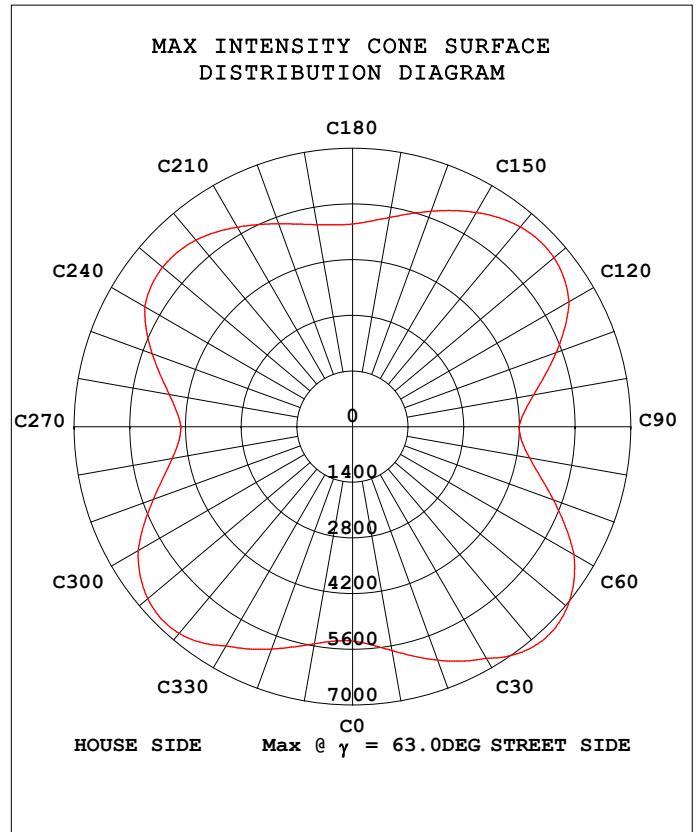
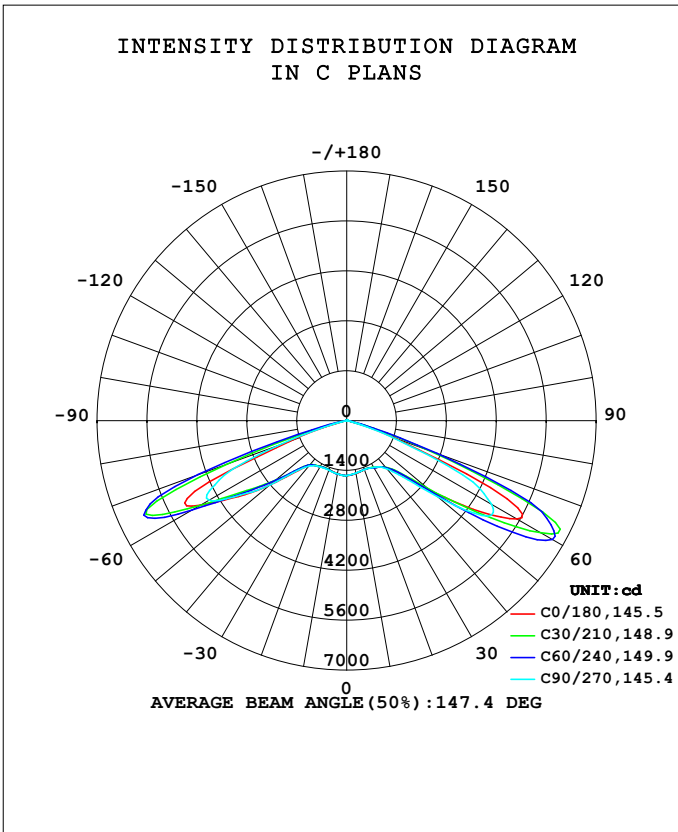


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 138.84 lm/W
MODEL	224101	I _{max} (cd)	6720	η street_up (%)	0.3	
NOMINAL POWER (W)	100	LOR (%)	100.0	η street_down (%)	50.3	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	13562	η house_up (%)	0.3	
NOMINAL FLUX (lm)	13561.5	MAXIMUM @ (C, γ)	30, 63.0	η house_down (%)	49.1	
LAMPS INSIDE	1	η up (%)	0.6	76 FLASHAREA (m2)	0.05000	
TEST VOLTAGE (V)	230	η down (%)	99.4	SLI	18.666	

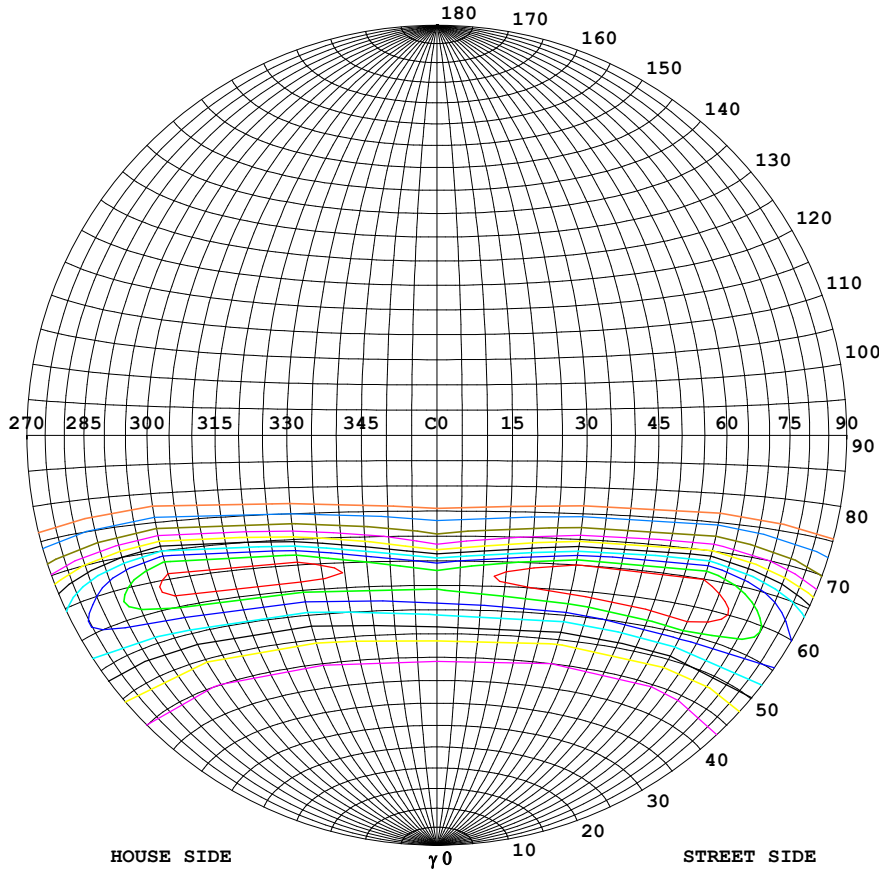


C Range: 0 - 360 DEG
C Interval: 30.0 DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: ADMIN
Test Date: 2023-07-12

γ Range: 0 - 180 DEG
γ Interval: 1.0 DEG
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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:



Classification:

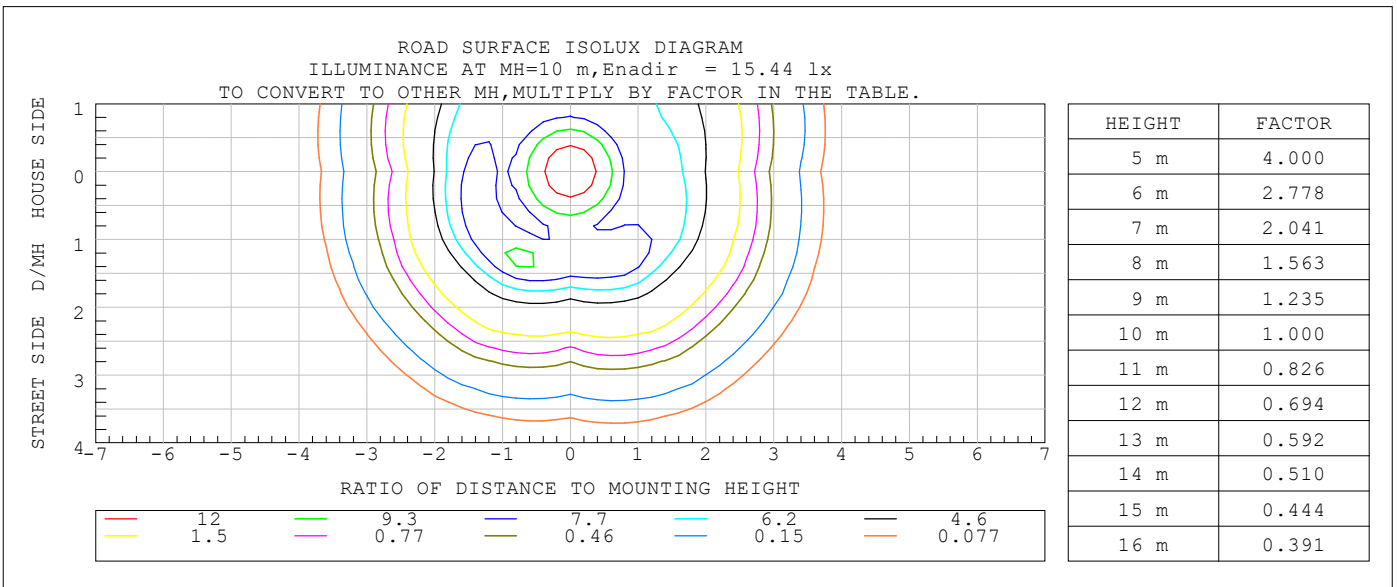
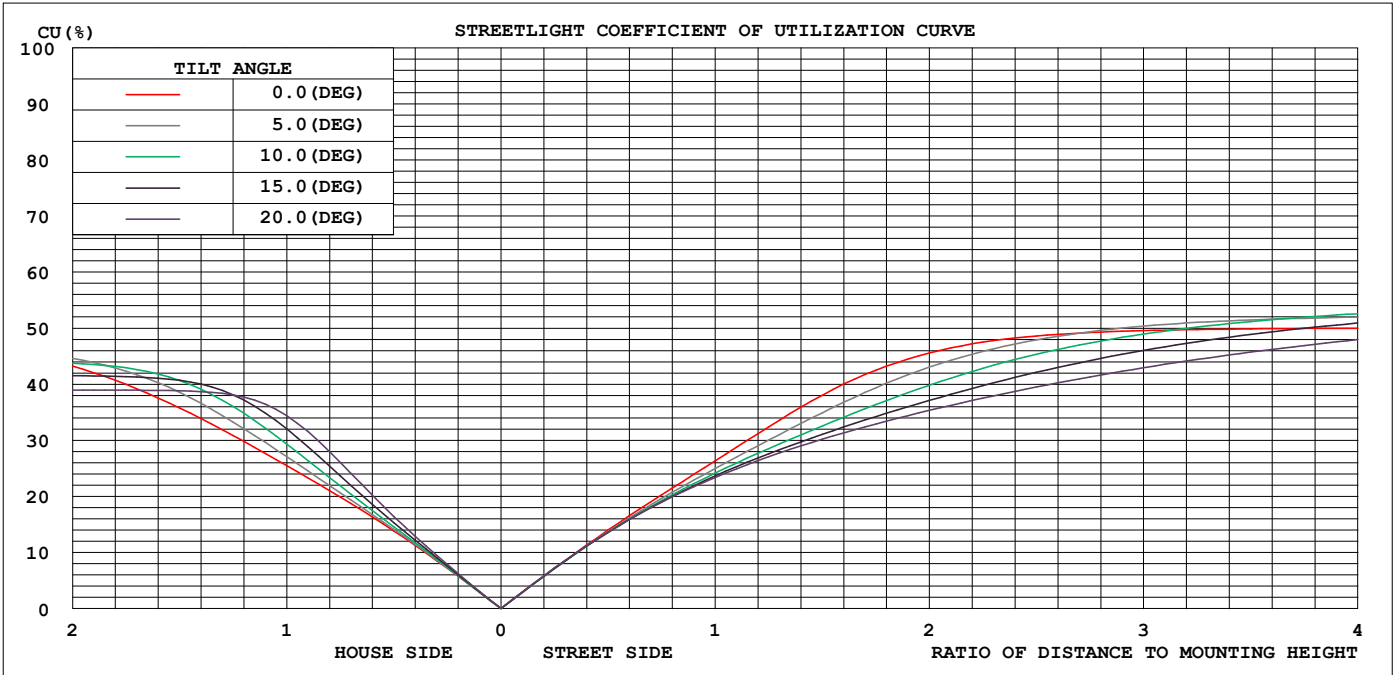
IES:Type VS - Short
 CIE:Broad - Intermediate
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:10.06cd/klm
 Max.At90:0.5101cd/klm
 Max.80-90:10.06cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	6720
90%	6048
80%	5376
70%	4704
60%	4032
50%	3360
40%	2688
30%	2016
20%	1344
10%	672
5%	336

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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: 2023-07-12

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

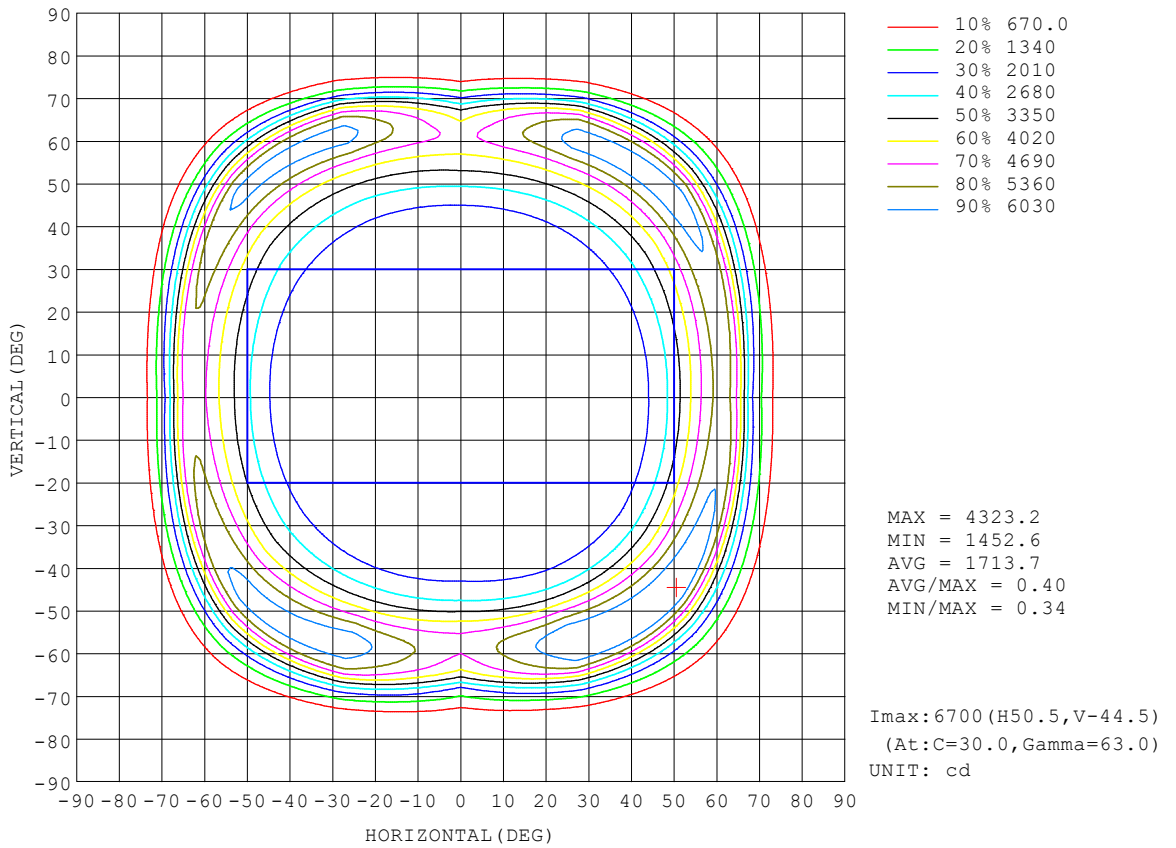
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1509	1499	1501	1499	1514	1520	1519	1516	0- 10	145.5	145.5	1.07,1.07
20	1467	1460	1465	1456	1470	1471	1483	1467	10- 20	420.8	566.3	4.18,4.18
30	1524	1528	1521	1509	1499	1492	1503	1517	20- 30	683.8	1250	9.22,9.22
40	1736	1725	1776	1694	1648	1625	1675	1692	30- 40	994.3	2244	16.5,16.5
50	3012	3035	3299	2949	2802	2600	2794	2800	40- 50	1668	3912	28.8,28.8
60	5513	6482	4684	5914	4753	4887	4458	5487	50- 60	3726	7638	56.3,56.3
70	1448	2567	1307	2981	1713	4003	2074	3499	60- 70	4878	12516	92.3,92.3
80	41.45	74.12	38.88	93.35	46.73	116.2	51.76	97.54	70- 80	942.9	13459	99.2,99.2
90	4.432	5.782	4.422	5.763	5.745	6.848	5.152	6.622	80- 90	16.16	13475	99.4,99.4
100	10.06	11.22	10.16	11.28	11.36	12.39	10.92	12.22	90-100	9.341	13485	99.4,99.4
110	14.33	14.63	14.46	15.26	15.62	16.33	15.50	15.88	100-110	14.40	13499	99.5,99.5
120	15.41	18.28	18.42	21.63	18.24	21.21	19.94	19.62	110-120	17.45	13517	99.7,99.7
130	14.78	15.23	14.81	15.96	16.41	16.33	15.67	15.76	120-130	15.25	13532	99.8,99.8
140	15.23	15.44	14.54	16.12	15.49	16.11	14.76	15.18	130-140	12.20	13544	99.9,99.9
150	12.16	11.81	11.88	12.29	11.93	12.19	12.08	11.63	140-150	8.717	13553	99.9,99.9
160	10.10	9.940	9.914	10.13	10.03	10.03	9.891	9.762	150-160	5.021	13558	100,100
170	9.603	9.570	9.559	9.643	9.597	9.661	9.539	9.466	160-170	2.758	13561	100,100
180	9.553	9.617	9.549	9.542	9.558	9.607	9.539	9.545	170-180	0.9127	13562	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

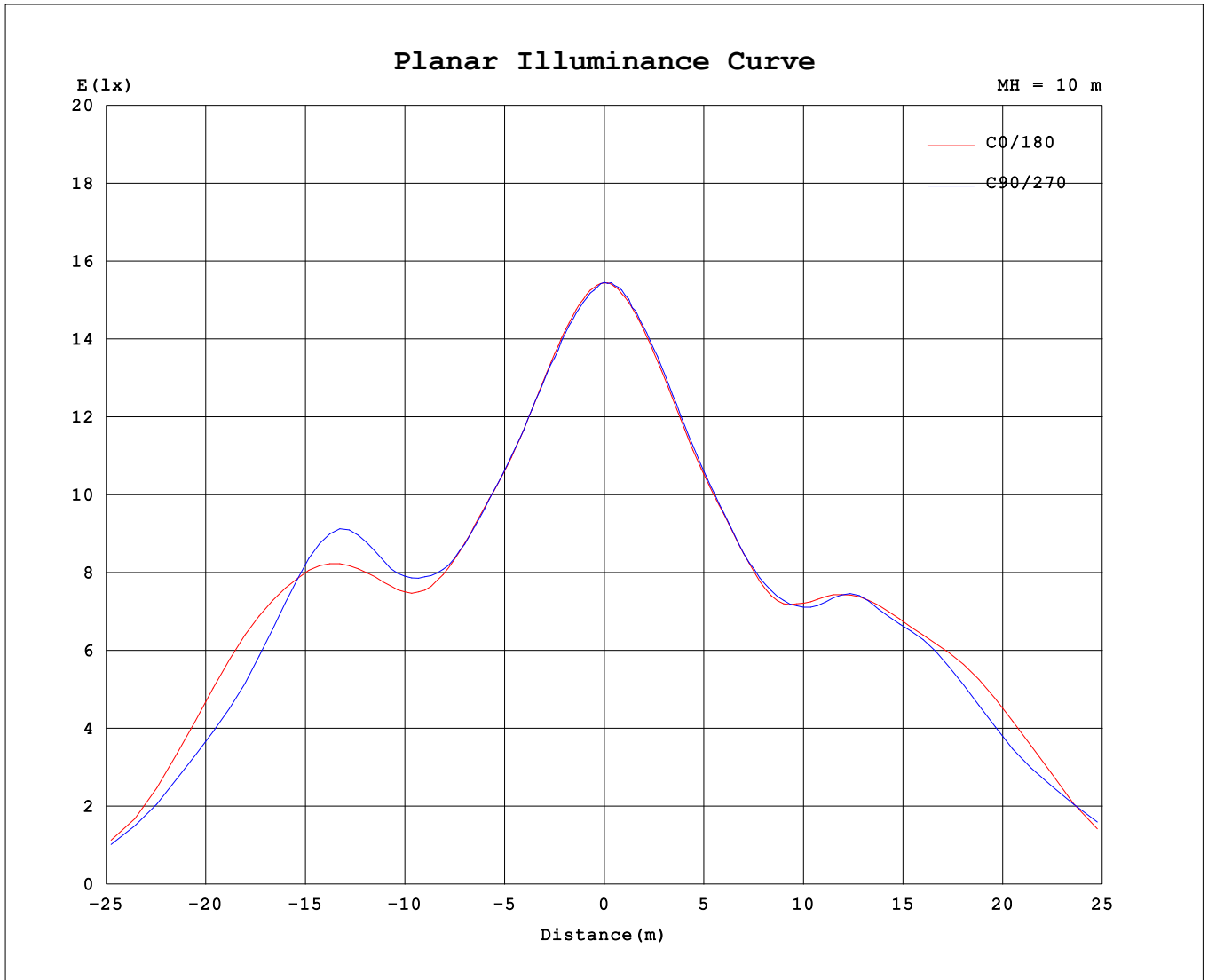
Test:U:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ADMIN
 Test Date: 2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity: 65.0%
 Test Distance: 9.345m [K=1.0000]
 Remarks:

Planar Illuminance Curve



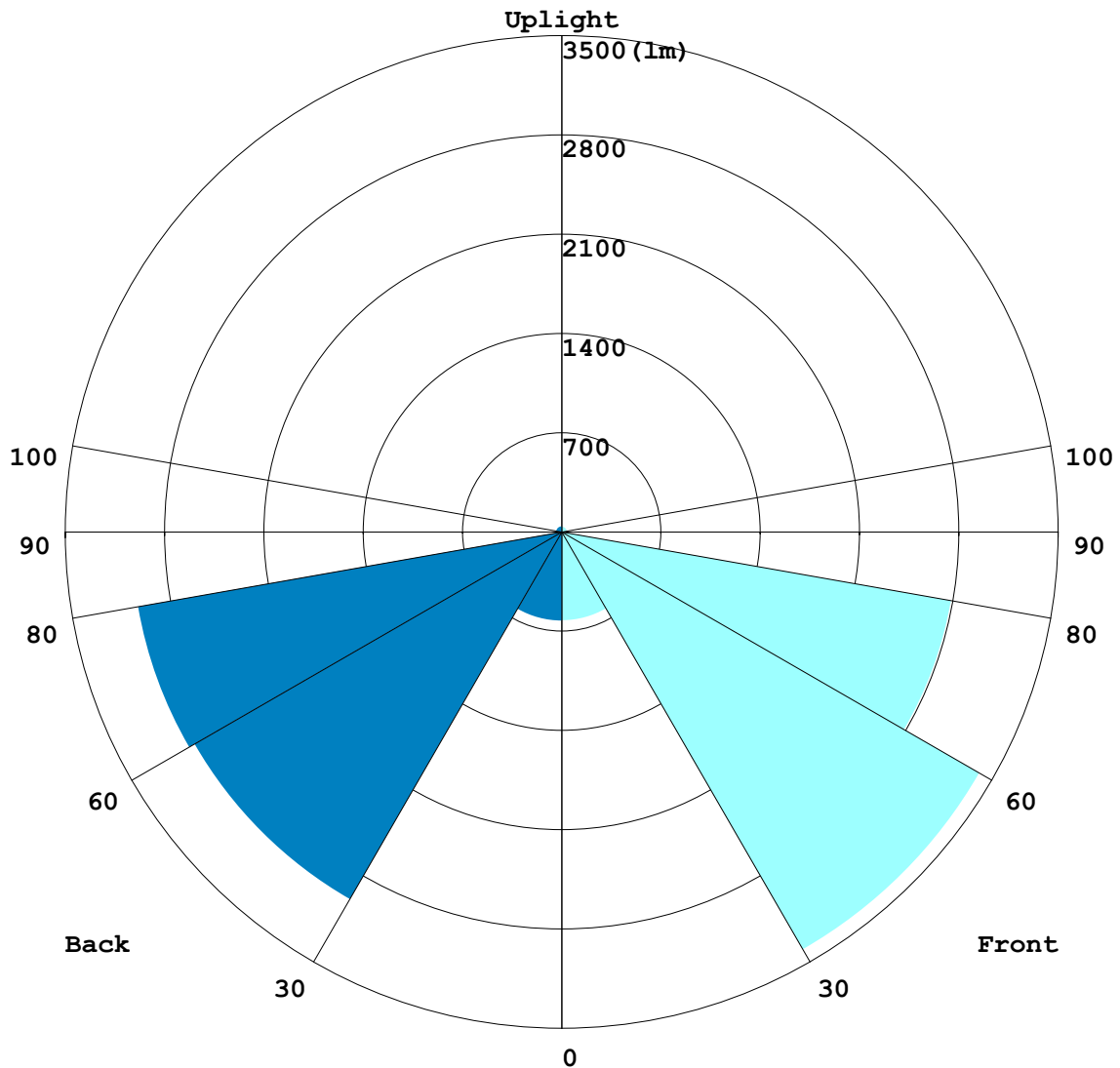
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ADMIN
 Test Date: 2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz		
Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	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:2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	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)	624	4.6
FM - Front-Medium(30-60)	3398	25.1
FH - Front-High(60-80)	2787.2	20.6
FVH - Front-Very High(80-90)	7.3149	0.1
Total Forward Light	6858.4	50.6

BL - Back-Low(0-30)	626.1	4.6
BM - Back-Medium(30-60)	2990	22.0
BH - Back-High(60-80)	3034.1	22.4
BVH - Back-Very High(80-90)	8.8407	0.1
Total Back Light	6703.1	49.4

UL - Uplight-Low(90-100)	9.341	0.1
UH - Uplight-High(100-180)	76.71	0.6
Total Up Light	86.051	0.6

BUG(Back,Up,Glare) Rating	B4-U3-G2
----------------------------------	-----------------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6659	44.128	6703.1
Street Side	6816.5	41.922	6858.4

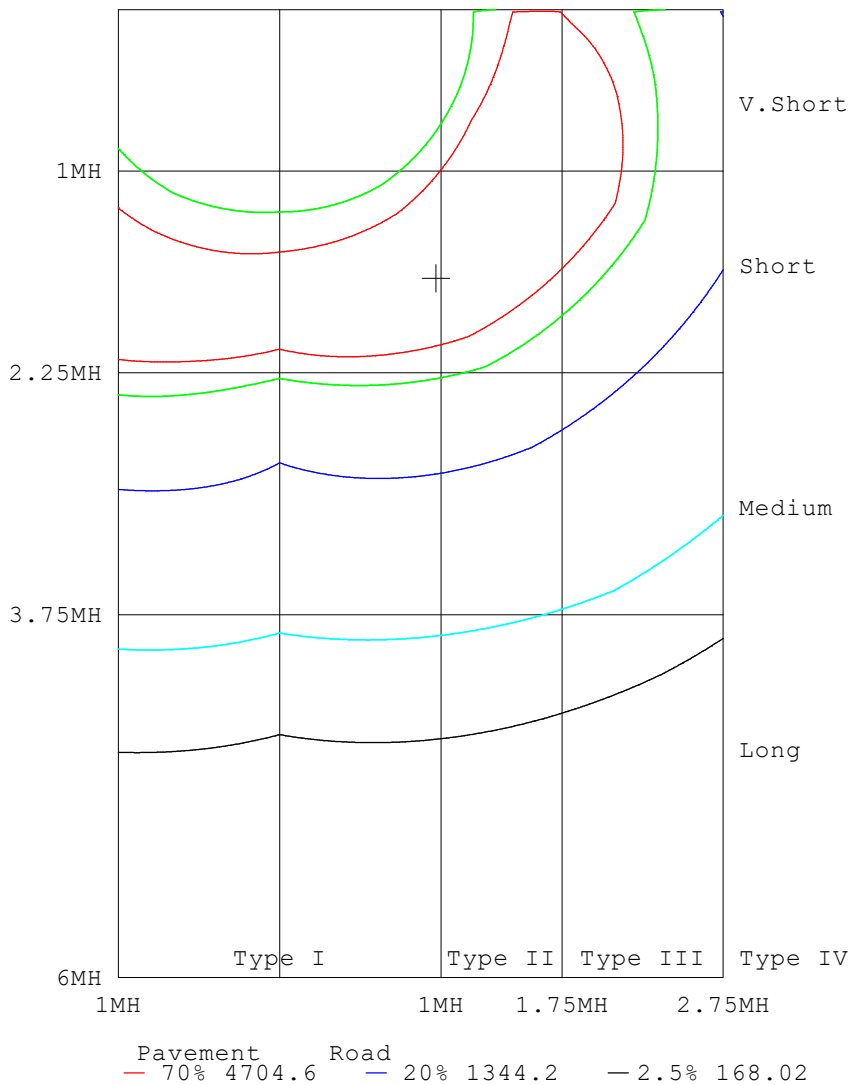
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	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:2023-07-12

50% 3360.4 5% 336.04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 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:230.39V I:0.4336A P:97.676W PF:0.9778 Freq:49.99Hz Lamp Flux:13561.5x1 lm		
NAME: MACRO-224101	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: BBT-LIGHTING	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	30	60	90	120	150	180	210	240	270	300	330								
0	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544								
5	1532	1528	1523	1521	1521	1530	1534	1539	1541	1542	1540	1535								
10	1509	1499	1499	1501	1496	1503	1514	1521	1519	1519	1517	1514								
15	1487	1477	1477	1480	1477	1477	1491	1496	1497	1503	1494	1489								
20	1467	1459	1460	1465	1456	1456	1470	1468	1474	1483	1473	1462								
25	1473	1471	1475	1476	1462	1468	1466	1462	1467	1479	1479	1466								
30	1524	1522	1534	1521	1513	1505	1499	1487	1497	1503	1520	1514								
35	1595	1592	1598	1588	1578	1565	1546	1529	1536	1546	1574	1586								
40	1736	1719	1732	1776	1714	1675	1648	1621	1629	1675	1682	1701								
45	2124	2021	2064	2236	2151	2058	2041	1931	1933	2011	2014	2056								
50	3012	2945	3125	3299	3081	2817	2802	2594	2605	2794	2778	2822								
55	4335	4512	5166	4634	4664	3872	3710	3419	3548	3642	3858	3893								
60	5513	6295	6668	4684	6319	5509	4753	4759	5015	4458	5441	5533								
65	4448	6063	6032	3593	5931	6103	4704	6215	6284	3949	6181	6269								
70	1448	2434	2701	1307	3015	2947	1713	3572	4432	2074	4002	2996								
75	389	542	568	369	663	657	402	743	1017	490	915	650								
80	41.4	69.6	78.6	38.9	95.6	91.1	46.7	95.9	136	51.8	113	82.0								
85	5.00	6.06	6.85	6.02	6.64	6.20	6.05	6.78	6.78	5.89	6.79	6.49								
90	4.43	5.52	6.04	4.42	5.70	5.83	5.75	6.92	6.78	5.15	6.73	6.51								
95	7.23	8.32	8.88	7.25	8.43	8.49	8.54	9.75	9.25	7.88	9.66	9.44								
100	10.1	11.0	11.5	10.2	11.2	11.4	11.4	12.6	12.1	10.9	12.4	12.1								
105	12.5	13.3	13.6	12.7	13.5	13.8	13.8	15.0	14.5	13.5	14.6	14.3								
110	14.3	14.6	14.7	14.5	15.2	15.3	15.6	16.6	16.1	15.5	16.0	15.7								
115	15.1	15.1	17.4	15.4	16.9	18.1	16.4	18.4	18.9	16.5	19.1	16.2								
120	15.4	15.3	21.2	18.4	21.8	21.5	18.2	20.4	22.0	19.9	22.9	16.3								
125	15.0	14.8	16.8	15.4	16.7	17.9	17.2	18.0	17.3	16.6	18.1	15.7								
130	14.8	14.9	15.6	14.8	15.2	16.7	16.4	17.0	15.6	15.7	16.3	15.2								
135	15.3	15.8	16.0	14.9	16.1	16.8	16.0	16.9	16.0	15.1	16.1	15.5								
140	15.2	15.5	15.4	14.5	15.9	16.4	15.5	16.3	16.0	14.8	15.4	15.0								
145	13.9	13.7	13.5	13.4	14.1	14.4	13.8	14.2	14.4	13.7	13.7	13.2								
150	12.2	11.9	11.7	11.9	12.2	12.4	11.9	12.0	12.3	12.1	11.8	11.5								
155	10.9	10.7	10.6	10.7	10.9	11.0	10.7	10.7	10.8	10.6	10.5	10.3								
160	10.1	9.98	9.90	9.91	10.1	10.2	10.0	10.0	10.0	9.89	9.80	9.72								
165	9.73	9.68	9.62	9.62	9.72	9.84	9.75	9.83	9.72	9.60	9.54	9.50								
170	9.60	9.59	9.55	9.56	9.60	9.69	9.60	9.72	9.60	9.54	9.48	9.45								
175	9.57	9.59	9.55	9.52	9.57	9.61	9.54	9.65	9.59	9.51	9.49	9.47								
180	9.55	9.65	9.59	9.55	9.54	9.55	9.56	9.64	9.57	9.54	9.54	9.55								

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ADMIN
 Test Date:2023-07-12

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.471
 Humidity:65.0%
 Test Distance:9.345m [K=1.0000]
 Remarks: