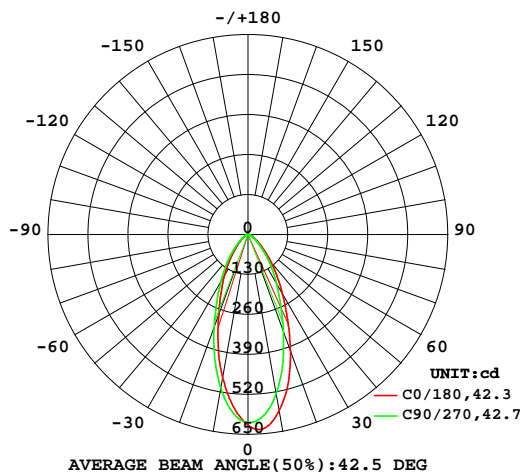


LUMINAIRE PHOTOMETRIC TEST REPORT

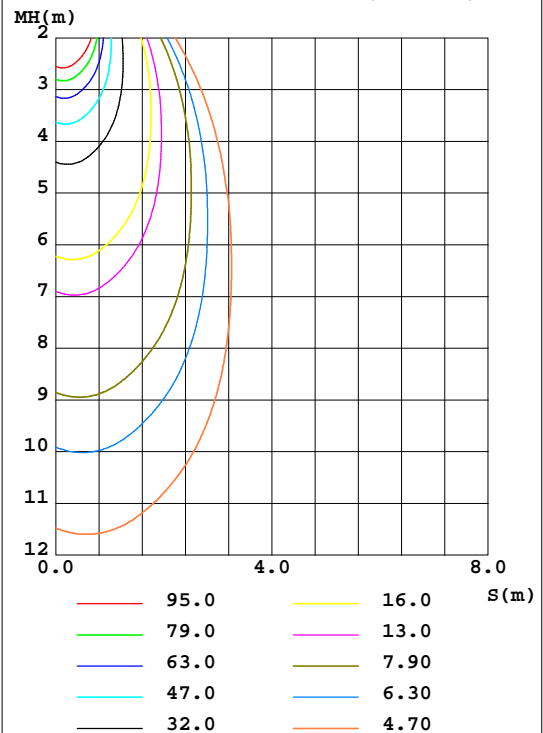
Test:U:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 76.63 lm/W
MODEL	6000K	I _{max} (cd)	634.9	S/MH(C0/180)	0.58	
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.66	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	463.08	h UP,DN(C0-180)	0.0,51.1	
NOMINAL FLUX(lm)	463.081	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,48.9	
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	230V	h down(%)	100.0	CIBSE SHR MAX	0.75	

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:11 September 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:

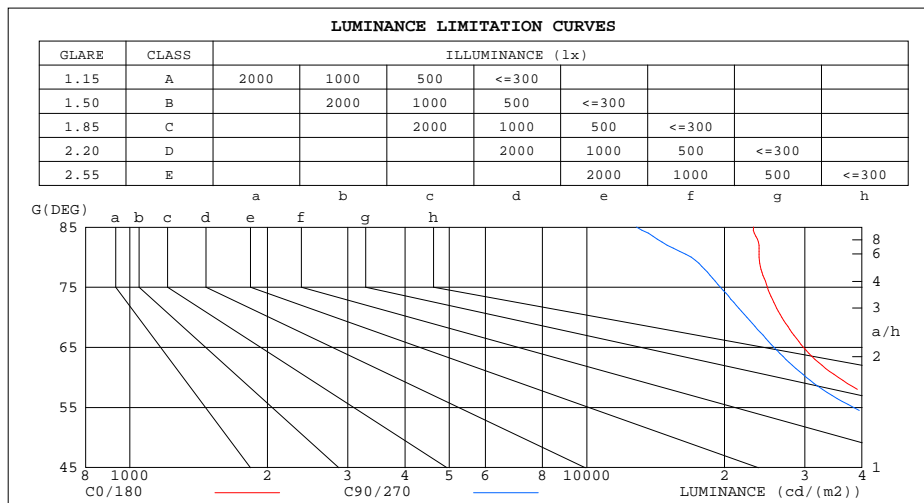
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	631.6	609.9	590.8	572.0	560.6	565.2	579.9	601.7	0- 5	14.38	14.38	3.1,3.1
10	582.8	554.6	527.0	494.6	473.4	482.9	508.3	540.6	5- 10	39.56	53.94	11.6,11.6
15	504.2	470.6	437.9	399.4	374.7	387.3	418.4	456.1	10- 15	56.16	110.1	23.8,23.8
20	404.8	370.2	337.8	301.7	279.4	292.9	323.7	359.7	15- 20	62.46	172.6	37.3,37.3
25	305.4	277.9	252.6	225.5	208.9	217.8	240.4	268.7	20- 25	60.39	232.9	50.3,50.3
30	226.4	206.5	187.7	166.5	153.0	158.9	175.5	197.4	25- 30	54.13	287.1	62,62
35	165.2	152.4	138.6	120.2	107.7	113.1	127.1	143.8	30- 35	46.16	333.2	72,72
40	117.6	107.8	96.80	81.80	71.48	76.38	88.14	101.3	35- 40	37.27	370.5	80,80
45	79.90	72.28	64.09	53.31	46.01	49.48	57.96	67.68	40- 45	28.02	398.5	86.1,86.1
50	51.64	46.84	41.64	34.75	30.00	31.91	37.09	43.43	45- 50	19.96	418.5	90.4,90.4
55	33.29	30.71	27.65	23.27	20.11	21.19	24.33	28.22	50- 55	13.97	432.5	93.4,93.4
60	22.30	20.80	18.98	16.33	14.41	15.01	16.86	19.21	55- 60	9.982	442.4	95.5,95.5
65	15.82	14.88	13.64	11.67	10.22	10.74	12.15	13.77	60- 65	7.398	449.8	97.1,97.1
70	11.48	10.68	9.629	7.982	6.777	7.250	8.458	9.800	65- 70	5.481	455.3	98.3,98.3
75	8.068	7.307	6.369	4.969	3.960	4.354	5.384	6.569	70- 75	3.846	459.2	99.2,99.2
80	5.198	4.523	3.688	2.445	1.535	1.822	2.691	3.776	75- 80	2.399	461.6	99.7,99.7
85	2.536	1.993	1.406	0.6248	0.0979	0.3723	1.002	1.690	80- 85	1.155	462.7	99.9,99.9
90	0.4972	0.2412	0.0785	0.0294	0.0327	0.0008	0.0327	0.2069	85- 90	0.3560	463.1	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:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	23171	12845
80	23833	16908
75	24819	19592
70	26713	22416
65	29797	25696
60	35509	30227
55	46206	38384
50	63963	51577
45	89966	72162

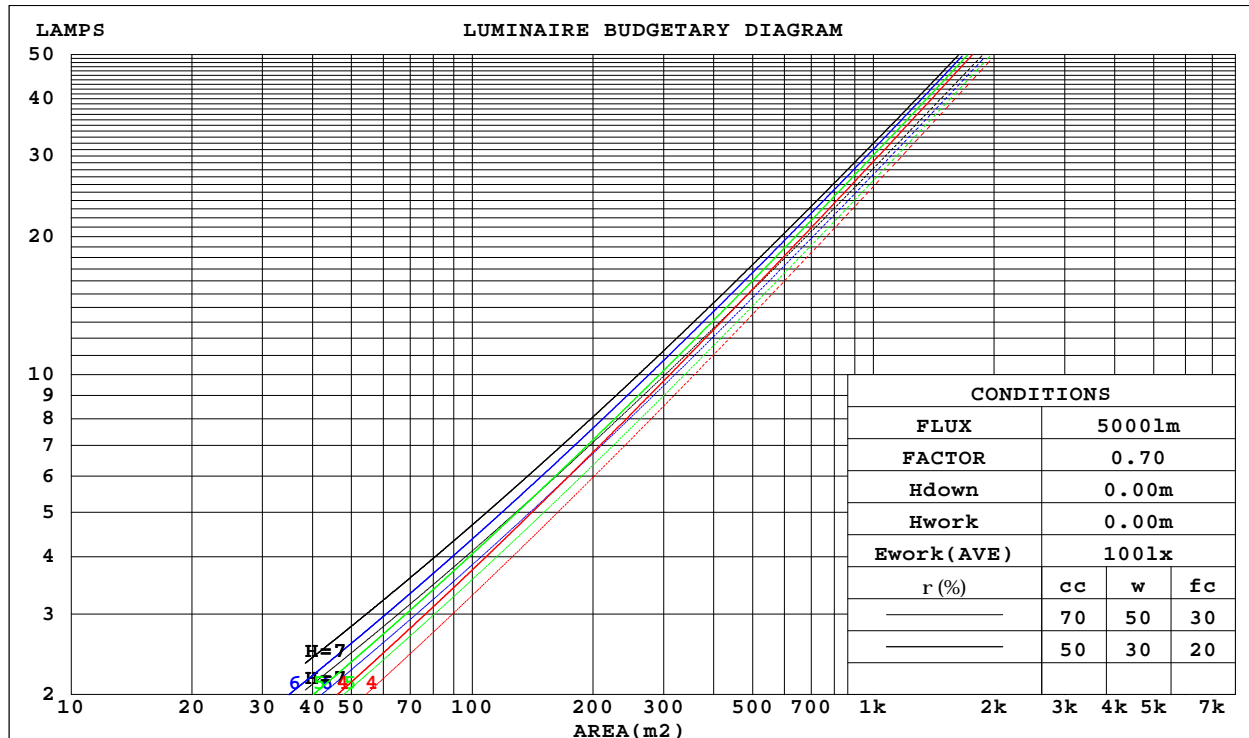
C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 2023

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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm															
NAME: 5RS230-2								TYPE:				WEIGHT:			
SPEC.:								DIM.:				SERIAL No.:			
MFR.: EVERFINE								SUR.:				Shielding Angle:			

r _{cc}	80%			70%			50%			30%			10%			0
r _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{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	1.00
1.0	1.09	1.07	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.93	.90	.87	.90	.88	.85	.84
3.0	.93	.87	.83	.92	.86	.82	.89	.84	.81	.86	.83	.80	.84	.81	.78	.77
4.0	.86	.80	.75	.85	.79	.75	.83	.78	.74	.81	.76	.73	.79	.75	.72	.71
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.76	.71	.67	.74	.70	.67	.65
6.0	.75	.68	.64	.74	.68	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.56
8.0	.66	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.54	.53
9.0	.62	.56	.52	.62	.56	.52	.61	.55	.51	.60	.55	.51	.59	.54	.51	.50
10.0	.59	.53	.49	.58	.52	.48	.57	.52	.48	.57	.52	.48	.56	.51	.48	.47



C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.081x1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)															
0.0																
1.0	.202	.115	.036	.195	.111	.035	.183	.105	.033	.171	.099	.032	.160	.093	.030	
2.0	.193	.106	.033	.188	.103	.032	.177	.098	.031	.167	.094	.029	.158	.089	.028	
3.0	.183	.097	.029	.178	.095	.029	.169	.091	.028	.160	.088	.027	.152	.084	.026	
4.0	.173	.090	.026	.168	.088	.026	.160	.085	.025	.153	.082	.025	.146	.079	.024	
5.0	.163	.083	.024	.159	.082	.024	.152	.079	.023	.146	.077	.023	.140	.075	.022	
6.0	.154	.077	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	.134	.070	.021	
7.0	.146	.072	.021	.144	.072	.020	.138	.070	.020	.133	.068	.020	.128	.066	.020	
8.0	.139	.068	.019	.137	.067	.019	.132	.066	.019	.127	.064	.019	.123	.063	.018	
9.0	.132	.064	.018	.130	.063	.018	.126	.062	.018	.121	.061	.017	.118	.060	.017	
10.0	.126	.061	.017	.124	.060	.017	.120	.059	.017	.116	.058	.016	.113	.057	.016	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR: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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.087	.127	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.111	.076	.050	.077	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.071	.040	.099	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.094	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.104	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm										
NAME: 5RS230-2					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	24.7	25.8	25.0	26.0	26.1	24.0	25.1	24.2	25.2	25.4
3H	25.1	26.1	25.4	26.3	26.5	24.4	25.3	24.6	25.5	25.7
4H	25.3	26.2	25.6	26.4	26.7	24.5	25.4	24.8	25.6	25.9
6H	25.4	26.3	25.7	26.6	26.8	24.6	25.5	24.9	25.7	26.0
8H	25.5	26.3	25.8	26.6	26.9	24.6	25.4	24.9	25.7	26.0
12H	25.5	26.3	25.9	26.6	26.9	24.6	25.4	24.9	25.7	26.0
4H 2H	24.8	25.7	25.1	25.9	26.1	24.1	25.0	24.4	25.3	25.5
3H	25.3	26.1	25.6	26.4	26.6	24.6	25.4	25.0	25.7	26.0
4H	25.6	26.3	25.9	26.6	26.9	24.9	25.6	25.2	25.9	26.2
6H	25.8	26.5	26.2	26.8	27.2	25.1	25.7	25.4	26.0	26.4
8H	26.0	26.5	26.3	26.9	27.3	25.1	25.7	25.5	26.1	26.4
12H	26.0	26.6	26.4	26.9	27.3	25.1	25.7	25.5	26.0	26.4
8H 4H	25.6	26.2	26.0	26.6	26.9	24.9	25.5	25.3	25.9	26.3
6H	26.0	26.5	26.4	26.9	27.3	25.2	25.7	25.7	26.1	26.5
8H	26.1	26.6	26.6	27.0	27.4	25.3	25.8	25.8	26.2	26.6
12H	26.3	26.7	26.8	27.1	27.6	25.4	25.7	25.9	26.2	26.7
12H 4H	25.6	26.1	26.0	26.5	26.9	24.9	25.5	25.3	25.8	26.2
6H	26.0	26.4	26.4	26.8	27.3	25.2	25.7	25.7	26.1	26.5
8H	26.2	26.5	26.6	27.0	27.4	25.4	25.7	25.8	26.2	26.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.9 / - 1.3					+ 1.0 / - 1.4				
1.5H	+ 1.5 / - 1.2					+ 1.4 / - 1.1				
2.0H	+ 2.2 / - 1.3					+ 1.9 / - 1.3				

CIE Pub.117, 463.1 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -2.7)
Area: 0.001256 m2

C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

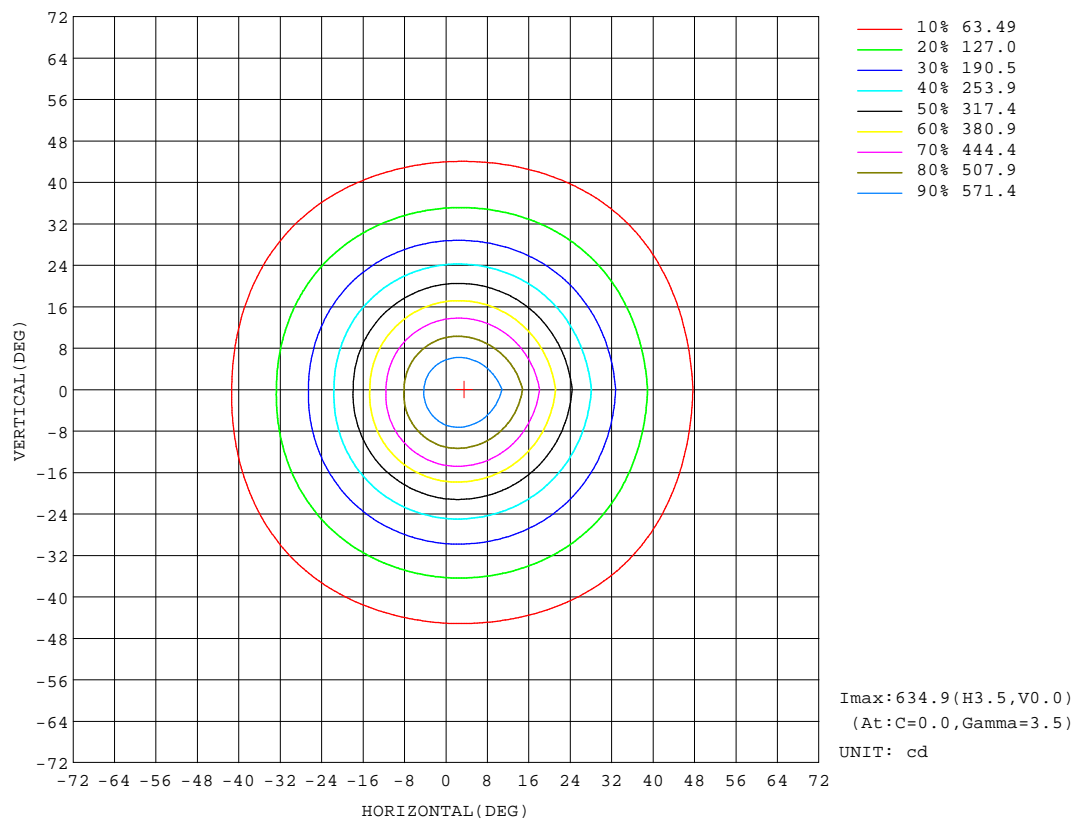
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	79	71	66	78	71	66	78	71	66	62
0.80	87	80	75	87	80	75	85	79	75	70
1.00	93	86	82	92	86	81	91	86	81	76
1.25	98	92	87	97	91	87	95	90	86	81
1.50	102	96	91	100	95	91	98	93	90	85
2.00	105	100	96	104	99	95	101	97	94	88
2.50	108	103	99	106	102	98	103	99	96	90
3.00	110	105	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	104	106	104	102	94
5.00	113	111	108	111	109	107	107	105	104	96
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:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



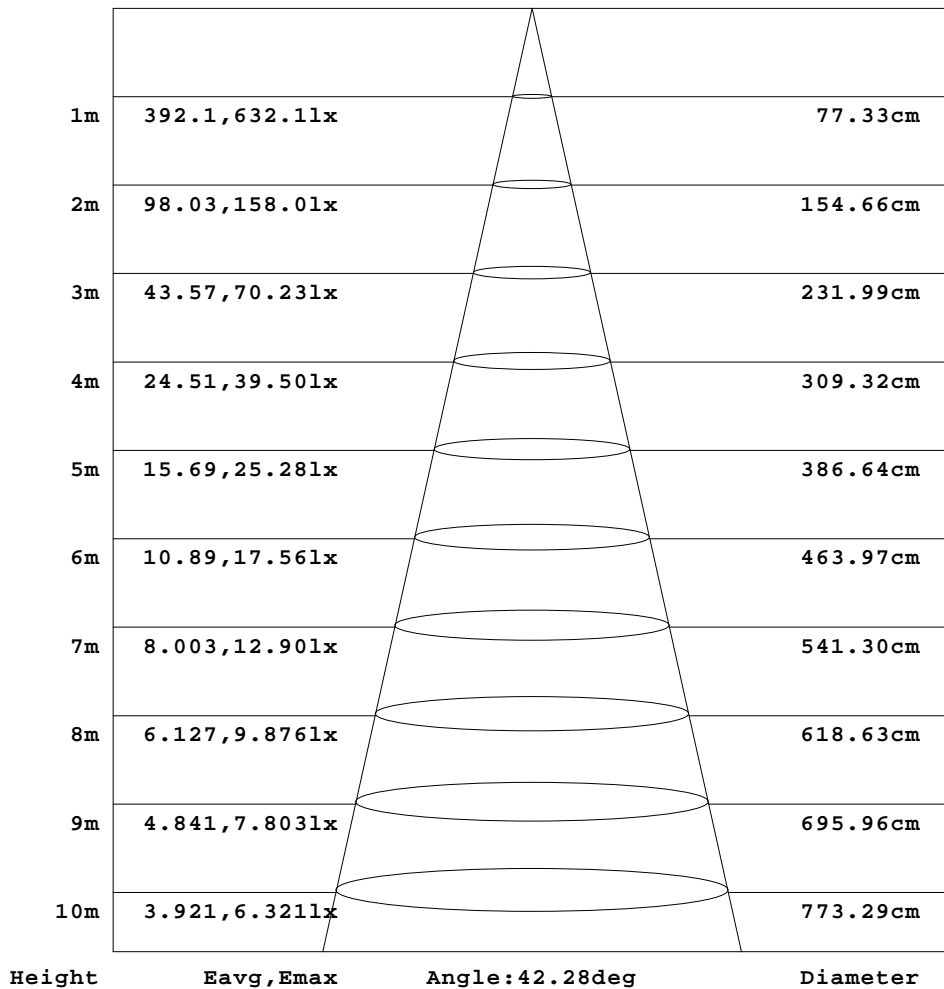
C Range: 0 - 360DEG
 C Interval: 2.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: will
 Test Date: 11 September 2023

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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

Flux out:191.2 lm



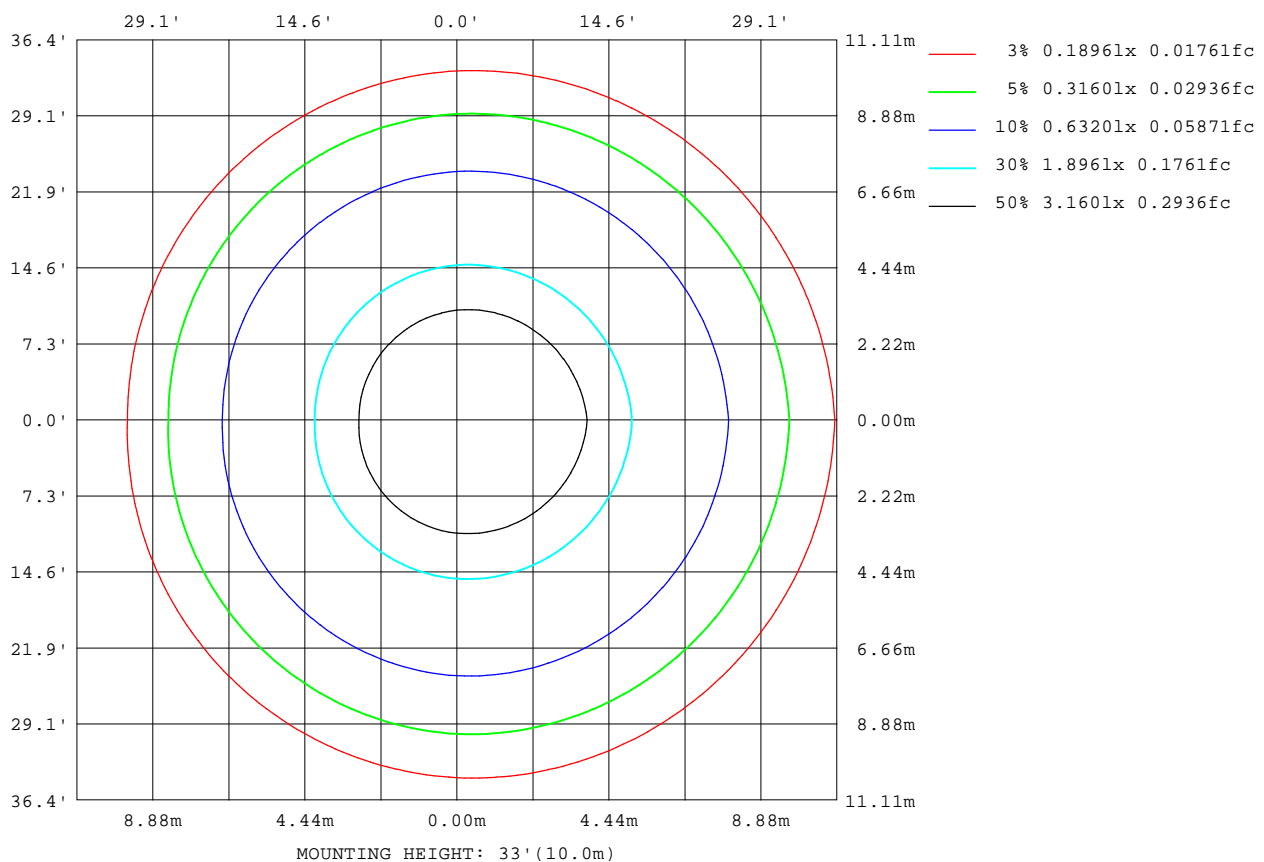
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 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:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	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: 11 September 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:

LED Avg.L Report

Test:U:228.75V I:0.0312A P:6.0428W PF:0.8463 Freq:49.99Hz Lamp Flux:463.08lx1 lm		
NAME: 5RS230-2	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

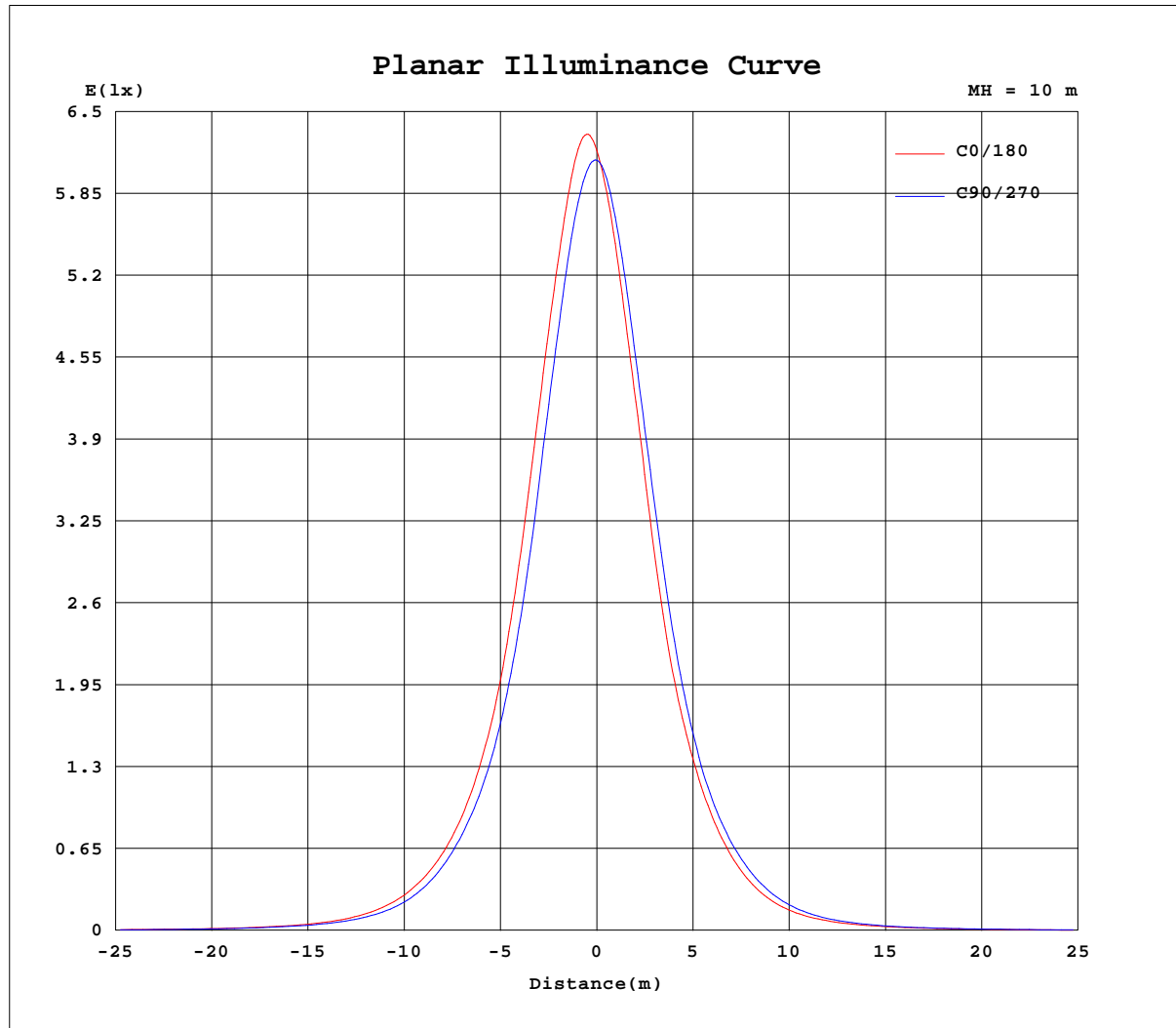
AvgL	cd/m2
L_0~180(65)av	24522
L_0~180(75)av	18500
L_0~180(85)av	12032
L_90~270(65)av	24291
L_90~270(75)av	18077
L_90~270(85)av	10999
L_45(65)av	24048
L_45(75)av	17841
L_45(85)av	10690

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 2.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:will
Test Date:11 September 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: 11 September 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:

