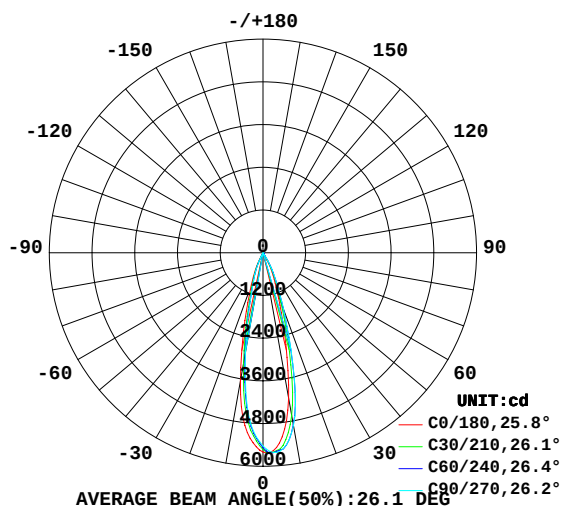


LUMINAIRE PHOTOMETRIC TEST REPORT

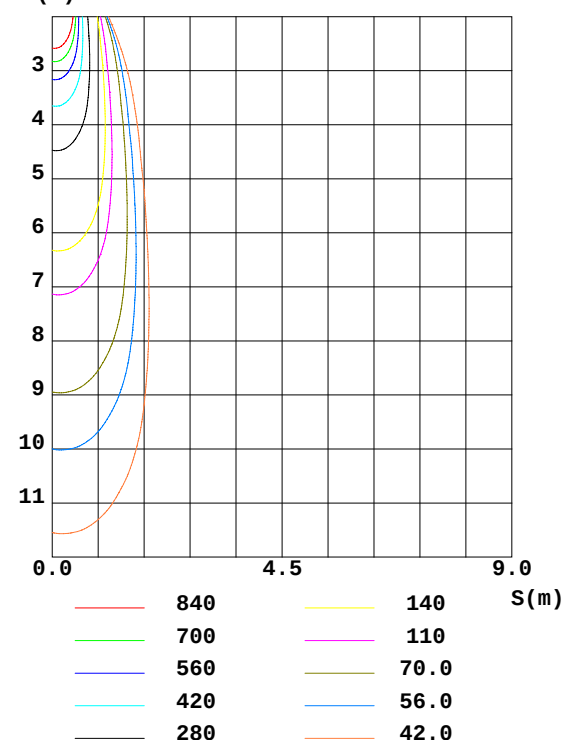
NAME:CL-Spot70 3000k-RA90-24D	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 74.12 lm/W			
MODEL		I _{max} (cd)	5640	S/MH(C0/180)	0.45
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	0.52
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1352.0	η UP, DN(C0-180)	0.2, 61.1
NOMINAL FLUX(lm)	1352.02	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.2, 38.5
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:0
Test Date:2022-04-22

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

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	4156	4797	4931	4423	3659	3016	2826	3186	0- 10	447.0	447.0	33.1, 33.1
20	1179	1588	1683	1336	965.6	753.7	719.3	835.7	10- 20	614.5	1062	78.5, 78.5
30	141.8	339.4	376.2	205.3	59.96	29.90	27.42	35.12	20- 30	249.9	1311	97, 97
40	14.69	16.86	17.51	15.27	12.26	9.386	10.68	11.75	30- 40	24.30	1336	98.8, 98.8
50	5.547	7.118	7.432	6.329	5.170	3.944	4.387	4.610	40- 50	6.893	1343	99.3, 99.3
60	2.003	2.717	2.851	2.113	1.429	1.235	1.059	1.366	50- 60	3.158	1346	99.5, 99.5
70	0.0577	0.2647	0.2538	0.1039	0	0	0	0	60- 70	0.7761	1347	99.6, 99.6
80	0	0	0	0	0	0	0	0	70- 80	0.0098	1347	99.6, 99.6
90	0	0	0	0	0	0	0	0	80- 90	0	1347	99.6, 99.6
100	0	0	0	0	0	0	0	0	90-100	0	1347	99.6, 99.6
110	0	0	0	0	0	0	0	0	100-110	0	1347	99.6, 99.6
120	0	0	0	0	0	0	0	0	110-120	0	1347	99.6, 99.6
130	0	0	0	0	0.0428	0.0756	0.0704	0.0378	120-130	0.0034	1347	99.6, 99.6
140	0.3860	0.2690	0.2791	0.3468	0.6621	0.8851	0.9189	0.7223	130-140	0.1596	1347	99.6, 99.6
150	2.220	1.770	1.692	1.975	2.627	3.193	3.296	2.835	140-150	0.8272	1348	99.7, 99.7
160	5.523	4.884	4.750	5.103	5.841	6.350	6.421	5.954	150-160	1.800	1349	99.8, 99.8
170	8.125	7.765	7.665	7.737	8.184	8.190	8.088	7.851	160-170	1.923	1351	99.9, 99.9
180	8.914	8.749	8.622	8.464	8.938	8.754	8.589	8.466	170-180	0.7852	1352	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

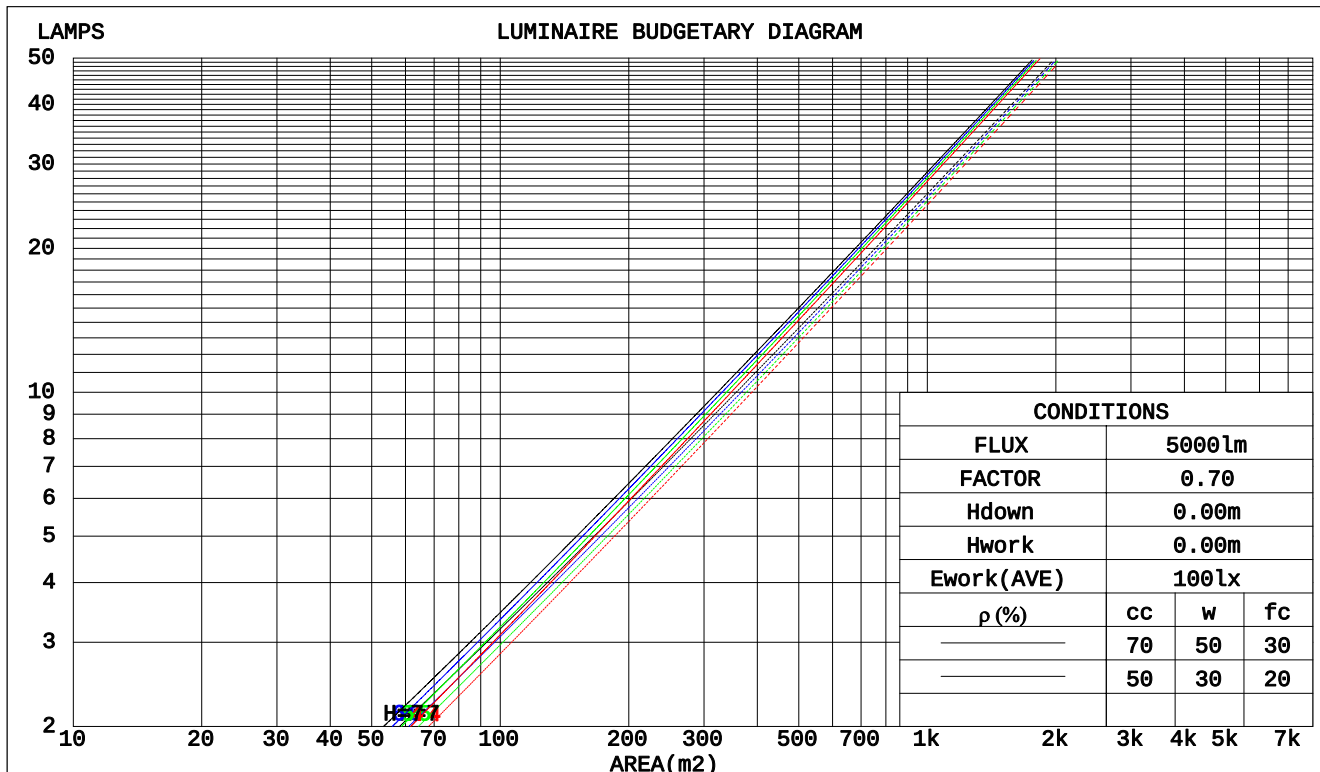
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

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

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.13	1.11	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.99	.99	.98	.96
2.0	1.07	1.04	1.02	1.06	1.03	1.01	1.03	1.00	.99	.00	.98	.96	.97	.96	.94	.93
3.0	1.03	.99	.96	1.02	.98	.96	.99	.96	.94	.97	.94	.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	.90	.88	.93	.89	.87	.91	.88	.86	.90	.87	.85	.84
6.0	.92	.88	.85	.91	.87	.84	.90	.86	.84	.88	.86	.83	.87	.85	.83	.82
7.0	.89	.85	.82	.88	.84	.81	.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	.83	.79	.77	.83	.79	.76	.82	.79	.76	.81	.78	.76	.81	.78	.76	.75
10.0	.81	.77	.74	.81	.77	.74	.80	.76	.74	.79	.76	.74	.79	.76	.74	.73



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

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

WEC AND CCEC

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

ρ _{cc}	80%			70%			50%			30%			10%			0	
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.137	.078	.025	.130	.074	.024	.118	.068	.022	.106	.061	.020	.096	.055	.018		
2.0	.127	.070	.021	.122	.067	.021	.111	.062	.019	.102	.057	.018	.093	.052	.017		
3.0	.119	.063	.019	.114	.061	.018	.105	.057	.017	.097	.053	.016	.090	.050	.015		
4.0	.111	.058	.017	.107	.056	.017	.100	.053	.016	.093	.050	.015	.087	.047	.014		
5.0	.105	.053	.015	.102	.052	.015	.095	.050	.015	.089	.047	.014	.084	.045	.013		
6.0	.099	.050	.014	.096	.049	.014	.091	.047	.014	.086	.045	.013	.081	.043	.013		
7.0	.094	.047	.013	.092	.046	.013	.087	.044	.013	.083	.042	.012	.079	.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	.081	.040	.011	.077	.039	.011	.074	.038	.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	.194	.194	.194	.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	.019	.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	.082	.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	.116	.089	.069	.099	.077	.060	.068	.054	.042	.040	.032	.025	.013	.010	.008	
6.0	.107	.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	.051	.034	.052	.036	.024	.030	.021	.014	.010	.007	.005	
10.0	.082	.054	.034	.071	.047	.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:0
Test Date:2022-04-22

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

Uncorrected UGR Table

NAME: Spot70-3000K-RA90-20W-24D.						TYPE:					WEIGHT:				
DIM.:						SPEC.:					SERIAL No.:				
MFR.: 0						SUR.:					PROTECTION ANGLE:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3					
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3					
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2					
Room dimensions						Viewed crosswise					Viewed endwise				
x = 2H y = 2H	-7.7	-7.0	-7.5	-6.9	-6.7	-2.1	-1.4	-1.9	-1.3	-1.1					
3H	-7.8	-7.2	-7.5	-7.0	-6.8	-2.2	-1.6	-2.0	-1.4	-1.2					
4H	-7.9	-7.3	-7.6	-7.1	-6.9	-2.3	-1.7	-2.0	-1.5	-1.3					
6H	-7.9	-7.4	-7.7	-7.2	-6.9	-2.4	-1.8	-2.1	-1.6	-1.3					
8H	-8.0	-7.5	-7.7	-7.2	-7.0	-2.4	-1.9	-2.1	-1.6	-1.4					
12H	-8.0	-7.5	-7.7	-7.3	-7.0	-2.5	-1.9	-2.1	-1.7	-1.4					
4H 2H	-7.7	-7.1	-7.4	-6.9	-6.7	-2.3	-1.7	-2.0	-1.5	-1.2					
3H	-7.8	-7.3	-7.5	-7.1	-6.8	-2.4	-1.9	-2.1	-1.6	-1.4					
4H	-7.9	-7.5	-7.6	-7.2	-6.9	-2.5	-2.0	-2.2	-1.7	-1.4					
6H	-8.0	-7.6	-7.7	-7.3	-6.9	-2.6	-2.2	-2.2	-1.9	-1.5					
8H	-8.1	-7.7	-7.7	-7.4	-7.0	-2.7	-2.3	-2.3	-1.9	-1.6					
12H	-8.1	-7.8	-7.7	-7.4	-7.0	-2.7	-2.4	-2.3	-2.0	-1.6					
8H 4H	-8.1	-7.7	-7.7	-7.3	-7.0	-2.7	-2.3	-2.3	-1.9	-1.6					
6H	-8.2	-7.9	-7.8	-7.5	-7.1	-2.8	-2.5	-2.3	-2.1	-1.6					
8H	-8.3	-8.0	-7.8	-7.6	-7.1	-2.8	-2.6	-2.4	-2.1	-1.7					
12H	-8.3	-8.1	-7.9	-7.6	-7.2	-2.9	-2.7	-2.4	-2.2	-1.7					
12H 4H	-8.1	-7.8	-7.7	-7.4	-7.0	-2.7	-2.4	-2.3	-2.0	-1.6					
6H	-8.3	-8.0	-7.8	-7.6	-7.1	-2.8	-2.6	-2.4	-2.1	-1.7					
8H	-8.3	-8.1	-7.9	-7.6	-7.2	-2.9	-2.7	-2.4	-2.2	-1.7					
Variations with the observer position at spacings:															
S = 1.0H	+ 1.9 / - 3.7					+ 1.7 / - 3.4									
1.5H	+ 2.0 / - 2.2					+ 2.7 / - 2.4									
2.0H	+ 3.1 / - 4.2					+ 3.3 / - 4.2									

CIE Pub.117 Corrected 1352 lm Total Lamp Luminous Flux.(8log(F/F0) = 1.0)

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

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

UTILIZATION FACTORS TABLE

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

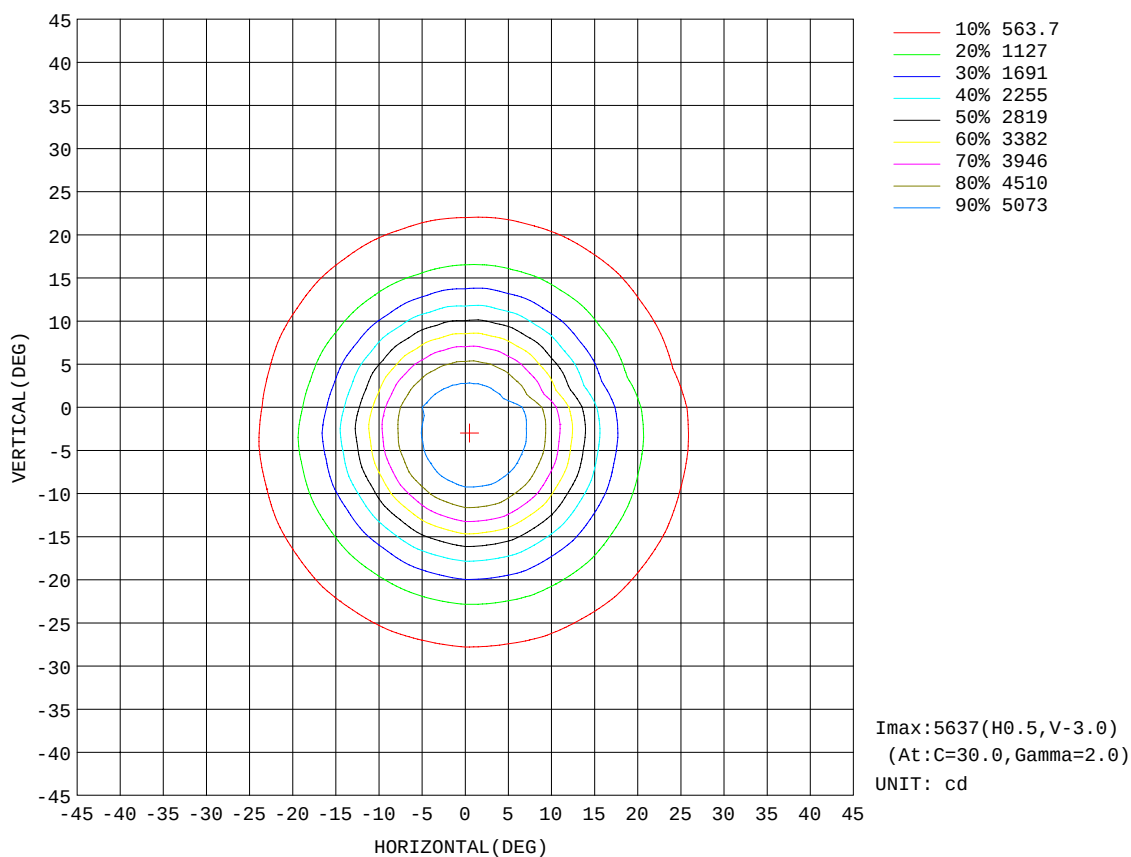
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	82	90	85	82	90	85	81	78
0.80	98	93	89	97	92	89	96	92	89	85
1.00	102	97	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	108	103	100	106	103	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	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:0
Test Date:2022-04-22

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

ISOCANDELA DIAGRAM

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

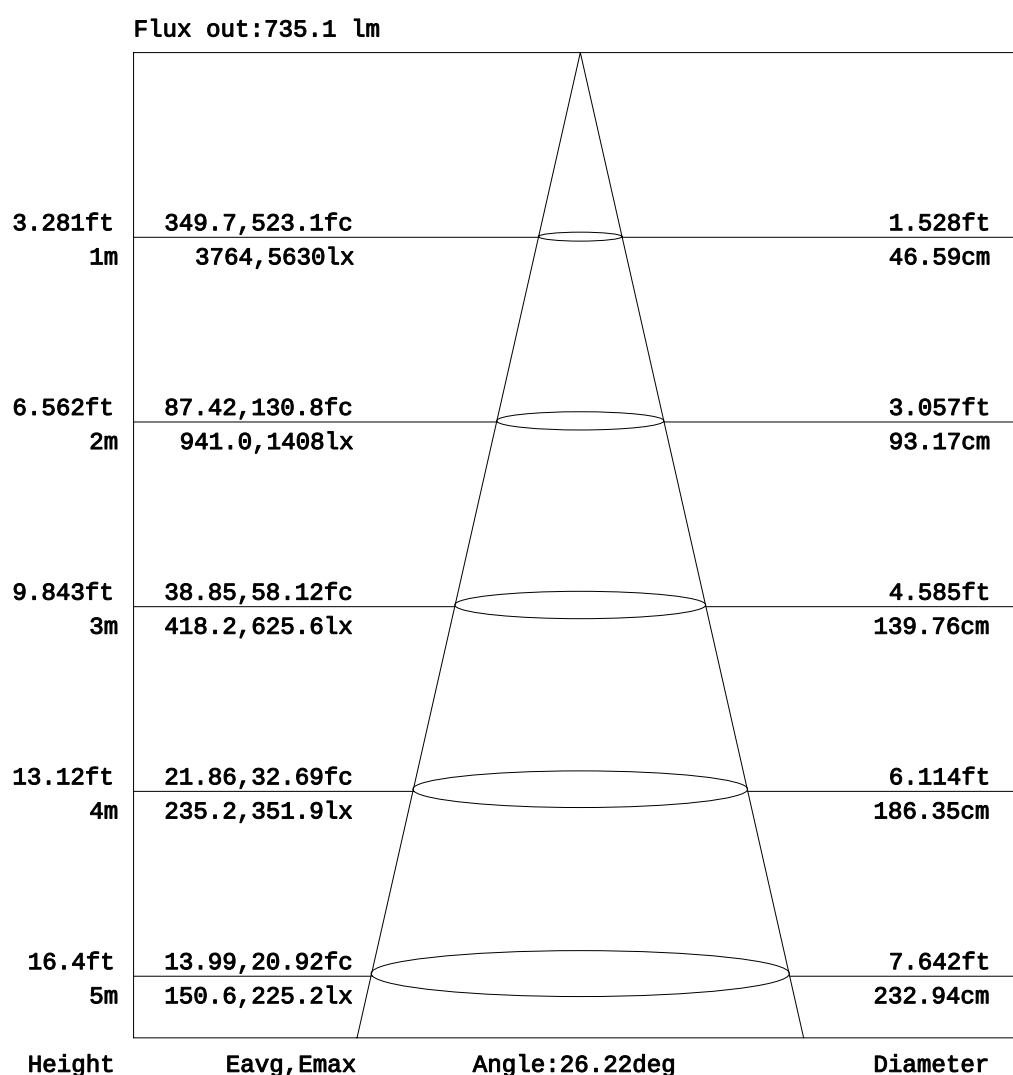


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 0
Test Date: 2022-04-22

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

AAI Figure

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:



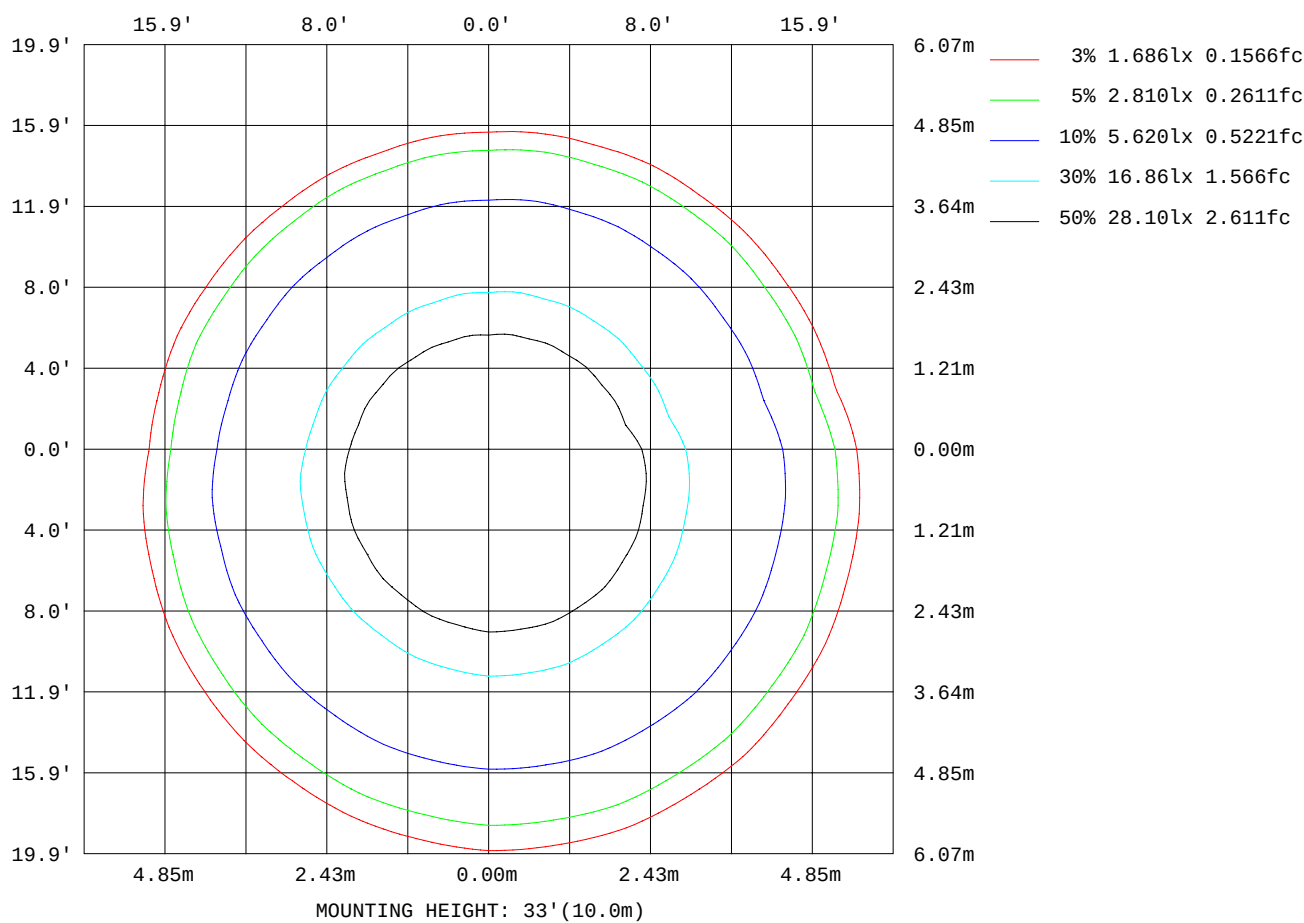
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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

ISOLUX DIAGRAM

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:



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

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

Average Luminance Table(CIBSE)

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	1352.02	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	61	66	72	77	79	81	84	89	85	82	80	77	73	71	69	67	60	58	52
60	40	43	45	49	53	56	58	61	60	57	52	51	47	44	41	40	38	36	29
65	19	20	25	28	31	31	32	34	33	31	30	29	27	23	19	17	16	14	13
70	2	2	4	5	7	8	10	10	9	7	7	5	6	3	3	1	1	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	89	200	---	500
Category 2	65 to 90	34	200	---	500
Category 3	75 to 90	0	200	---	500

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

No match

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

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

Average Luminance Table(CIBSE)

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	1352.02	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	61	66	72	77	79	81	84	89	85	82	80	77	73	71	69	67	60	58	52
60	40	43	45	49	53	56	58	61	60	57	52	51	47	44	41	40	38	36	29
65	19	20	25	28	31	31	32	34	33	31	30	29	27	23	19	17	16	14	13
70	2	2	4	5	7	8	10	10	9	7	7	5	6	3	3	1	1	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	89	1000	1500	200	500
65 to 90	34	1000	1500	200	500

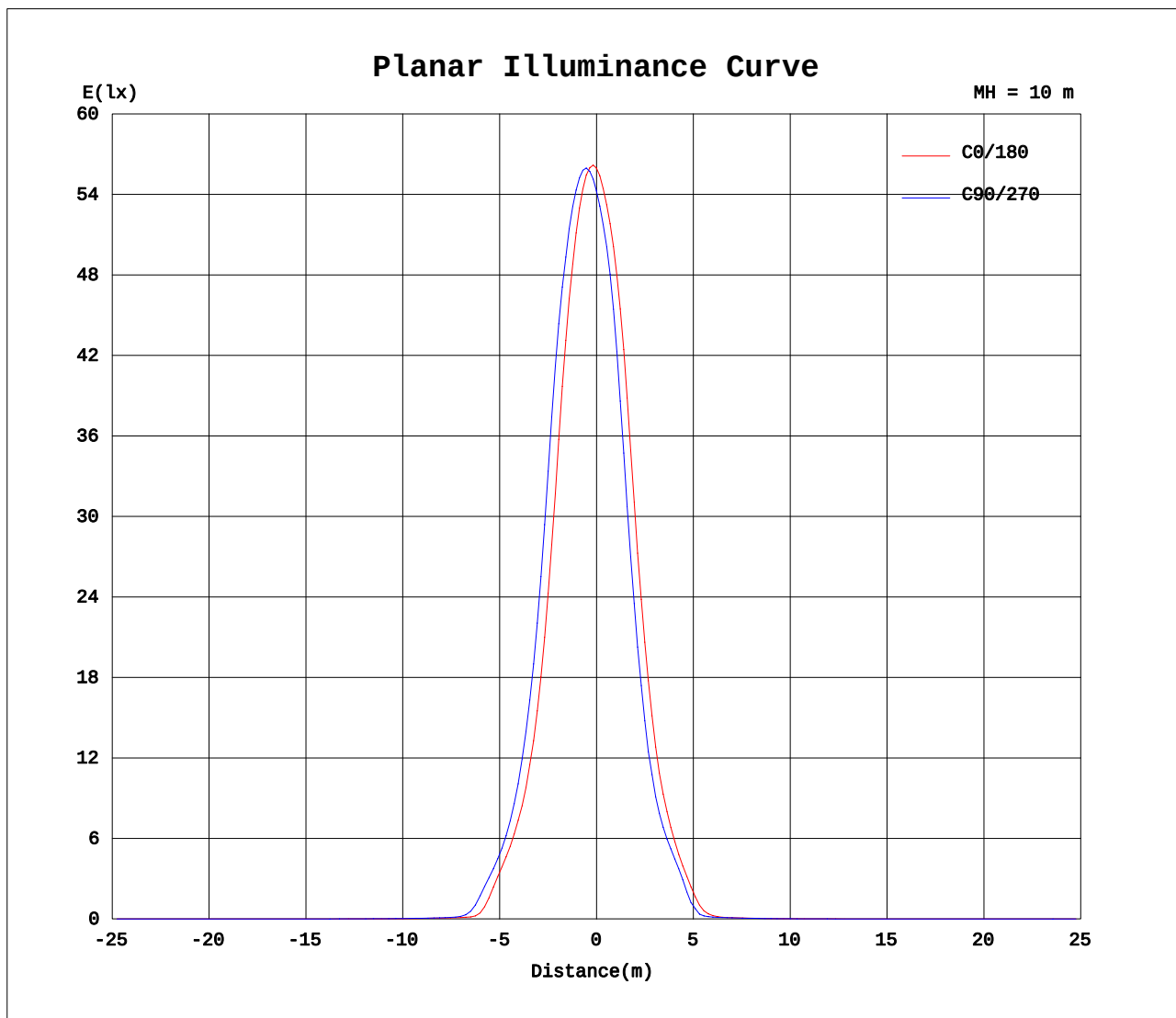
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

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

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

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

Planar Illuminance Curve



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

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

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	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	5597	5569	5552	5524	5512	5484	5477	5452	5449	5427	5426	5413	5414	5405	5407	5403	5407	5410	5597
5	5361	5444	5487	5533	5534	5548	5565	5596	5622	5589	5533	5480	5397	5332	5248	5185	5107	5049	5069
10	4156	4350	4485	4645	4734	4860	4904	4958	4941	4931	4837	4763	4623	4513	4332	4206	4003	3878	3659
15	2330	2532	2662	2870	2986	3181	3219	3308	3257	3262	3104	3033	2831	2728	2545	2449	2269	2175	1972
20	1179	1280	1377	1470	1538	1637	1670	1725	1694	1683	1599	1545	1436	1374	1298	1229	1139	1079	966
25	624	675	709	760	789	830	844	863	844	835	800	774	723	687	635	597	536	498	427
30	142	194	232	290	318	361	371	390	377	376	340	310	264	229	182	148	122	87.2	60.0
35	21.3	22.3	23.1	24.6	26.7	30.4	32.6	35.5	36.2	37.0	34.3	33.0	30.0	27.9	25.3	23.3	21.2	20.1	18.1
40	14.7	15.1	15.5	16.0	16.6	17.2	17.5	17.7	17.5	17.5	17.3	16.9	16.4	15.6	15.0	14.6	14.1	13.7	12.3
45	9.02	9.65	9.98	10.3	10.7	11.5	11.8	12.0	11.8	11.7	11.5	10.9	10.3	10.0	9.65	9.35	8.93	8.55	7.79
50	5.55	6.18	6.66	6.79	6.94	7.29	7.59	7.70	7.51	7.43	7.16	6.99	6.67	6.41	6.24	6.02	5.67	5.56	5.17
55	3.50	3.80	4.12	4.39	4.51	4.66	4.83	5.12	4.90	4.68	4.59	4.44	4.18	4.10	3.98	3.83	3.45	3.35	2.99
60	2.00	2.14	2.26	2.47	2.65	2.78	2.92	3.03	2.98	2.85	2.61	2.56	2.34	2.18	2.04	2.00	1.88	1.78	1.43
65	0.79	0.85	1.07	1.20	1.29	1.31	1.36	1.42	1.39	1.29	1.28	1.23	1.15	0.99	0.81	0.70	0.69	0.59	0.53
70	0.06	0.07	0.15	0.18	0.25	0.28	0.35	0.34	0.32	0.25	0.25	0.18	0.20	0.11	0.10	0.03	0.02	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	0.04
135	0.05	0.07	0.01	0.05	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.04	0.00	0.06	0.03	0.09	0.07	0.14	0.26
140	0.39	0.38	0.31	0.32	0.26	0.28	0.24	0.26	0.23	0.28	0.24	0.31	0.28	0.35	0.34	0.42	0.42	0.50	0.66
145	1.06	1.01	0.90	0.88	0.80	0.79	0.74	0.76	0.73	0.78	0.77	0.83	0.84	0.92	0.96	1.04	1.10	1.20	1.41
150	2.22	2.10	1.97	1.89	1.80	1.74	1.68	1.67	1.66	1.69	1.72	1.78	1.84	1.93	2.02	2.13	2.24	2.37	2.63
155	3.80	3.62	3.48	3.34	3.24	3.15	3.09	3.07	3.06	3.08	3.13	3.20	3.29	3.38	3.51	3.64	3.79	3.93	4.20
160	5.52	5.35	5.20	5.05	4.94	4.83	4.78	4.73	4.74	4.75	4.80	4.85	4.95	5.04	5.17	5.28	5.42	5.58	5.84
165	7.07	6.94	6.78	6.68	6.55	6.47	6.40	6.36	6.35	6.37	6.39	6.45	6.50	6.59	6.68	6.79	6.88	7.01	7.27
170	8.12	8.08	7.94	7.90	7.78	7.75	7.67	7.67	7.62	7.67	7.64	7.68	7.67	7.74	7.74	7.83	7.84	7.93	8.18
175	8.66	8.63	8.53	8.52	8.41	8.42	8.32	8.35	8.27	8.31	8.23	8.26	8.19	8.23	8.17	8.24	8.20	8.32	8.70
180	8.91	8.92	8.84	8.83	8.75	8.75	8.68	8.68	8.62	8.62	8.56	8.56	8.49	8.49	8.44	8.44	8.45	8.53	8.94

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

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

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Spot70-3000K-RA90-20W-24D.	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: 0	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	5569	5552	5524	5512	5484	5477	5452	5449	5427	5426	5413	5414	5405	5407	5403	5407	5410		
5	4951	4883	4789	4748	4666	4654	4599	4611	4599	4642	4651	4717	4751	4831	4872	4961	5016		
10	3443	3333	3157	3089	2942	2917	2832	2861	2826	2909	2928	3055	3106	3266	3343	3530	3647		
15	1802	1716	1573	1511	1417	1405	1359	1392	1385	1442	1464	1547	1587	1691	1748	1881	1960		
20	888	845	791	770	738	730	715	723	719	743	754	786	811	861	894	959	1006		
25	393	379	337	314	283	280	260	275	272	303	314	357	382	427	446	489	516		
30	49.1	42.6	35.2	31.5	28.3	27.4	26.7	27.3	27.4	28.6	29.4	31.3	32.8	37.4	41.9	53.7	68.4		
35	16.6	15.8	15.4	15.2	15.2	15.6	16.0	16.6	16.9	17.4	17.6	17.7	17.7	17.7	17.7	18.4	18.8		
40	11.1	10.4	9.71	9.41	9.37	9.55	9.79	10.5	10.7	11.0	11.2	11.6	11.6	11.9	12.0	12.3	12.8		
45	7.30	6.88	6.13	5.95	5.79	6.01	6.36	6.67	6.84	7.05	7.11	7.25	7.25	7.44	7.47	7.69	7.72		
50	4.86	4.52	4.14	3.94	3.95	4.07	4.19	4.27	4.39	4.51	4.58	4.49	4.55	4.67	4.80	4.99	5.11		
55	2.94	2.84	2.63	2.52	2.51	2.45	2.41	2.43	2.52	2.51	2.61	2.56	2.71	2.83	2.87	3.01	3.20		
60	1.42	1.34	1.29	1.24	1.23	1.18	1.04	1.10	1.06	1.25	1.28	1.31	1.34	1.39	1.45	1.50	1.58		
65	0.42	0.24	0.24	0.17	0.19	0.13	0.14	0.11	0.15	0.15	0.21	0.23	0.31	0.40	0.53	0.60	0.71		
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
130	0.01	0.07	0.04	0.09	0.06	0.11	0.08	0.11	0.07	0.10	0.05	0.08	0.02	0.06	0.00	0.03	0.00		
135	0.24	0.31	0.30	0.36	0.34	0.40	0.36	0.40	0.36	0.38	0.31	0.33	0.25	0.27	0.20	0.21	0.15		
140	0.68	0.78	0.80	0.88	0.89	0.95	0.93	0.96	0.92	0.91	0.84	0.82	0.73	0.71	0.62	0.61	0.52		
145	1.50	1.61	1.69	1.80	1.86	1.91	1.93	1.93	1.90	1.86	1.78	1.70	1.59	1.52	1.41	1.33	1.23		
150	2.78	2.91	3.03	3.15	3.24	3.30	3.33	3.33	3.30	3.23	3.14	3.02	2.90	2.76	2.64	2.50	2.38		
155	4.35	4.50	4.65	4.76	4.86	4.93	4.96	4.96	4.92	4.85	4.74	4.62	4.49	4.33	4.19	4.03	3.89		
160	5.96	6.09	6.20	6.31	6.39	6.44	6.46	6.47	6.42	6.36	6.26	6.15	6.01	5.89	5.75	5.61	5.46		
165	7.30	7.41	7.45	7.55	7.55	7.62	7.59	7.62	7.55	7.52	7.40	7.35	7.23	7.17	7.04	6.97	6.85		
170	8.16	8.20	8.16	8.21	8.17	8.21	8.15	8.17	8.09	8.08	7.96	7.95	7.85	7.85	7.77	7.77	7.68		
175	8.64	8.65	8.56	8.59	8.51	8.55	8.47	8.48	8.39	8.39	8.28	8.28	8.19	8.22	8.16	8.20	8.14		
180	8.90	8.90	8.79	8.79	8.72	8.72	8.65	8.65	8.59	8.59	8.52	8.52	8.47	8.47	8.44	8.46	8.52		

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

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