	.039	.011	.073	.038	.011	
8.0	.084	.041	.012	.082	.040	.011	.078	.039	.011	.074	.038	.011	.070	.036	.011	
9.0	.080	.039	.011	.078	.038	.011	.075	.037	.010	.071	.036	.010	.068	.035	.010	
10.0	.077	.037	.010	.075	.036	.010	.072	.035	.010	.069	.034	.010	.066	.033	.010	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.171	.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	.052	.047	.043	.017	.015	.014	
3.0	.137	.116	.099	.117	.100	.086	.081	.070	.060	.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	.060	.067	.053	.043	.039	.031	.025	.013	.010	.008	
6.0	.104	.078	.059	.090	.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	.044	.077	.055	.039	.054	.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	.046	.030	.047	.032	.021	.028	.019	.013	.009	.006	.004	

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

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity:65.0%  
 Test Distance:7.100m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

NAME: spot35-SQ-s-3000k-RA90-15D					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	-10.6	-10.0	-10.4	-9.9	-9.7	-11.0	-10.4	-10.8	-10.2	-10.1					
3H	-10.8	-10.2	-10.5	-10.0	-9.8	-11.1	-10.5	-10.8	-10.3	-10.1					
4H	-10.8	-10.3	-10.6	-10.1	-9.9	-11.2	-10.6	-10.9	-10.4	-10.2					
6H	-10.9	-10.4	-10.7	-10.2	-9.9	-11.2	-10.7	-11.0	-10.5	-10.2					
8H	-11.0	-10.5	-10.7	-10.2	-10.0	-11.3	-10.8	-11.0	-10.5	-10.3					
12H	-11.0	-10.5	-10.7	-10.3	-10.0	-11.3	-10.8	-11.0	-10.6	-10.3					
4H 2H	-10.8	-10.2	-10.5	-10.0	-9.8	-11.1	-10.5	-10.8	-10.3	-10.1					
3H	-10.9	-10.4	-10.6	-10.2	-9.9	-11.2	-10.7	-10.9	-10.5	-10.2					
4H	-11.0	-10.6	-10.7	-10.3	-10.0	-11.3	-10.9	-11.0	-10.6	-10.3					
6H	-11.1	-10.7	-10.7	-10.4	-10.1	-11.4	-11.0	-11.0	-10.7	-10.3					
8H	-11.2	-10.8	-10.8	-10.5	-10.1	-11.5	-11.1	-11.1	-10.7	-10.4					
12H	-11.2	-10.9	-10.8	-10.5	-10.1	-11.5	-11.2	-11.1	-10.8	-10.4					
8H 4H	-11.2	-10.8	-10.8	-10.5	-10.1	-11.5	-11.1	-11.1	-10.7	-10.4					
6H	-11.3	-11.0	-10.9	-10.6	-10.2	-11.6	-11.3	-11.2	-10.9	-10.5					
8H	-11.4	-11.1	-10.9	-10.7	-10.2	-11.6	-11.4	-11.2	-11.0	-10.5					
12H	-11.4	-11.2	-10.9	-10.7	-10.3	-11.7	-11.5	-11.2	-11.0	-10.6					
12H 4H	-11.2	-10.9	-10.8	-10.5	-10.1	-11.5	-11.2	-11.1	-10.8	-10.4					
6H	-11.4	-11.1	-10.9	-10.7	-10.2	-11.6	-11.4	-11.2	-11.0	-10.5					
8H	-11.4	-11.2	-10.9	-10.7	-10.3	-11.7	-11.5	-11.2	-11.0	-10.6					
Variations with the observer position at spacings:															
S = 1.0H	+ 3.1 / - 5.4					+ 3.7 / - 5.1									
1.5H	+ 4.7 / - 3.9					+ 5.5 / - 3.3									
2.0H	+ 4.5 / - 5.2					+ 4.1 / - 4.1									

CIE Pub.117 Corrected 364.9 lm Total Lamp Luminous Flux. (8log(F/F0) = -3.5)

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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

## UTILIZATION FACTORS TABLE

NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

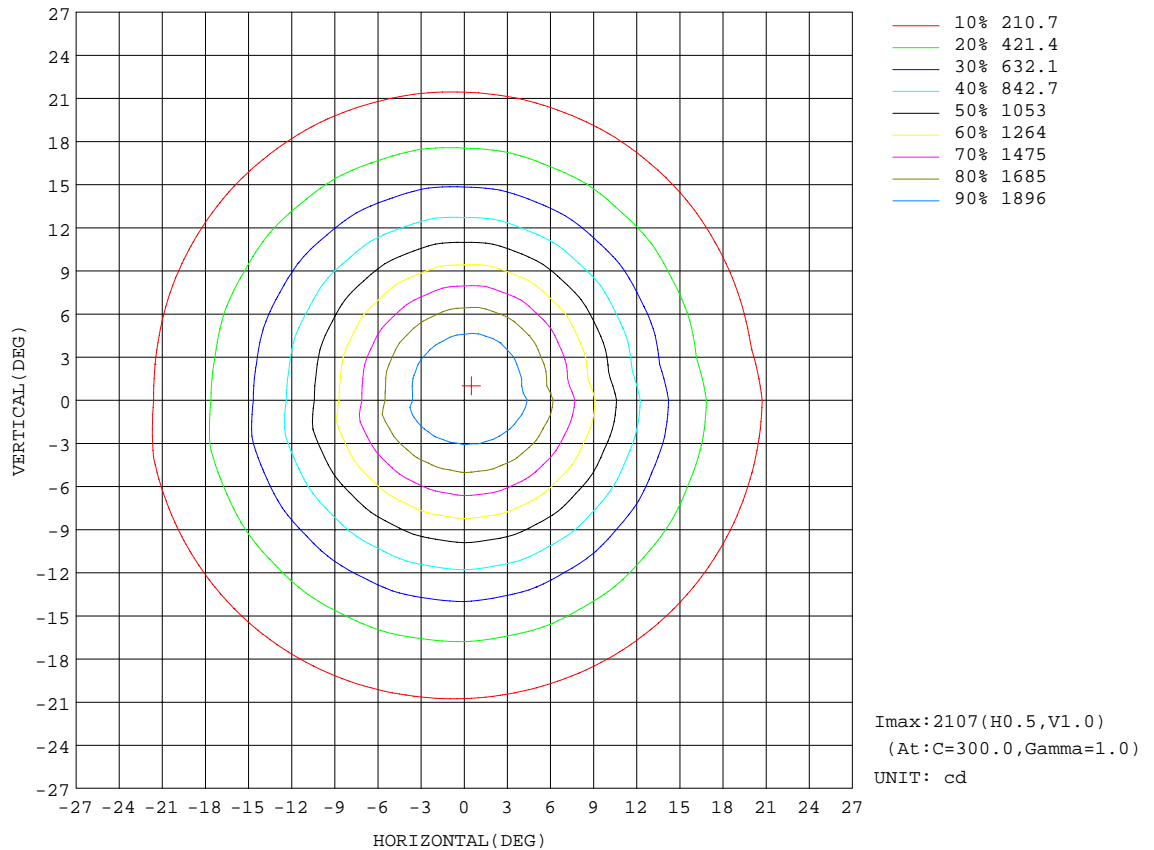
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	82	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	91	89	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	108	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: tang  
 Test Date: 2022-04-09

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

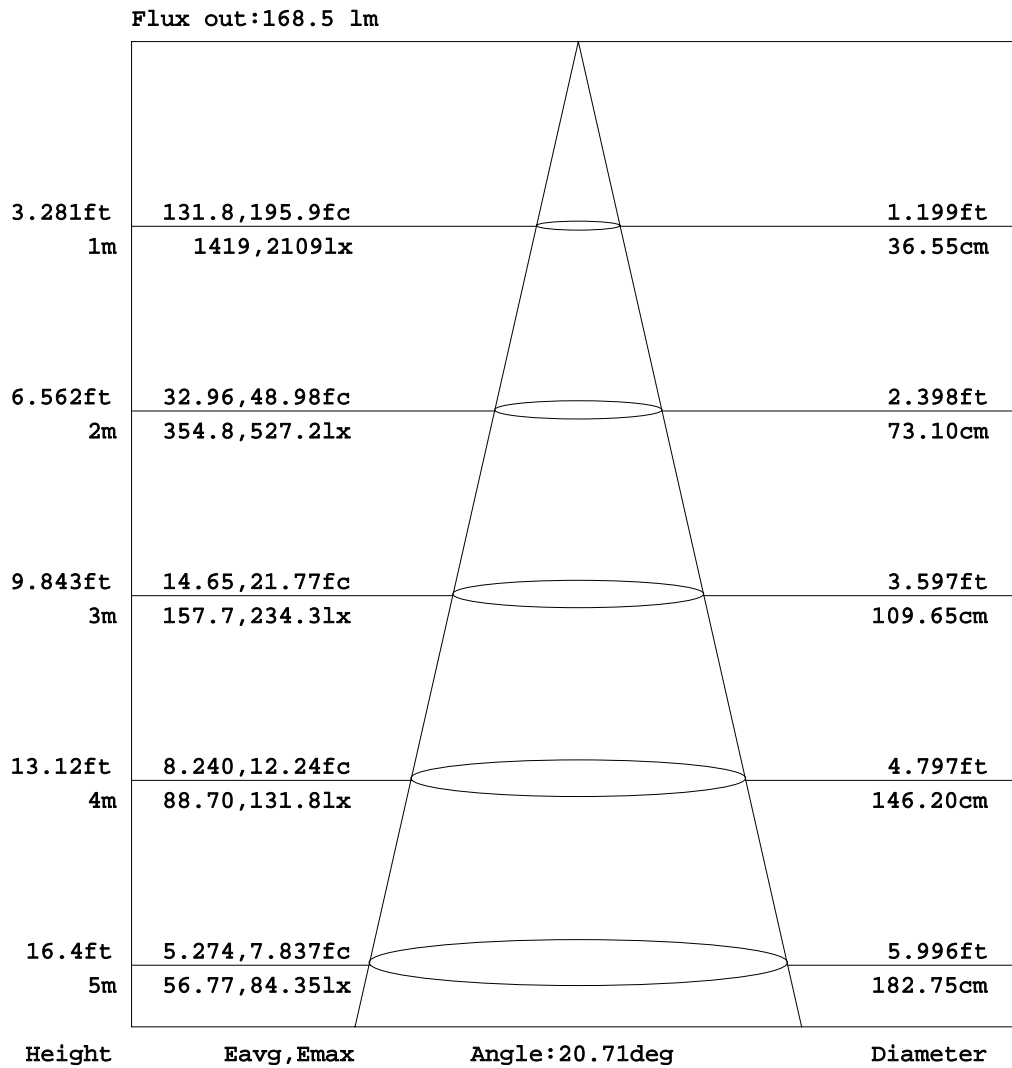


C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: tang  
 Test Date: 2022-04-09

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

AAI Figure

NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:



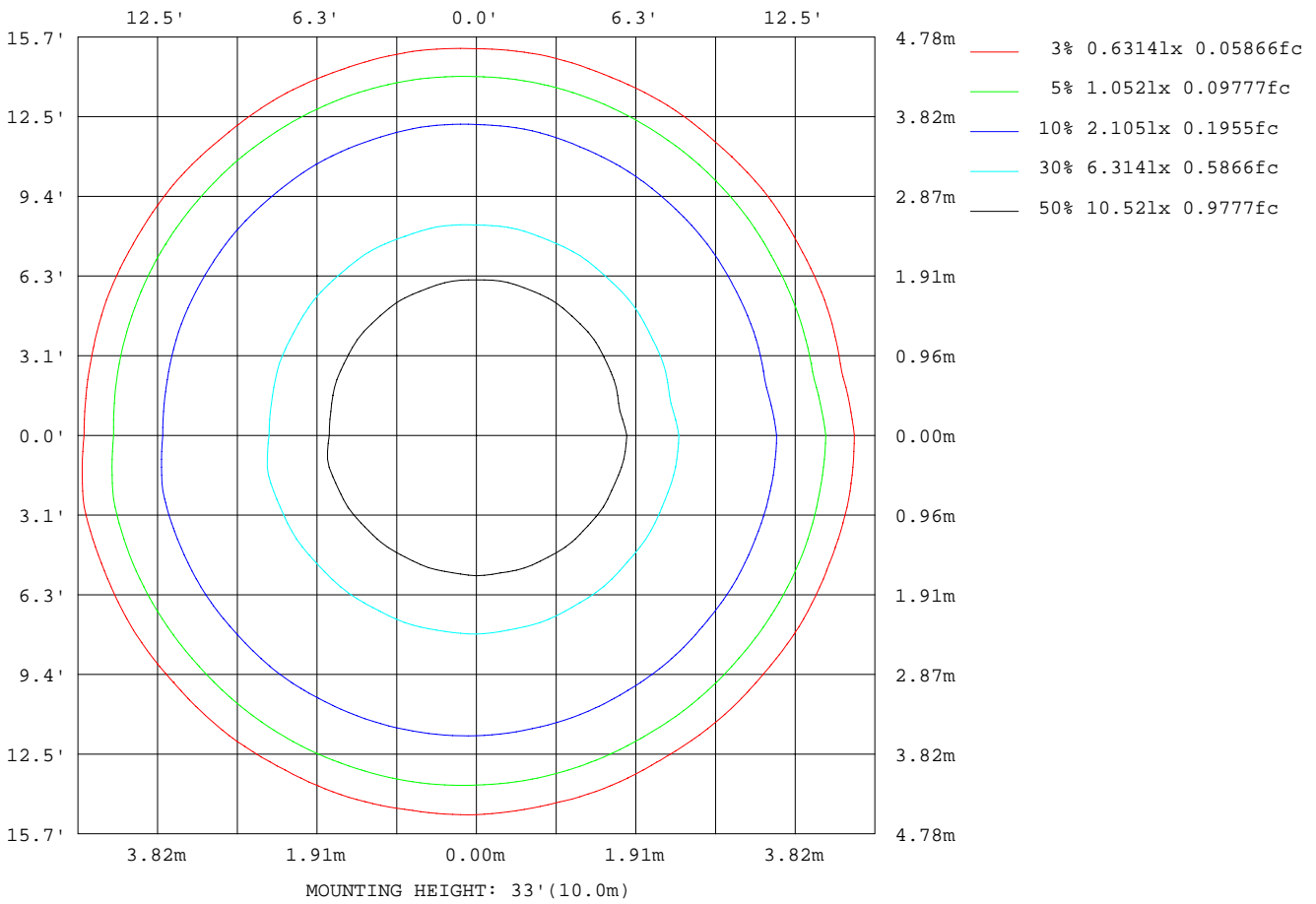
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity:65.0%  
 Test Distance:7.100m [K=1.0000]  
 Remarks:

ISOLUX DIAGRAM

NAME: spot35-SQ-s-3000k-RA90-15D	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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

Average Luminance Table(CIBSE)

NAME: spot35-SQ-s-3000k-RA90-15D	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	364.898	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 deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	20	19	20	19	20	19	20	20	21	21	21	21	22	21	23	22	23	23	24
60	15	13	14	13	14	14	15	14	15	15	16	15	17	16	17	16	17	17	17
65	7	6	7	6	7	6	7	7	8	8	9	8	10	9	10	9	10	10	10
70	2	1	2	1	3	1	3	2	3	2	4	3	4	3	4	3	4	3	3
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	specified	maximum	specified
		calculated	maximum	measured	maximum
Category 1	55 to 90	24	200	---	500
Category 2	65 to 90	10	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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity:65.0%  
 Test Distance:7.100m [K=1.0000]  
 Remarks:

Average Luminance Table(CIBSE)

NAME: spot35-SQ-s-3000k-RA90-15D	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	364.898	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	20	19	20	19	20	19	20	20	21	21	21	21	22	21	23	22	23	23	24
60	15	13	14	13	14	14	15	14	15	15	16	15	17	16	17	16	17	17	17
65	7	6	7	6	7	6	7	7	8	8	9	8	10	9	10	9	10	10	10
70	2	1	2	1	3	1	3	2	3	2	4	3	4	3	4	3	4	3	3
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	24	1000	1500	200	500
65 to 90	10	1000	1500	200	500

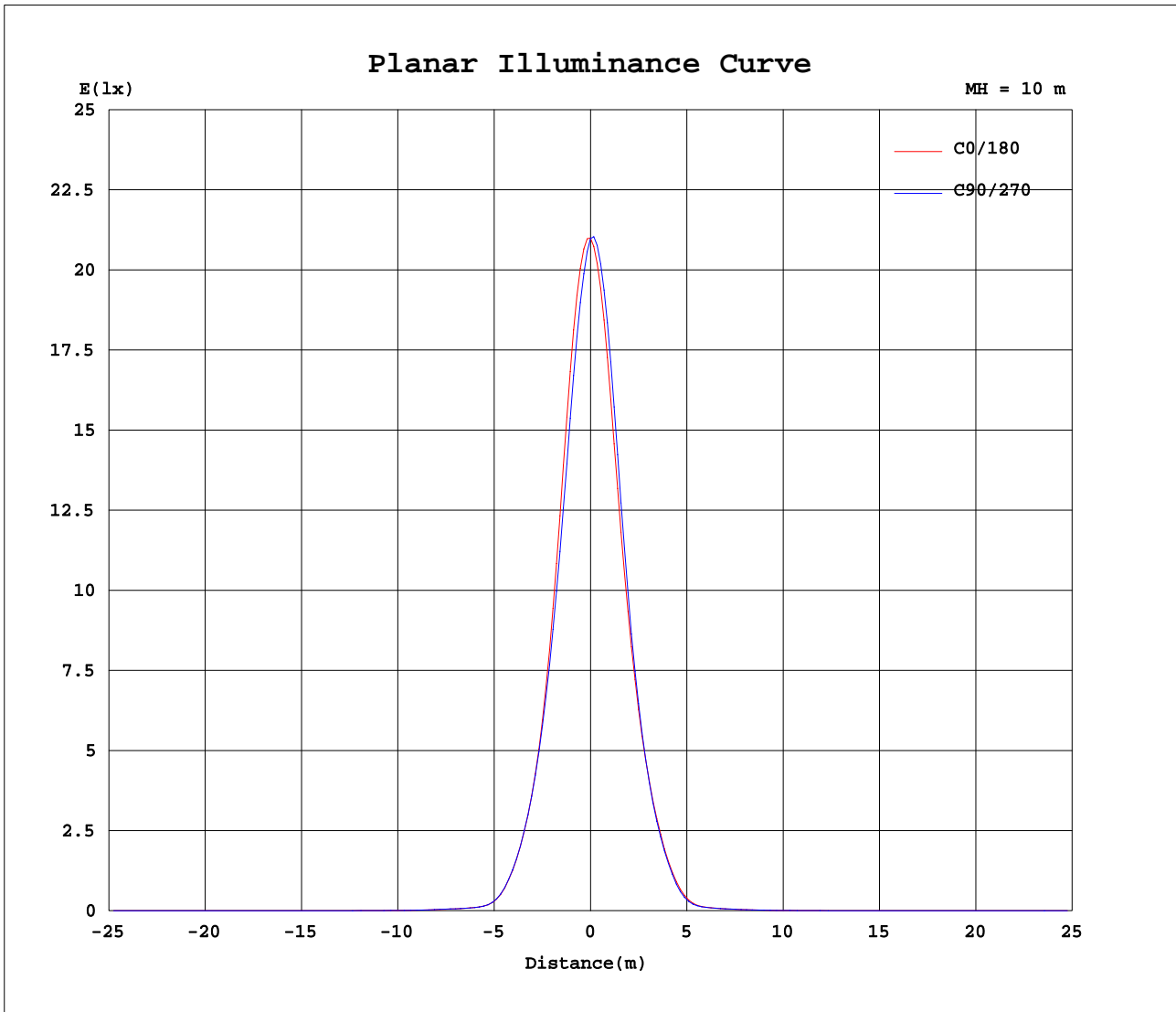
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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 GO-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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	2100	2096	2095	2094	2093	2094	2093	2096	2095	2098	2097	2100	2100	2102	2102	2103	2102	2102	2100
5	1834	1818	1789	1776	1747	1737	1713	1707	1688	1690	1679	1690	1690	1710	1717	1744	1755	1782	1747
10	1135	1123	1094	1089	1066	1066	1048	1050	1036	1044	1035	1049	1049	1069	1076	1102	1111	1138	1102
15	560	555	540	541	531	537	533	543	539	551	550	563	564	581	586	606	613	631	605
20	243	239	235	232	230	230	232	234	239	243	249	255	263	274	277	290	294	306	288
25	68.8	68.4	65.6	65.0	62.6	63.2	62.6	65.2	66.6	70.5	72.2	77.1	79.5	85.0	87.4	93.0	95.5	101	90.0
30	18.7	18.6	17.9	17.6	17.0	17.0	16.9	17.4	17.6	18.4	18.6	19.4	19.7	20.6	20.8	21.6	21.9	22.7	20.8
35	11.6	11.3	10.9	10.5	10.2	10.1	10.1	10.1	10.3	11.5	10.9	11.2	11.4	11.6	11.5	11.7	11.8	11.9	11.5
40	6.71	6.44	5.96	5.74	5.42	5.40	5.31	5.41	5.48	6.30	5.96	6.30	6.36	6.44	6.27	6.36	6.29	6.44	6.20
45	3.36	3.19	3.01	2.88	2.79	2.75	2.76	2.78	2.85	3.15	3.26	3.26	3.28	3.31	3.28	3.27	3.27	3.31	3.20
50	1.82	1.74	1.73	1.67	1.68	1.64	1.68	1.66	1.72	1.78	1.80	1.82	1.88	1.87	1.92	1.91	1.95	1.93	1.95
55	1.16	1.09	1.14	1.09	1.14	1.11	1.16	1.13	1.19	1.19	1.21	1.20	1.26	1.23	1.29	1.28	1.34	1.32	1.35
60	0.74	0.67	0.70	0.66	0.72	0.68	0.73	0.71	0.76	0.75	0.79	0.77	0.83	0.78	0.84	0.81	0.86	0.84	0.87
65	0.28	0.24	0.28	0.25	0.30	0.26	0.31	0.29	0.34	0.33	0.36	0.35	0.40	0.36	0.42	0.38	0.44	0.41	0.42
70	0.07	0.03	0.09	0.04	0.09	0.05	0.10	0.07	0.11	0.08	0.13	0.09	0.14	0.10	0.14	0.10	0.15	0.12	0.12
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	0.01	0.00	0.01	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	0.04	0.08	0.02	0.06	0.00	0.04	0.00	0.05	0.00	0.02	0.00	0.03	0.00	0.02	0.00	0.02	0.00	0.02	0.01
145	0.21	0.26	0.20	0.24	0.20	0.24	0.19	0.24	0.18	0.21	0.16	0.22	0.16	0.20	0.16	0.19	0.14	0.18	0.18
150	0.53	0.57	0.53	0.58	0.54	0.58	0.54	0.57	0.53	0.56	0.51	0.56	0.51	0.52	0.48	0.51	0.45	0.49	0.50
155	1.00	1.05	1.02	1.06	1.03	1.07	1.03	1.07	1.02	1.05	1.01	1.04	0.99	1.02	0.97	0.98	0.93	0.96	0.96
160	1.54	1.58	1.55	1.59	1.56	1.60	1.56	1.59	1.55	1.59	1.53	1.57	1.52	1.54	1.49	1.51	1.46	1.49	1.47
165	1.96	2.01	1.96	2.01	1.96	2.00	1.96	1.99	1.95	2.00	1.94	1.98	1.92	1.95	1.90	1.93	1.88	1.92	1.90
170	2.21	2.25	2.18	2.24	2.18	2.22	2.17	2.21	2.15	2.20	2.15	2.19	2.14	2.18	2.12	2.17	2.12	2.17	2.14
175	2.28	2.31	2.26	2.28	2.24	2.25	2.22	2.24	2.22	2.25	2.22	2.26	2.21	2.25	2.20	2.26	2.22	2.28	2.27
180	2.31	2.31	2.29	2.29	2.26	2.26	2.25	2.25	2.25	2.25	2.26	2.26	2.26	2.26	2.26	2.27	2.27	2.29	2.31

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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: spot35-SQ-s-3000k-RA90-15D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: VD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C( DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	2096	2095	2094	2093	2094	2093	2096	2095	2098	2097	2100	2100	2102	2102	2103	2102	2102		
5	1755	1778	1785	1805	1809	1828	1833	1853	1857	1871	1867	1872	1858	1852	1829	1818	1790		
10	1105	1129	1134	1157	1158	1177	1173	1191	1183	1195	1180	1181	1158	1152	1123	1113	1080		
15	605	618	616	627	623	632	624	629	616	615	599	594	575	569	550	544	525		
20	288	295	291	295	289	294	286	288	278	276	264	257	248	241	233	227	222		
25	90.3	92.8	91.1	91.9	88.8	89.2	85.5	85.1	81.0	79.6	74.7	72.9	68.6	67.2	63.6	62.7	59.6		
30	20.6	20.7	20.5	20.6	20.2	20.4	20.0	19.9	19.4	19.1	18.5	18.4	18.0	18.0	17.7	17.7	17.4		
35	11.5	11.6	11.7	11.9	12.0	12.1	12.0	11.8	11.5	11.3	11.0	10.9	10.8	10.9	10.9	10.9	11.0		
40	6.16	6.33	6.41	6.68	6.83	7.02	6.84	6.69	6.39	6.29	6.06	6.10	5.97	6.06	6.04	6.21	6.25		
45	3.21	3.26	3.31	3.42	3.48	3.53	3.42	3.31	3.17	3.12	3.03	3.03	2.99	3.01	3.03	3.10	3.15		
50	1.98	1.96	1.98	1.96	1.97	1.94	1.92	1.81	1.77	1.75	1.75	1.73	1.72	1.71	1.74	1.72	1.77		
55	1.38	1.33	1.34	1.27	1.29	1.24	1.24	1.16	1.18	1.14	1.17	1.11	1.13	1.08	1.12	1.08	1.14		
60	0.90	0.85	0.87	0.82	0.86	0.81	0.82	0.75	0.77	0.73	0.76	0.70	0.71	0.66	0.69	0.65	0.71		
65	0.45	0.41	0.44	0.39	0.43	0.39	0.40	0.35	0.38	0.32	0.35	0.29	0.30	0.25	0.27	0.22	0.25		
70	0.17	0.11	0.15	0.10	0.14	0.09	0.13	0.07	0.11	0.05	0.09	0.04	0.09	0.03	0.08	0.02	0.08		
75	0.01	0.00	0.01	0.00	0.00	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	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.02	0.00	0.03	0.00	0.04	0.00		
145	0.13	0.18	0.13	0.17	0.13	0.17	0.14	0.17	0.14	0.18	0.14	0.20	0.16	0.21	0.17	0.22	0.19		
150	0.44	0.48	0.44	0.47	0.43	0.47	0.43	0.47	0.44	0.47	0.44	0.50	0.47	0.52	0.49	0.55	0.52		
155	0.91	0.94	0.89	0.91	0.87	0.91	0.88	0.91	0.88	0.92	0.89	0.94	0.91	0.97	0.95	1.00	0.98		
160	1.41	1.44	1.39	1.43	1.38	1.42	1.37	1.42	1.39	1.43	1.39	1.44	1.42	1.47	1.45	1.50	1.48		
165	1.83	1.86	1.81	1.84	1.81	1.84	1.79	1.84	1.81	1.85	1.82	1.87	1.83	1.89	1.85	1.91	1.88		
170	2.09	2.12	2.07	2.09	2.06	2.10	2.06	2.10	2.06	2.11	2.07	2.11	2.08	2.14	2.10	2.16	2.11		
175	2.20	2.23	2.17	2.21	2.17	2.22	2.17	2.23	2.18	2.23	2.18	2.23	2.19	2.25	2.21	2.27	2.22		
180	2.30	2.30	2.27	2.27	2.26	2.26	2.25	2.25	2.25	2.26	2.26	2.26	2.26	2.26	2.26	2.27	2.29		

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 GO-2000B\_V1 SYSTEM V2.0.262  
 Humidity: 65.0%  
 Test Distance: 7.100m [K=1.0000]  
 Remarks: