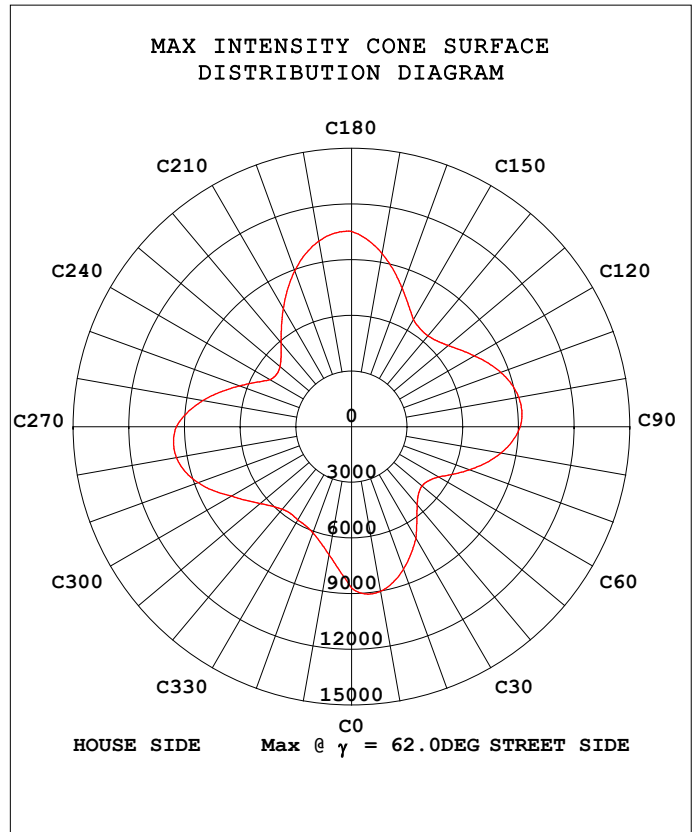
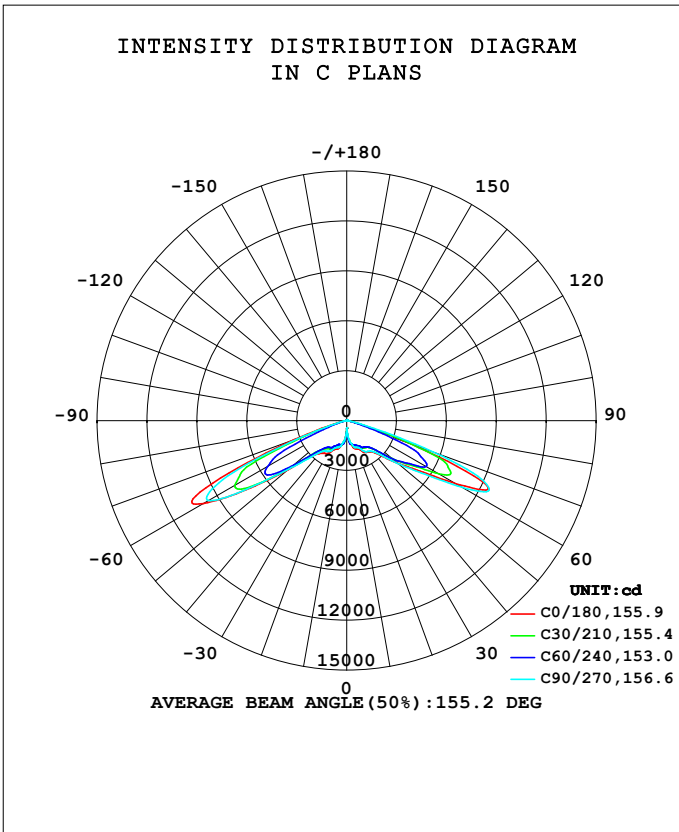


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 116.55 lm/W
MODEL	3000	I _{max} (cd)	10530	η street_up (%)	0.5	
NOMINAL POWER (W)	150	LOR (%)	100.0	η street_down (%)	50.0	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	17024	η house_up (%)	0.5	
NOMINAL FLUX (lm)	17023.7	MAXIMUM @ (C, γ)	180,62.0	η house_down (%)	49.1	
LAMPS INSIDE	1	η up (%)	0.9	76 FLASHAREA (m2)	0.05000	
TEST VOLTAGE (V)	230	η down (%)	99.1	SLI	19.566	

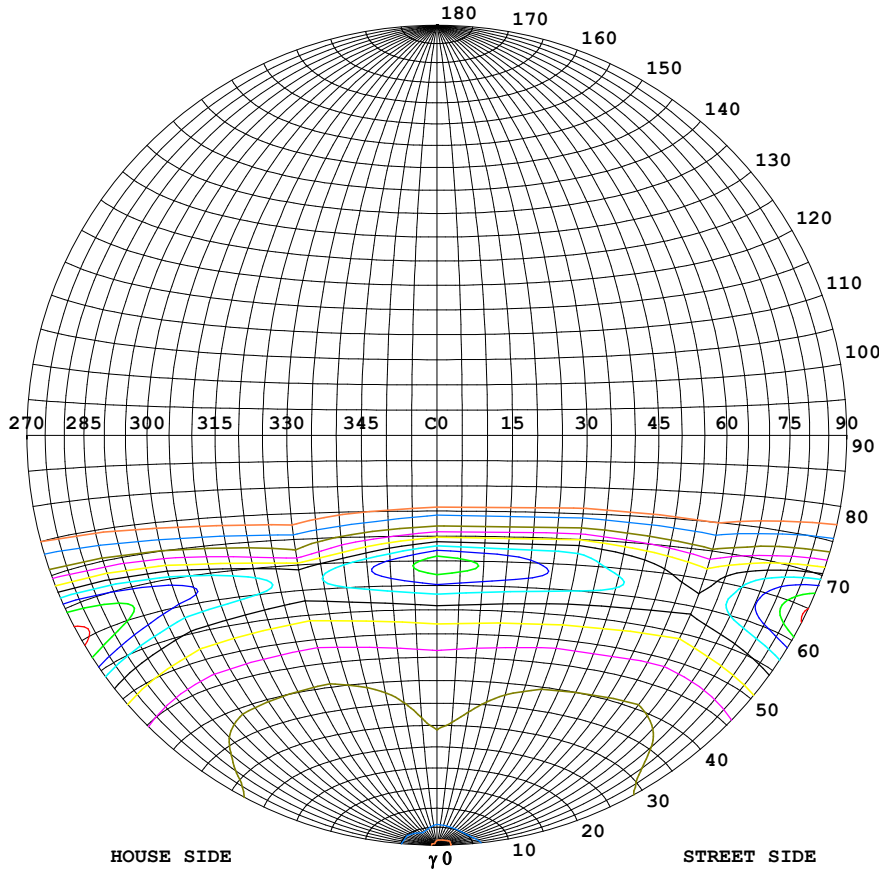


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ADMIN
 Test Date: 2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 9.345m [K=1.0000]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:



Classification:

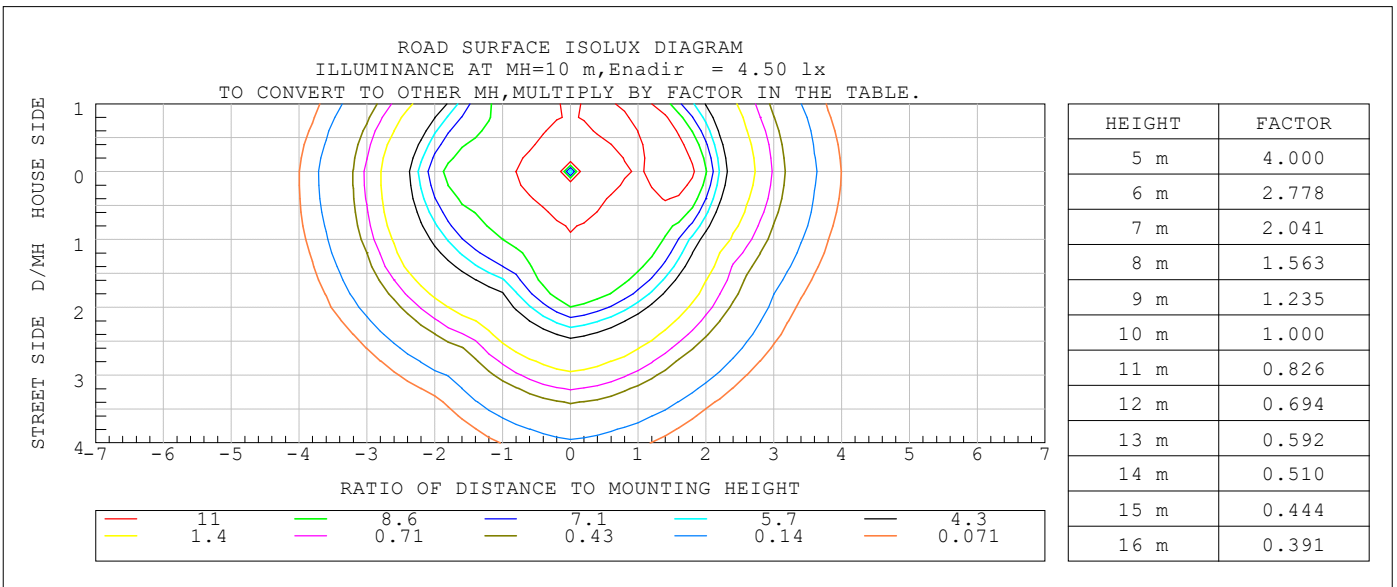
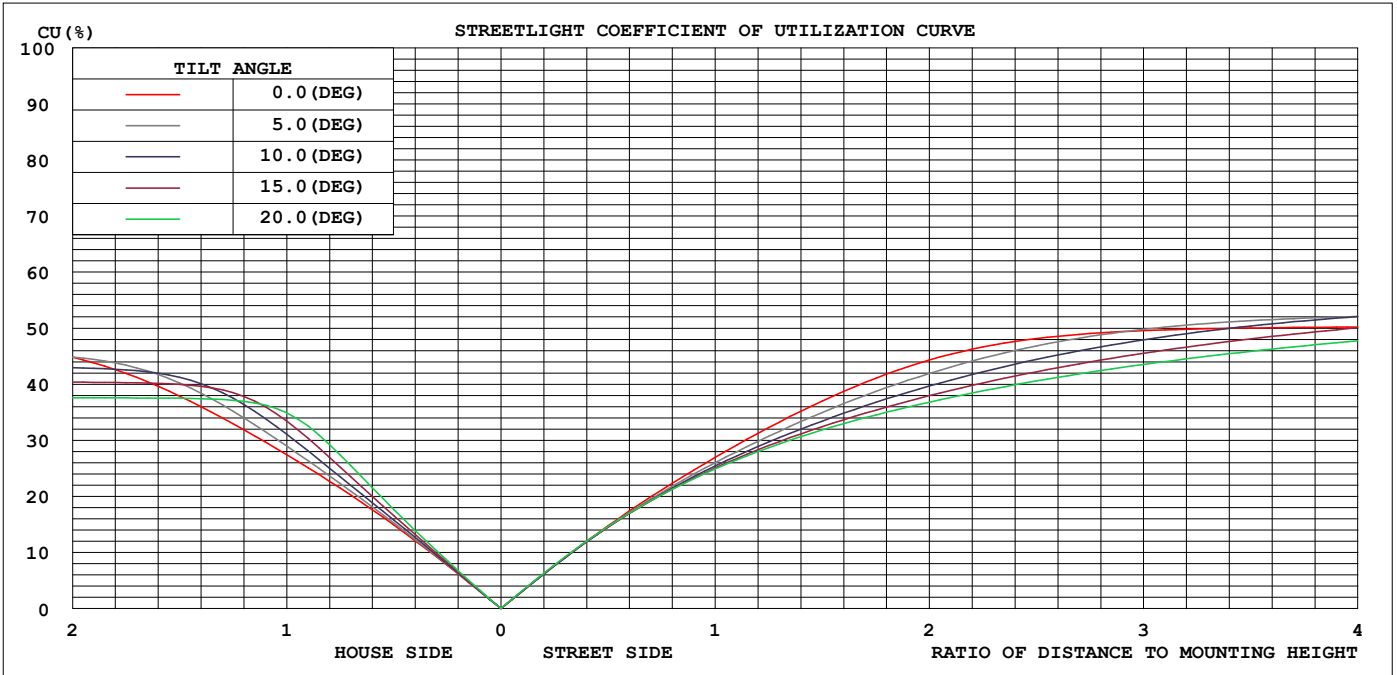
IES:Type III - Short
 CIE:Broad - Intermediate
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:10.19cd/klm
 Max.At90:1.852cd/klm
 Max.80-90:10.19cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	10530
90%	9477
80%	8424
70%	7371
60%	6318
50%	5265
40%	4212
30%	3159
20%	2106
10%	1053
5%	526

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

gamma Range: 0 - 180DEG
 gamma Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ADMIN
Test Date: 2023-09-20

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.471
Humidity: 65.0%
Test Distance: 9.345m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

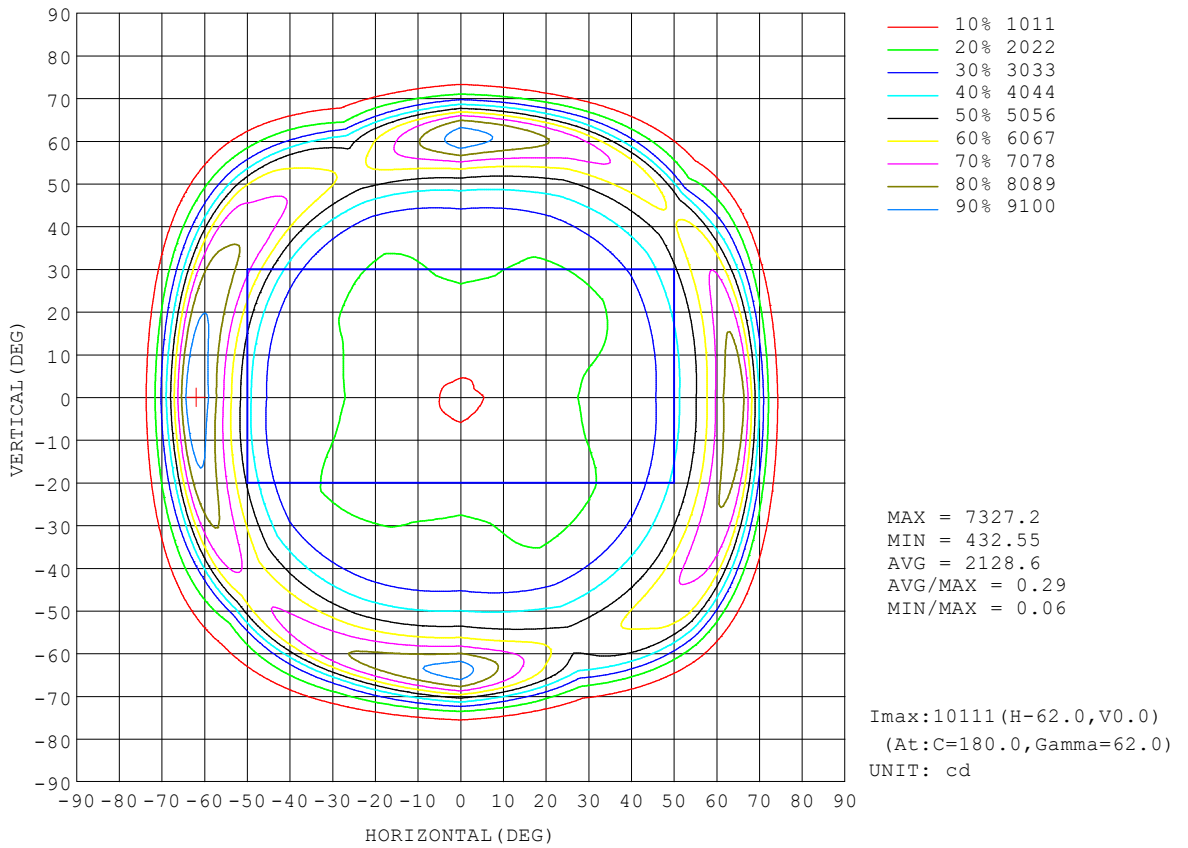
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	142.5	141.2	133.5	133.5	139.8	141.7	135.7	135.4	0- 10	109.4	109.4	0.64,0.64
20	178.4	161.3	170.6	153.2	182.0	158.2	172.6	153.5	10- 20	438.4	547.8	3.22,3.22
30	221.9	189.1	214.5	182.3	228.6	192.5	214.6	182.6	20- 30	823.9	1372	8.06,8.06
40	248.0	211.4	243.0	208.6	260.0	224.2	249.1	206.6	30- 40	1310	2682	15.8,15.8
50	395.6	354.9	401.3	353.2	459.0	422.3	451.6	353.0	40- 50	2246	4928	28.9,28.9
60	757.9	596.4	803.3	673.5	996.7	661.7	961.1	637.4	50- 60	4972	9899	58.2,58.2
70	410.0	324.5	552.8	244.6	337.0	182.3	275.3	168.6	60- 70	6013	15913	93.5,93.5
80	8.860	9.024	17.35	10.17	9.350	5.568	4.233	4.058	70- 80	922.2	16835	98.9,98.9
90	1.835	2.197	1.656	2.337	2.115	2.133	2.058	2.744	80- 90	32.32	16867	99.1,99.1
100	2.191	2.272	1.969	2.306	2.449	2.296	2.380	2.593	90-100	25.00	16892	99.2,99.2
110	2.559	2.493	2.372	2.450	2.696	2.513	2.614	2.669	100-110	25.67	16918	99.4,99.4
120	2.852	2.724	2.632	2.613	2.942	2.730	2.860	2.805	110-120	26.21	16944	99.5,99.5
130	3.068	2.909	2.831	2.744	3.075	2.793	2.966	2.852	120-130	25.41	16969	99.7,99.7
140	2.928	2.794	2.731	2.652	2.866	2.594	2.782	2.621	130-140	21.81	16991	99.8,99.8
150	2.757	2.613	2.611	2.450	2.425	2.286	2.335	2.303	140-150	16.55	17008	99.9,99.9
160	1.956	1.868	1.888	1.821	1.871	1.740	1.769	1.742	150-160	9.874	17018	100,100
170	1.614	1.464	1.536	1.438	1.587	1.442	1.496	1.431	160-170	4.659	17022	100,100
180	1.244	1.204	1.185	1.159	1.244	1.204	1.186	1.159	170-180	1.366	17024	100,100
DEG	LUMINOUS INTENSITY:X10cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

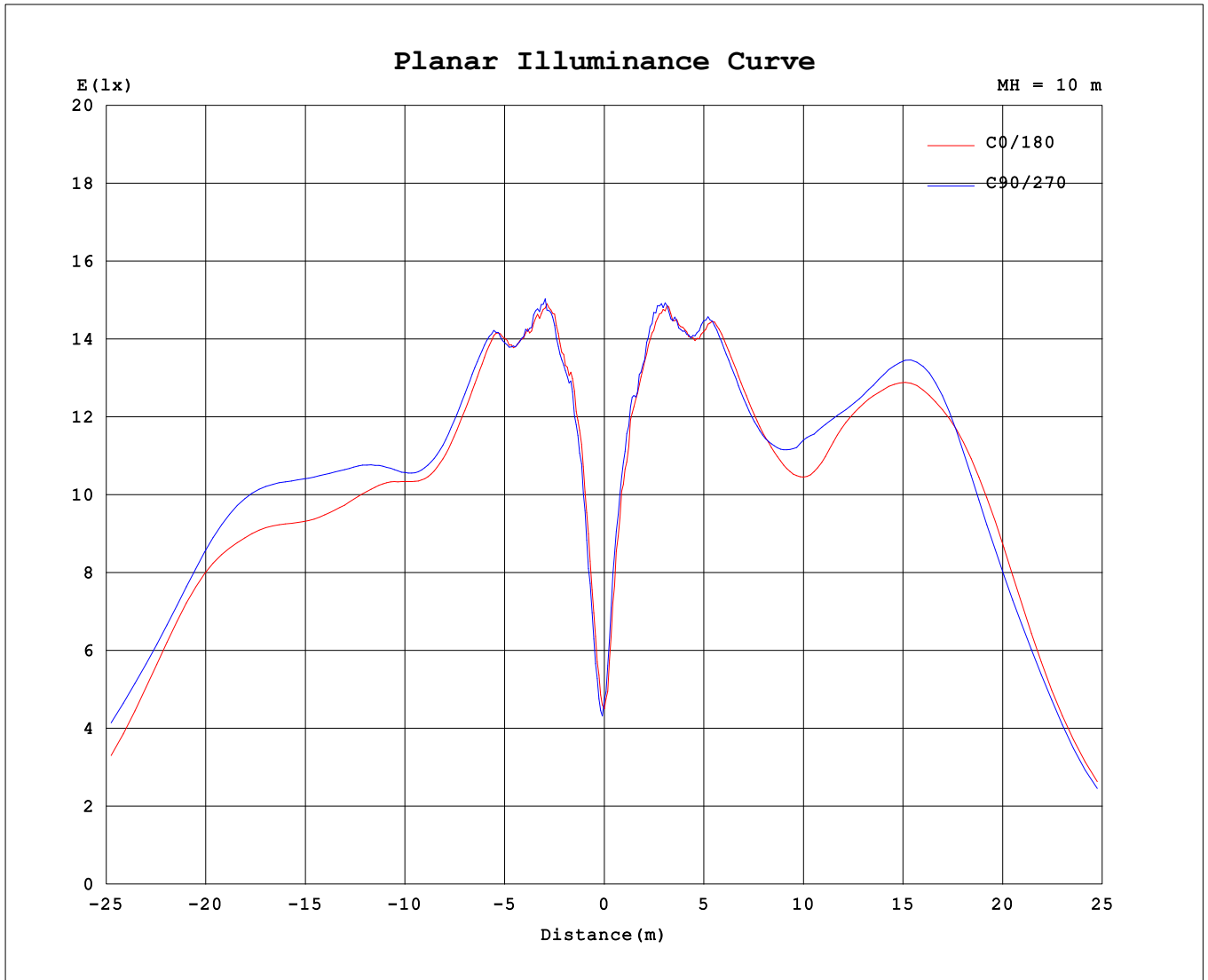
Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

Planar Illuminance Curve



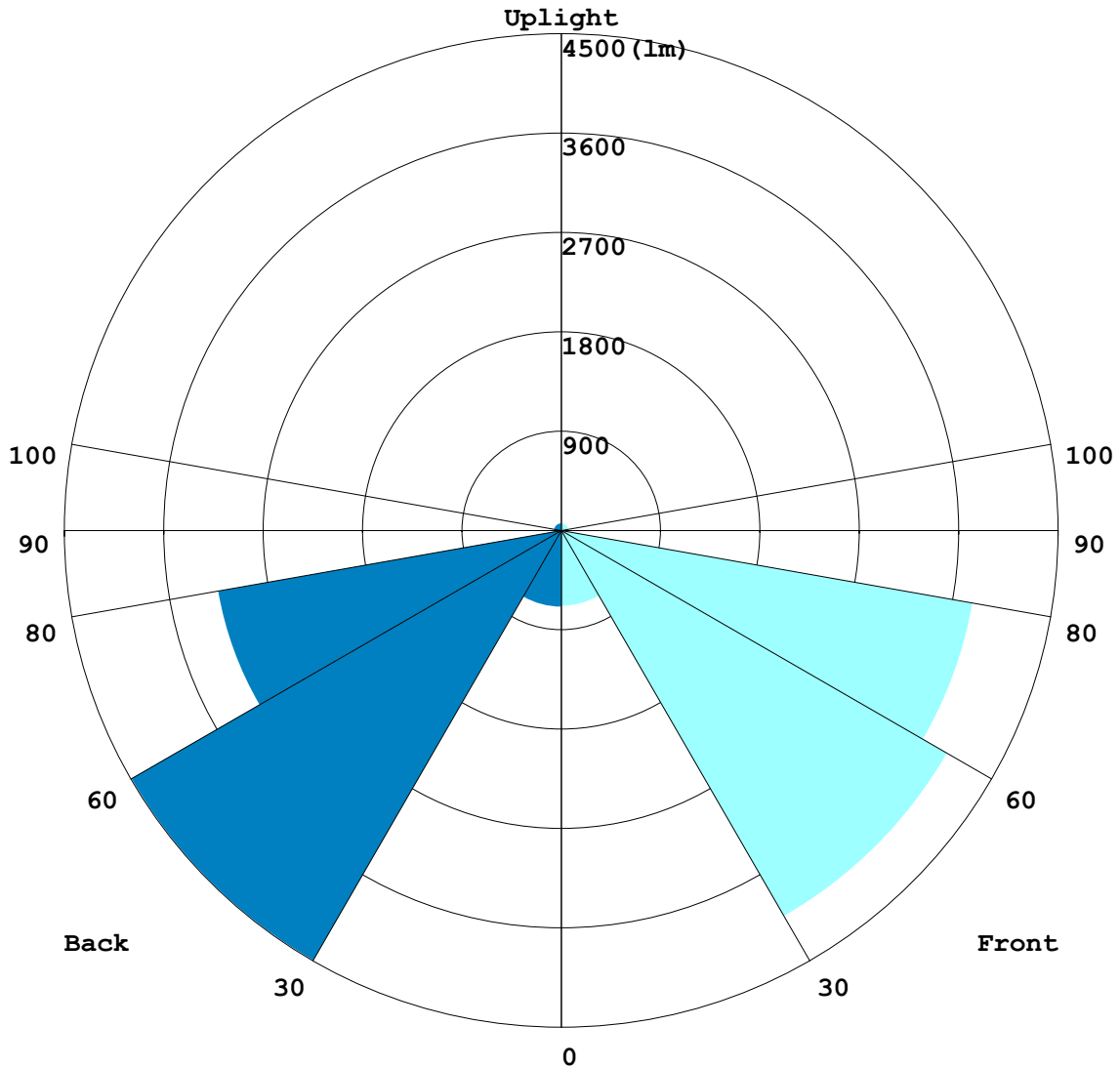
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ADMIN
 Test Date: 2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 9.345m [K=1.0000]
 Remarks:

LCS REPORT

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

BUG REPORT

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	681.59	4.0
FM - Front-Medium(30-60)	4034.2	23.7
FH - Front-High(60-80)	3780	22.2
FVH - Front-Very High(80-90)	17.757	0.1
Total Forward Light	8590.8	50.5

BL - Back-Low(0-30)	690.15	4.1
BM - Back-Medium(30-60)	4493.6	26.4
BH - Back-High(60-80)	3155.3	18.5
BVH - Back-Very High(80-90)	14.566	0.1
Total Back Light	8432.9	49.5

UL - Uplight-Low(90-100)	24.998	0.1
UH - Uplight-High(100-180)	131.54	0.8
Total Up Light	156.54	0.9

BUG(Back,Up,Glare) Rating	B4-U3-G4
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	8353.6	79.262	8432.9
Street Side	8513.5	77.275	8590.8

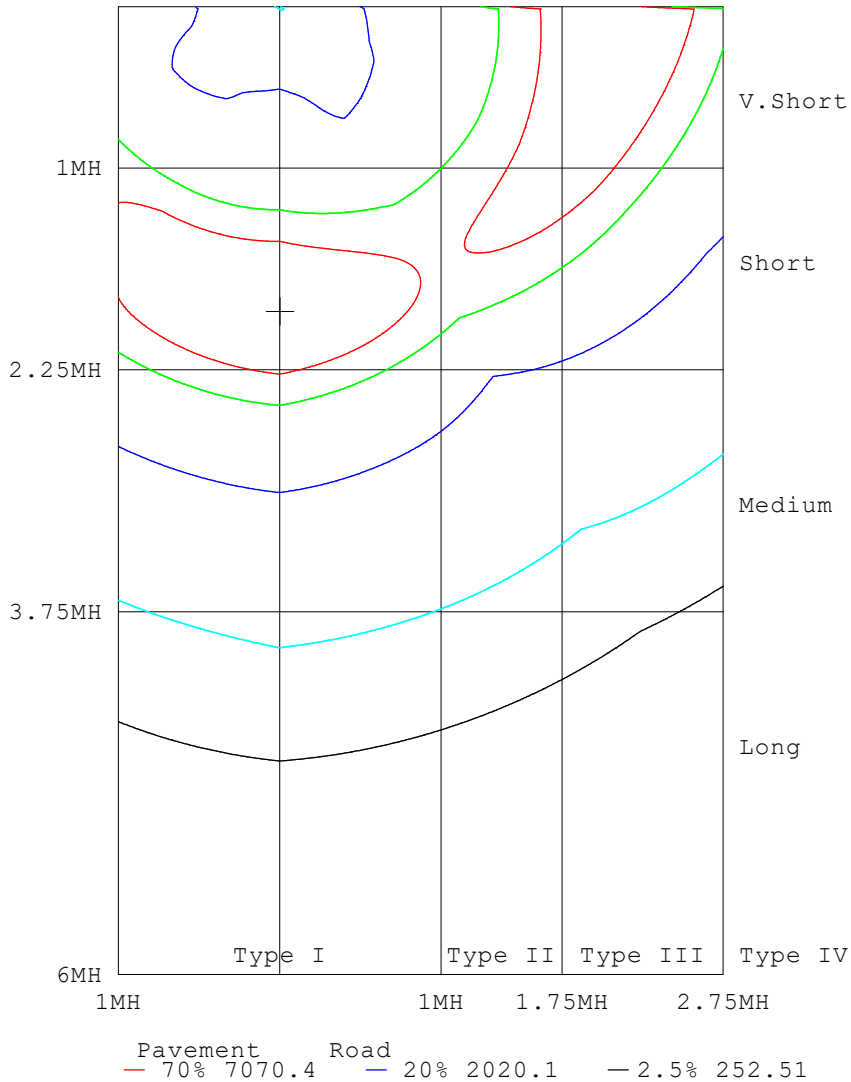
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

ROAD ISOCANDELA REPORT

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.08V I:0.6453A P:146.06W PF:0.9837 Freq:49.99Hz Lamp Flux:17023.7x1 lm		
NAME: COMO-150	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

Table--1

UNIT: X10cd

C (DEG) \ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330							
0	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9	46.9							
5	101	104	105	88.6	96.0	95.5	106	105	115	105	105	117							
10	142	139	143	133	132	135	140	141	142	136	134	137							
15	170	155	153	161	147	145	168	152	151	163	149	147							
20	178	164	158	171	159	148	182	162	154	173	157	150							
25	194	168	170	184	161	161	196	172	169	188	166	162							
30	222	191	187	215	186	179	229	197	188	215	186	179							
35	231	198	194	227	198	190	241	206	196	225	193	184							
40	248	213	210	243	213	204	260	227	222	249	211	202							
45	305	261	254	296	261	244	308	277	282	319	268	257							
50	396	354	356	401	361	345	459	427	418	452	366	340							
55	521	466	448	550	498	503	706	679	570	693	496	438							
60	758	640	552	803	697	650	997	776	545	961	700	574							
65	932	676	482	939	751	564	889	664	381	791	647	447							
70	410	415	232	553	314	174	337	245	118	275	206	131							
75	79.0	77.1	52.1	121	74.5	50.0	68.1	46.8	30.5	51.3	38.3	24.5							
80	8.86	10.3	7.75	17.3	12.0	8.36	9.35	7.19	3.92	4.23	3.86	4.26							
85	2.01	2.28	2.82	1.93	2.22	3.02	2.23	2.25	2.49	2.08	2.38	3.31							
90	1.84	2.00	2.39	1.66	2.02	2.66	2.12	2.05	2.22	2.06	2.34	3.15							
95	2.01	2.14	2.39	1.83	2.16	2.63	2.35	2.16	2.31	2.24	2.43	2.97							
100	2.19	2.26	2.29	1.97	2.23	2.38	2.45	2.24	2.35	2.38	2.47	2.72							
105	2.37	2.40	2.32	2.18	2.36	2.33	2.58	2.37	2.44	2.52	2.57	2.64							
110	2.56	2.52	2.46	2.37	2.49	2.41	2.70	2.47	2.56	2.61	2.65	2.69							
115	2.68	2.62	2.61	2.50	2.57	2.47	2.81	2.57	2.67	2.73	2.71	2.74							
120	2.85	2.73	2.72	2.63	2.67	2.56	2.94	2.69	2.77	2.86	2.80	2.81							
125	3.00	2.85	2.82	2.77	2.78	2.64	3.05	2.74	2.83	2.94	2.85	2.86							
130	3.07	2.96	2.86	2.83	2.84	2.65	3.08	2.72	2.87	2.97	2.82	2.88							
135	3.03	3.01	2.82	2.82	2.86	2.61	3.04	2.64	2.81	2.92	2.71	2.80							
140	2.93	2.93	2.66	2.73	2.78	2.52	2.87	2.57	2.62	2.78	2.63	2.61							
145	2.95	2.88	2.63	2.78	2.76	2.50	2.69	2.51	2.46	2.60	2.58	2.50							
150	2.76	2.70	2.52	2.61	2.55	2.35	2.43	2.33	2.24	2.34	2.38	2.23							
155	2.28	2.26	2.16	2.22	2.19	2.04	2.12	2.03	1.94	2.00	2.04	1.91							
160	1.96	1.89	1.85	1.89	1.87	1.77	1.87	1.78	1.70	1.77	1.80	1.68							
165	1.80	1.65	1.61	1.74	1.65	1.56	1.75	1.59	1.50	1.63	1.61	1.47							
170	1.61	1.49	1.44	1.54	1.49	1.39	1.59	1.49	1.39	1.50	1.50	1.36							
175	1.63	1.49	1.34	1.25	1.17	1.18	1.49	1.49	1.41	1.51	1.51	1.39							
180	1.24	1.20	1.21	1.18	1.16	1.16	1.24	1.20	1.21	1.19	1.16	1.16							

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:ADMIN
 Test Date:2023-09-20

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks: