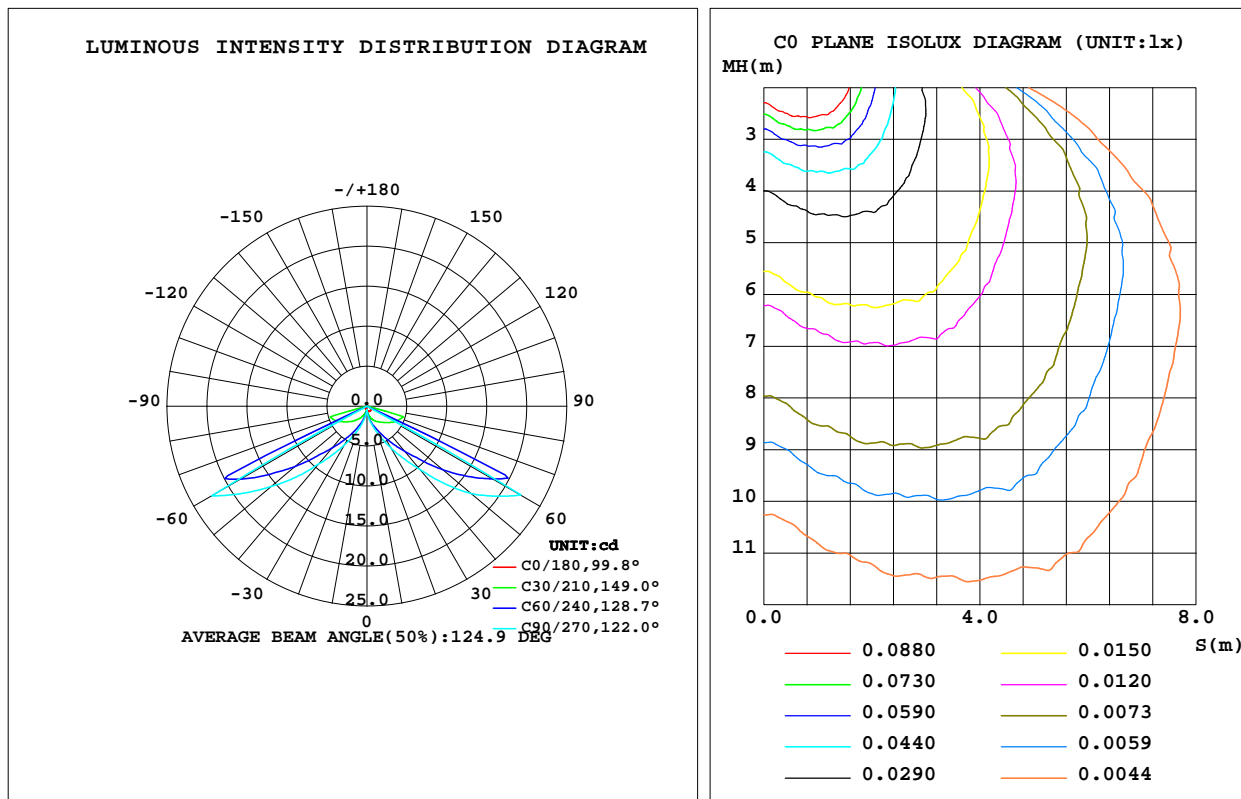


# LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 4.08 lm/W
MODEL		I <sub>max</sub> (cd)	22.50	S/MH(C0/180)	2.08	
NOMINAL POWER(W)	6	LOR(%)	100.0	S/MH(C90/270)	2.65	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	23.402	h UP,DN(C0-180)	0.0,51.2	
NOMINAL FLUX(lm)	23.4024	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.0,48.8	
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	219.2	h down(%)	100.0	CIBSE SHR MAX	0.90	



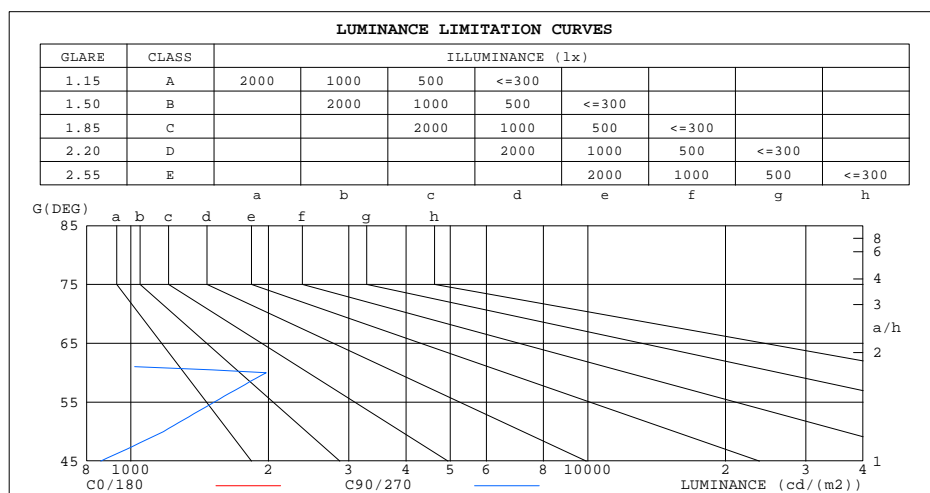
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-11-18

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	0.5156	0.8387	0.9516	0.7682	0.4105	0.5938	0.7357	0.6711	0- 5	0.0147	0.0147	0.06,0.06
10	0.5776	1.259	1.566	1.147	0.4034	0.8788	1.279	1.027	5- 10	0.0630	0.0776	0.33,0.33
15	0.6444	1.717	2.354	1.581	0.4154	1.269	2.042	1.483	10- 15	0.1496	0.2272	0.97,0.97
20	0.6970	2.207	3.261	2.081	0.4106	1.739	2.946	2.008	15- 20	0.2831	0.5103	2.18,2.18
25	0.7591	2.673	4.524	2.653	0.4392	2.276	4.124	2.614	20- 25	0.4725	0.9828	4.2,4.2
30	0.7591	3.234	6.035	3.347	0.4248	2.904	5.524	3.304	25- 30	0.7323	1.715	7.33,7.33
35	0.7448	3.948	7.989	4.144	0.3676	3.640	7.310	4.108	30- 35	1.076	2.791	11.9,11.9
40	0.7257	4.892	10.30	5.182	0.3294	4.527	9.448	5.099	35- 40	1.528	4.319	18.5,18.5
45	0.7018	6.144	13.66	6.794	0.3055	5.746	12.53	6.326	40- 45	2.133	6.452	27.6,27.6
50	0.6923	7.562	17.02	8.512	0.2816	7.219	15.61	7.650	45- 50	2.930	9.382	40.1,40.1
55	0.6446	9.012	19.62	9.760	0.2482	8.716	19.02	9.178	50- 55	3.845	13.23	56.5,56.5
60	0.5968	10.09	22.22	10.92	0.2148	9.926	22.44	10.30	55- 60	4.801	18.03	77.7,77.7
65	0.4632	11.24	0	11.55	0.1671	11.10	0	11.74	60- 65	3.493	21.52	92.9,92.9
70	0.1957	0	0	0	0.1575	0	0	0	65- 70	1.239	22.76	97.3,97.3
75	0.1241	0	0	0	0.1480	0	0	0	70- 75	0.4564	23.22	99.2,99.2
80	0.0717	0	0	0	0.0811	0	0	0	75- 80	0.1529	23.37	99.9,99.9
85	0.0001	0	0	0	0.0000	0	0	0	80- 85	0.0319	23.40	100,100
90	0	0	0	0	0	0	0	0	85- 90	0.0018	23.40	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(°)	C0/180	C90/270
85	0	0
80	18	0
75	21	0
70	25	0
65	49	0
60	53	1977
55	50	1522
50	48	1179
45	44	860

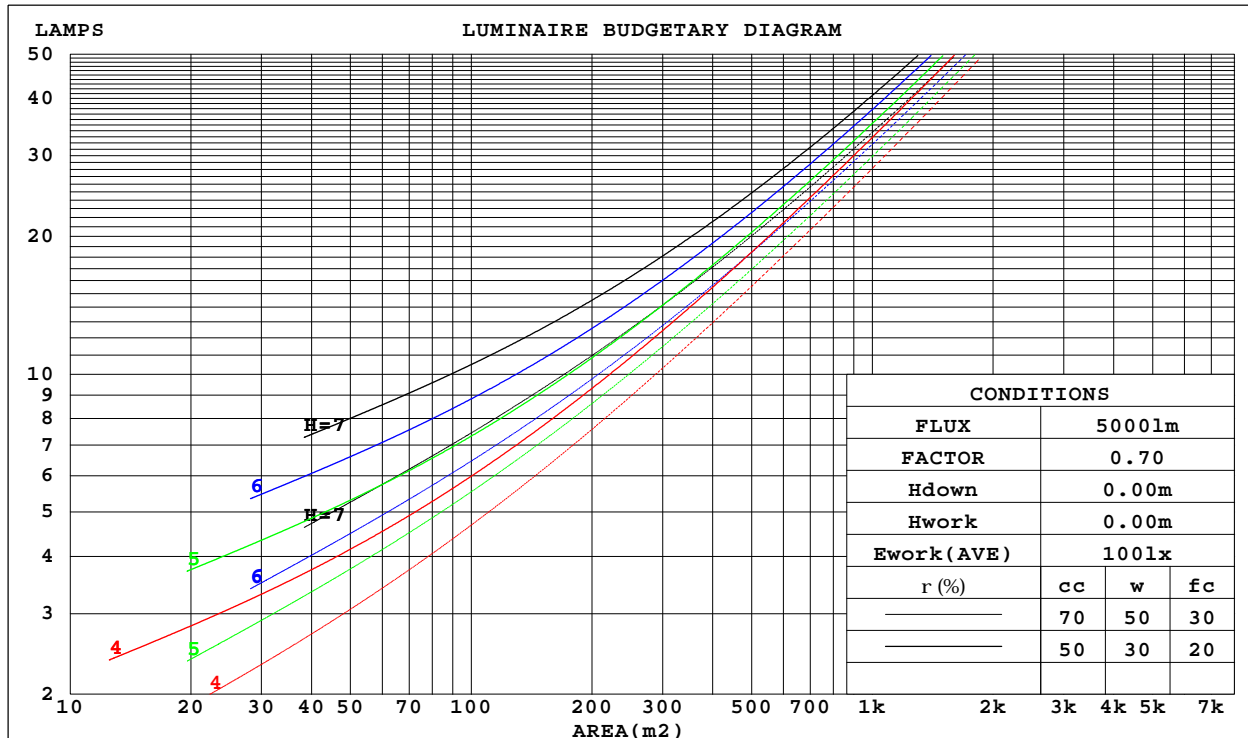
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-11-18

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: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	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	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.87	.89	.87	.85	.83
2.0	.87	.80	.73	.85	.78	.72	.82	.76	.71	.78	.73	.69	.75	.71	.67	.65
3.0	.74	.64	.57	.72	.63	.56	.69	.61	.55	.66	.60	.54	.63	.58	.53	.51
4.0	.62	.52	.45	.61	.52	.44	.58	.50	.43	.56	.49	.43	.54	.47	.42	.40
5.0	.53	.43	.35	.52	.42	.35	.50	.41	.35	.48	.40	.34	.46	.39	.34	.31
6.0	.46	.36	.28	.45	.35	.28	.43	.34	.28	.41	.34	.28	.40	.33	.27	.25
7.0	.40	.30	.23	.40	.30	.23	.38	.29	.23	.36	.28	.23	.35	.28	.22	.20
8.0	.36	.26	.19	.35	.26	.19	.33	.25	.19	.32	.24	.19	.31	.24	.19	.16
9.0	.32	.22	.16	.31	.22	.16	.30	.22	.16	.29	.21	.16	.28	.21	.16	.13
10.0	.29	.20	.14	.28	.19	.14	.27	.19	.13	.26	.19	.13	.25	.18	.13	.11



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: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	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	.324	.184	.058	.317	.181	.057	.303	.174	.056	.291	.168	.054	.280	.162	.052	
2.0	.323	.177	.054	.316	.174	.054	.304	.169	.053	.293	.164	.051	.283	.160	.050	
3.0	.307	.163	.049	.301	.161	.049	.290	.157	.048	.280	.154	.047	.271	.150	.046	
4.0	.287	.149	.044	.281	.147	.044	.272	.144	.043	.263	.141	.043	.254	.138	.042	
5.0	.266	.136	.039	.261	.134	.039	.253	.132	.039	.245	.129	.038	.237	.127	.038	
6.0	.247	.124	.035	.242	.122	.035	.235	.120	.035	.227	.118	.035	.220	.116	.034	
7.0	.229	.113	.032	.225	.112	.032	.218	.110	.032	.211	.108	.032	.205	.107	.031	
8.0	.212	.104	.029	.209	.103	.029	.203	.101	.029	.197	.100	.029	.191	.098	.029	
9.0	.198	.096	.027	.195	.095	.027	.189	.094	.027	.184	.092	.026	.179	.091	.026	
10.0	.185	.089	.025	.182	.088	.025	.177	.087	.024	.172	.086	.024	.168	.084	.024	

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	.181	.156	.133	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.176	.132	.094	.151	.113	.081	.104	.078	.057	.060	.046	.033	.019	.015	.011	
3.0	.172	.115	.069	.147	.099	.060	.101	.069	.042	.058	.040	.025	.019	.013	.008	
4.0	.166	.102	.053	.143	.088	.046	.098	.061	.032	.057	.036	.019	.018	.012	.006	
5.0	.160	.092	.042	.137	.080	.036	.095	.056	.026	.055	.033	.015	.018	.011	.005	
6.0	.153	.084	.034	.132	.073	.030	.091	.051	.021	.053	.030	.013	.017	.010	.004	
7.0	.147	.078	.029	.126	.067	.025	.087	.047	.018	.051	.028	.011	.016	.009	.004	
8.0	.140	.072	.025	.120	.062	.022	.083	.044	.016	.049	.026	.009	.016	.008	.003	
9.0	.133	.067	.022	.115	.058	.020	.080	.041	.014	.046	.024	.008	.015	.008	.003	
10.0	.127	.063	.020	.110	.055	.018	.076	.038	.012	.044	.023	.007	.014	.007	.002	

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: PW131010-DT					TYPE:LED			WEIGHT:0.7(Kg)			
DIM.: 200*106*106					SPEC.:			SERIAL No.:			
MFR.:					SUR.:106*106*2			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	6.2	8.0	6.4	8.2	8.4	17.9	19.7	18.2	19.9	20.2	
	3H	6.9	8.6	7.2	8.8	9.1	17.7	19.3	18.0	19.6	19.8
	4H	7.1	8.7	7.4	8.9	9.2	17.6	19.1	17.9	19.4	19.7
	6H	7.1	8.6	7.5	8.9	9.2	17.4	18.9	17.8	19.2	19.5
	8H	7.1	8.5	7.5	8.8	9.1	17.4	18.8	17.7	19.1	19.4
	12H	7.1	8.4	7.4	8.7	9.0	17.3	18.7	17.7	19.0	19.3
4H	2H	12.8	14.3	13.1	14.6	14.9	18.2	19.8	18.6	20.1	20.3
	3H	13.7	15.0	14.1	15.4	15.7	18.0	19.4	18.4	19.7	20.0
	4H	14.0	15.2	14.3	15.5	15.8	17.9	19.1	18.3	19.5	19.8
	6H	14.1	15.1	14.5	15.5	15.9	17.8	18.9	18.2	19.2	19.6
	8H	14.1	15.1	14.5	15.4	15.8	17.8	18.8	18.2	19.1	19.5
	12H	14.0	14.9	14.5	15.3	15.7	17.7	18.6	18.2	19.0	19.4
8H	4H	13.8	14.8	14.2	15.2	15.6	17.8	18.8	18.3	19.2	19.6
	6H	13.9	14.8	14.4	15.2	15.6	17.8	18.6	18.2	19.0	19.4
	8H	14.0	14.7	14.4	15.1	15.6	17.7	18.4	18.2	18.9	19.3
	12H	14.0	14.6	14.4	15.0	15.5	17.7	18.3	18.2	18.8	19.2
12H	4H	13.8	14.7	14.2	15.1	15.5	17.8	18.7	18.2	19.1	19.5
	6H	13.9	14.6	14.4	15.1	15.5	17.7	18.4	18.2	18.9	19.3
	8H	13.9	14.5	14.4	15.0	15.5	17.7	18.3	18.2	18.8	19.2
Variations with the observer position at spacings:											
S = 1.0H	+ 1.4 / - 3.2					+ 0.4 / - 0.6					
1.5H	+ 2.6 / - 4.3					+ 2.9 / - 7.5					
2.0H	+ 1.3 / -17.6					+ 2.3 / - 6.5					

CIE Pub.117 Corrected 23.40 lm Total Lamp Luminous Flux.(8log(F/F0) = -13.0)

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: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	PROTECTION ANGLE:

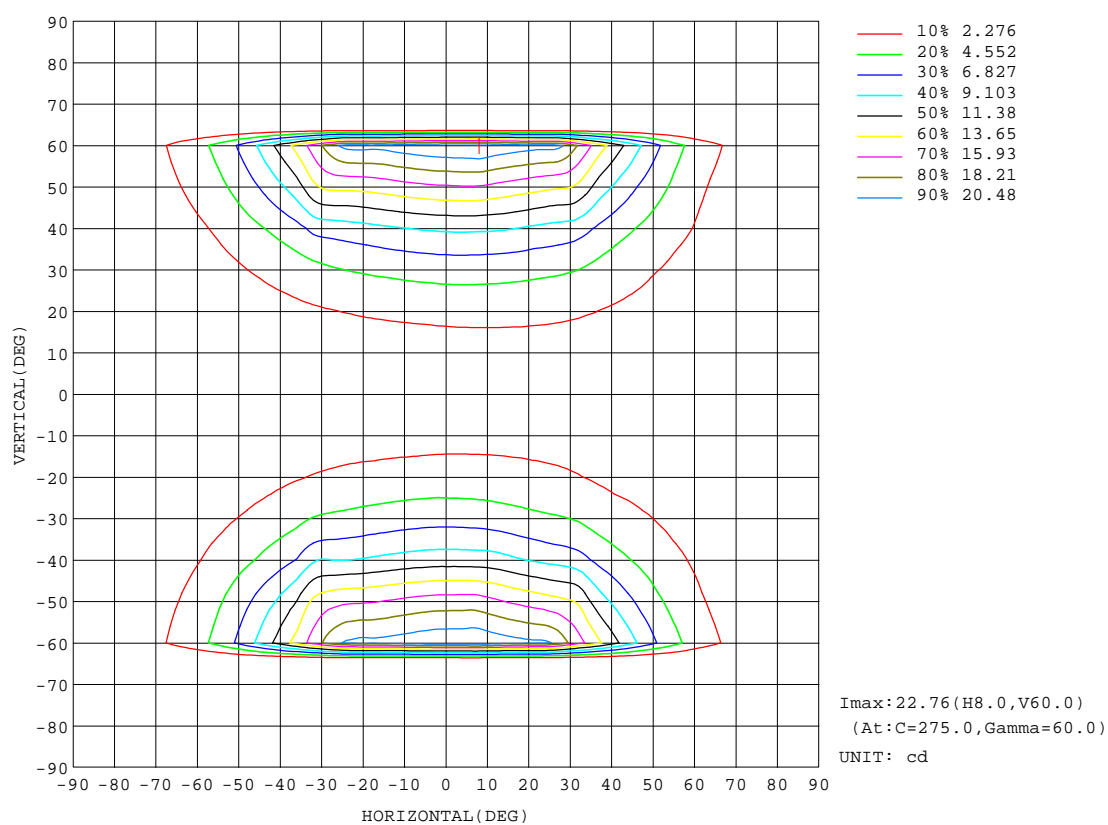
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	40	25	16	39	24	16	37	24	16	7
0.80	52	37	28	51	37	28	49	36	27	19
1.00	64	51	41	63	50	41	60	52	41	32
1.25	74	61	52	72	60	52	69	59	51	42
1.50	81	68	60	79	68	59	75	66	58	50
2.00	90	80	73	88	79	72	84	77	70	61
2.50	95	86	79	93	85	78	89	82	76	67
3.00	100	92	85	97	90	84	93	87	82	73
4.00	104	98	93	102	96	91	97	93	89	79
5.00	107	102	97	105	100	96	100	96	92	83
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: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	PROTECTION ANGLE:

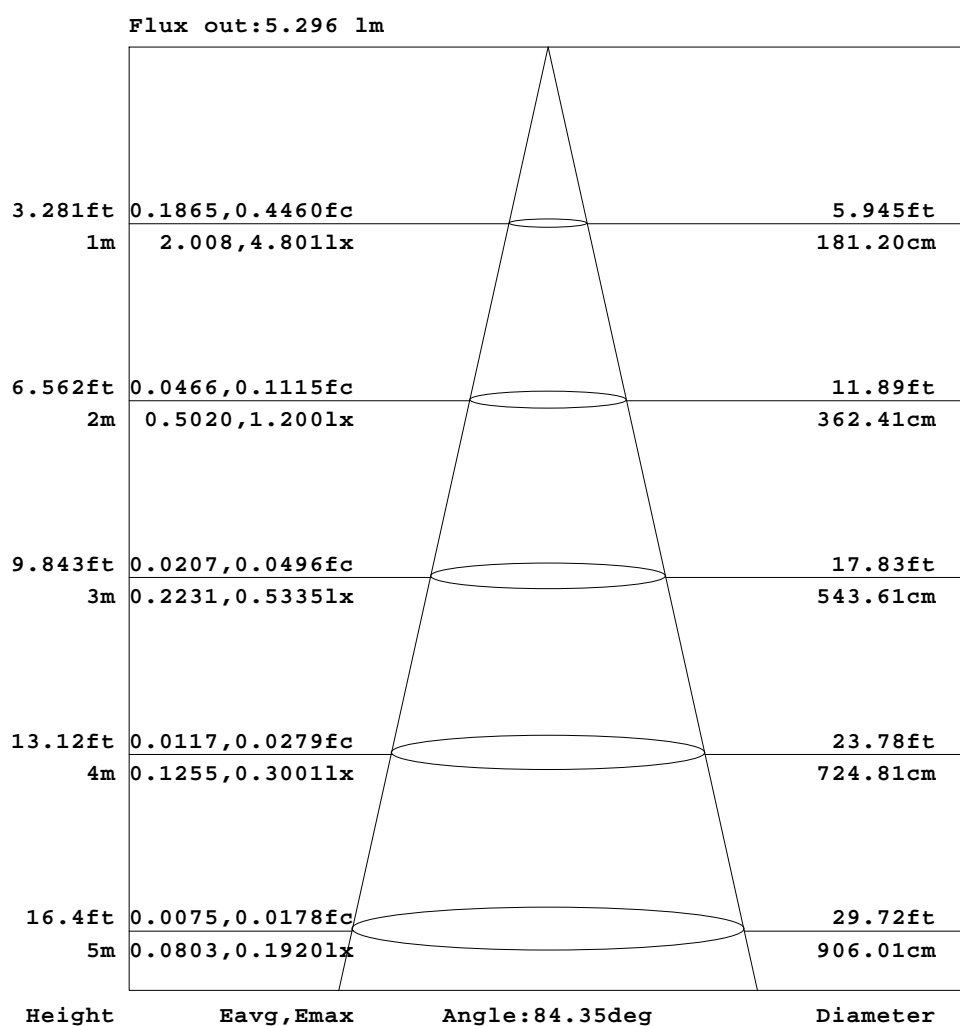


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQG  
Test Date:2019-11-18

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: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	PROTECTION ANGLE:



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

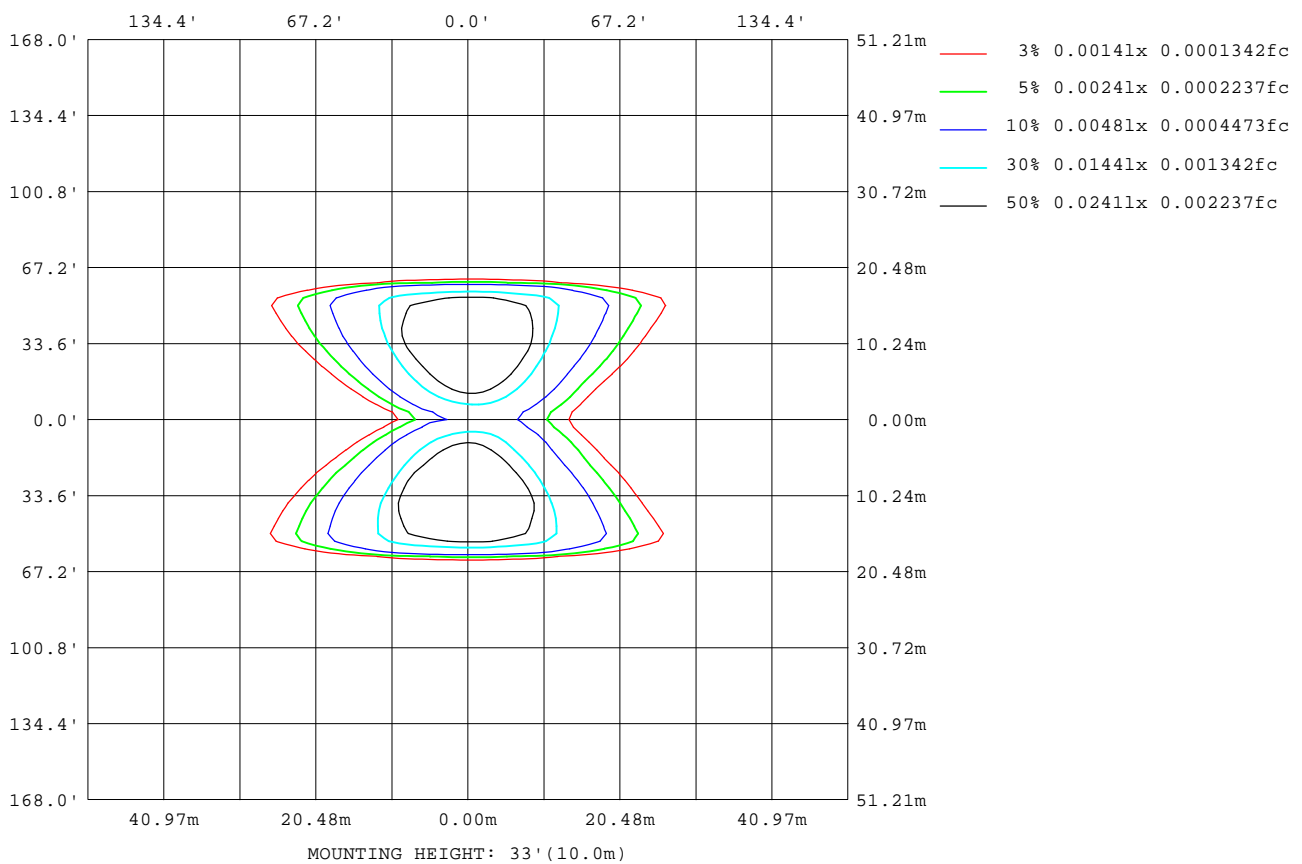
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZENGQ  
Test Date:2019-11-18

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

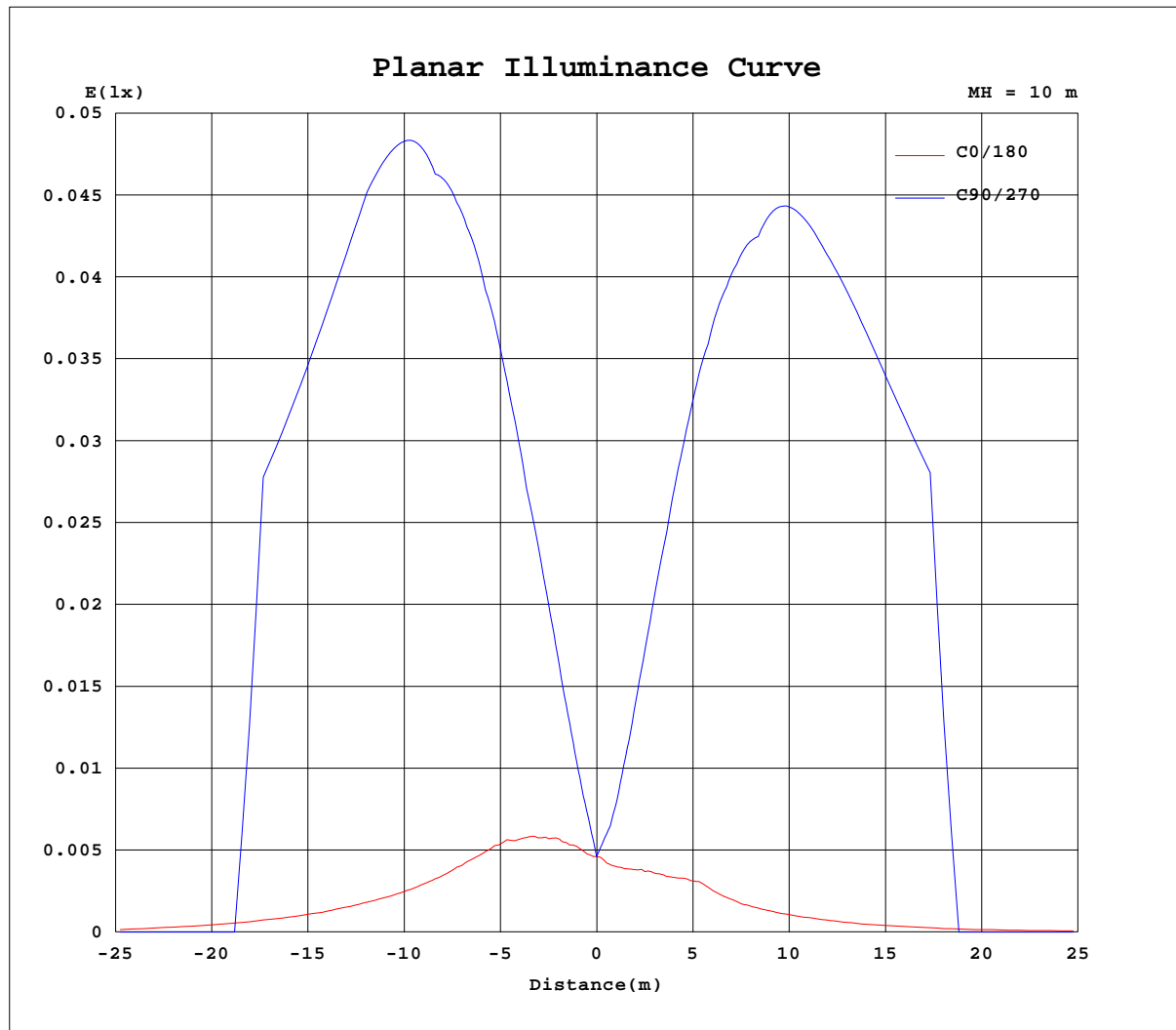
NAME: PW131010-DT	TYPE:LED	WEIGHT:0.7(Kg)
DIM.: 200*106*106	SPEC.:	SERIAL No.:
MFR.:	SUR.:106*106*2	PROTECTION ANGLE:



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: