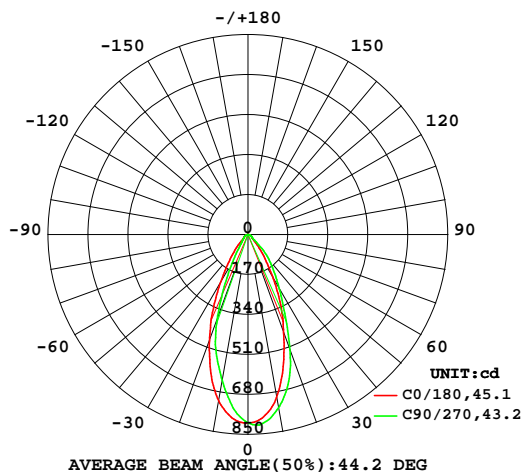


## LUMINAIRE PHOTOMETRIC TEST REPORT

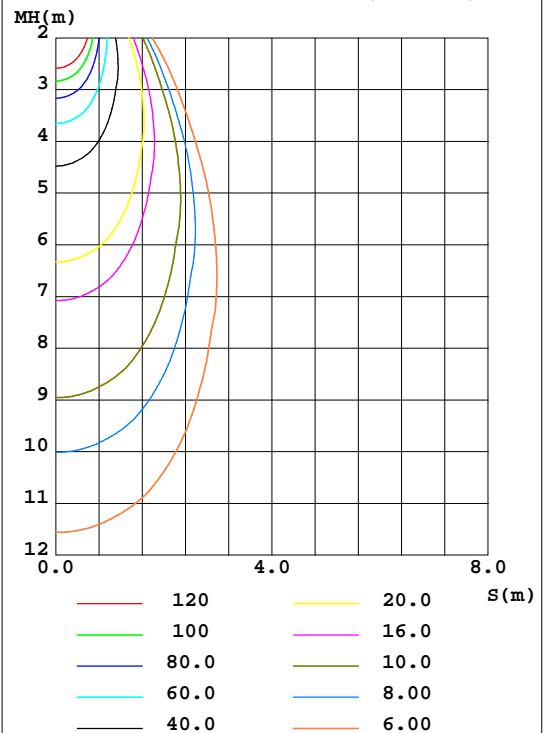
Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.47 lm/W			
MODEL	2700K	I <sub>max</sub> (cd)	811.2	S/MH(C0/180)	0.73
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	0.63
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	539.83	h UP,DN(C0-180)	0.0,56.9
NOMINAL FLUX(lm)	539.826	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,43.1
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230V	h down(%)	100.0	CIBSE SHR MAX	0.70

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 2.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: will  
 Test Date: 02 August 2023

g Range: 0 - 90DEG  
 Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
 Humidity: 65.0%  
 Test Distance: 8.989m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

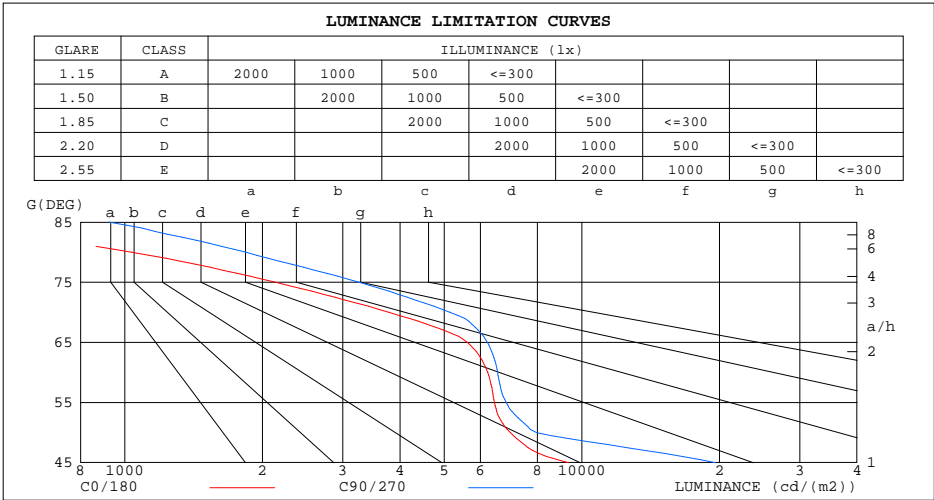
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	777.1	795.0	802.1	797.1	783.4	757.4	738.6	747.4	0- 5	18.85	18.85	3.49,3.49
10	703.0	735.5	748.9	741.8	718.1	668.5	631.6	647.5	5- 10	52.62	71.47	13.2,13.2
15	580.5	636.7	660.4	645.9	610.3	559.6	522.5	533.3	10- 15	76.52	148.0	27.4,27.4
20	444.5	498.6	522.6	512.5	480.8	426.8	385.4	395.6	15- 20	86.67	234.7	43.5,43.5
25	329.0	357.2	370.2	370.7	350.7	282.5	229.1	251.4	20- 25	80.62	315.3	58.4,58.4
30	217.3	253.9	268.7	260.7	232.5	169.4	122.6	144.4	25- 30	65.54	380.8	70.5,70.5
35	129.2	177.9	196.3	178.2	141.8	94.53	62.37	77.49	30- 35	48.93	429.7	79.6,79.6
40	73.85	121.8	139.7	119.2	84.93	57.56	41.14	47.93	35- 40	35.72	465.5	86.2,86.2
45	37.51	67.87	78.66	63.38	41.51	32.97	30.01	31.38	40- 45	24.63	490.1	90.8,90.8
50	25.43	28.09	29.06	27.91	25.95	24.18	23.09	23.61	45- 50	14.10	504.2	93.4,93.4
55	20.95	21.92	22.23	21.72	20.89	20.06	19.57	19.93	50- 55	10.04	514.2	95.3,95.3
60	17.66	18.35	18.56	18.23	17.58	16.58	15.92	16.36	55- 60	8.848	523.1	96.9,96.9
65	13.45	14.55	14.91	14.40	13.36	11.67	10.53	11.27	60- 65	7.444	530.5	98.3,98.3
70	7.337	9.320	9.985	8.981	7.354	5.881	5.026	5.602	65- 70	5.172	535.7	99.2,99.2
75	3.139	4.368	4.779	4.140	3.145	2.363	1.935	2.235	70- 75	2.695	538.4	99.7,99.7
80	1.018	1.616	1.812	1.488	0.9949	0.6219	0.4252	0.5763	75- 80	1.082	539.5	99.9,99.9
85	0.1873	0.3923	0.4561	0.3319	0.1604	0.0790	0.0516	0.0889	80- 85	0.3056	539.8	100,100
90	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	0.0386	85- 90	0.0511	539.8	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	379	923
80	1034	1839
75	2138	3255
70	3782	5147
65	5612	6219
60	6226	6546
55	6441	6833
50	6977	7971
45	9354	19614

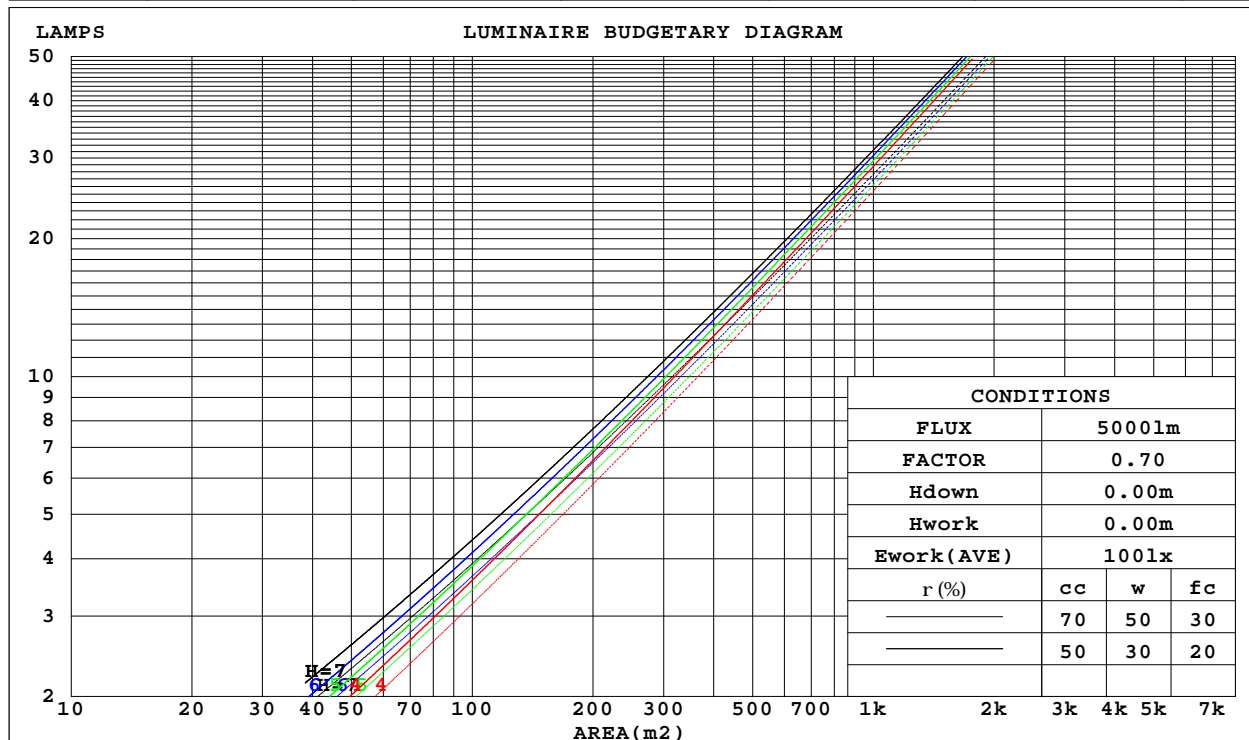
C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	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	1.00
1.0	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.95	.93
2.0	1.02	.98	.95	1.01	.97	.94	.97	.94	.91	.94	.92	.89	.92	.89	.88	.86
3.0	.95	.90	.86	.94	.89	.85	.91	.87	.84	.89	.85	.83	.86	.84	.81	.80
4.0	.89	.83	.79	.88	.82	.78	.86	.81	.77	.84	.80	.77	.82	.78	.76	.74
5.0	.83	.77	.73	.82	.77	.73	.80	.76	.72	.79	.75	.71	.77	.74	.71	.69
6.0	.78	.72	.68	.77	.72	.68	.76	.71	.67	.75	.70	.67	.73	.69	.66	.65
7.0	.74	.68	.63	.73	.67	.63	.72	.67	.63	.71	.66	.63	.69	.65	.62	.61
8.0	.70	.64	.60	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.56	.66	.60	.56	.65	.59	.56	.64	.59	.56	.63	.59	.56	.54
10.0	.63	.57	.53	.62	.57	.53	.61	.56	.53	.61	.56	.53	.60	.56	.53	.51



C Range: 0 - 360DEG  
 C Interval: 2.5DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: will  
 Test Date: 02 August 2023

g Range: 0 - 90DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
 Humidity: 65.0%  
 Test Distance: 8.989m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.186	.106	.033	.179	.102	.032	.166	.095	.030	.155	.089	.029	.144	.084	.027	
2.0	.178	.098	.030	.172	.095	.029	.162	.090	.028	.152	.085	.027	.143	.081	.025	
3.0	.169	.090	.027	.164	.088	.026	.155	.084	.025	.146	.080	.025	.138	.077	.024	
4.0	.160	.083	.024	.156	.081	.024	.148	.078	.023	.140	.075	.023	.134	.073	.022	
5.0	.151	.077	.022	.148	.076	.022	.141	.073	.022	.134	.071	.021	.128	.069	.021	
6.0	.144	.072	.021	.140	.071	.020	.134	.069	.020	.129	.067	.020	.123	.065	.019	
7.0	.136	.067	.019	.134	.067	.019	.128	.065	.019	.123	.063	.018	.119	.062	.018	
8.0	.130	.064	.018	.127	.063	.018	.123	.061	.018	.118	.060	.017	.114	.059	.017	
9.0	.124	.060	.017	.122	.059	.017	.117	.058	.016	.113	.057	.016	.110	.056	.016	
10.0	.119	.057	.016	.117	.056	.016	.113	.055	.016	.109	.054	.015	.106	.053	.015	

r <sub>cc</sub>	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	20%			20%			20%			20%			20%			0
R <sub>CR</sub>	R <sub>CR</sub> :Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)															
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.135	.114	.097	.092	.079	.067	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.066	.043	.026	.039	.025	.015	.012	.008	.005	
8.0	.106	.064	.036	.091	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.096	.055	.027	.083	.048	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm										
NAME: 5RS102-8					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: EVERFINE					SUR.:			Shielding 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	17.5	18.5	17.7	18.6	18.8	18.8	19.8	19.0	19.9	20.1
	3H	17.8	18.7	18.1	18.9	19.1	19.1	20.0	19.4	20.2
	4H	17.8	18.7	18.1	18.9	19.1	19.1	20.0	19.4	20.2
	6H	17.8	18.6	18.1	18.8	19.1	19.1	19.9	19.4	20.2
	8H	17.7	18.5	18.1	18.8	19.0	19.1	19.8	19.4	20.1
	12H	17.7	18.4	18.0	18.7	19.0	19.0	19.8	19.4	20.0
4H	2H	17.6	18.5	17.9	18.7	18.9	18.8	19.6	19.1	19.9
	3H	18.1	18.8	18.4	19.1	19.4	19.2	20.0	19.6	20.2
	4H	18.1	18.8	18.5	19.1	19.4	19.3	20.0	19.7	20.3
	6H	18.1	18.7	18.5	19.0	19.4	19.3	19.9	19.7	20.2
	8H	18.0	18.6	18.4	18.9	19.3	19.3	19.8	19.7	20.2
	12H	18.0	18.5	18.4	18.9	19.3	19.2	19.7	19.6	20.1
8H	4H	18.1	18.6	18.5	19.0	19.4	19.2	19.8	19.6	20.1
	6H	18.1	18.5	18.5	18.9	19.3	19.2	19.7	19.7	20.1
	8H	18.0	18.4	18.5	18.8	19.3	19.2	19.6	19.7	20.0
	12H	18.0	18.3	18.5	18.8	19.2	19.2	19.5	19.6	19.9
12H	4H	18.1	18.6	18.5	18.9	19.3	19.2	19.7	19.6	20.1
	6H	18.0	18.4	18.5	18.8	19.3	19.2	19.6	19.6	20.0
	8H	18.0	18.3	18.5	18.8	19.2	19.2	19.5	19.6	19.9
Variations with the observer position at spacings:										
S = 1.0H	+ 1.7 / - 2.3					+ 1.6 / - 2.9				
1.5H	+ 2.7 / - 2.2					+ 3.1 / - 2.9				
2.0H	+ 1.7 / - 0.9					+ 4.0 / - 1.4				

CIE Pub.117, 539.8 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -2.1)  
Area: 0.00567162 m2

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

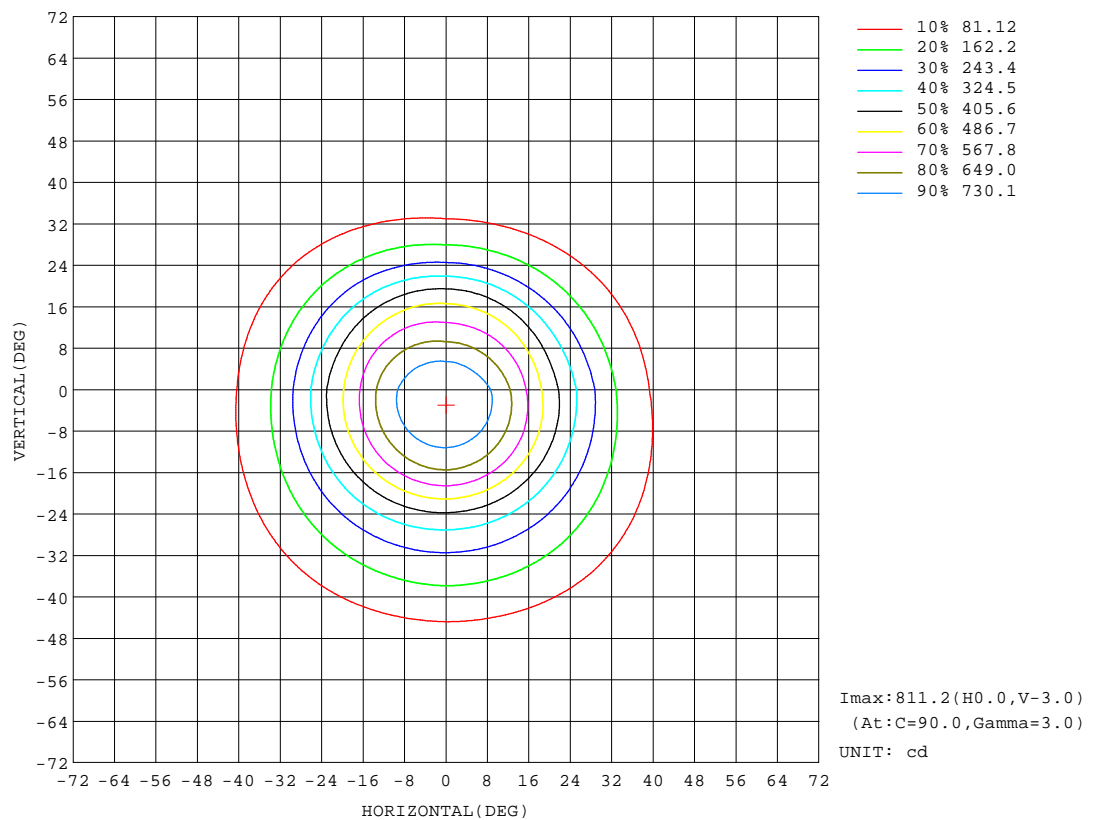
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	83	76	72	82	76	71	82	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	89	85	93	89	85	80
1.25	101	95	91	99	94	90	97	93	89	85
1.50	104	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: will  
Test Date: 02 August 2023

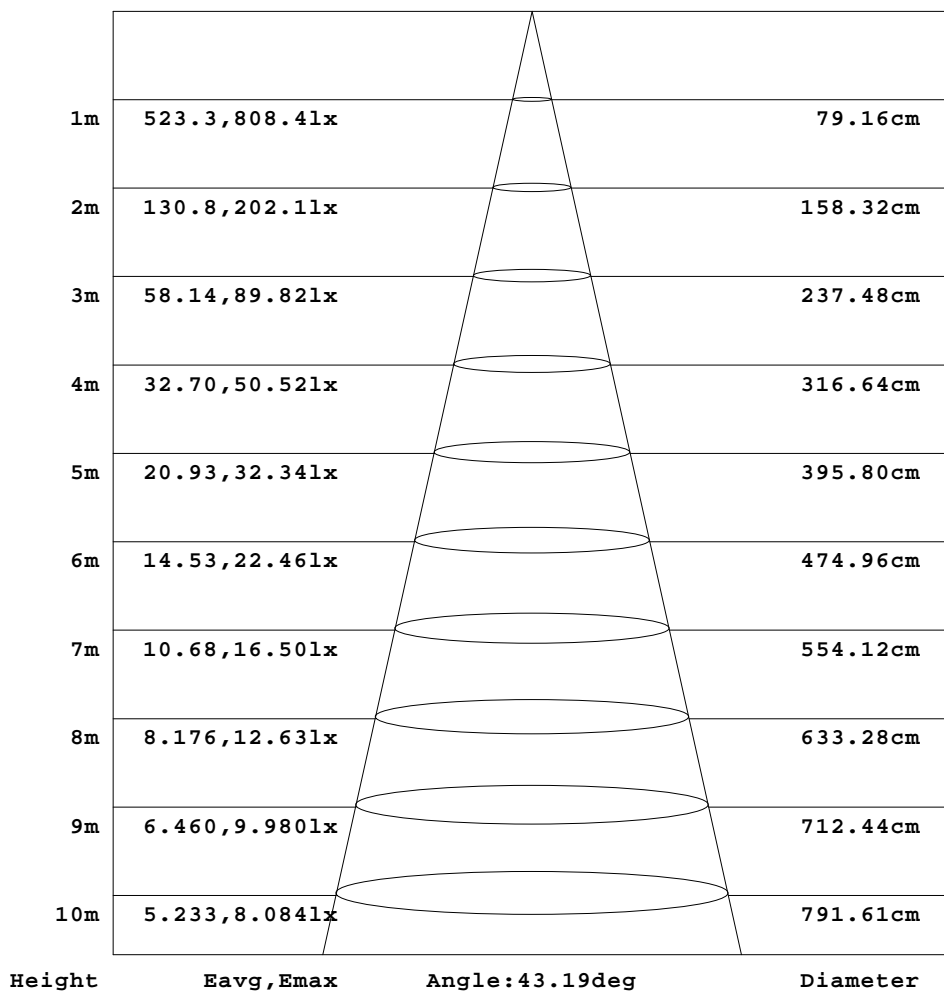
Range: 0 - 90DEG  
Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Flux out:268.3 lm



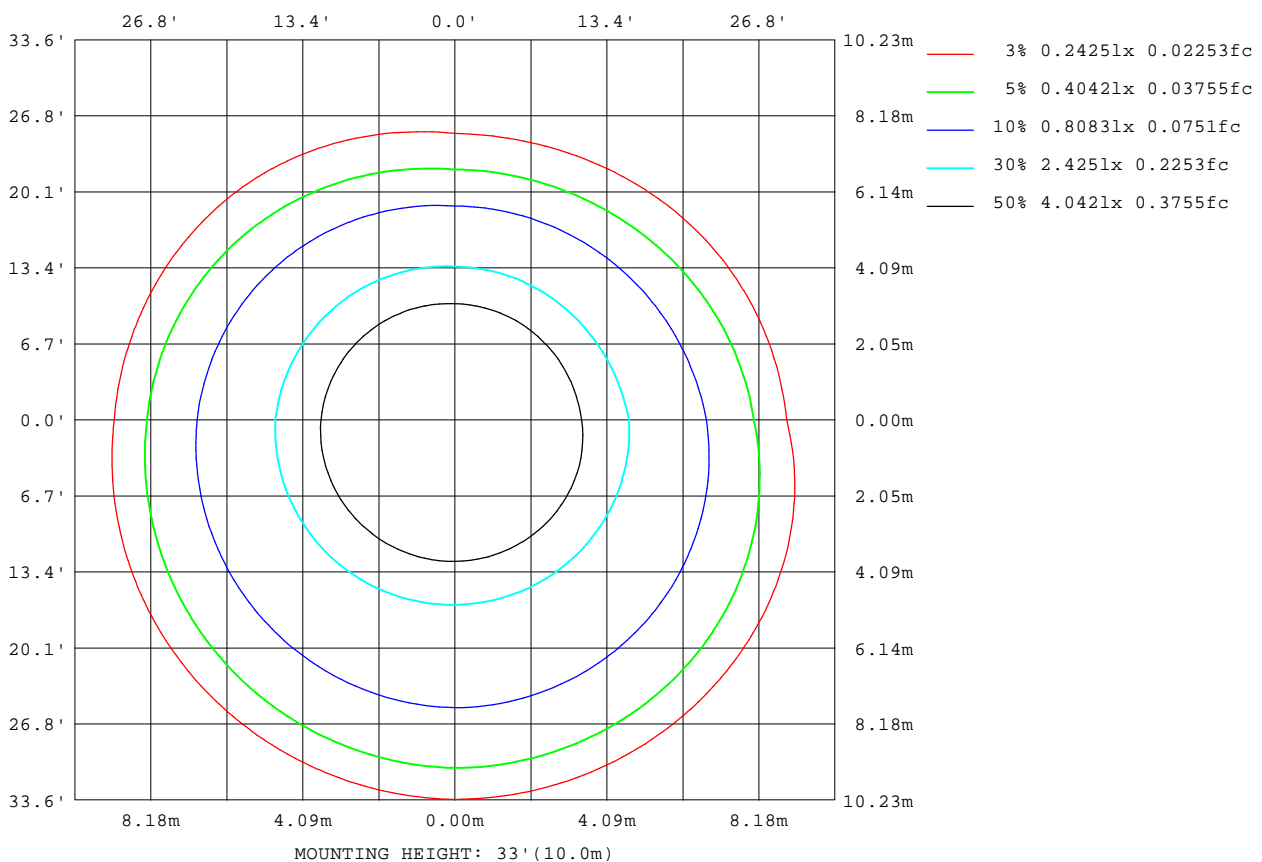
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: will  
Test Date: 02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:228.68V I:0.0305A P:6.6264W PF:0.9503 Freq:49.99Hz Lamp Flux:539.826x1 lm		
NAME: 5RS102-8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

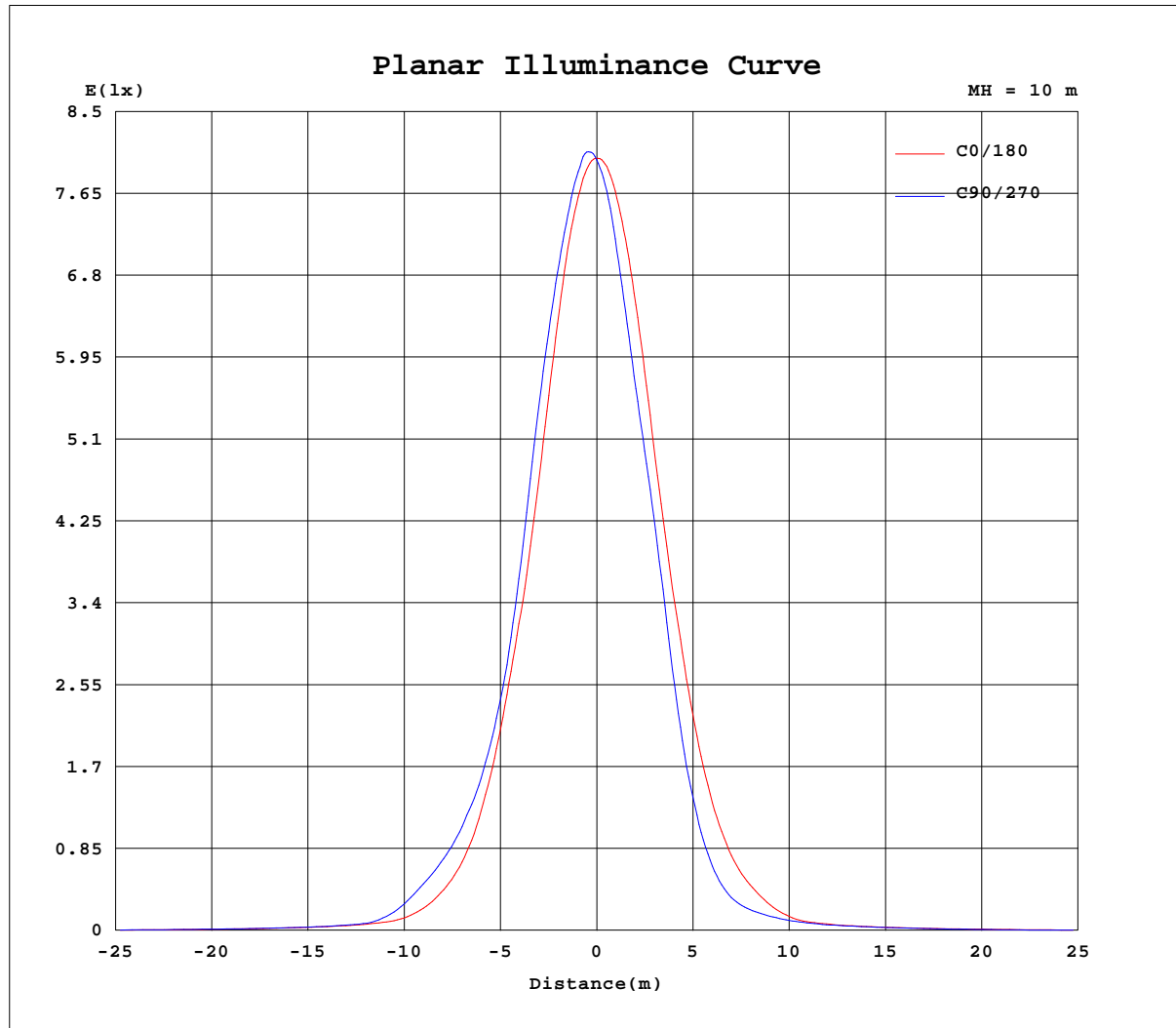
AvgL	cd/m2
L_0~180(65)av	5593
L_0~180(75)av	2141
L_0~180(85)av	352
L_90~270(65)av	5307
L_90~270(75)av	2287
L_90~270(85)av	514
L_45(65)av	5413
L_45(75)av	2232
L_45(85)av	451

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:will  
Test Date:02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity:65.0%  
Test Distance:8.989m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 2.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: will  
Test Date: 02 August 2023

g Range: 0 - 90DEG  
g Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.416  
Humidity: 65.0%  
Test Distance: 8.989m [K=1.0000]  
Remarks:

















