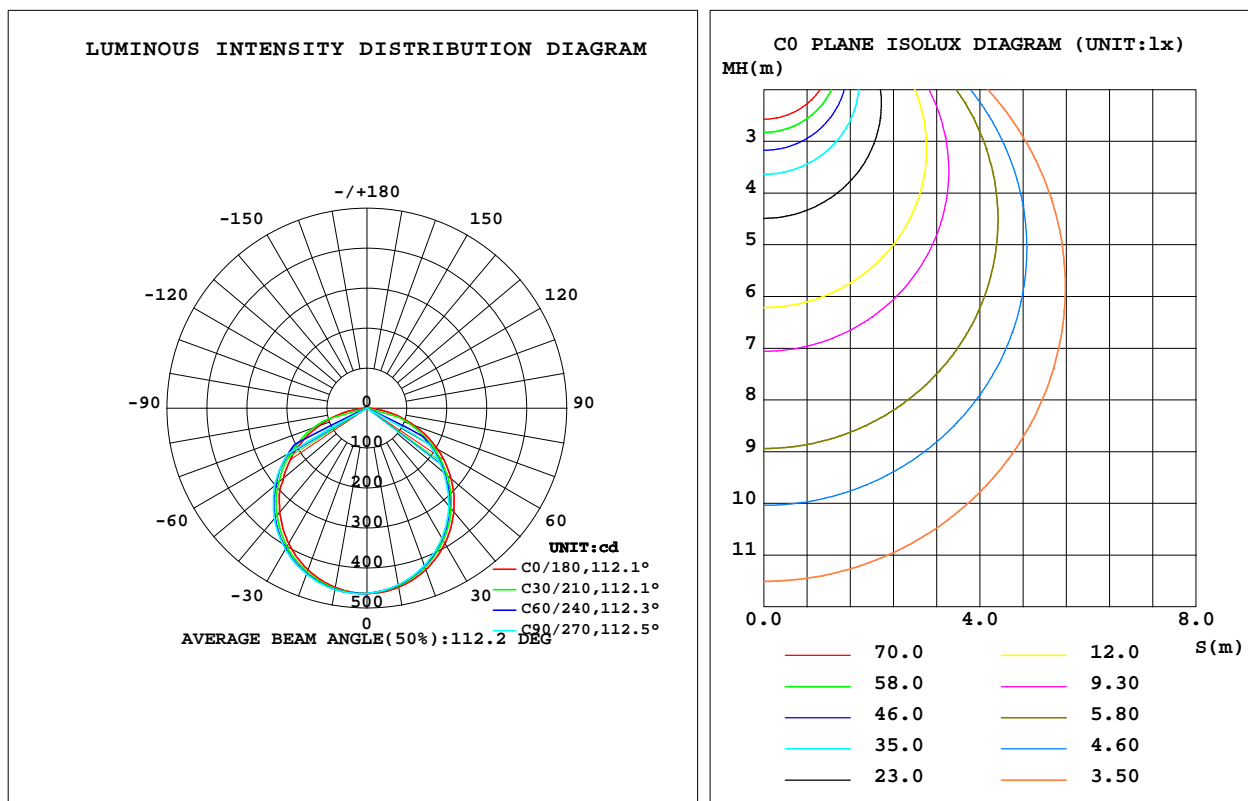


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 36.35 lm/W			
MODEL		I <sub>max</sub> (cd)	464.2	S/MH(C0/180)	1.25
NOMINAL POWER(W)	32	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	218	TOTAL FLUX(lm)	1187.2	h UP,DN(C0-180)	0.0,47.8
NOMINAL FLUX(lm)	1187.18	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,52.2
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	218.9	h down(%)	100.0	CIBSE SHR MAX	1.30



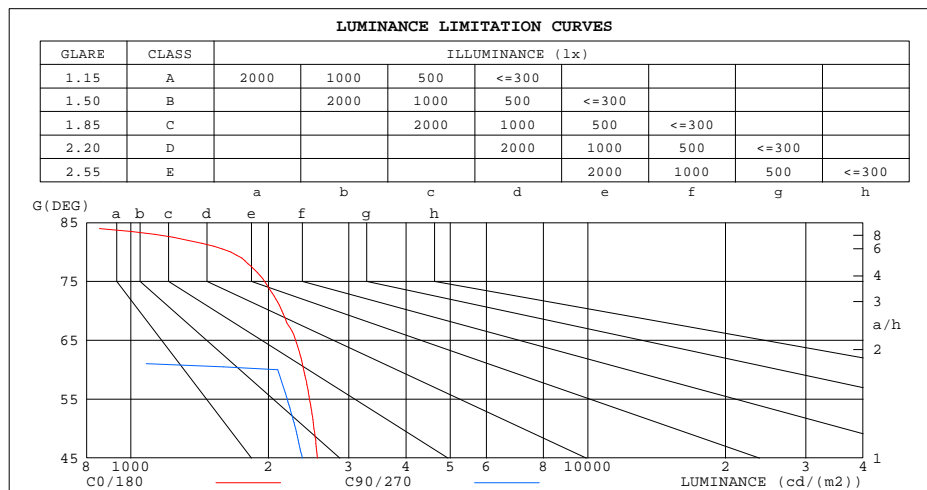
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZENGQG  
 Test Date:2019-12-04

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	461.5	458.7	458.0	459.0	461.4	463.2	464.0	462.9	0- 5	11.05	11.05	0.93,0.93
10	454.8	450.2	449.2	450.7	455.2	459.0	461.0	458.5	5- 10	32.76	43.80	3.69,3.69
15	444.3	438.1	435.9	438.7	445.0	450.9	453.2	450.4	10- 15	53.34	97.14	8.18,8.18
20	429.8	421.7	419.5	423.1	430.8	439.0	442.2	437.6	15- 20	72.08	169.2	14.3,14.3
25	412.0	402.0	398.8	403.0	412.8	422.6	426.7	421.6	20- 25	88.37	257.6	21.7,21.7
30	390.4	378.7	375.4	380.2	391.6	403.1	408.2	401.7	25- 30	101.7	359.3	30.3,30.3
35	365.7	352.6	348.5	354.5	366.8	380.6	385.6	378.5	30- 35	111.6	470.8	39.7,39.7
40	338.2	324.3	319.3	325.1	339.9	354.3	360.8	353.2	35- 40	117.7	588.5	49.6,49.6
45	307.7	292.3	284.9	293.5	310.6	325.9	331.4	323.8	40- 45	119.9	708.5	59.7,59.7
50	274.8	259.1	250.4	256.4	272.9	294.6	302.0	293.0	45- 50	117.8	826.3	69.6,69.6
55	239.5	221.1	214.2	220.7	238.1	258.1	266.3	256.6	50- 55	111.9	938.2	79.7,79.7
60	203.0	183.2	177.9	184.8	203.8	225.0	230.7	220.4	55- 60	102.3	1040	87.6,87.6
65	164.8	145.8	0	146.2	165.7	185.4	0	183.5	60- 65	72.66	1113	93.8,93.8
70	124.4	0	0	0	126.2	0	0	0	65- 70	40.12	1153	97.1,97.1
75	86.29	0	0	0	87.99	0	0	0	70- 75	21.71	1175	99.9,99.9
80	48.79	0	0	0	50.52	0	0	0	75- 80	9.559	1185	99.8,99.8
85	7.954	0	0	0	8.182	0	0	0	80- 85	2.521	1187	100,100
90	0.2674	0	0	0	0.1112	0	0	0	85- 90	0.1099	1187	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	537	0
80	1654	0
75	1963	0
70	2141	0
65	2296	0
60	2390	2096
55	2459	2199
50	2518	2294
45	2563	2372

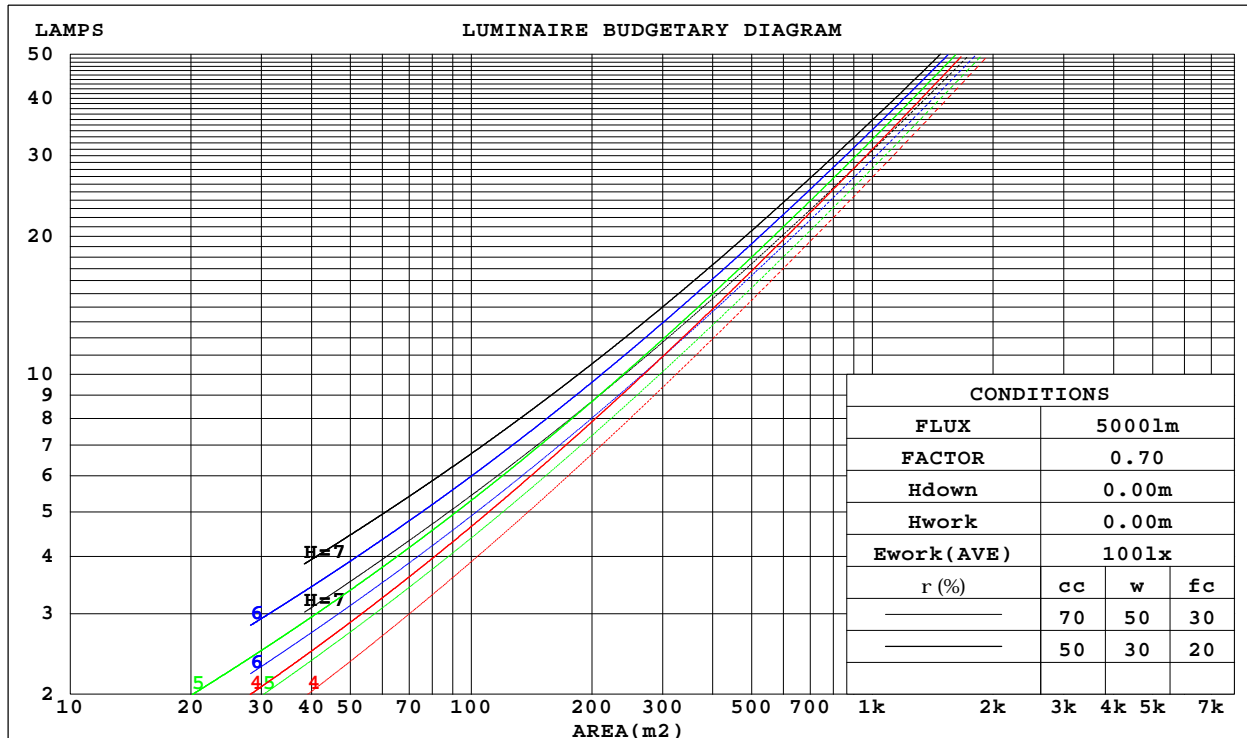
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	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	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.86	.82	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.83	.76	.70	.81	.75	.69	.79	.73	.68	.76	.71	.67	.73	.69	.65	.63
4.0	.74	.66	.59	.73	.65	.59	.70	.63	.58	.68	.62	.57	.66	.61	.57	.55
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.49	.47
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.44	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.53	.45	.40	.52	.45	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.49	.41	.35	.49	.41	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
9.0	.45	.37	.32	.45	.37	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.30
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:2019-12-04

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: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	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	.265	.151	.048	.258	.147	.047	.245	.141	.045	.233	.134	.043	.222	.129	.041	
2.0	.260	.142	.044	.254	.140	.043	.242	.135	.042	.232	.130	.041	.222	.125	.040	
3.0	.247	.131	.039	.241	.129	.039	.231	.125	.038	.222	.122	.037	.213	.118	.037	
4.0	.232	.120	.035	.227	.119	.035	.218	.116	.035	.210	.113	.034	.202	.110	.033	
5.0	.217	.111	.032	.213	.109	.032	.205	.107	.031	.198	.104	.031	.191	.102	.031	
6.0	.203	.102	.029	.200	.101	.029	.193	.099	.029	.186	.097	.028	.180	.095	.028	
7.0	.191	.094	.027	.187	.093	.027	.181	.092	.026	.175	.090	.026	.170	.088	.026	
8.0	.179	.088	.025	.176	.087	.025	.171	.085	.024	.165	.084	.024	.160	.082	.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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.146	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.023	.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:2019-12-04

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: PP120302-DT					TYPE:		WEIGHT:2.165KG				
DIM.: D500*100					SPEC.:		SERIAL No.:				
MFR.:					SUR.:f465		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	16.1	17.6	16.4	17.8	18.0	14.9	16.3	15.2	16.5	16.7	
	3H	17.6	18.9	17.9	19.2	19.4	14.7	16.0	15.0	16.2	16.5
	4H	18.2	19.4	18.5	19.7	19.9	14.6	15.8	14.9	16.1	16.3
	6H	18.5	19.7	18.8	19.9	20.2	14.5	15.7	14.8	15.9	16.2
	8H	18.5	19.7	18.9	19.9	20.2	14.4	15.6	14.8	15.8	16.1
	12H	18.5	19.6	18.9	19.9	20.2	14.4	15.5	14.7	15.7	16.0
4H	2H	16.5	17.8	16.8	18.0	18.3	15.5	16.7	15.8	17.0	17.2
	3H	18.2	19.3	18.5	19.5	19.8	15.3	16.4	15.6	16.6	16.9
	4H	18.8	19.8	19.2	20.1	20.5	15.2	16.1	15.5	16.5	16.8
	6H	19.2	20.1	19.6	20.4	20.8	15.1	15.9	15.5	16.3	16.6
	8H	19.3	20.1	19.7	20.4	20.8	15.0	15.8	15.4	16.2	16.6
	12H	19.3	20.0	19.7	20.4	20.8	15.0	15.7	15.4	16.1	16.5
8H	4H	18.7	19.5	19.1	19.9	20.2	15.2	16.0	15.6	16.4	16.8
	6H	19.1	19.7	19.5	20.1	20.6	15.1	15.8	15.6	16.2	16.6
	8H	19.2	19.7	19.6	20.1	20.6	15.1	15.7	15.6	16.1	16.5
	12H	19.2	19.6	19.6	20.1	20.6	15.1	15.5	15.5	16.0	16.5
12H	4H	18.7	19.4	19.1	19.8	20.2	15.2	15.9	15.6	16.3	16.7
	6H	19.0	19.6	19.5	20.0	20.5	15.1	15.7	15.6	16.1	16.5
	8H	19.1	19.6	19.6	20.0	20.5	15.1	15.6	15.5	16.0	16.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5					
1.5H	+ 0.3 / - 0.3					+ 1.1 / - 1.8					
2.0H	+ 0.3 / - 0.6					+ 0.7 / - 1.0					

CIE Pub.117 Corrected 1187 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:2019-12-04

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: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL NO.:
MFR.:	SUR.:f465	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) $k(RI) \times RCR = 5$									
$k = 0.60$	60	48	42	59	48	41	58	48	41	35
0.80	70	59	52	69	59	52	68	58	52	45
1.00	79	69	62	78	68	62	76	70	61	55
1.25	87	77	71	85	76	70	83	75	69	63
1.50	92	83	76	90	82	76	87	80	75	68
2.00	98	91	85	96	89	84	93	87	83	75
2.50	102	95	89	100	93	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNM = 1.25		

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

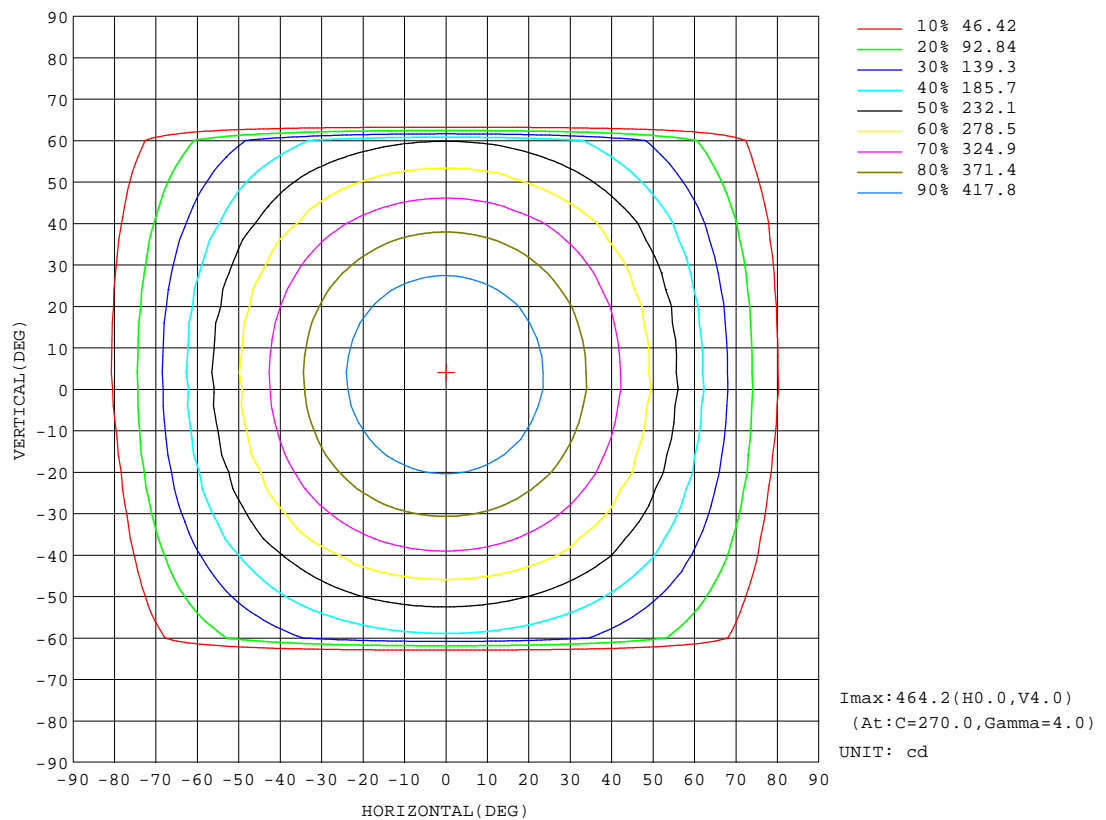
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Range: 0 - 90DEG
Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.265
Humidity:65.0%
Test Distance:9.650m [K=1.0000]
Remarks:

```

ISOCANDELA DIAGRAM

NAME: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	PROTECTION ANGLE:

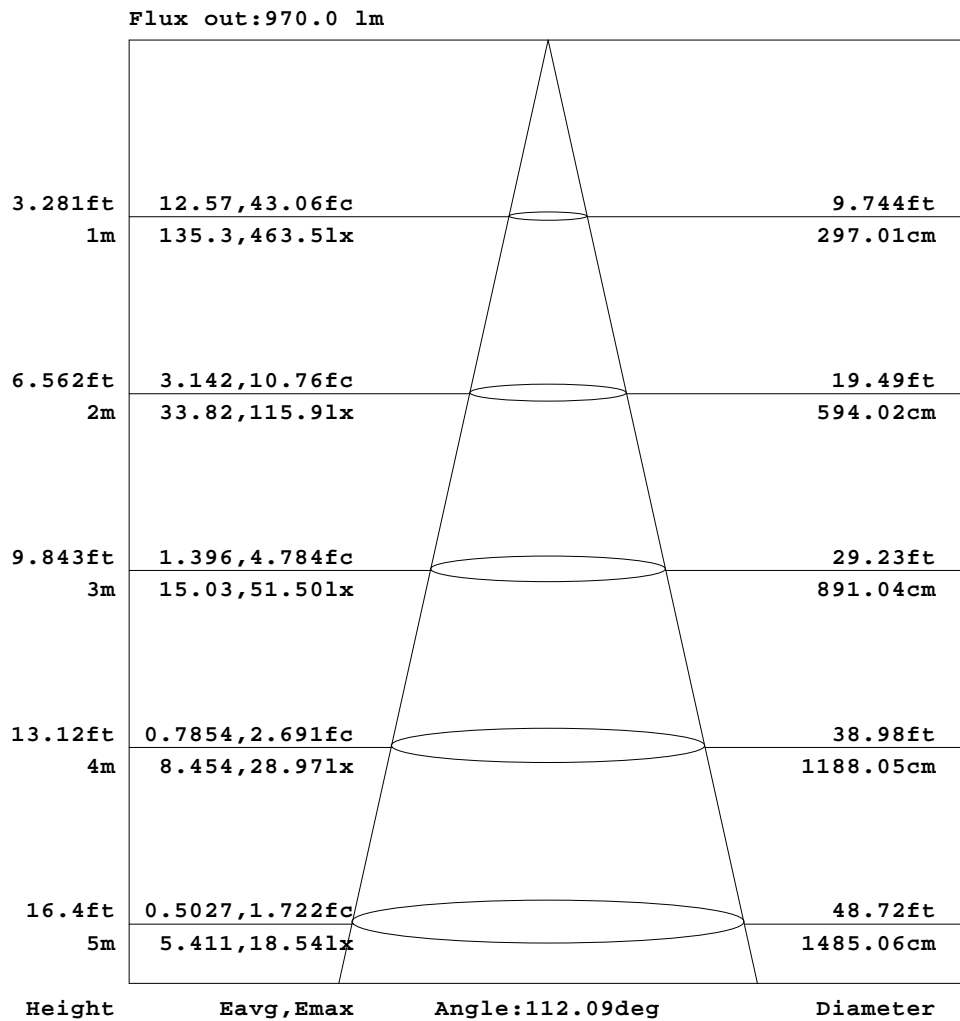


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-12-04

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: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	PROTECTION ANGLE:



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

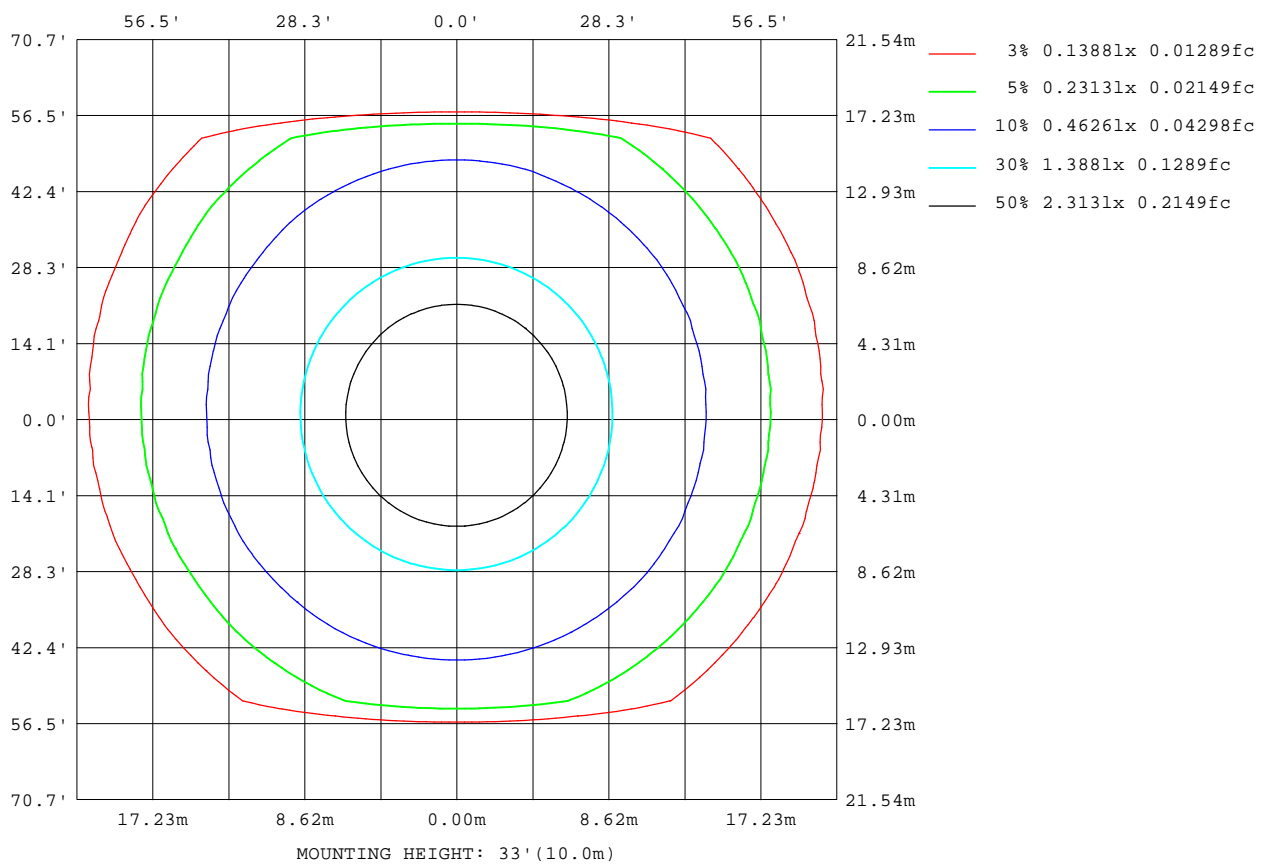
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQ  
Test Date:2019-12-04

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

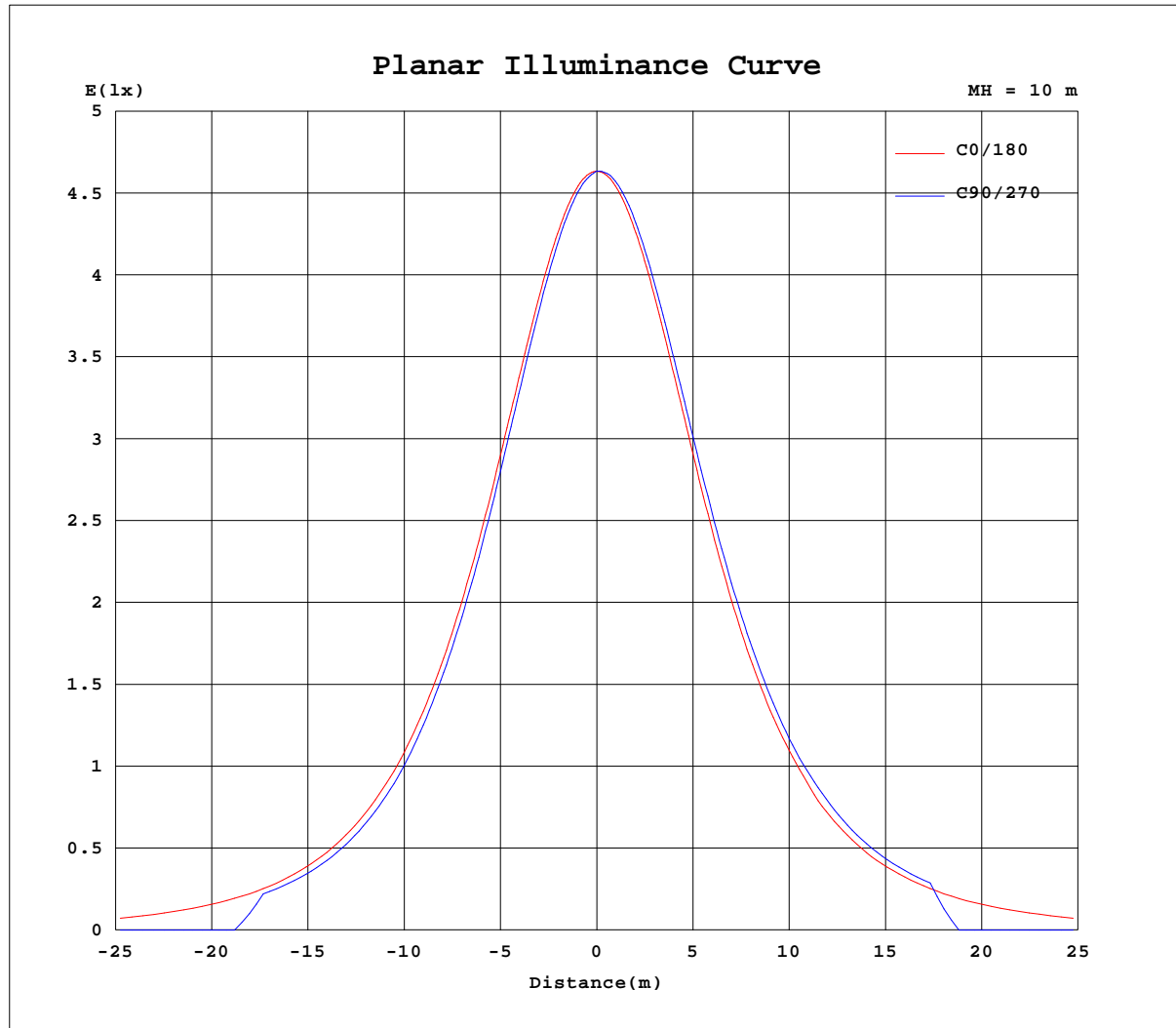
NAME: PP120302-DT	TYPE:	WEIGHT:2.165KG
DIM.: D500*100	SPEC.:	SERIAL No.:
MFR.:	SUR.:f465	PROTECTION ANGLE:



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: