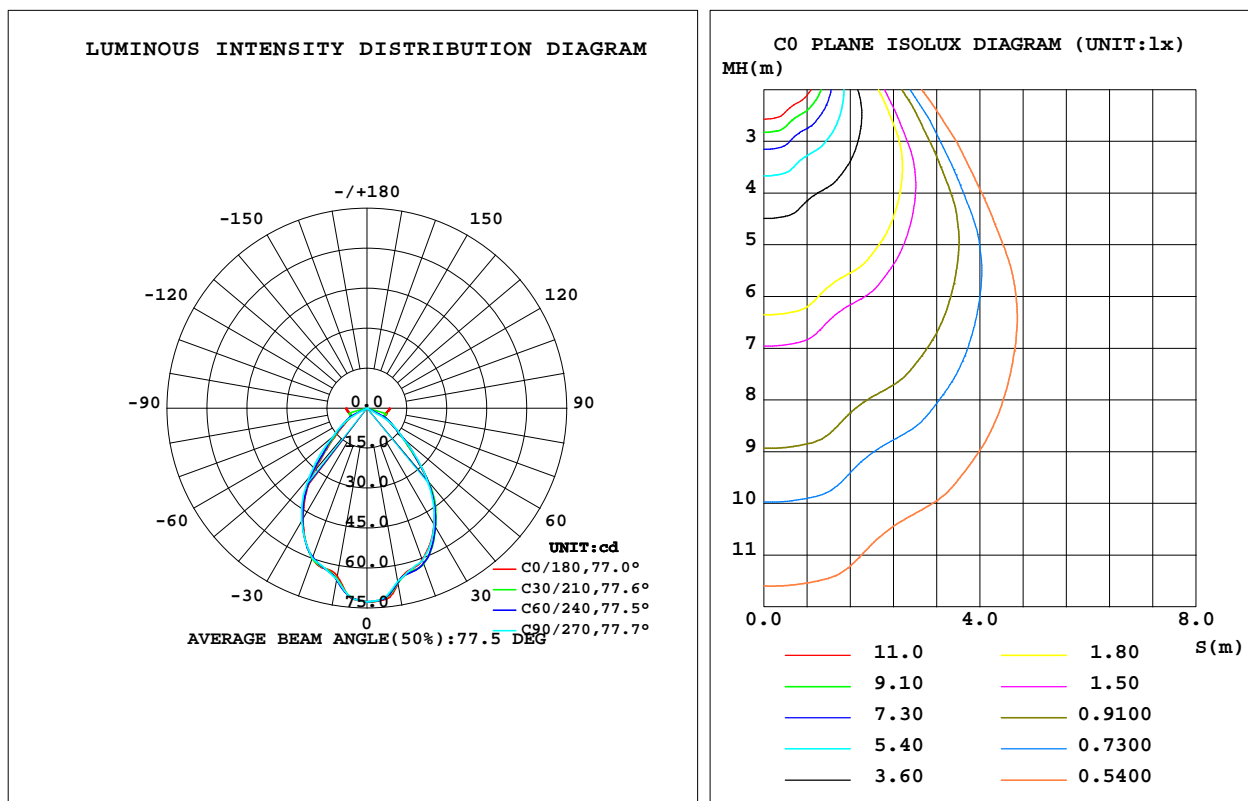


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 9.94 lm/W
MODEL		I <sub>max</sub> (cd)	72.68	S/MH(C0/180)	1.07	
NOMINAL POWER(W)	12	LOR(%)	100.0	S/MH(C90/270)	1.07	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	114.26	h UP,DN(C0-180)	0.0,50.5	
NOMINAL FLUX(lm)	114.26	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,49.5	
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.00	
TEST VOLTAGE(V)	219.1	h down(%)	100.0	CIBSE SHR MAX	1.15	



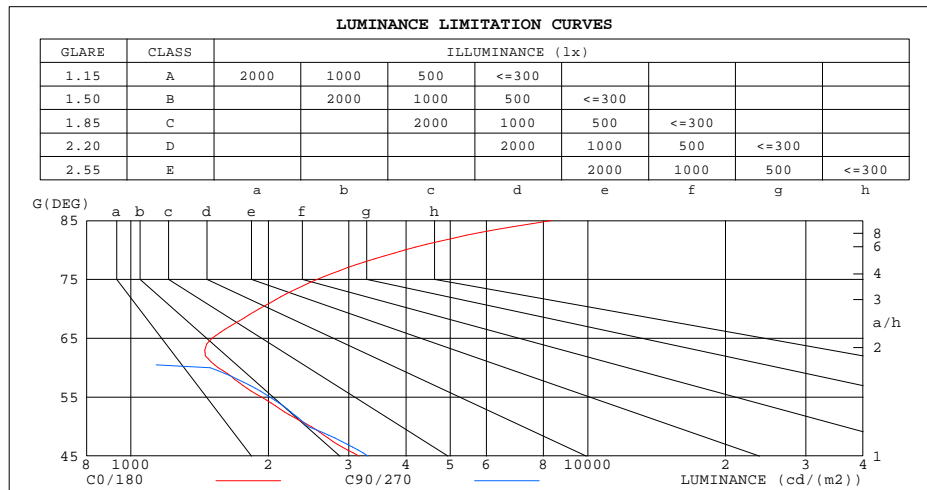
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZENGQG  
 Test Date:2019-12-04

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	72.21	71.82	71.52	71.39	71.45	71.15	71.07	71.67	0- 5	1.723	1.723	1.51,1.51
10	66.88	66.92	66.09	65.82	64.11	65.49	65.21	67.10	5- 10	4.911	6.633	5.81,5.81
15	62.69	63.83	62.87	62.68	62.22	62.25	62.01	63.68	10- 15	7.580	14.21	12.4,12.4
20	60.64	62.24	60.83	59.60	59.93	59.30	59.97	61.70	15- 20	10.19	24.40	21.4,21.4
25	56.18	57.85	56.44	54.95	54.73	54.72	54.83	57.21	20- 25	12.23	36.63	32.1,32.1
30	50.36	51.51	50.46	48.76	48.10	48.85	49.03	50.93	25- 30	13.37	49.99	43.8,43.8
35	43.87	43.88	43.38	41.78	40.53	41.67	42.17	43.66	30- 35	13.58	63.57	55.6,55.6
40	35.75	35.58	35.08	32.67	30.56	32.08	33.67	35.02	35- 40	12.78	76.35	66.8,66.8
45	25.25	25.26	26.42	22.93	20.99	22.13	25.13	24.66	40- 45	10.61	86.96	76.1,76.1
50	18.06	17.91	17.75	16.03	14.56	15.45	16.59	17.38	45- 50	8.192	95.15	83.3,83.3
55	12.54	13.18	13.09	11.51	10.22	11.23	12.20	12.78	50- 55	6.215	101.4	88.7,88.7
60	8.788	9.395	8.431	8.106	7.218	7.943	7.801	8.973	55- 60	4.685	106.1	92.8,92.8
65	7.195	7.672	0	7.116	6.741	7.115	0	7.454	60- 65	2.953	109.0	95.4,95.4
70	7.390	0	0	0	6.937	0	0	0	65- 70	1.911	110.9	97.1,97.1
75	7.481	0	0	0	7.037	0	0	0	70- 75	1.434	112.4	98.3,98.3
80	7.805	0	0	0	7.400	0	0	0	75- 80	1.030	113.4	99.2,99.2
85	8.211	0	0	0	7.730	0	0	0	80- 85	0.6455	114.0	99.8,99.8
90	8.522	0	0	0	7.826	0	0	0	85- 90	0.2335	114.3	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	8331	0
80	3975	0
75	2556	0
70	1911	0
65	1505	0
60	1554	1491
55	1933	2018
50	2485	2442
45	3157	3304

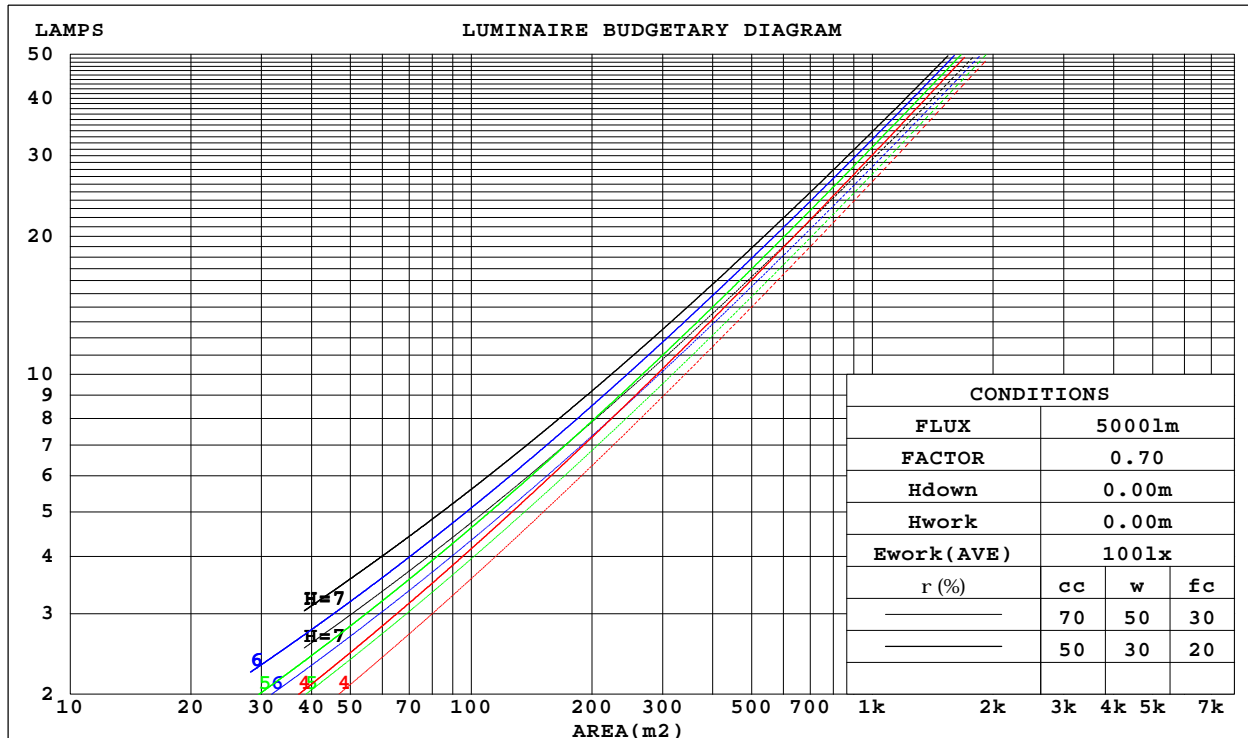
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION 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	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.98	.96	.94	.94	.92	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.81	.79
3.0	.88	.81	.76	.86	.80	.75	.84	.78	.74	.81	.77	.73	.79	.75	.72	.70
4.0	.80	.73	.67	.79	.72	.67	.76	.71	.66	.74	.69	.65	.72	.68	.64	.62
5.0	.73	.65	.60	.72	.65	.60	.70	.64	.59	.68	.63	.58	.66	.62	.58	.56
6.0	.67	.59	.54	.66	.59	.54	.64	.58	.53	.63	.57	.53	.61	.56	.52	.51
7.0	.62	.54	.49	.61	.54	.49	.59	.53	.48	.58	.52	.48	.57	.52	.48	.46
8.0	.57	.49	.44	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.47	.44	.42
9.0	.53	.45	.41	.52	.45	.41	.51	.45	.40	.50	.44	.40	.49	.44	.40	.38
10.0	.49	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.46	.41	.37	.35



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	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	.237	.135	.043	.230	.131	.042	.217	.125	.040	.205	.118	.038	.194	.113	.036	
2.0	.227	.125	.038	.221	.122	.038	.210	.117	.036	.200	.112	.035	.191	.108	.034	
3.0	.215	.115	.034	.210	.112	.034	.200	.109	.033	.191	.105	.032	.183	.101	.031	
4.0	.203	.105	.031	.198	.104	.031	.190	.101	.030	.182	.098	.029	.175	.095	.029	
5.0	.191	.097	.028	.187	.096	.028	.180	.094	.028	.173	.091	.027	.166	.089	.027	
6.0	.180	.090	.026	.177	.089	.026	.170	.087	.025	.164	.085	.025	.158	.083	.025	
7.0	.170	.084	.024	.167	.083	.024	.161	.081	.023	.156	.080	.023	.150	.078	.023	
8.0	.161	.079	.022	.158	.078	.022	.153	.076	.022	.148	.075	.022	.143	.074	.021	
9.0	.153	.074	.021	.150	.073	.021	.145	.072	.020	.141	.071	.020	.137	.069	.020	
10.0	.145	.070	.019	.143	.069	.019	.138	.068	.019	.134	.067	.019	.130	.066	.019	

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	.175	.157	.140	.150	.135	.121	.103	.093	.083	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.091	.068	.050	.052	.040	.029	.017	.013	.010	
4.0	.145	.100	.065	.125	.086	.057	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.082	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.131	.080	.044	.113	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.125	.073	.037	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.119	.067	.032	.102	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.098	.054	.024	.068	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.024	.093	.050	.021	.065	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP121134-BMB/BC						TYPE:		WEIGHT:1.17KG			
DIM.: D220*520						SPEC.:		SERIAL No.:			
MFR.:						SUR.:D120		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	14.5	15.8	14.8	16.0	16.2	14.3	15.5	14.5	15.7	15.9	
	3H	15.7	16.9	16.0	17.1	17.3	14.1	15.2	14.4	15.5	15.7
	4H	16.8	17.9	17.1	18.1	18.4	14.0	15.1	14.3	15.3	15.6
	6H	18.4	19.4	18.7	19.7	20.0	13.9	14.9	14.2	15.2	15.4
	8H	19.5	20.4	19.8	20.7	21.0	13.8	14.8	14.2	15.1	15.4
	12H	20.8	21.7	21.1	22.0	22.3	13.8	14.7	14.1	15.0	15.3
4H	2H	14.8	15.8	15.0	16.1	16.3	14.5	15.6	14.8	15.8	16.0
	3H	16.3	17.2	16.6	17.5	17.8	14.3	15.2	14.6	15.5	15.8
	4H	17.6	18.5	18.0	18.8	19.1	14.2	15.0	14.5	15.3	15.7
	6H	19.4	20.2	19.8	20.5	20.9	14.1	14.8	14.5	15.2	15.5
	8H	20.6	21.3	21.0	21.6	22.0	14.0	14.7	14.4	15.1	15.5
	12H	21.9	22.6	22.4	23.0	23.3	14.0	14.6	14.4	15.0	15.4
8H	4H	17.5	18.2	17.9	18.5	18.9	14.2	14.9	14.6	15.3	15.7
	6H	19.3	19.9	19.7	20.3	20.7	14.1	14.7	14.6	15.1	15.5
	8H	20.5	21.0	20.9	21.4	21.8	14.1	14.6	14.6	15.0	15.5
	12H	21.8	22.2	22.3	22.7	23.2	14.1	14.5	14.5	14.9	15.4
12H	4H	17.4	18.1	17.8	18.4	18.8	14.2	14.9	14.6	15.2	15.6
	6H	19.2	19.8	19.7	20.2	20.6	14.1	14.6	14.6	15.1	15.5
	8H	20.4	20.8	20.9	21.3	21.8	14.1	14.5	14.6	15.0	15.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 1.0 / - 1.5					
1.5H	+ 0.3 / - 0.3					+ 0.8 / - 1.3					
2.0H	+ 0.5 / - 1.6					+ 2.0 / - 2.0					

CIE Pub.117 Corrected 114.3 lm Total Lamp Luminous Flux.(8log(F/F0) = -7.5)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION ANGLE:

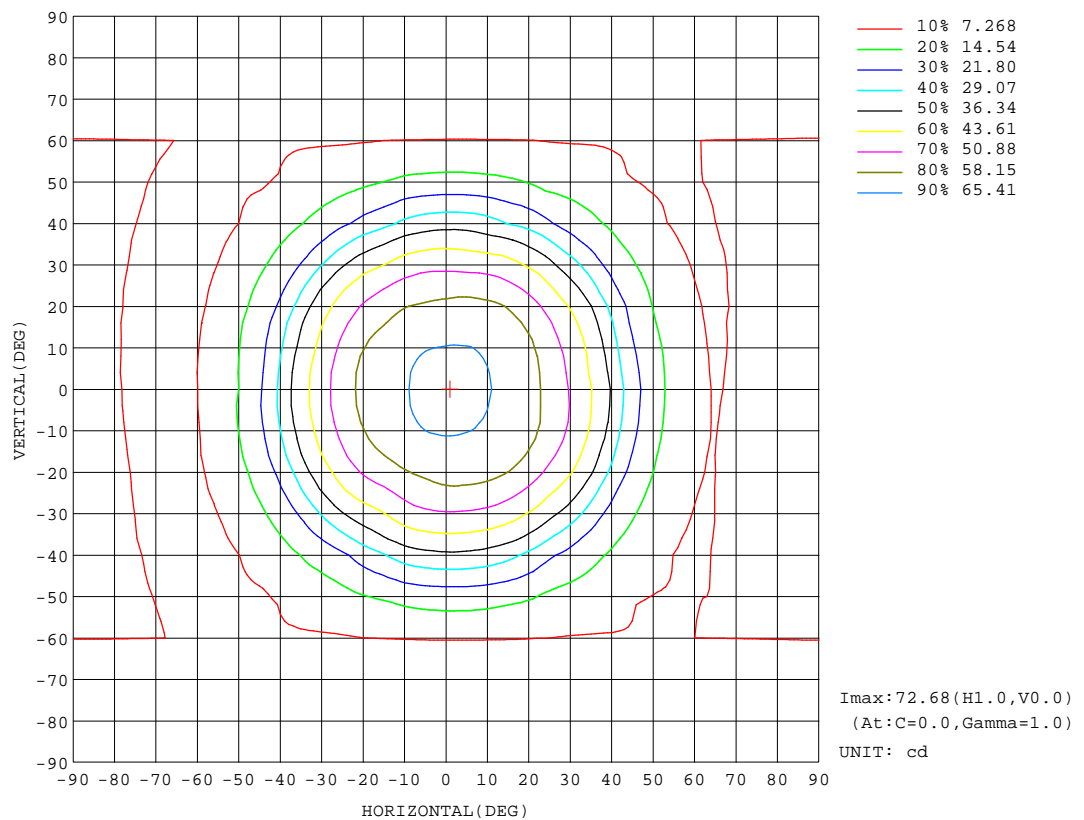
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	71	61	56	70	61	56	69	61	55	50
0.80	80	71	65	79	71	65	78	70	65	59
1.00	87	79	73	86	78	73	84	79	73	67
1.25	93	86	80	92	85	80	90	84	79	73
1.50	97	90	85	96	89	85	93	88	83	78
2.00	102	96	91	101	95	91	98	93	89	83
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	98	105	101	97	102	98	95	88
4.00	110	106	103	108	104	101	104	101	99	91
5.00	112	108	105	110	106	104	105	103	101	92
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:2019-12-04

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: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION ANGLE:

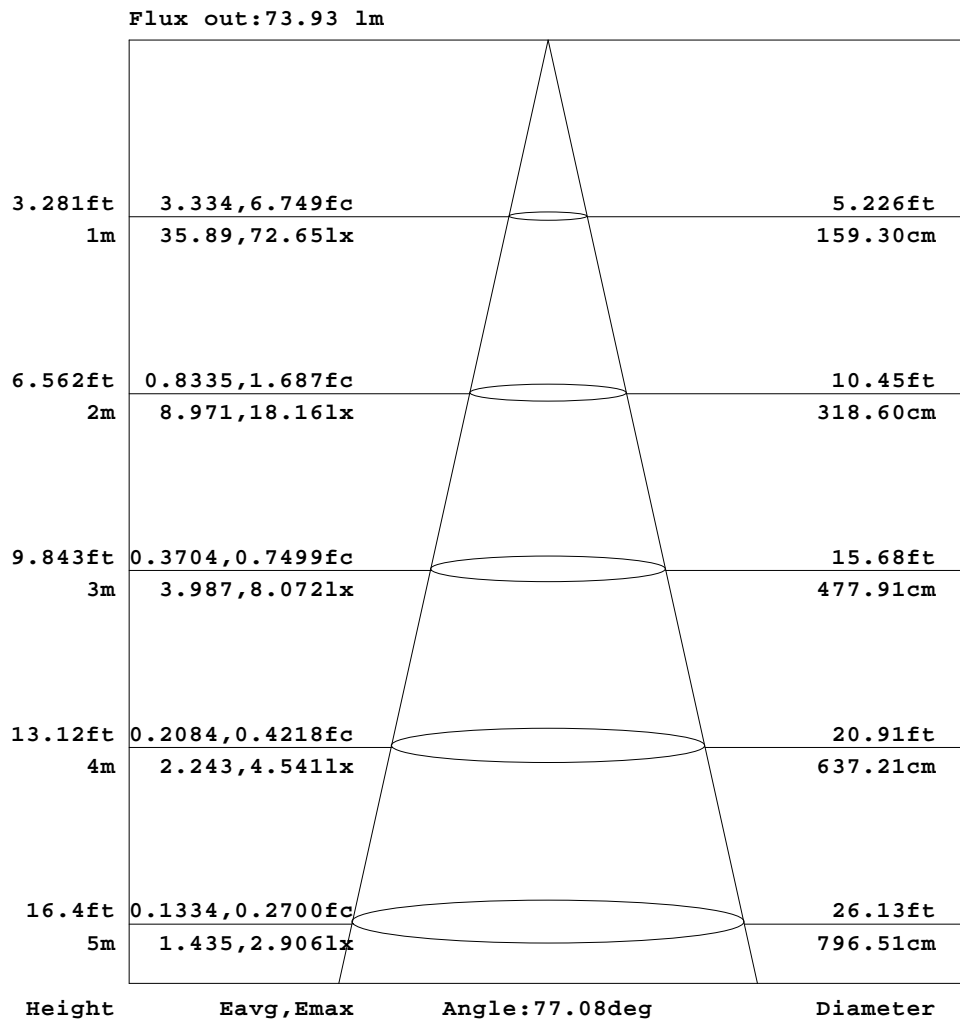


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION ANGLE:



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

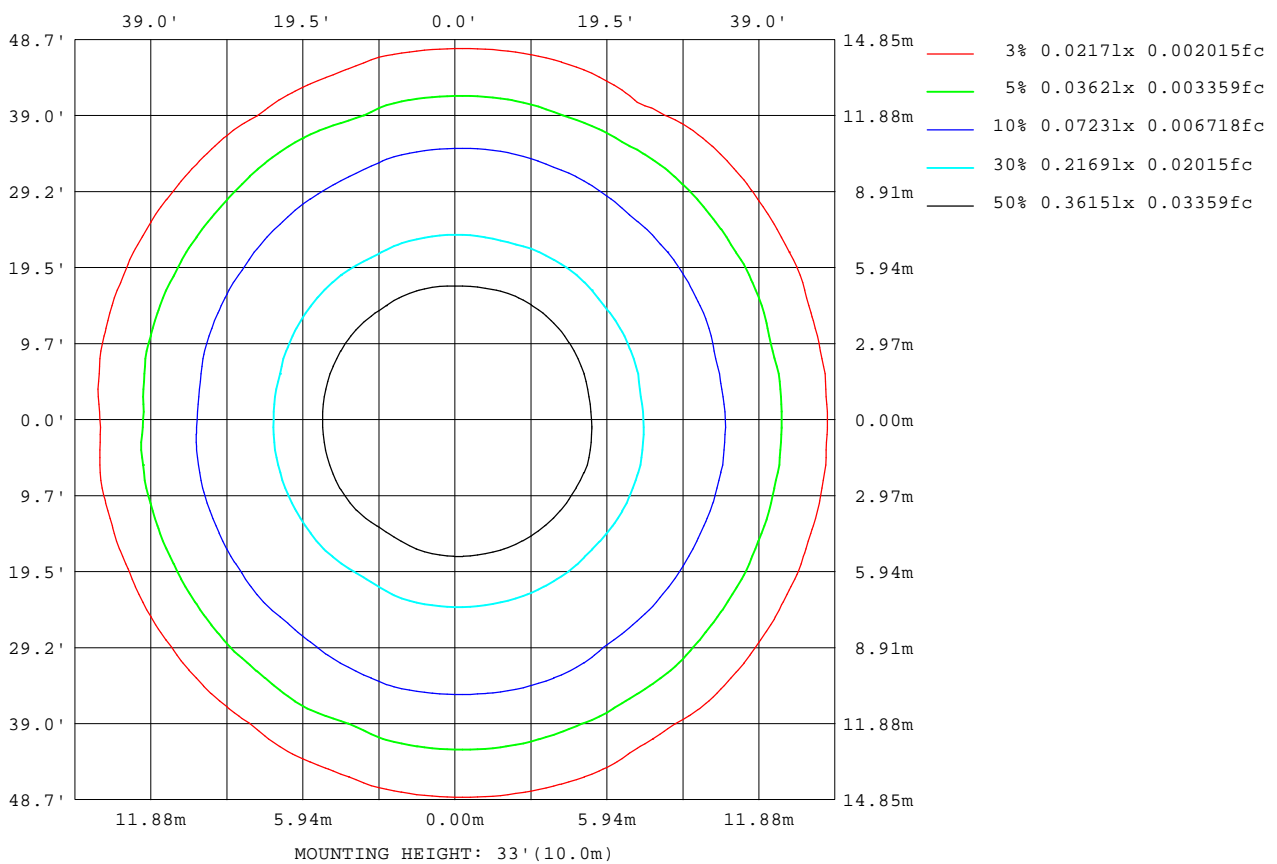
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: ZENGQ  
Test Date: 2019-12-04

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

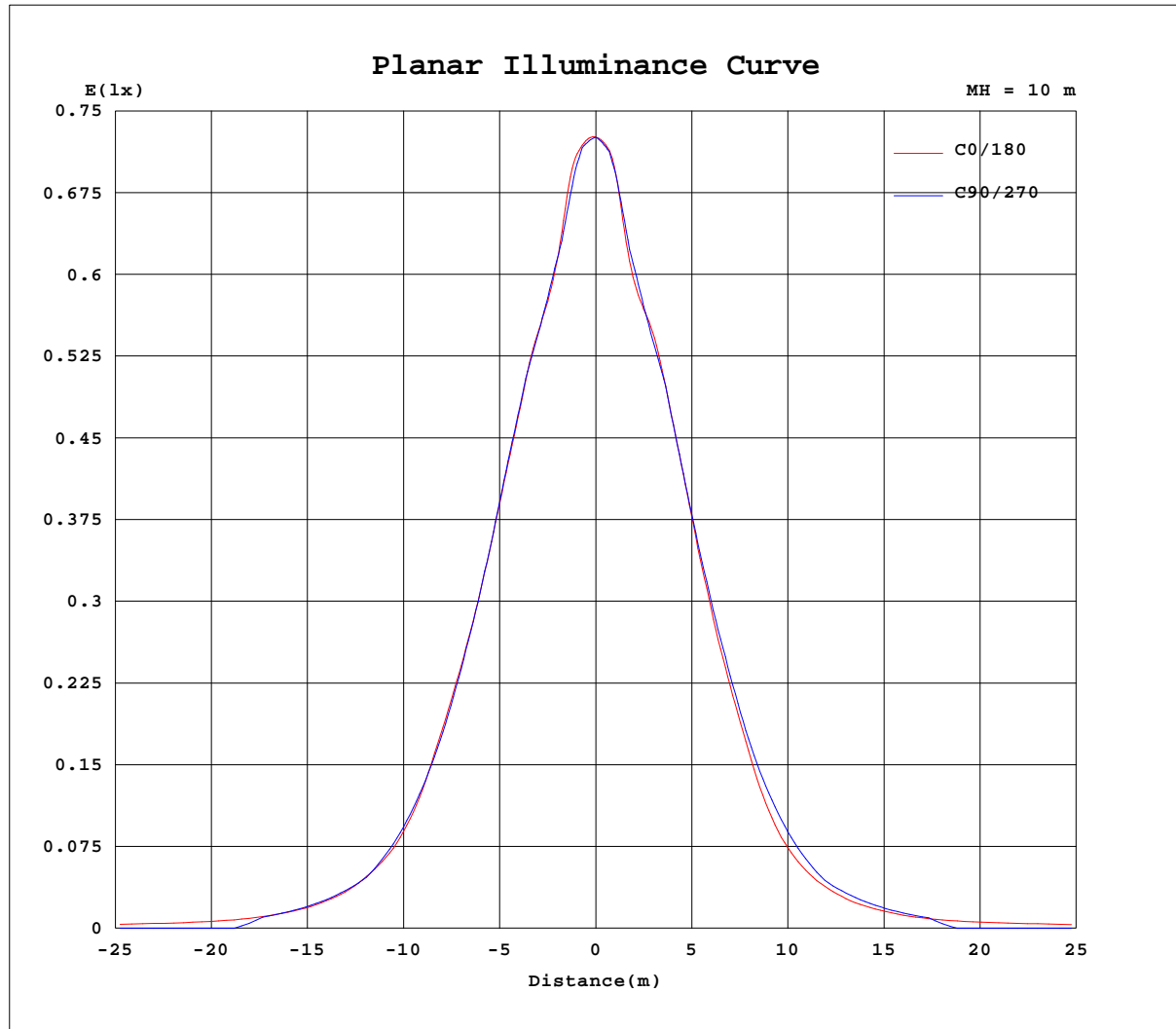
NAME: PP121134-BMB/BC	TYPE:	WEIGHT:1.17KG
DIM.: D220*520	SPEC.:	SERIAL No.:
MFR.:	SUR.:D120	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: 2019-12-04

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: