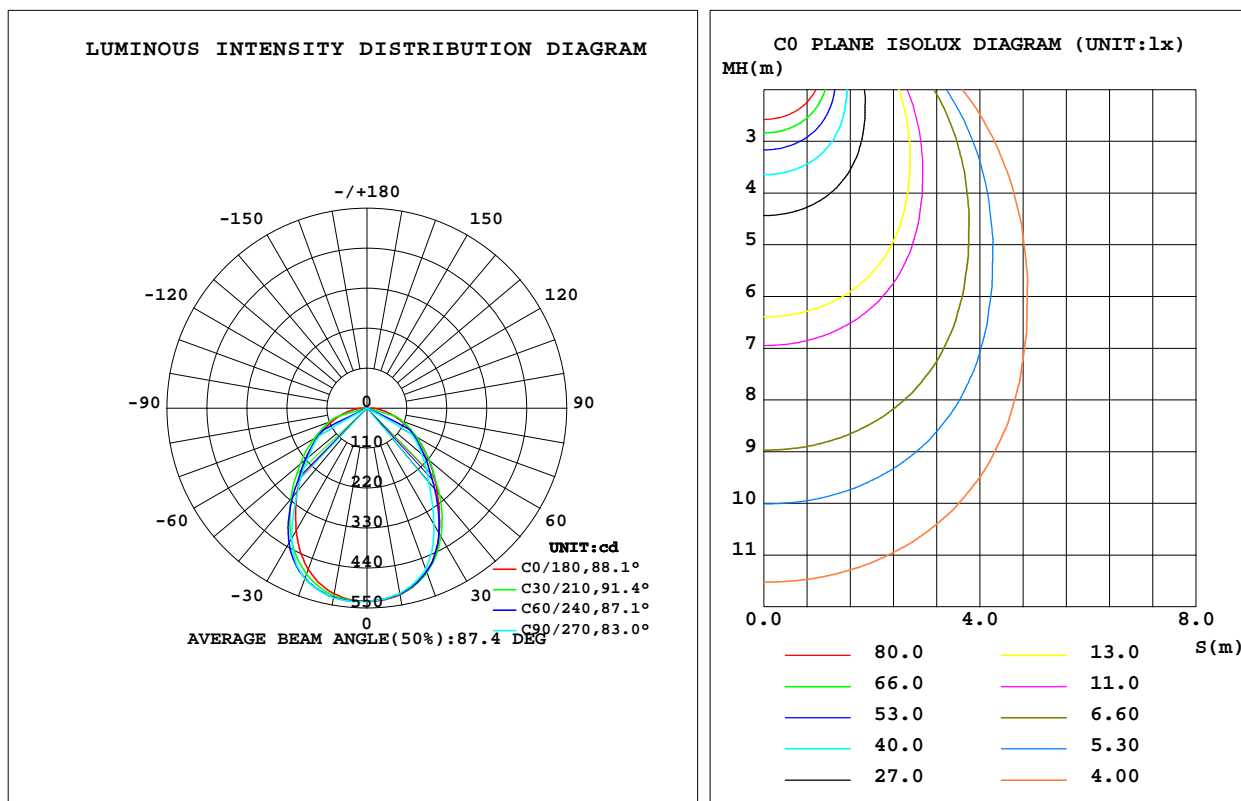


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 39.57 lm/W			
MODEL		I _{max} (cd)	532.9	S/MH(C0/180)	1.13
NOMINAL POWER(W)	28	LOR(%)	100.0	S/MH(C90/270)	1.08
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1106.6	h UP,DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	1106.56	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,51.4
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	219.2	h down(%)	100.0	CIBSE SHR MAX	1.15



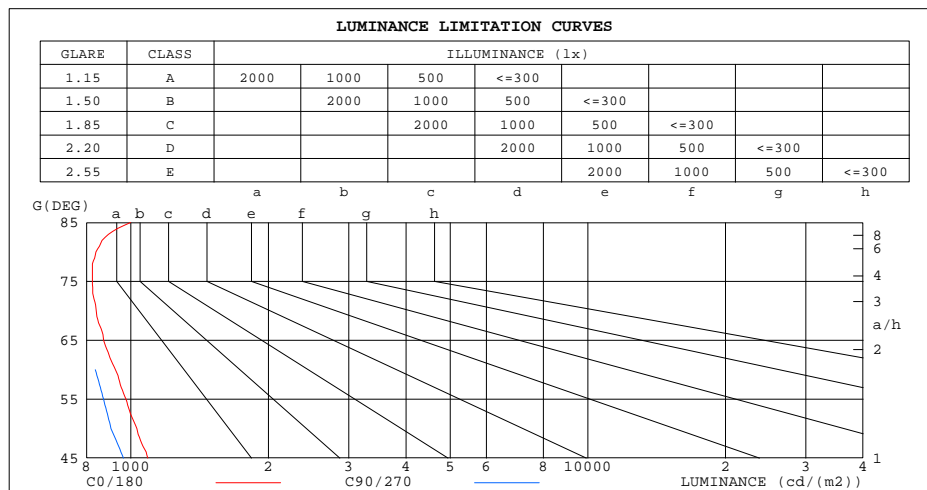
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	529.3	527.8	526.8	527.4	528.5	531.3	532.8	531.7	0- 5	12.68	12.68	1.15,1.15
10	521.3	519.2	517.5	518.1	518.5	526.3	530.1	527.5	5- 10	37.63	50.31	4.55,4.55
15	505.3	504.4	499.0	501.3	500.0	514.0	518.3	517.1	10- 15	61.11	111.4	10.1,10.1
20	479.6	481.2	472.2	477.2	472.7	493.8	499.8	498.0	15- 20	81.77	193.2	17.5,17.5
25	443.2	450.1	426.2	443.8	435.3	464.8	465.5	470.5	20- 25	98.10	291.3	26.3,26.3
30	396.7	408.8	368.3	401.3	390.2	428.0	416.0	433.4	25- 30	108.4	399.7	36.1,36.1
35	347.1	359.2	312.6	351.5	342.8	383.5	352.3	387.0	30- 35	111.8	511.5	46.2,46.2
40	300.8	305.7	263.5	297.4	299.1	330.9	294.5	335.0	35- 40	109.6	621.1	56.1,56.1
45	260.0	252.1	229.9	248.0	257.3	278.4	252.8	276.3	40- 45	103.8	724.9	65.5,65.5
50	223.6	209.9	196.4	204.1	221.7	227.5	211.1	230.5	45- 50	96.42	821.3	74.2,74.2
55	189.0	177.0	168.7	173.2	187.8	190.8	181.1	191.1	50- 55	87.79	909.1	82.2,82.2
60	156.1	147.4	141.1	144.9	155.6	157.6	151.0	155.9	55- 60	78.46	987.5	89.2,89.2
65	124.4	123.7	0	121.2	125.6	130.8	0	130.0	60- 65	55.86	1043	94.3,94.3
70	97.06	0	0	0	98.34	0	0	0	65- 70	31.94	1075	97.2,97.2
75	71.97	0	0	0	73.76	0	0	0	70- 75	18.26	1094	98.8,98.8
80	49.18	0	0	0	50.68	0	0	0	75- 80	8.975	1103	99.6,99.6
85	29.38	0	0	0	30.64	0	0	0	80- 85	3.338	1106	99.9,99.9
90	8.617	0	0	0	6.579	0	0	0	85- 90	0.6593	1107	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		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	999	0
80	839	0
75	824	0
70	841	0
65	872	0
60	925	836
55	976	872
50	1031	905
45	1090	963

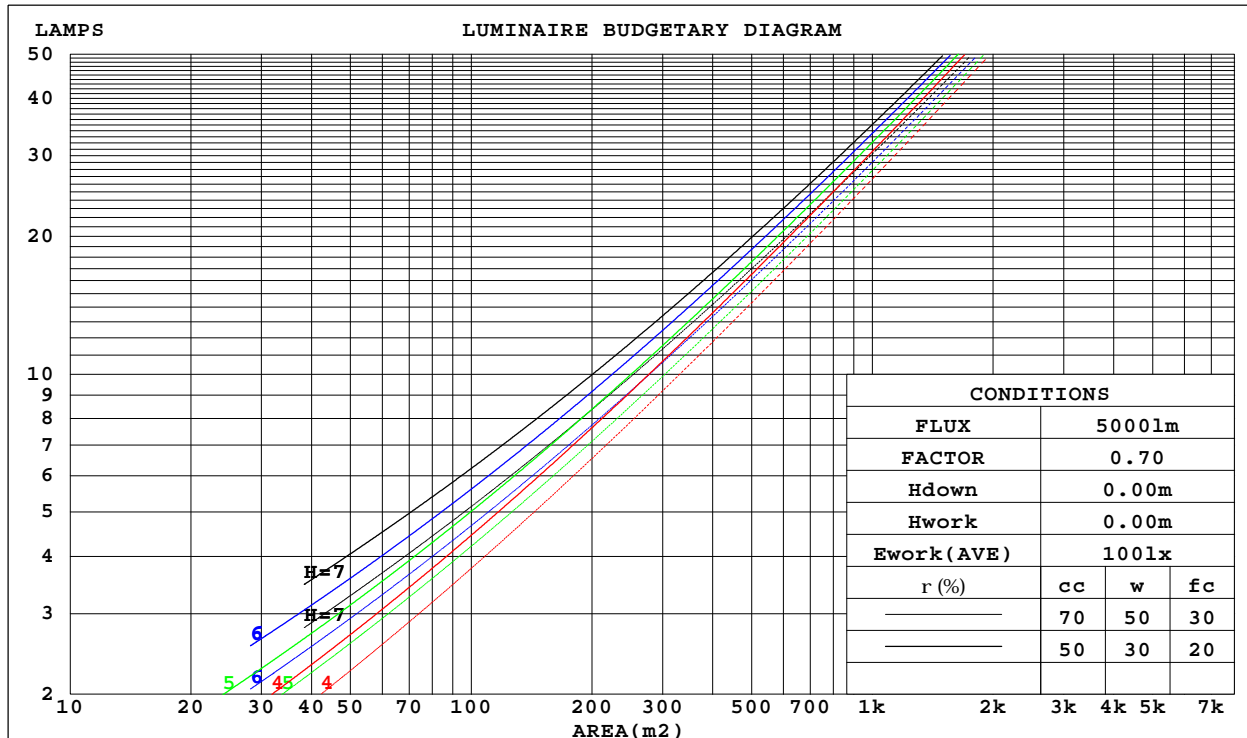
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION 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	.00	
1.0	1.07	1.03	1.00	1.05	1.01	.98	1.00	.98	.95	.97	.94	.92	.93	.91	.90	.88	
2.0	.95	.89	.84	.93	.88	.83	.90	.85	.81	.87	.83	.80	.84	.81	.78	.76	
3.0	.85	.78	.72	.83	.77	.71	.80	.75	.70	.78	.73	.69	.75	.71	.68	.66	
4.0	.76	.68	.62	.75	.68	.62	.72	.66	.61	.70	.65	.60	.68	.63	.60	.58	
5.0	.69	.61	.55	.68	.60	.54	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51	
6.0	.62	.54	.48	.62	.54	.48	.60	.53	.48	.58	.52	.47	.57	.51	.47	.45	
7.0	.57	.49	.43	.56	.49	.43	.55	.48	.43	.53	.47	.42	.52	.46	.42	.40	
8.0	.52	.44	.39	.52	.44	.39	.50	.44	.39	.49	.43	.38	.48	.42	.38	.36	
9.0	.48	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.33	
10.0	.45	.37	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.42	.36	.32	.30	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION 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	.254	.145	.046	.247	.141	.045	.234	.134	.043	.222	.128	.041	.211	.122	.039	
2.0	.247	.136	.042	.241	.133	.041	.230	.128	.040	.220	.123	.039	.210	.119	.037	
3.0	.235	.125	.037	.229	.123	.037	.219	.119	.036	.210	.115	.035	.202	.112	.035	
4.0	.221	.115	.034	.216	.113	.033	.207	.110	.033	.199	.107	.032	.192	.104	.032	
5.0	.207	.106	.031	.203	.104	.030	.195	.102	.030	.188	.099	.030	.181	.097	.029	
6.0	.194	.097	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.183	.090	.026	.179	.089	.025	.173	.088	.025	.167	.086	.025	.162	.084	.025	
8.0	.172	.084	.024	.169	.083	.024	.164	.082	.023	.158	.080	.023	.153	.079	.023	
9.0	.162	.079	.022	.160	.078	.022	.155	.077	.022	.150	.075	.022	.146	.074	.021	
10.0	.154	.074	.020	.151	.073	.020	.147	.072	.020	.142	.071	.020	.138	.070	.020	

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	.176	.157	.139	.151	.134	.119	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.103	.142	.114	.089	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.063	.129	.087	.054	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.143	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.036	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.035	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.030	.106	.059	.027	.073	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.027	.101	.055	.023	.070	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

Uncorrected UGR Table

NAME: PP121121					TYPE:LED			WEIGHT:3.1(Kg)			
DIM.: 750*450*60					SPEC.:			SERIAL No.:			
MFR.:					SUR.:750*450			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	12.7	14.1	13.0	14.3	14.5	11.5	12.8	11.7	13.0	13.2	
	3H	14.2	15.5	14.5	15.7	15.9	11.2	12.5	11.5	12.7	13.0
	4H	14.8	16.0	15.2	16.3	16.5	11.1	12.3	11.5	12.6	12.8
	6H	15.3	16.5	15.7	16.7	17.0	11.0	12.2	11.4	12.4	12.7
	8H	15.5	16.6	15.8	16.9	17.1	11.0	12.1	11.3	12.3	12.6
	12H	15.7	16.7	16.0	17.0	17.3	10.9	12.0	11.3	12.3	12.6
4H	2H	13.2	14.4	13.5	14.6	14.8	12.0	13.2	12.3	13.5	13.7
	3H	14.9	15.9	15.2	16.2	16.5	11.8	12.9	12.2	13.2	13.5
	4H	15.6	16.6	16.0	16.9	17.2	11.7	12.7	12.1	13.0	13.3
	6H	16.2	17.0	16.6	17.4	17.7	11.7	12.5	12.0	12.8	13.2
	8H	16.4	17.2	16.8	17.6	17.9	11.6	12.4	12.0	12.7	13.1
	12H	16.6	17.3	17.0	17.7	18.1	11.6	12.3	12.0	12.6	13.0
8H	4H	15.5	16.3	15.9	16.6	17.0	11.8	12.6	12.2	13.0	13.3
	6H	16.1	16.7	16.5	17.1	17.5	11.8	12.4	12.2	12.8	13.2
	8H	16.3	16.9	16.8	17.3	17.7	11.7	12.3	12.2	12.7	13.1
	12H	16.5	17.0	17.0	17.4	17.9	11.7	12.1	12.1	12.6	13.1
12H	4H	15.5	16.1	15.9	16.5	16.9	11.8	12.5	12.2	12.9	13.3
	6H	16.0	16.6	16.5	17.0	17.5	11.7	12.3	12.2	12.7	13.1
	8H	16.3	16.7	16.7	17.2	17.7	11.7	12.1	12.2	12.6	13.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 0.5 / - 0.7					
1.5H	+ 0.3 / - 0.3					+ 1.0 / - 1.5					
2.0H	+ 0.4 / - 1.2					+ 0.8 / - 1.2					

CIE Pub.117 Corrected 1107 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.4)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION ANGLE:

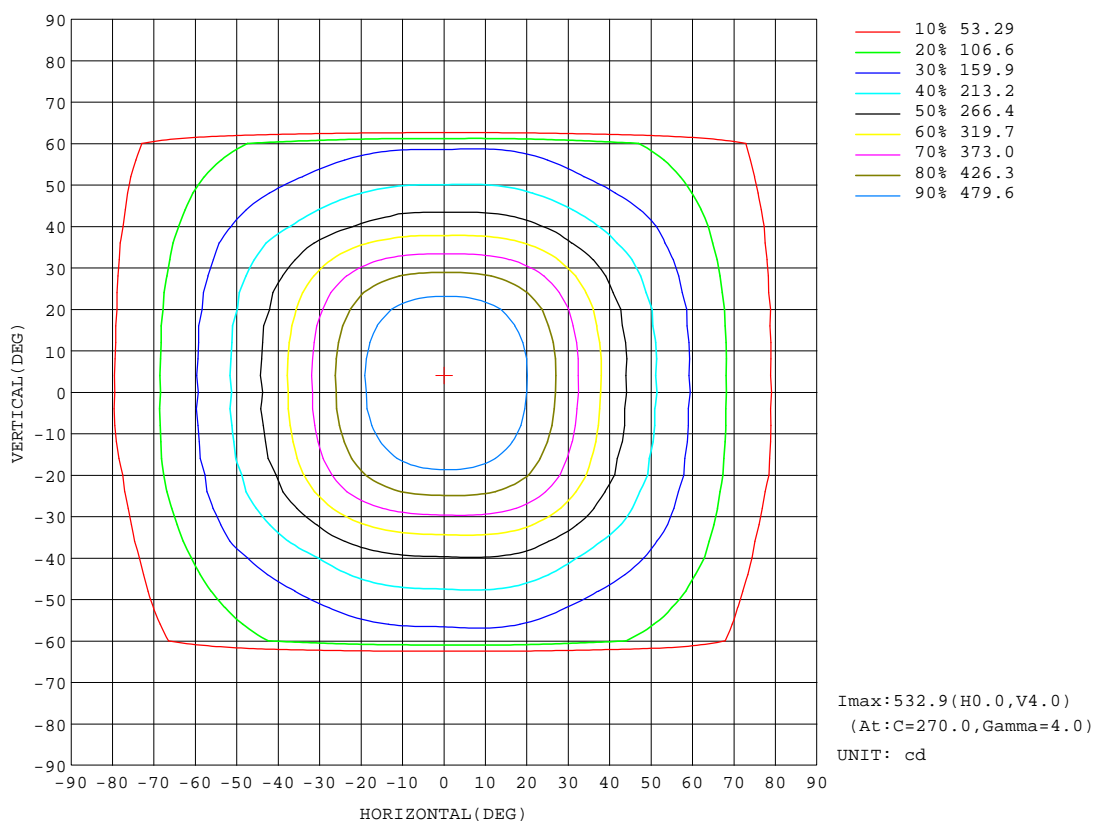
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	64	53	47	63	53	47	62	53	47	41
0.80	74	64	57	73	63	57	71	63	57	51
1.00	82	73	66	81	72	66	79	73	66	59
1.25	89	80	74	88	80	74	85	78	73	67
1.50	94	85	80	92	85	79	89	83	78	71
2.00	100	93	87	98	91	87	95	89	85	78
2.50	103	96	91	101	95	91	97	93	89	81
3.00	106	100	96	104	99	94	100	96	92	85
4.00	109	104	101	107	103	99	103	99	96	88
5.00	111	107	104	109	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION ANGLE:

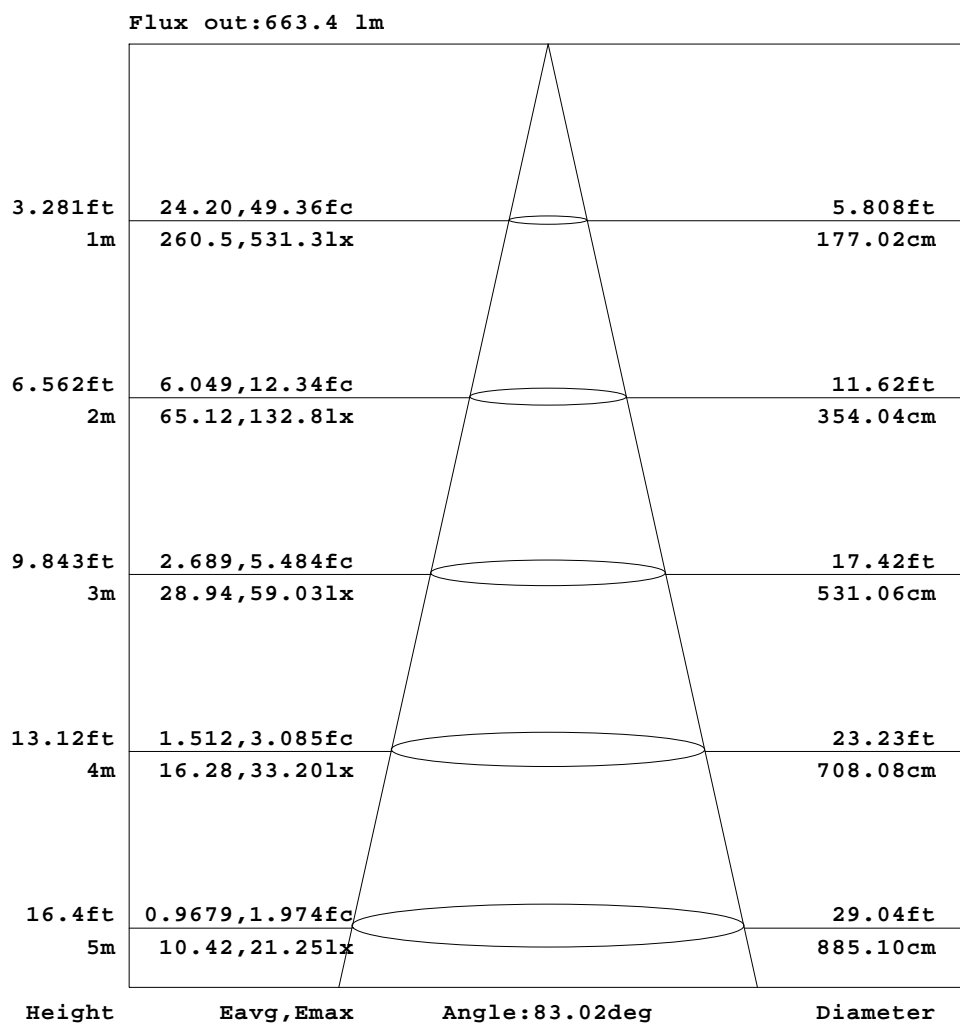


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

AAI Figure

NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION ANGLE:



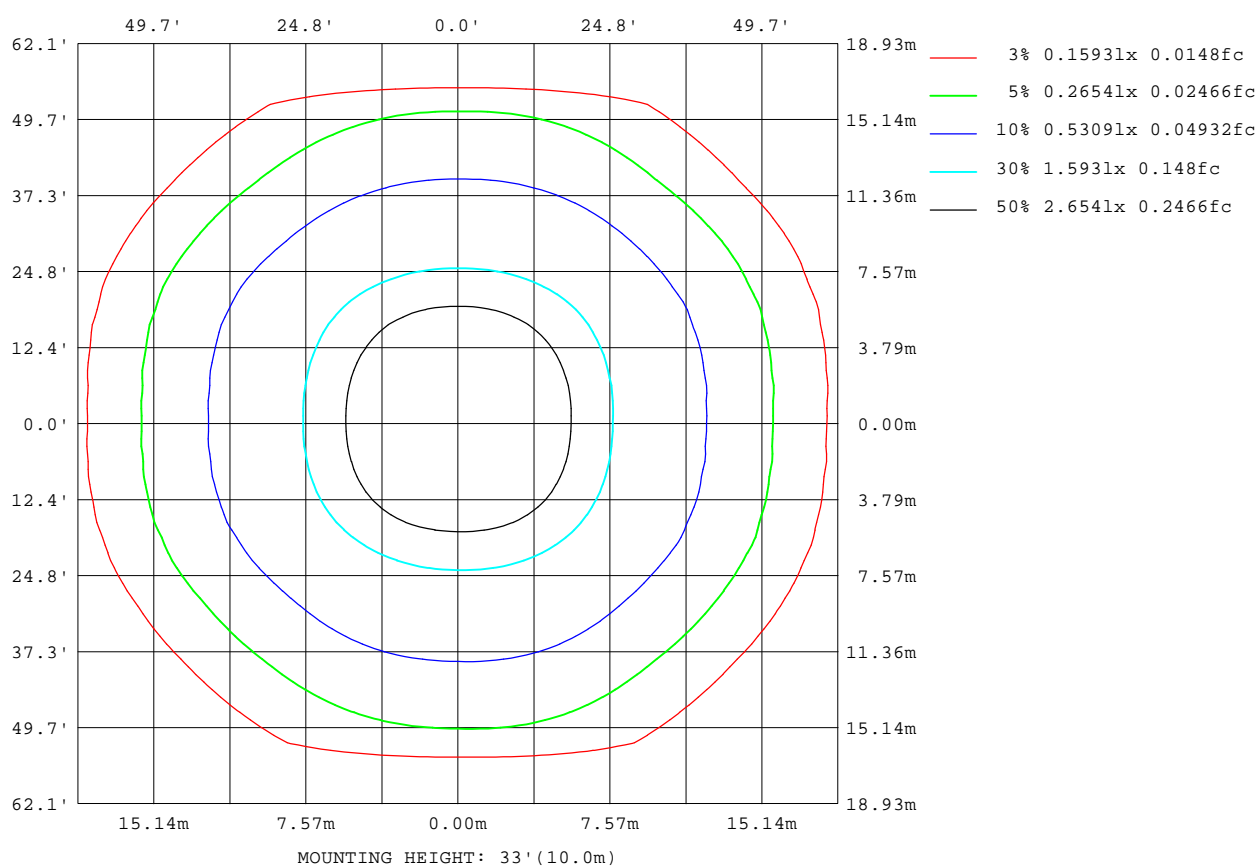
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

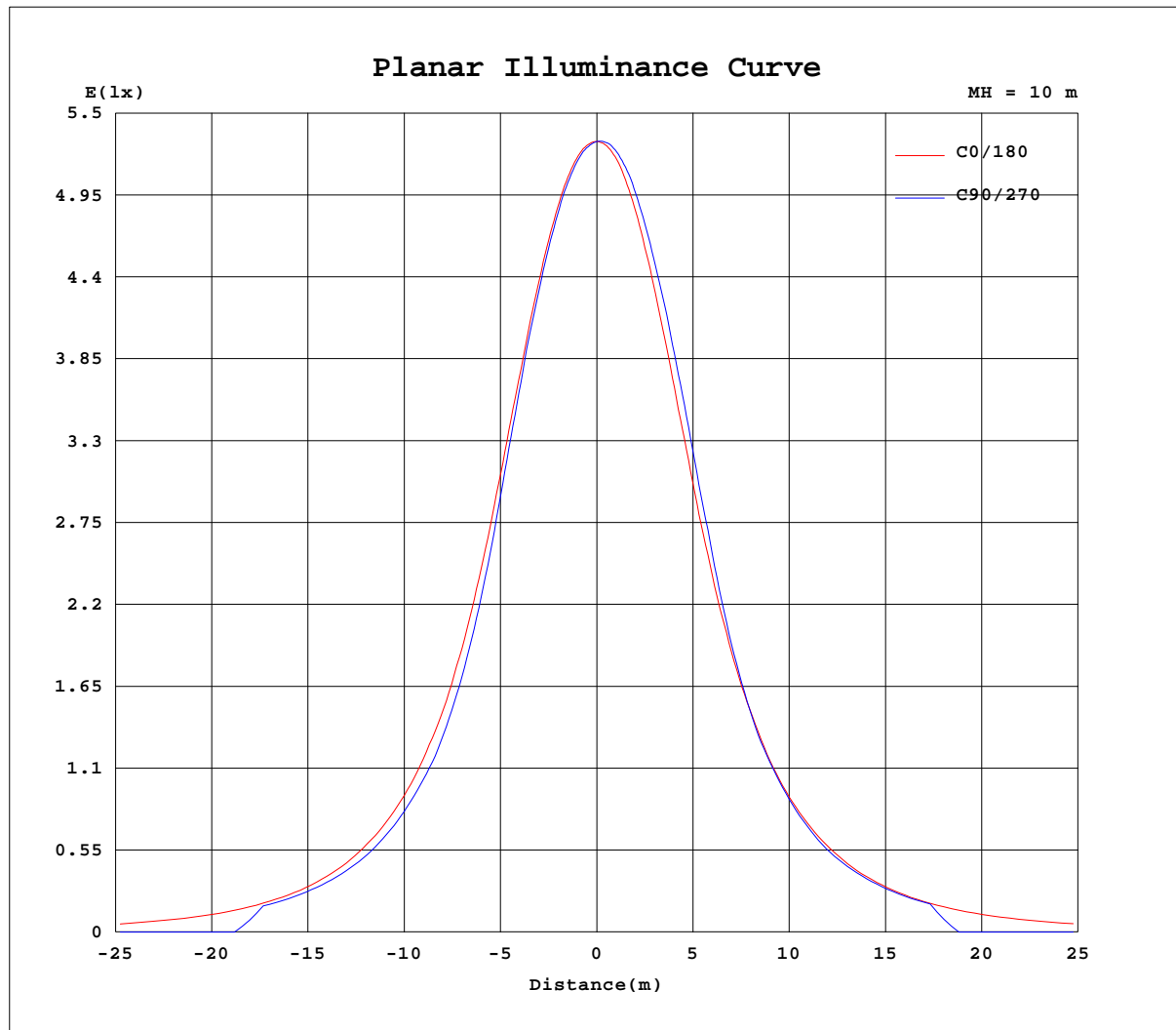
NAME: PP121121	TYPE:LED	WEIGHT:3.1(Kg)
DIM.: 750*450*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:750*450	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZENGQG
Test Date: 2019-11-18

g Range: 0 - 90DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity: 65.0%
Test Distance: 9.650m [K=1.0000]
Remarks: