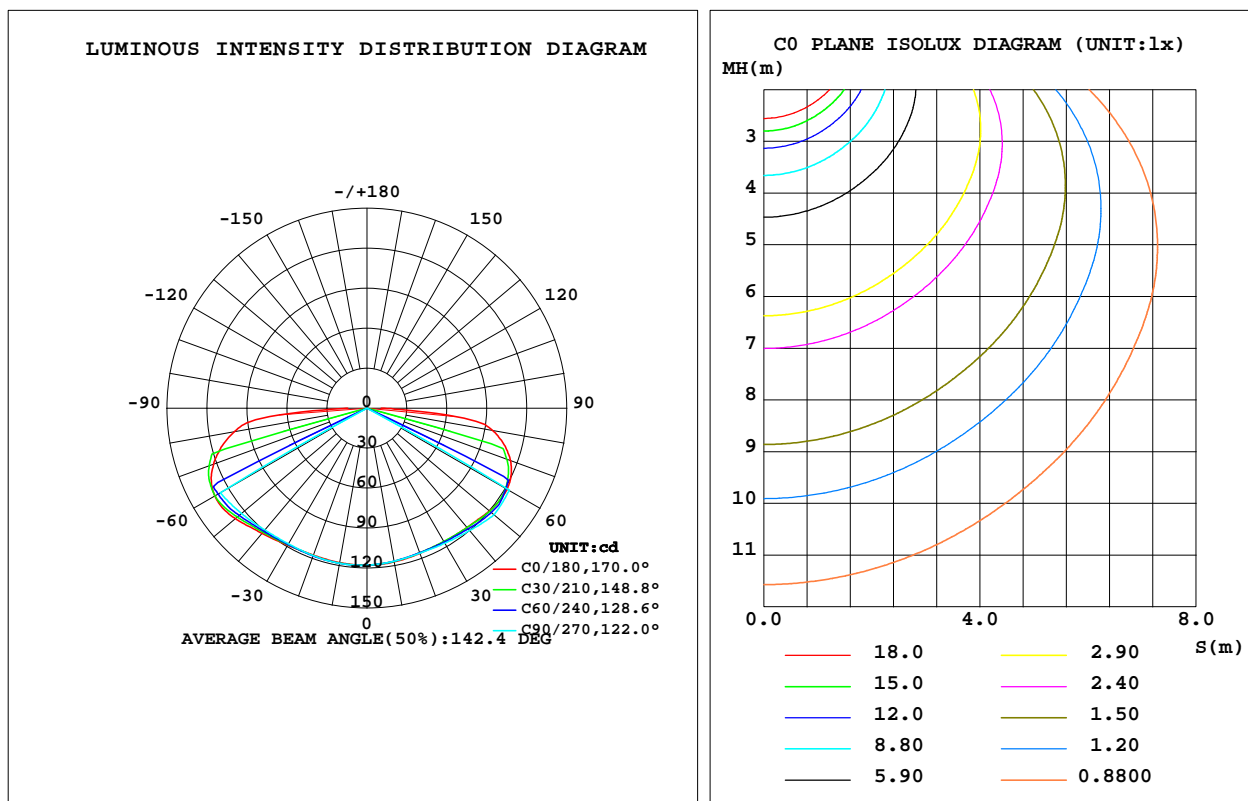


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PW131161-BT	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 36.06 lm/W			
MODEL		I _{max} (cd)	132.1	S/MH(C0/180)	1.52
NOMINAL POWER(W)	14	LOR(%)	100.0	S/MH(C90/270)	1.55
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	508.85	h UP,DN(C0-180)	0.0,49.6
NOMINAL FLUX(lm)	508.845	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,50.4
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	219.0	h down(%)	100.0	CIBSE SHR MAX	1.75



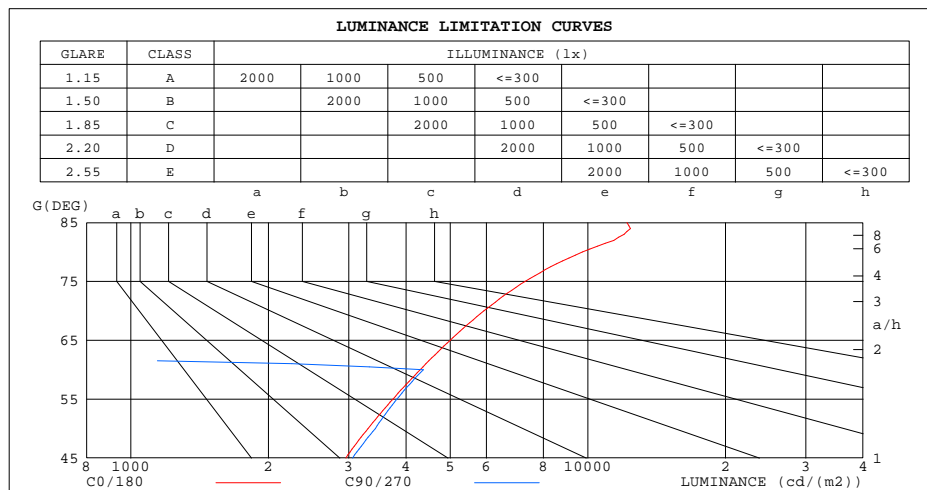
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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	117.6	117.3	117.3	117.5	117.8	118.1	118.1	117.9	0- 5	2.815	2.815	0.55,0.55
10	117.2	116.7	116.6	117.1	117.7	118.1	118.2	117.8	5- 10	8.410	11.23	2.21,2.21
15	116.6	116.0	116.1	116.7	117.5	118.1	118.1	117.5	10- 15	13.91	25.13	4.94,4.94
20	116.0	115.5	115.8	116.7	117.4	118.0	117.8	117.1	15- 20	19.27	44.40	8.73,8.73
25	115.6	115.4	116.2	117.4	117.8	117.9	117.5	116.7	20- 25	24.49	68.89	13.5,13.5
30	115.6	115.7	117.0	118.6	118.8	118.3	117.6	116.7	25- 30	29.62	98.51	19.4,19.4
35	116.1	116.4	118.2	120.2	120.5	119.4	118.2	117.2	30- 35	34.69	133.2	26.2,26.2
40	116.9	117.5	119.8	122.4	122.6	121.1	119.3	118.1	35- 40	39.70	172.9	34,34
45	118.1	119.4	122.2	125.3	125.5	123.2	121.1	119.6	40- 45	44.71	217.6	42.8,42.8
50	120.0	121.2	124.5	128.2	129.1	126.2	122.9	121.6	45- 50	49.71	267.3	52.5,52.5
55	121.4	121.4	123.9	128.7	131.7	129.1	125.0	123.7	50- 55	54.38	321.7	63.2,63.2
60	121.5	120.6	123.3	127.7	131.9	130.9	127.1	124.9	55- 60	58.18	379.9	74.7,74.7
65	119.3	116.8	0	123.0	129.0	129.8	0	123.7	60- 65	48.85	428.7	84.3,84.3
70	114.5	0	0	0	122.5	0	0	0	65- 70	33.30	462.0	90.8,90.8
75	106.7	0	0	0	113.3	0	0	0	70- 75	23.24	485.3	95.4,95.4
80	95.54	0	0	0	100.8	0	0	0	75- 80	14.76	500.0	98.3,98.3
85	59.99	0	0	0	73.30	0	0	0	80- 85	7.483	507.5	99.7,99.7
90	10.63	0	0	0	14.44	0	0	0	85- 90	1.334	508.8	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	12178	0
80	9734	0
75	7295	0
70	5924	0
65	4996	0
60	4298	4365
55	3744	3823
50	3304	3427
45	2954	3057

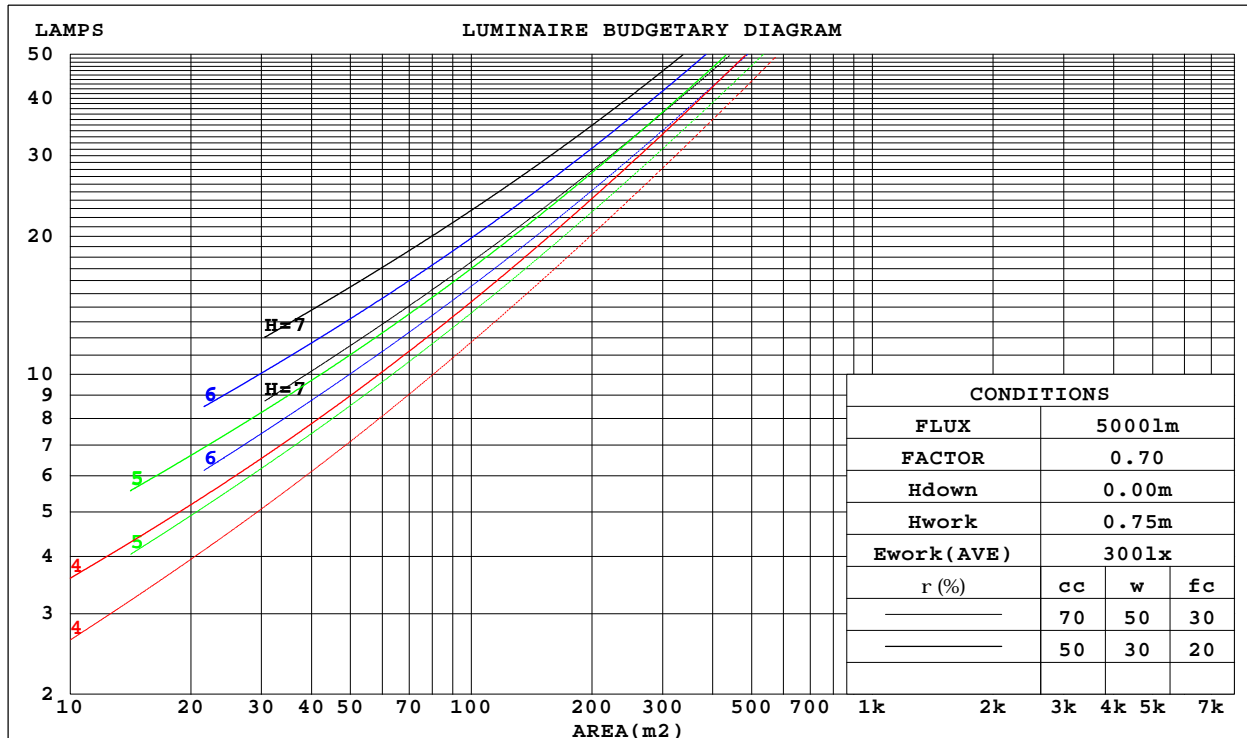
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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: PW131161-BT	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	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	
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	1.03	.98	.94	1.00	.96	.92	.96	.93	.90	.92	.89	.87	.89	.86	.84	.82	
2.0	.88	.81	.74	.86	.79	.74	.83	.77	.72	.79	.74	.70	.76	.72	.69	.66	
3.0	.76	.67	.60	.74	.66	.60	.71	.64	.58	.68	.62	.57	.66	.61	.56	.54	
4.0	.66	.57	.49	.65	.56	.49	.62	.55	.48	.60	.53	.48	.58	.52	.47	.45	
5.0	.58	.49	.41	.57	.48	.41	.55	.47	.41	.53	.46	.40	.51	.45	.40	.37	
6.0	.52	.42	.35	.51	.42	.35	.49	.41	.35	.47	.40	.34	.46	.39	.34	.32	
7.0	.46	.37	.30	.46	.37	.30	.44	.36	.30	.42	.35	.30	.41	.35	.30	.27	
8.0	.42	.33	.27	.41	.33	.27	.40	.32	.26	.39	.31	.26	.37	.31	.26	.24	
9.0	.38	.29	.24	.38	.29	.23	.36	.29	.23	.35	.28	.23	.34	.28	.23	.21	
10.0	.35	.27	.21	.34	.26	.21	.33	.26	.21	.32	.26	.21	.32	.25	.21	.19	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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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:

```

WEC AND CCEC

NAME: PW131161-BT	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	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	.331	.188	.060	.324	.185	.059	.310	.178	.057	.298	.172	.055	.287	.166	.054	
2.0	.314	.172	.053	.308	.170	.052	.296	.165	.051	.285	.160	.050	.275	.155	.049	
3.0	.291	.155	.046	.286	.153	.046	.275	.149	.045	.265	.145	.045	.256	.142	.044	
4.0	.268	.140	.041	.263	.138	.041	.254	.135	.040	.245	.132	.040	.237	.129	.039	
5.0	.247	.126	.037	.243	.125	.036	.235	.122	.036	.227	.120	.036	.219	.117	.035	
6.0	.229	.115	.033	.225	.113	.033	.217	.111	.032	.210	.109	.032	.204	.107	.032	
7.0	.212	.105	.030	.208	.104	.030	.202	.102	.029	.195	.100	.029	.189	.098	.029	
8.0	.197	.096	.027	.194	.096	.027	.188	.094	.027	.182	.092	.027	.177	.091	.026	
9.0	.184	.089	.025	.181	.088	.025	.176	.087	.025	.171	.086	.024	.166	.084	.024	
10.0	.172	.083	.023	.170	.082	.023	.165	.081	.023	.160	.080	.023	.156	.079	.023	

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	.182	.156	.133	.156	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.175	.132	.095	.150	.113	.082	.103	.078	.057	.059	.046	.034	.019	.015	.011	
3.0	.169	.114	.071	.145	.099	.062	.099	.069	.043	.057	.040	.026	.018	.013	.008	
4.0	.162	.101	.055	.139	.088	.048	.095	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.154	.091	.045	.133	.079	.039	.091	.055	.027	.053	.032	.016	.017	.011	.005	
6.0	.147	.083	.037	.127	.072	.032	.087	.050	.023	.051	.030	.014	.016	.010	.004	
7.0	.140	.076	.031	.121	.066	.027	.083	.046	.019	.048	.027	.012	.016	.009	.004	
8.0	.134	.071	.027	.115	.061	.024	.080	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.127	.066	.024	.110	.057	.021	.076	.040	.015	.044	.024	.009	.014	.008	.003	
10.0	.121	.061	.021	.105	.053	.019	.073	.037	.013	.042	.022	.008	.014	.007	.003	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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: PW131161-BT					TYPE:LED			WEIGHT:2.129(Kg)			
DIM.: D300*60					SPEC.:			SERIAL No.:			
MFR.:					SUR.:D300*60			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	18.8	20.4	19.0	20.6	20.8	17.5	19.2	17.8	19.4	19.6	
	3H	21.8	23.4	22.1	23.6	23.8	17.3	18.8	17.6	19.0	19.3
	4H	23.5	24.9	23.8	25.2	25.4	17.2	18.6	17.5	18.9	19.1
	6H	25.1	26.5	25.4	26.8	27.0	17.1	18.4	17.4	18.7	19.0
	8H	25.9	27.2	26.3	27.5	27.8	17.0	18.3	17.3	18.6	18.9
	12H	26.6	27.8	26.9	28.1	28.4	16.9	18.2	17.3	18.5	18.8
4H	2H	19.6	21.1	20.0	21.3	21.6	18.6	20.0	18.9	20.3	20.5
	3H	22.8	24.1	23.2	24.4	24.7	18.3	19.6	18.7	19.9	20.2
	4H	24.5	25.7	24.9	26.0	26.4	18.2	19.4	18.6	19.7	20.1
	6H	26.3	27.3	26.7	27.7	28.1	18.1	19.2	18.5	19.5	19.9
	8H	27.2	28.1	27.6	28.5	28.9	18.1	19.0	18.5	19.4	19.8
	12H	27.9	28.8	28.3	29.2	29.6	18.0	18.9	18.5	19.3	19.7
8H	4H	24.4	25.4	24.8	25.7	26.1	18.7	19.6	19.1	20.0	20.4
	6H	26.2	27.0	26.6	27.4	27.8	18.6	19.4	19.0	19.8	20.2
	8H	27.1	27.8	27.5	28.2	28.6	18.5	19.2	19.0	19.7	20.1
	12H	27.8	28.4	28.3	28.8	29.3	18.5	19.1	19.0	19.6	20.0
12H	4H	24.4	25.2	24.8	25.6	26.0	18.7	19.6	19.1	19.9	20.4
	6H	26.1	26.8	26.6	27.3	27.7	18.6	19.3	19.1	19.7	20.2
	8H	27.0	27.6	27.5	28.1	28.6	18.6	19.2	19.0	19.6	20.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 0.3 / - 0.3					
1.5H	+ 0.5 / - 0.2					+ 1.9 / - 3.4					
2.0H	+ 0.7 / - 1.7					+ 1.2 / - 2.6					

CIE Pub.117 Corrected 508.8 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.3)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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: 10131161001	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	PROTECTION ANGLE:

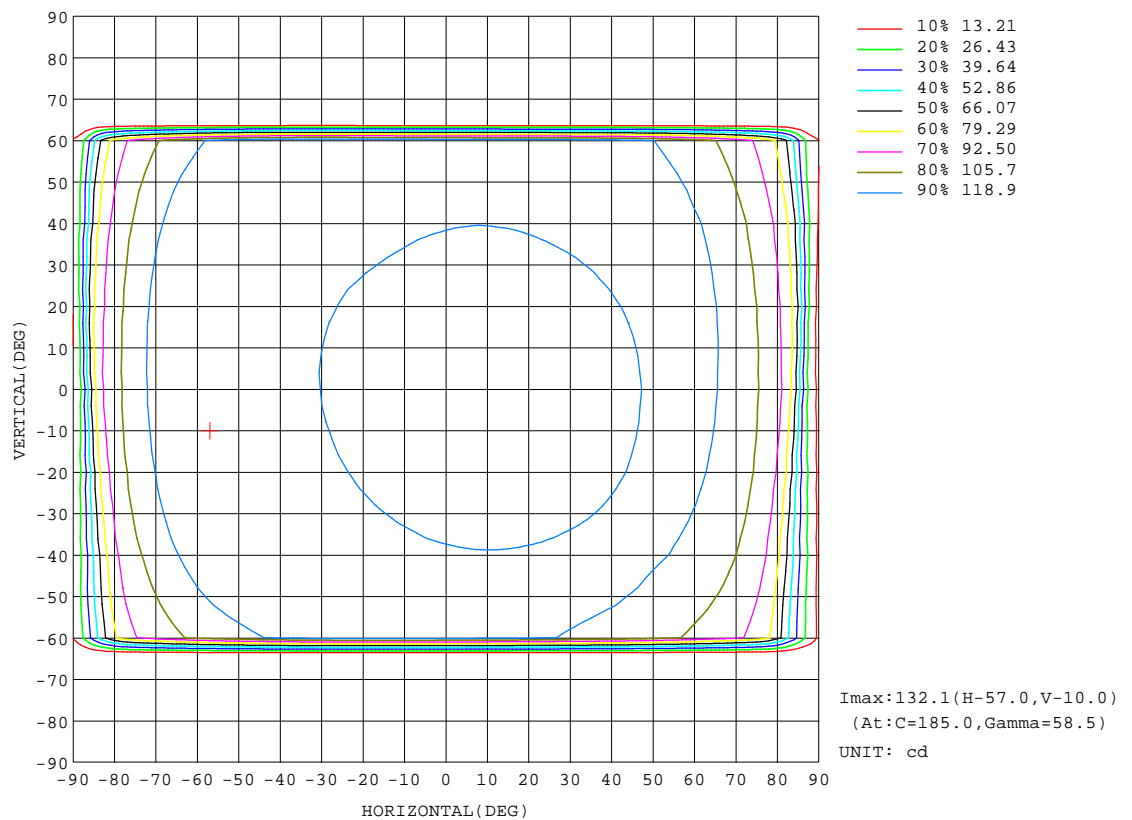
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	38	30	50	38	30	49	37	30	23
0.80	61	49	40	60	48	40	58	47	40	32
1.00	71	58	50	70	58	50	67	60	50	42
1.25	79	67	59	77	66	59	74	65	58	50
1.50	84	73	65	82	72	65	79	70	64	56
2.00	92	83	76	90	81	75	87	79	73	65
2.50	97	88	81	94	87	80	90	84	79	70
3.00	100	93	87	98	91	86	94	88	84	75
4.00	105	99	94	102	97	92	98	93	90	80
5.00	108	102	98	105	100	96	100	97	93	84
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:2019-12-02

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: 10131161001	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	PROTECTION ANGLE:

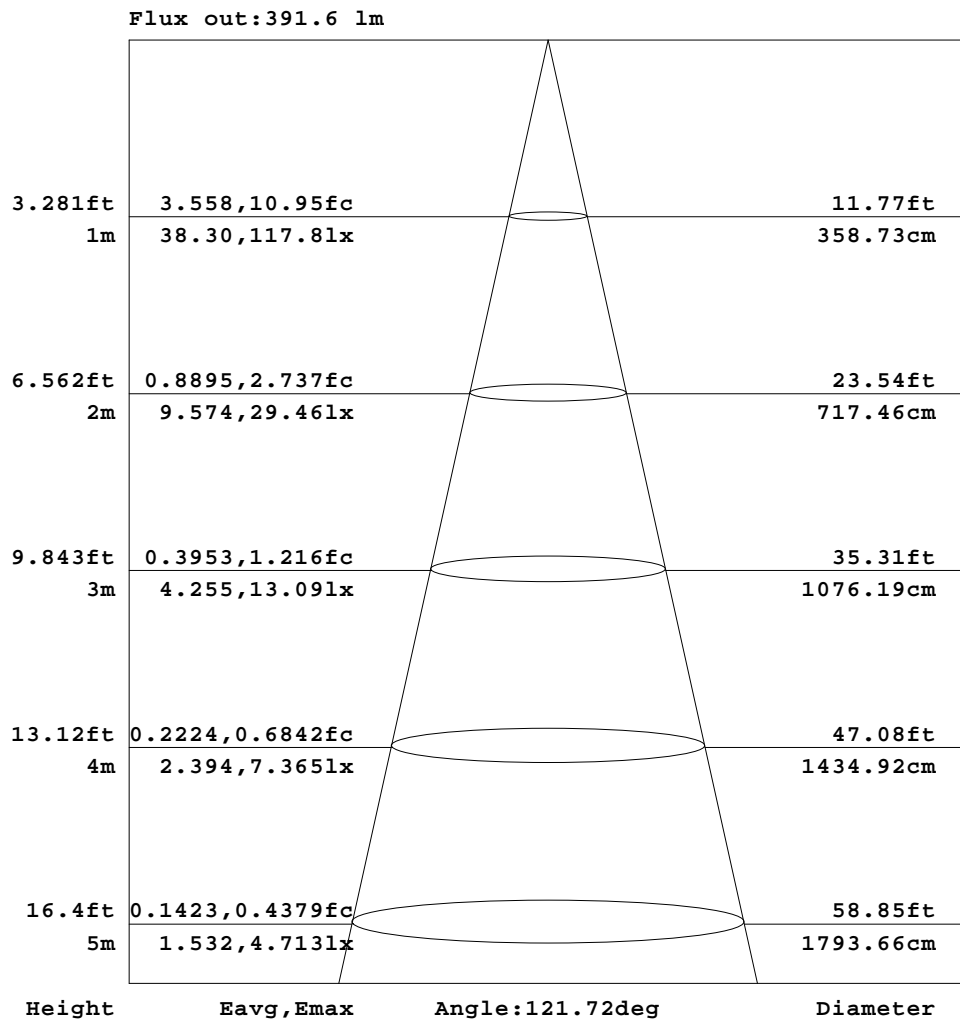


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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: 10131161001	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	PROTECTION ANGLE:



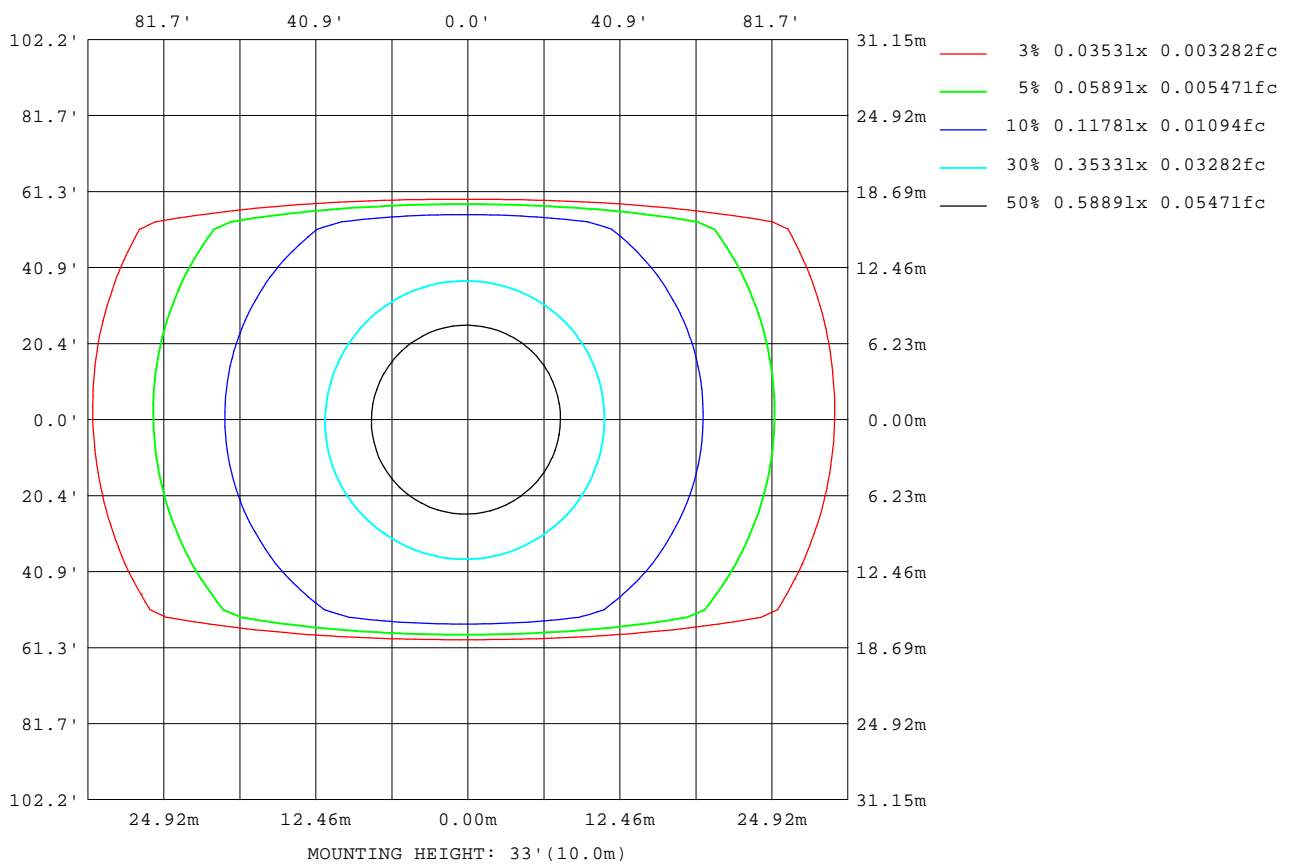
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZENGQG
Test Date:2019-12-02

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

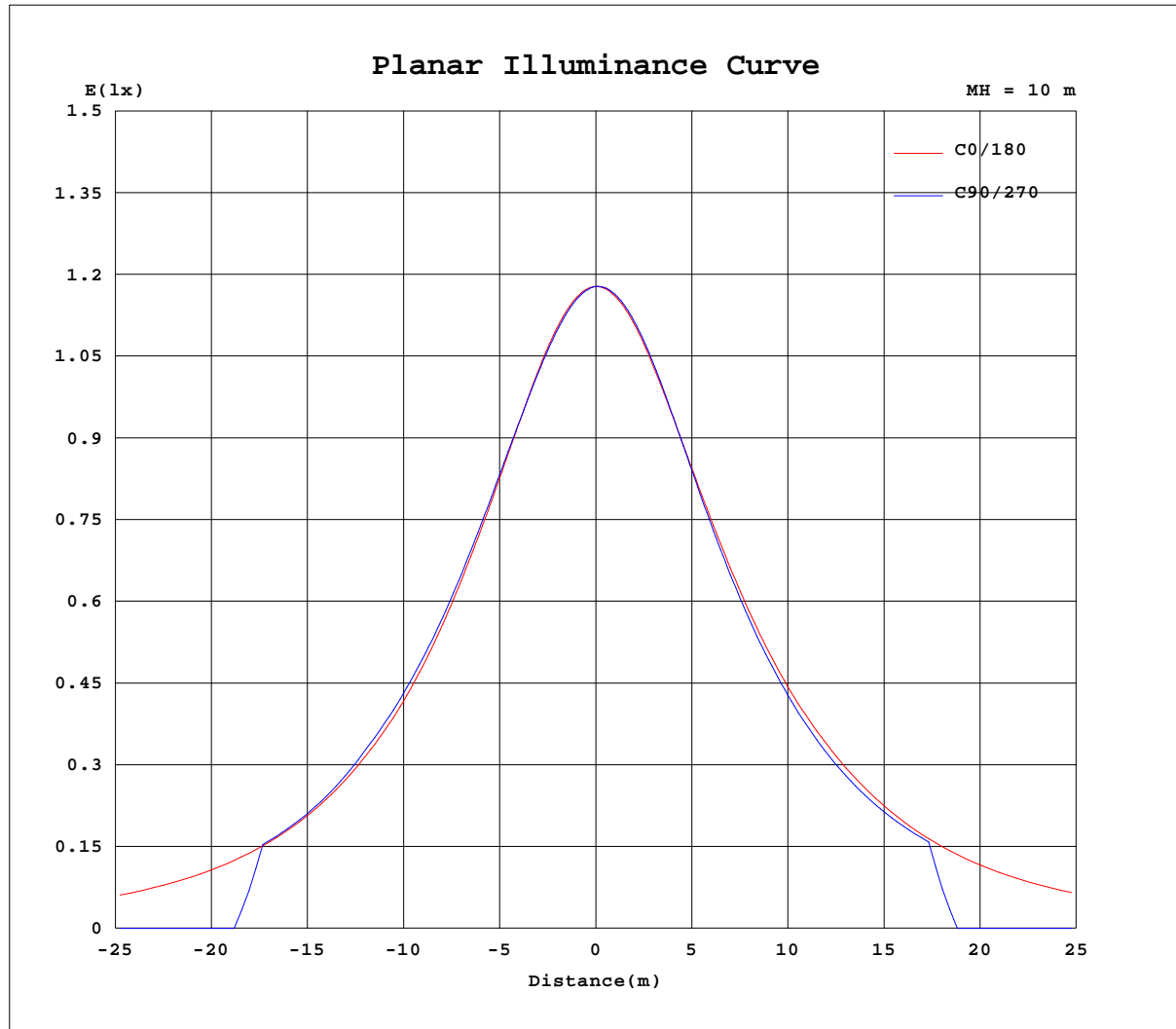
NAME: 10131161001	TYPE:LED	WEIGHT:2.129(Kg)
DIM.: D300*60	SPEC.:	SERIAL No.:
MFR.:	SUR.:D300*60	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
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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: 2019-12-02

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: