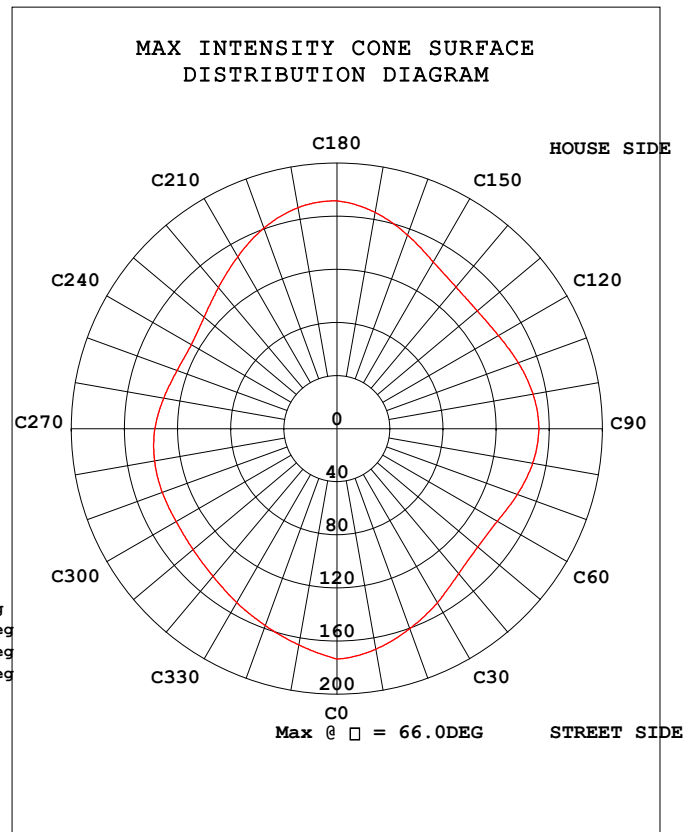
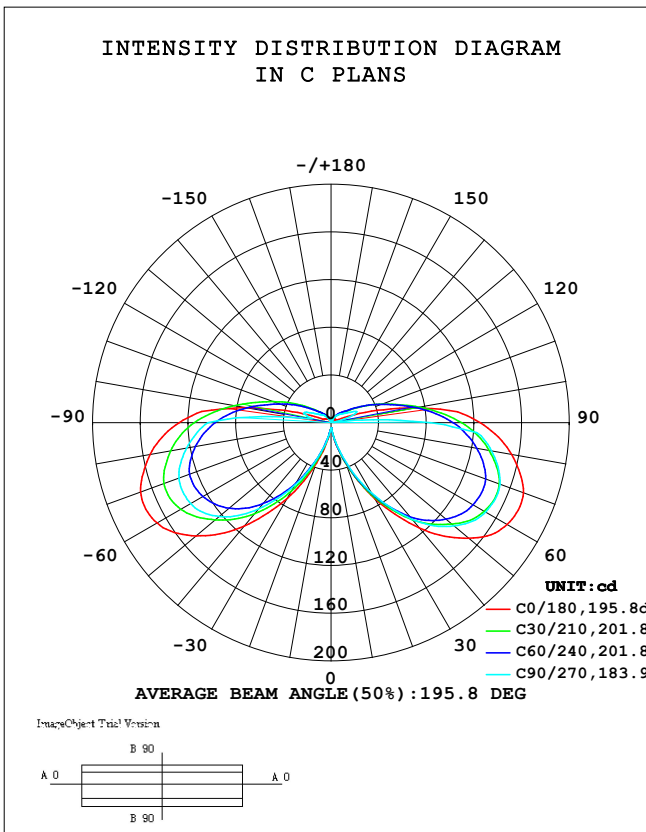


**STREETLIGHT PHOTOMETRIC TEST REPORT**

Test:U:221.2V I:0.0940A P:19.90W PF:0.9550 Lamp Flux:936.071x1 lm		
NAME: BOLEDA VENTUS	TYPE:Bollard	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: LUMENA LIGHTS LTD	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 47.04 lm/W
MODEL	BAG	Imax(cd)	173.5	<input type="checkbox"/> street_up(%)	11.8	
NOMINAL POWER(W)	20	LOR(%)	100.0	<input type="checkbox"/> street_down(%)	45.9	
RATED VOLTAGE(V)	222	TOTAL FLUX(lm)	936.1	<input type="checkbox"/> house_up(%)	10.1	
NOMINAL FLUX(lm)	936.071	MAXIMUM @ (C, <input type="checkbox"/> )	0,66.0	<input type="checkbox"/> house_down(%)	32.3	
LAMPS INSIDE	1	<input type="checkbox"/> up(%)	21.9	76 FLASHAREA(m2)		
TEST VOLTAGE(V)	221.3	<input type="checkbox"/> down(%)	78.1	SLI		



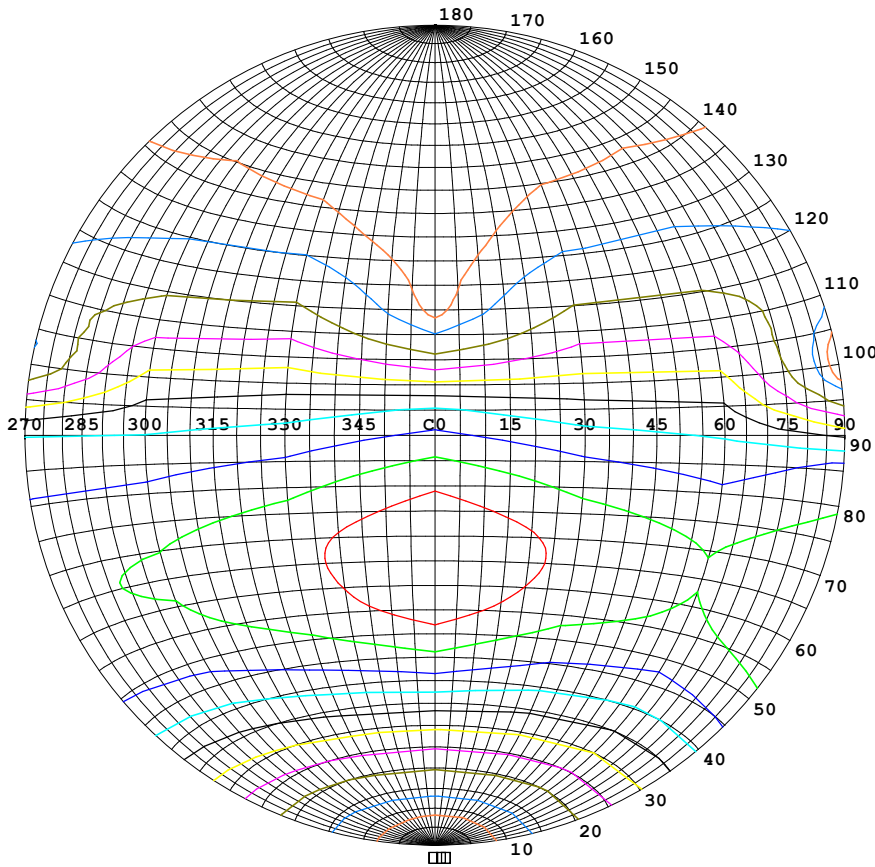
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:sun  
 Test Date:2022-05-19

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
 Test Distance:7.475m [K=1.0000]  
 Remarks:

NOTE: SLI:SPECIFIC LUMINAIRE INDEX

**STREETLIGHT ISOCANDELA DIAGRAM**

Test:U:221.2V I:0.0940A P:19.90W PF:0.9550 Lamp Flux:936.07lx1 lm		
NAME: BOLEDA VENTUS	TYPE:Bollard	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: LUMENA LIGHTS LTD	SUR.:	PROTECTION ANGLE:



Classification:

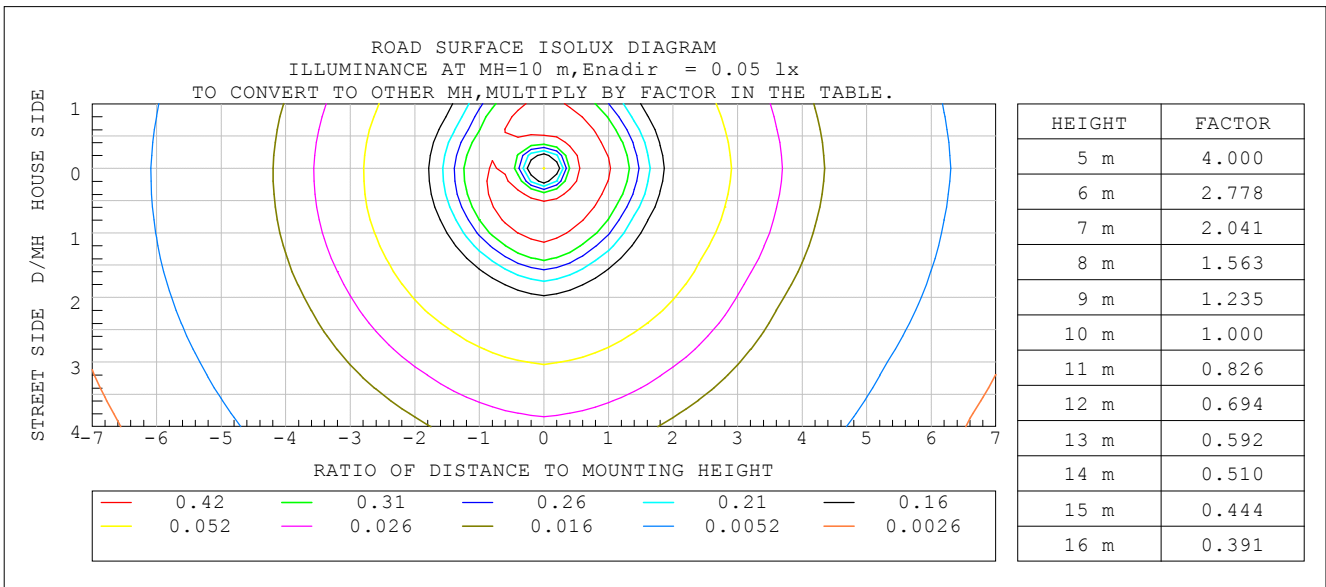
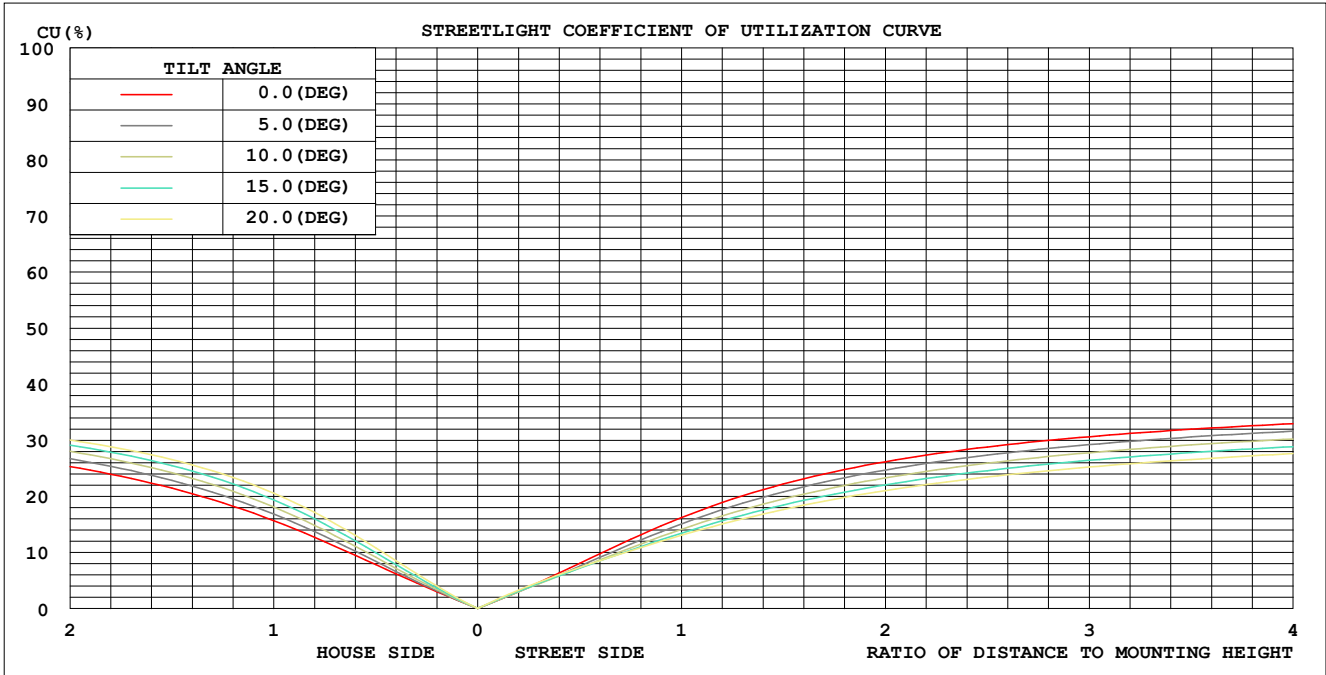
IES:Type IV - Short  
 CIE:Broad - Intermediate  
 IES:None cut-off  
 CIE:Non-cut-off  
 Max.At80:164.7cd/klm  
 Max.At90:136.2cd/klm  
 Max.80-90:164.7cd/klm

UNIT	cd
I <sub>max</sub> =100%	173
90%	156
80%	139
70%	121
60%	104
50%	87
40%	69
30%	52
20%	35
10%	17
5%	9

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:sun  
 Test Date:2022-05-19

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
 Test Distance:7.475m [K=1.0000]  
 Remarks:

COEFFICIENT OF UTILIZATION CURVE  
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: sun  
Test Date: 2022-05-19

Range: 0 - 180DEG  
 Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
Humidity: 65.0%  
Test Distance: 7.475m [K=1.0000]  
Remarks:

ZONAL FLUX DIAGRAM

Test:U:221.2V I:0.0940A P:19.90W PF:0.9550 Lamp Flux:936.07lx1 lm		
NAME: BOLEDA VENTUS	TYPE:Bollard	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: LUMENA LIGHTS LTD	SUR.:	PROTECTION ANGLE:

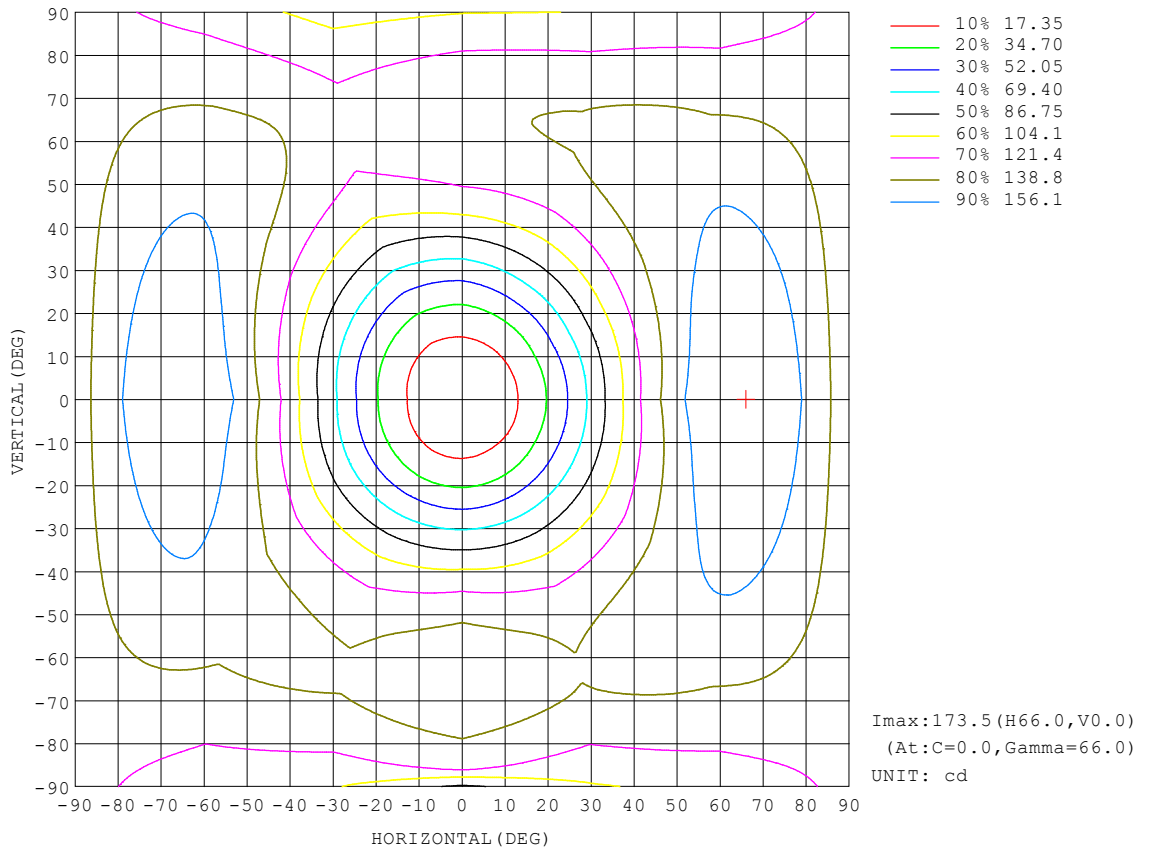
°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum,lamp
10	11.28	11.12	10.44	10.87	12.04	10.17	10.57	11.41	0- 10	0.7255	0.7255	0.08,0.08
20	35.91	35.18	33.13	34.24	36.10	30.80	29.19	34.51	10- 20	6.346	7.072	0.76,0.76
30	73.52	70.55	68.25	69.30	73.19	62.08	60.37	70.48	20- 30	23.88	30.95	3.31,3.31
40	115.4	104.8	105.9	103.4	113.4	94.22	94.49	105.3	30- 40	54.57	85.52	9.14,9.14
50	150.9	129.3	134.9	127.8	147.9	119.4	122.6	131.6	40- 50	92.04	177.6	19,19
60	170.8	143.1	149.9	140.5	168.6	134.8	136.1	143.8	50- 60	125.5	303.1	32.4,32.4
70	171.7	144.1	150.9	141.8	170.0	137.8	135.9	144.2	60- 70	146.5	449.5	48,48
80	153.9	129.5	136.8	129.2	154.2	126.2	123.1	129.5	70- 80	148.9	598.4	63.9,63.9
90	125.3	106.1	83.24	107.6	127.5	106.1	103.3	107.5	80- 90	133.0	731.4	78.1,78.1
100	73.70	74.08	2.662	77.17	73.81	77.15	19.56	76.32	90-100	94.22	825.7	88.2,88.2
110	17.71	45.68	21.33	48.11	17.68	48.94	23.64	46.19	100-110	53.09	878.8	93.9,93.9
120	4.953	25.85	17.31	26.67	6.084	28.65	15.56	24.76	110-120	29.03	907.8	97,97
130	4.308	14.34	11.62	13.75	5.032	15.61	10.47	12.34	120-130	14.46	922.2	98.5,98.5
140	3.657	9.262	8.205	8.402	4.098	9.793	6.692	8.016	130-140	7.605	929.8	99.3,99.3
150	2.932	5.191	4.793	4.722	3.161	5.837	3.733	4.747	140-150	3.896	933.7	99.8,99.8
160	2.198	2.560	2.608	2.359	2.201	3.218	2.636	2.517	150-160	1.654	935.4	99.9,99.9
170	1.557	1.292	1.242	1.261	1.667	1.625	1.407	1.318	160-170	0.5634	936.0	100,100
180	0.9729	0.8535	0.7297	0.7606	1.114	0.8402	0.8358	0.7650	170-180	0.1131	936.1	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:sun  
 Test Date:2022-05-19

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
 Test Distance:7.475m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

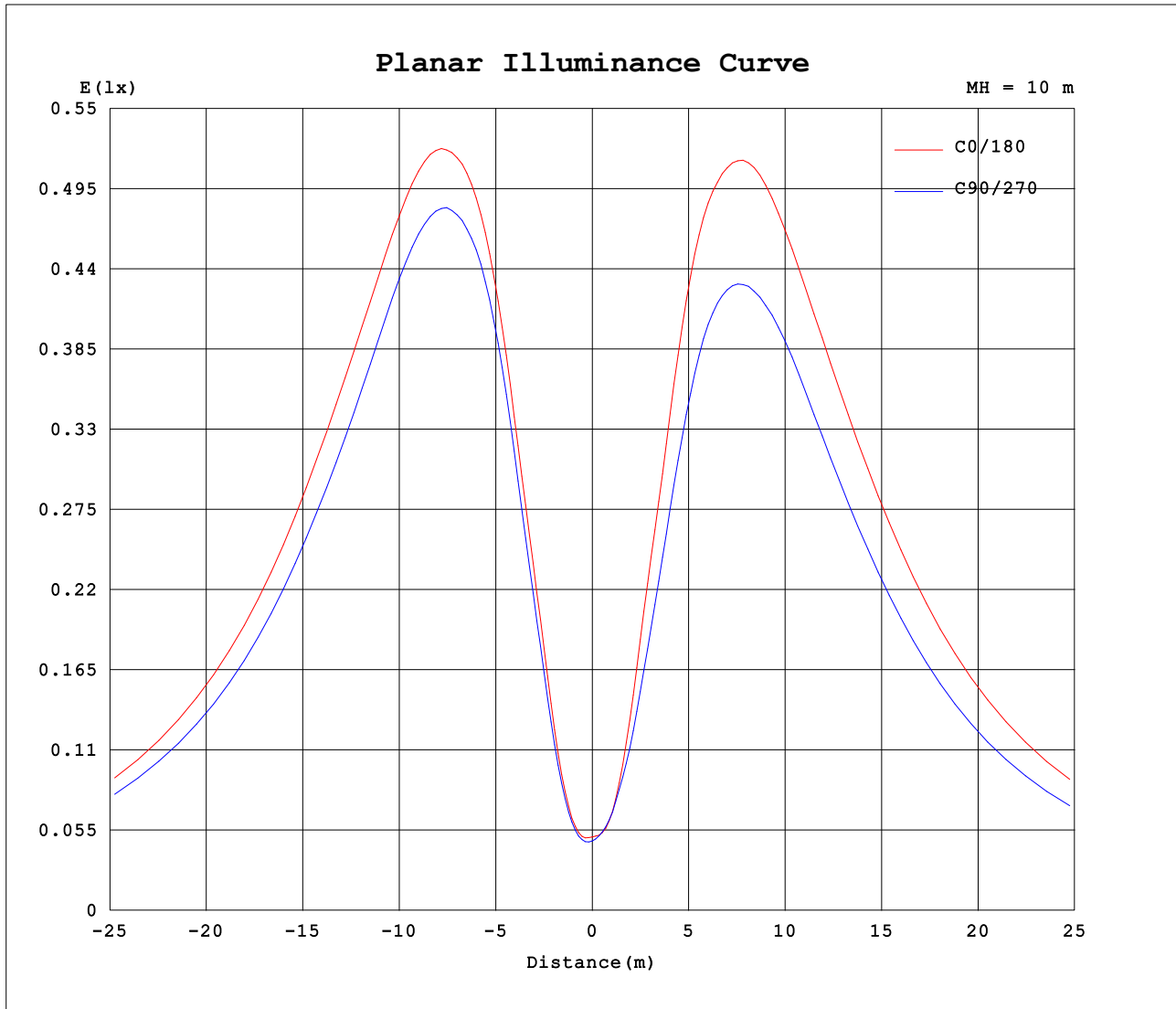
Test:U:221.2V I:0.0940A P:19.90W PF:0.9550 Lamp Flux:936.07lx1 lm		
NAME: BOLEDA VENTUS	TYPE:Bollard	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: LUMENA LIGHTS LTD	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: sun  
 Test Date: 2022-05-19

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity: 65.0%  
 Test Distance: 7.475m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:sun  
 Test Date:2022-05-19

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
 Test Distance:7.475m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.2V I:0.0940A P:19.90W PF:0.9550 Lamp Flux:936.071x1 lm		
NAME: BOLEDA VENTUS	TYPE:Bollard	WEIGHT:
DIM.:	SPEC.:20W	SERIAL No.:
MFR.: LUMENA LIGHTS LTD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	5.05	4.84	4.70	4.76	4.92	4.89	5.05	4.84	4.70	4.76	4.92	4.89							
5	5.84	5.66	5.74	5.58	5.86	5.84	6.20	5.83	5.83	6.27	6.67	6.41							
10	11.3	11.0	11.2	10.4	10.5	11.3	12.0	10.6	9.73	10.6	11.2	11.6							
15	22.1	21.8	21.1	20.1	19.9	21.5	22.8	20.1	17.6	18.3	20.1	21.7							
20	35.9	36.0	34.4	33.1	33.4	35.1	36.1	32.8	28.8	29.2	33.0	36.0							
25	53.7	53.3	51.7	50.0	50.7	51.9	53.8	48.4	42.6	43.6	49.8	54.0							
30	73.5	71.7	69.4	68.2	68.6	70.0	73.2	66.0	58.2	60.4	67.9	73.1							
35	93.9	89.4	86.6	86.8	85.8	87.6	92.7	83.0	73.8	77.5	84.7	91.8							
40	115	107	103	106	102	105	113	99.8	88.7	94.5	101	110							
45	135	121	116	123	116	119	132	115	102	110	115	125							
50	151	132	126	135	126	130	148	127	112	123	126	137							
55	164	143	134	145	133	138	161	138	119	131	134	145							
60	171	149	138	150	138	143	169	146	124	136	138	149							
65	173	151	139	152	140	145	172	149	127	137	140	151							
70	172	150	138	151	140	144	170	149	126	136	139	150							
75	164	144	132	145	134	139	163	144	122	131	133	143							
80	154	135	124	137	127	131	154	137	116	123	125	134							
85	141	124	114	126	117	121	143	127	107	114	116	123							
90	125	110	102	83.2	106	109	128	115	97.3	103	104	111							
95	107	92.9	88.3	26.3	91.0	95.0	109	99.4	85.6	58.6	90.0	95.8							
100	73.7	75.5	72.7	2.66	75.3	79.0	73.8	82.4	71.9	19.6	73.3	79.3							
105	40.6	59.1	57.5	9.28	60.0	62.7	39.5	65.8	58.0	20.9	57.9	62.4							
110	17.7	45.9	45.5	21.3	47.4	48.8	17.7	51.8	46.0	23.6	44.1	48.3							
115	6.12	34.9	35.1	22.6	36.5	36.9	7.11	40.3	36.1	20.1	33.0	36.2							
120	4.95	25.5	26.2	17.3	27.0	26.3	6.08	30.0	27.3	15.6	24.0	25.6							
125	4.53	18.2	19.5	13.8	19.7	18.1	5.58	21.9	20.3	12.3	16.9	17.5							
130	4.31	13.6	15.1	11.6	14.8	12.7	5.03	15.9	15.3	10.5	12.7	12.0							
135	4.01	10.9	12.3	9.92	11.7	9.70	4.55	12.3	12.2	8.98	10.6	9.29							
140	3.66	8.55	9.98	8.21	9.29	7.52	4.10	9.78	9.80	6.69	8.75	7.28							
145	3.28	6.40	7.79	6.41	7.14	5.70	3.64	7.66	7.78	4.75	7.01	5.61							
150	2.93	4.60	5.78	4.79	5.28	4.16	3.16	5.82	5.86	3.73	5.30	4.19							
155	2.55	3.22	4.05	3.56	3.71	2.98	2.63	4.42	4.28	3.15	3.77	3.15							
160	2.20	2.25	2.87	2.61	2.56	2.16	2.20	3.38	3.06	2.64	2.62	2.41							
165	1.84	1.58	2.05	1.84	1.86	1.54	1.92	2.56	1.93	1.84	1.81	1.84							
170	1.56	1.13	1.46	1.24	1.41	1.11	1.67	1.89	1.36	1.41	1.25	1.39							
175	1.24	0.83	1.08	0.85	1.10	0.85	1.34	1.42	1.10	1.19	0.85	1.06							
180	0.97	0.84	0.86	0.73	0.84	0.68	1.11	0.92	0.76	0.84	0.68	0.85							

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:sun  
 Test Date:2022-05-19

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.274  
 Humidity:65.0%  
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