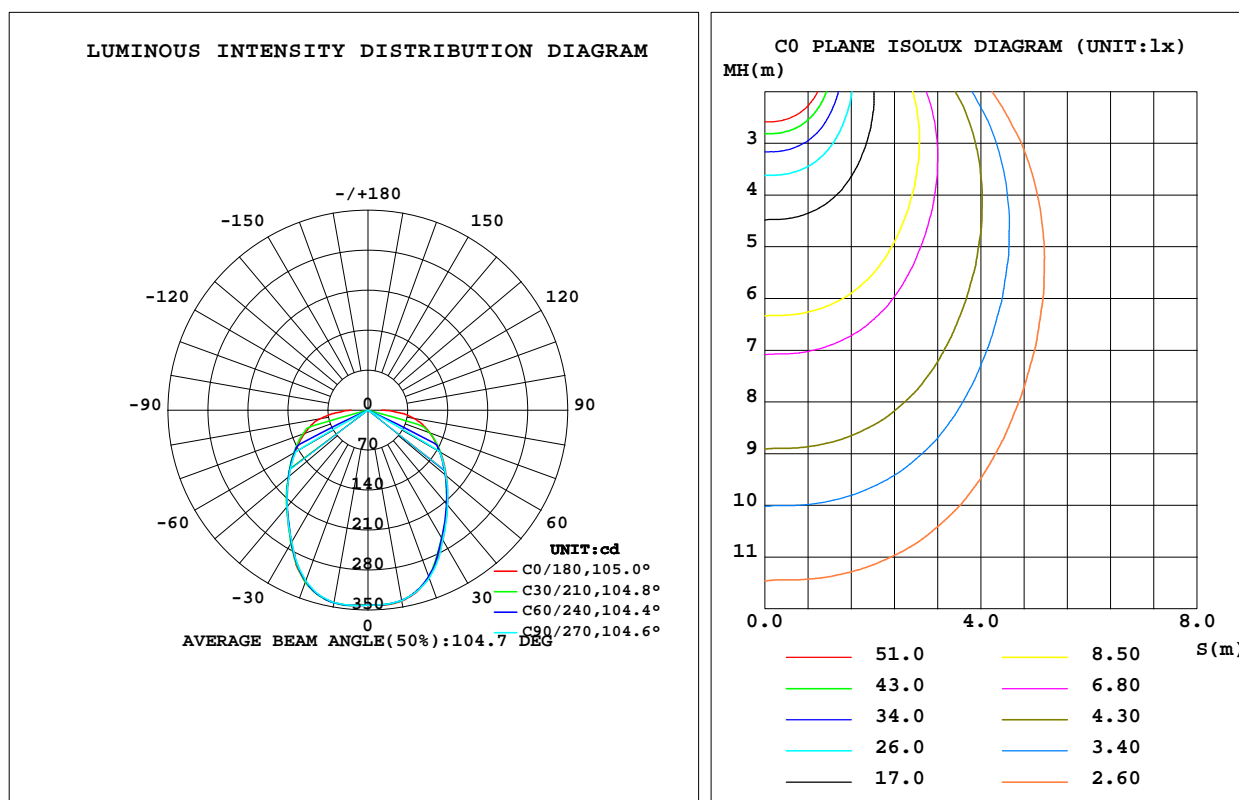


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 18.19 lm/W			
MODEL		I _{max} (cd)	343.8	S/MH(C0/180)	1.15
NOMINAL POWER(W)	46	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	838.56	h UP,DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	838.557	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.5
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	219.0	h down(%)	100.0	CIBSE SHR MAX	1.15



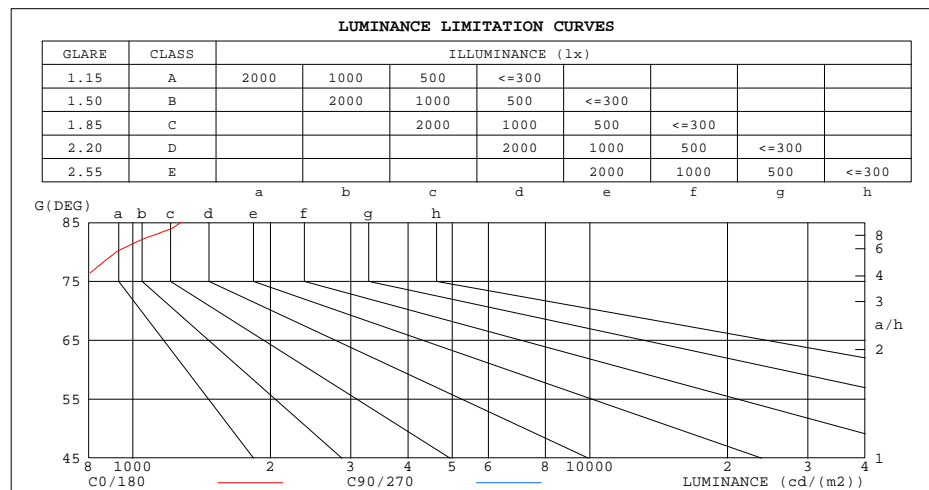
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-11

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	342.2	341.6	341.2	341.8	342.8	343.3	342.7	342.6	0- 5	8.171	8.171	0.97,0.97
10	339.3	338.2	338.7	339.7	342.0	342.5	342.3	340.1	5- 10	24.44	32.61	3.89,3.89
15	329.7	328.5	328.9	332.5	335.2	335.7	334.0	331.0	10- 15	39.90	72.50	8.65,8.65
20	312.1	310.1	313.4	318.2	320.4	320.1	318.3	313.4	15- 20	53.36	125.9	15,15
25	287.5	286.0	290.1	296.6	298.2	294.4	294.7	291.5	20- 25	63.73	189.6	22.6,22.6
30	261.8	259.1	262.1	269.9	268.1	267.9	266.7	266.2	25- 30	70.39	260.0	31,31
35	238.1	234.3	238.7	246.0	243.6	244.5	243.0	241.0	30- 35	74.42	334.4	39.9,39.9
40	216.4	213.7	216.8	220.3	221.0	220.0	220.5	219.5	35- 40	76.60	411.0	49,49
45	197.0	194.1	197.4	199.5	200.3	200.6	200.4	198.6	40- 45	77.19	488.2	58.2,58.2
50	179.2	177.0	177.9	179.7	181.5	182.1	180.4	179.7	45- 50	76.39	564.6	67.3,67.3
55	162.4	160.8	161.2	161.9	164.1	165.6	163.3	161.8	50- 55	74.37	639.0	76.2,76.2
60	144.8	145.5	144.4	145.3	147.9	150.1	146.2	145.0	55- 60	71.35	710.3	84.7,84.7
65	130.0	131.4	0	129.4	132.8	135.3	0	129.5	60- 65	54.44	764.7	91.2,91.2
70	115.0	0	0	0	118.0	0	0	0	65- 70	33.77	798.5	95.2,95.2
75	99.47	0	0	0	103.2	0	0	0	70- 75	21.14	819.7	97.7,97.7
80	80.29	0	0	0	84.33	0	0	0	75- 80	12.00	831.7	99.2,99.2
85	55.80	0	0	0	56.30	0	0	0	80- 85	5.572	837.2	99.8,99.8
90	24.43	0	0	0	30.14	0	0	0	85- 90	1.332	838.6	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	1274	0
80	920	0
75	765	0
70	669	0
65	612	0
60	576	575
55	563	559
50	555	551
45	554	555

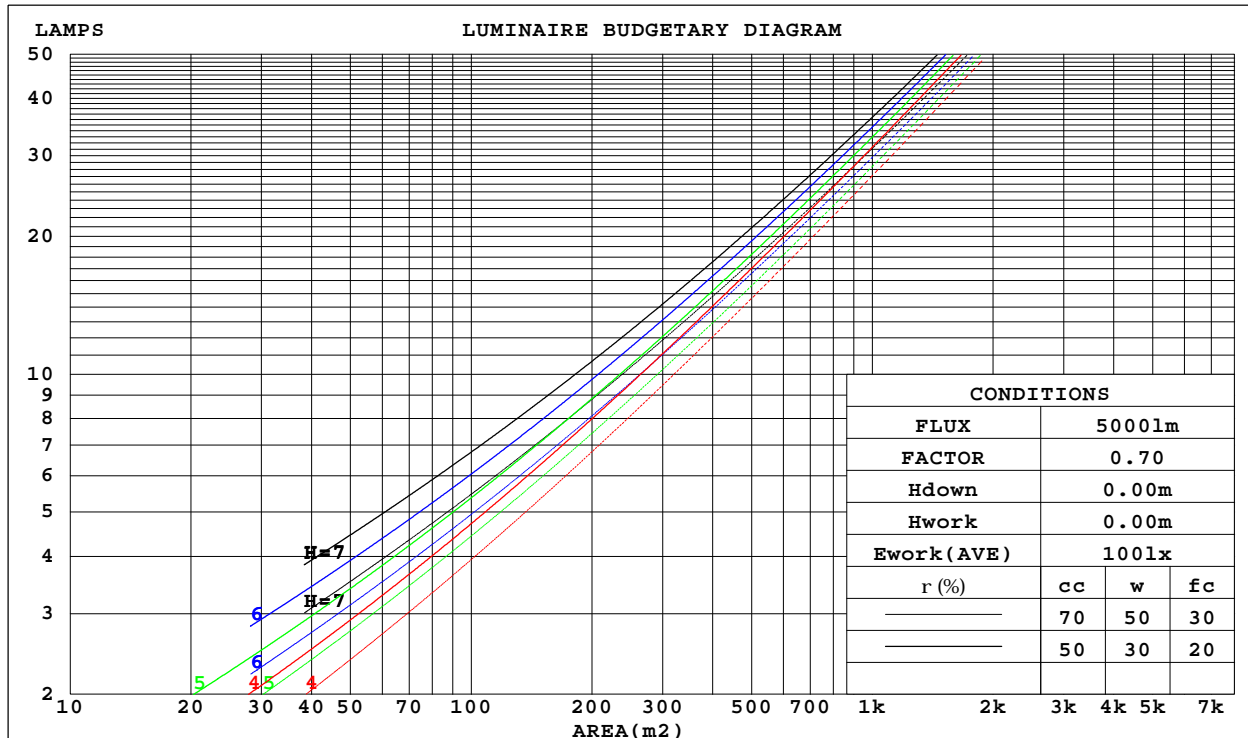
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-11-11

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: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	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	1.00
1.0	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.87	.81	.91	.85	.80	.88	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.81	.73	.68	.78	.72	.67	.75	.70	.65	.72	.68	.64	.62
4.0	.73	.65	.58	.72	.64	.58	.69	.63	.57	.67	.61	.56	.65	.60	.56	.54
5.0	.66	.57	.51	.64	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.51	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.39	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.41	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.33
9.0	.45	.37	.32	.45	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.38	.33	.28	.27



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

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: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	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	.278	.158	.050	.271	.155	.049	.258	.148	.047	.246	.142	.046	.235	.136	.044	
2.0	.268	.147	.045	.262	.144	.044	.251	.139	.043	.240	.135	.042	.230	.130	.041	
3.0	.252	.134	.040	.247	.132	.040	.237	.128	.039	.227	.125	.038	.219	.121	.037	
4.0	.236	.122	.036	.231	.121	.036	.222	.118	.035	.213	.115	.035	.206	.112	.034	
5.0	.220	.112	.032	.215	.111	.032	.207	.108	.032	.200	.106	.031	.193	.103	.031	
6.0	.205	.103	.029	.201	.102	.029	.194	.100	.029	.188	.097	.029	.181	.095	.028	
7.0	.192	.095	.027	.188	.094	.027	.182	.092	.027	.176	.090	.026	.171	.089	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.166	.084	.024	.161	.083	.024	
9.0	.169	.082	.023	.166	.081	.023	.161	.080	.023	.156	.078	.022	.152	.077	.022	
10.0	.159	.076	.021	.157	.076	.021	.152	.075	.021	.148	.073	.021	.144	.072	.021	

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	.178	.156	.137	.152	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.052	.036	.022	.017	.012	.007	
5.0	.146	.090	.049	.126	.078	.042	.087	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

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

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: PP020112					TYPE:LED			WEIGHT:3.648(Kg)			
DIM.: D800*60					SPEC.:			SERIAL No.:			
MFR.:					SUR.:f800			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	11.3	12.7	11.5	12.9	13.1	10.2	11.7	10.5	11.9	12.1	
	3H	13.5	14.8	13.7	15.0	15.3	10.0	11.4	10.3	11.6	11.8
	4H	14.5	15.8	14.8	16.0	16.3	9.9	11.2	10.2	11.4	11.7
	6H	15.5	16.7	15.8	16.9	17.2	9.8	11.0	10.1	11.3	11.6
	8H	15.9	17.1	16.3	17.4	17.6	9.8	10.9	10.1	11.2	11.5
	12H	16.5	17.6	16.8	17.9	18.2	9.7	10.8	10.1	11.1	11.4
4H	2H	11.9	13.2	12.3	13.5	13.7	11.0	12.3	11.3	12.5	12.8
	3H	14.3	15.4	14.7	15.7	16.0	10.8	11.9	11.2	12.2	12.5
	4H	15.4	16.4	15.8	16.7	17.1	10.7	11.7	11.1	12.0	12.4
	6H	16.5	17.4	16.9	17.7	18.1	10.6	11.5	11.0	11.9	12.2
	8H	17.0	17.8	17.4	18.2	18.6	10.6	11.4	11.0	11.8	12.1
	12H	17.6	18.3	18.0	18.7	19.1	10.5	11.3	11.0	11.7	12.1
8H	4H	15.3	16.1	15.7	16.5	16.9	10.9	11.7	11.3	12.1	12.5
	6H	16.3	17.0	16.8	17.4	17.8	10.8	11.5	11.3	11.9	12.3
	8H	16.9	17.5	17.3	17.9	18.3	10.8	11.4	11.2	11.8	12.3
	12H	17.4	18.0	17.9	18.4	18.9	10.8	11.3	11.2	11.7	12.2
12H	4H	15.2	16.0	15.7	16.4	16.8	10.9	11.6	11.3	12.0	12.4
	6H	16.3	16.9	16.8	17.3	17.8	10.8	11.4	11.3	11.8	12.3
	8H	16.8	17.3	17.3	17.8	18.3	10.8	11.3	11.2	11.7	12.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
1.5H	+ 0.6 / - 0.4					+ 1.4 / - 2.1					
2.0H	+ 0.4 / - 0.9					+ 0.9 / - 1.6					

CIE Pub.117 Corrected 838.6 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.6)

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

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: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	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	$k(RI) \times RCR = 5$									
$k = 0.60$	60	48	42	59	48	41	58	48	41	35
0.80	70	59	52	69	58	52	67	58	51	45
1.00	79	68	61	78	68	61	75	69	60	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	91	82	75	89	81	75	86	79	73	66
2.00	97	89	84	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	78
3.00	104	98	93	102	96	92	98	93	90	81
4.00	108	103	98	105	101	97	101	97	94	86
5.00	110	105	102	107	104	100	103	100	97	88
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:2019-11-11

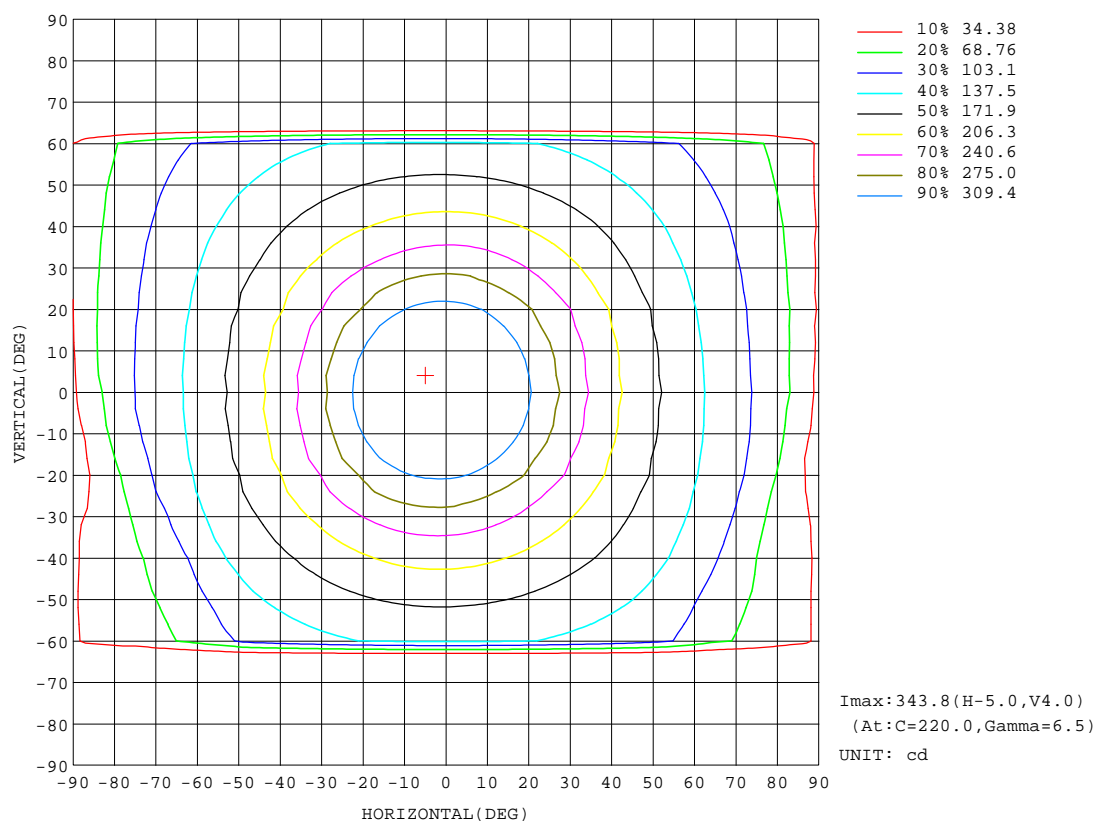
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Range: 0 - 90DEG
Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

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ISOCANDELA DIAGRAM

NAME: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	PROTECTION ANGLE:

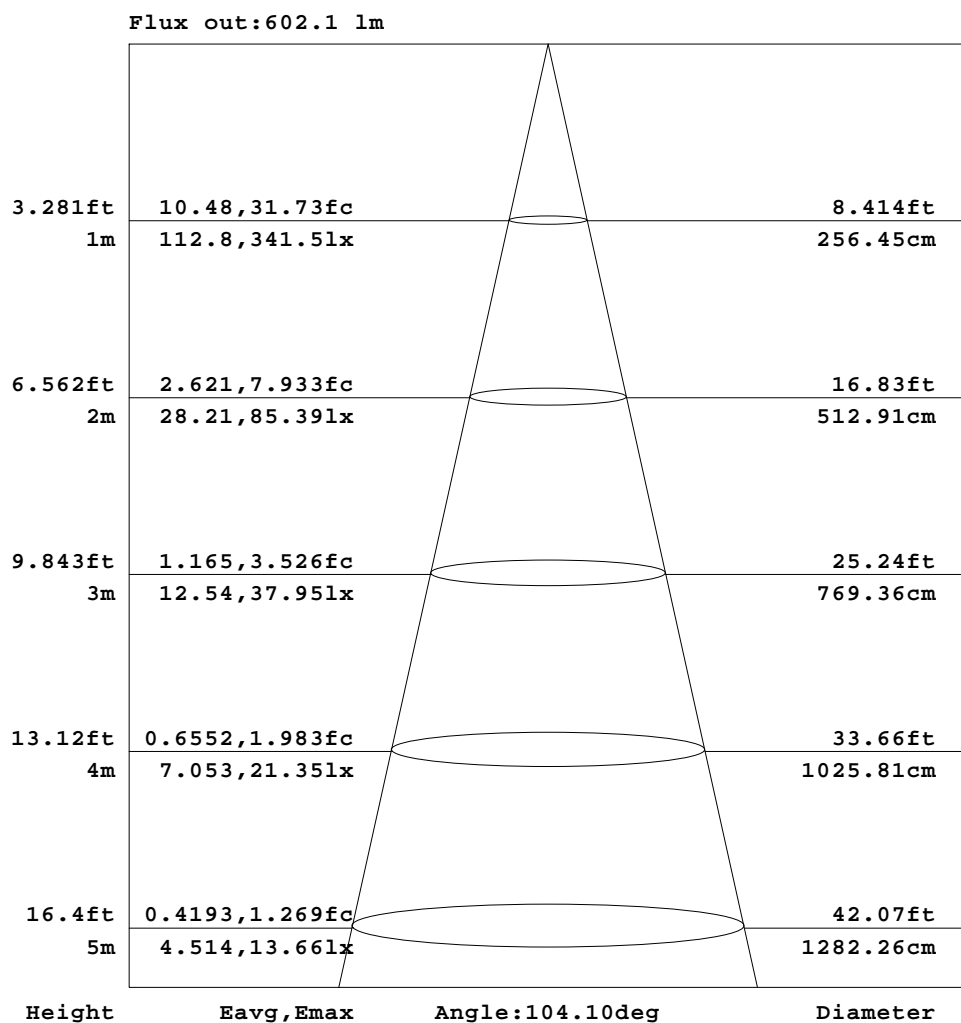


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ZENGQG
Test Date: 2019-11-11

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: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	PROTECTION ANGLE:



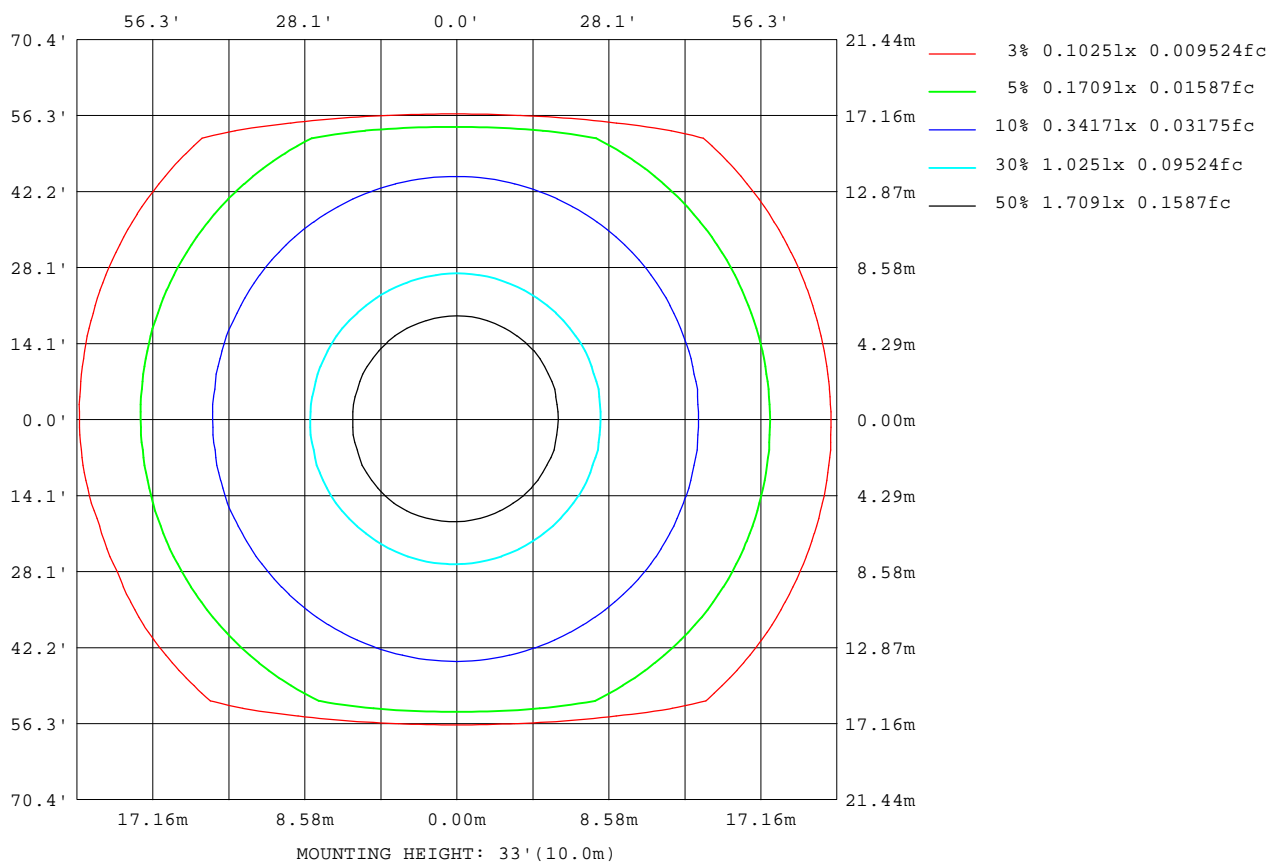
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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

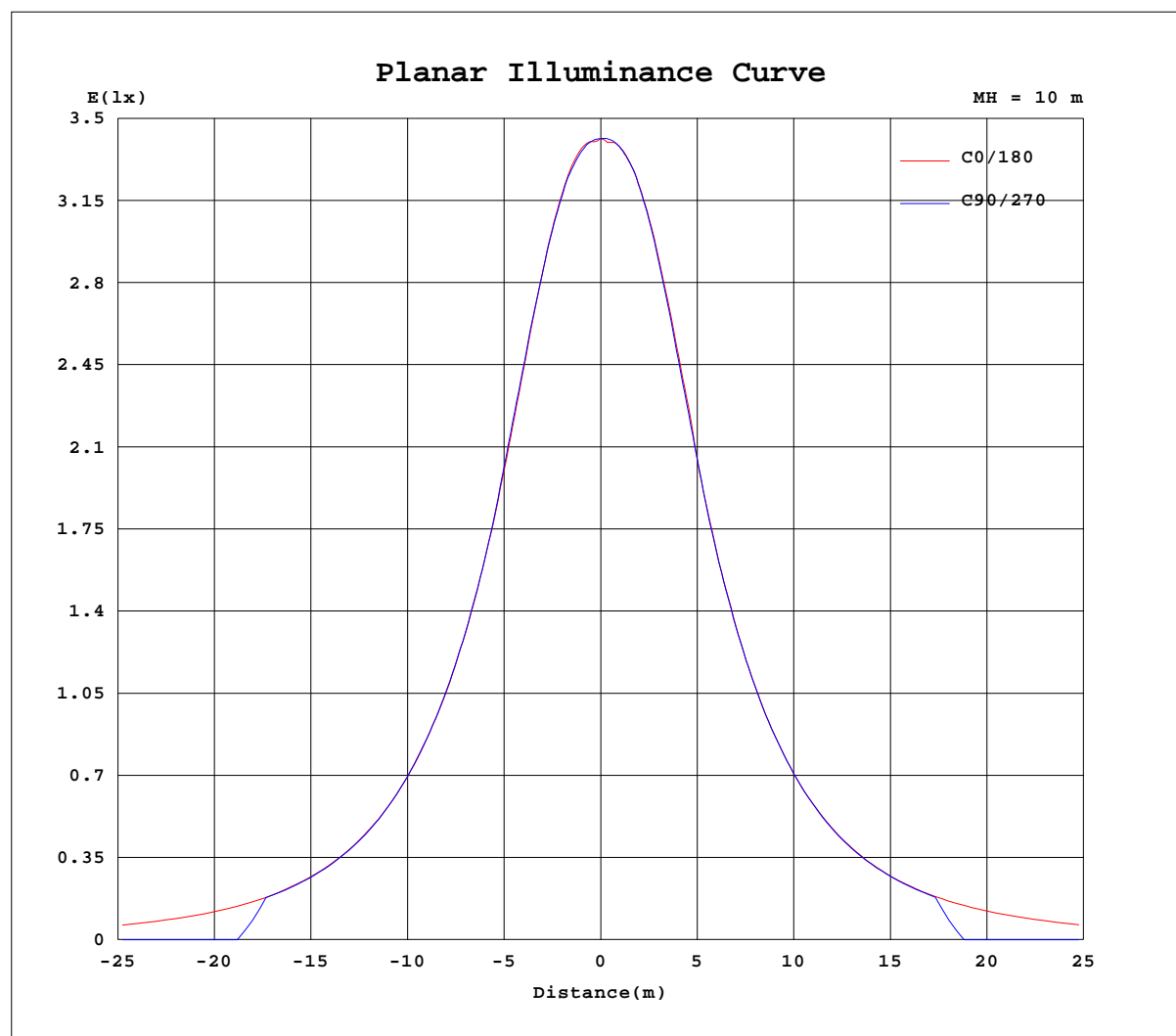
NAME: PP020112	TYPE:LED	WEIGHT:3.648(Kg)
DIM.: D800*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:f800	PROTECTION ANGLE:



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

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: 2019-11-11

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: