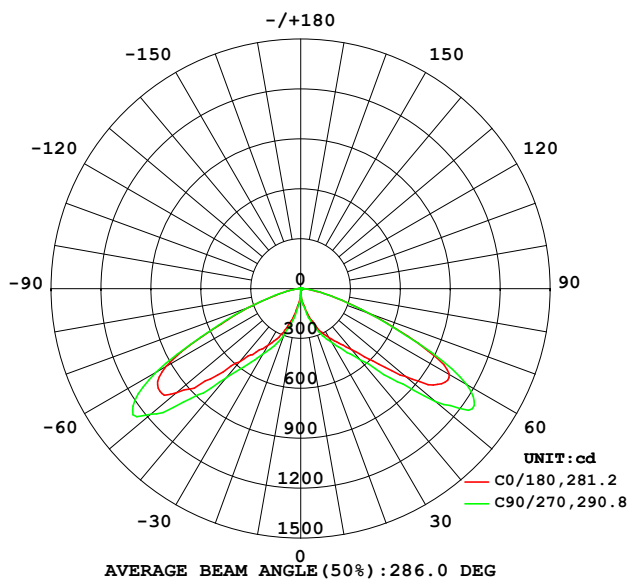
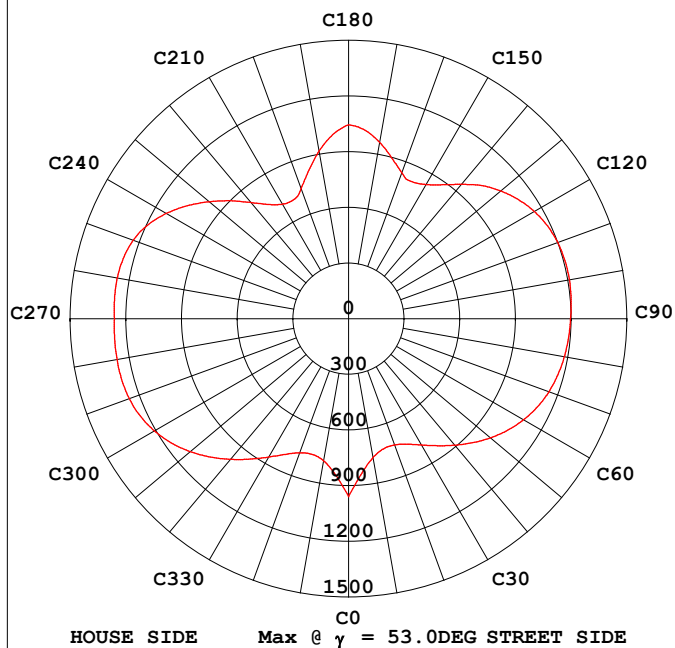


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: HL-BL-MW-MCCT-24W-DC	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.: HAVELLS	SUR.: 0.18	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.11 lm/W			
MODEL	HL-BL-MW-MCCT-24W-DC	I _{max} (cd)	1262	η street_up (%)	0.6
NOMINAL POWER (W)	24	LOR (%)	100.0	η street_down (%)	49.9
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	2747	η house_up (%)	0.7
NOMINAL FLUX (lm)	2747.27	MAXIMUM @ (C, γ)	270,53.0	η house_down (%)	48.8
LAMPS INSIDE	1	η up (%)	1.3	76 FLASHAREA (m2)	
TEST VOLTAGE (V)	120	η down (%)	98.7	SLI	

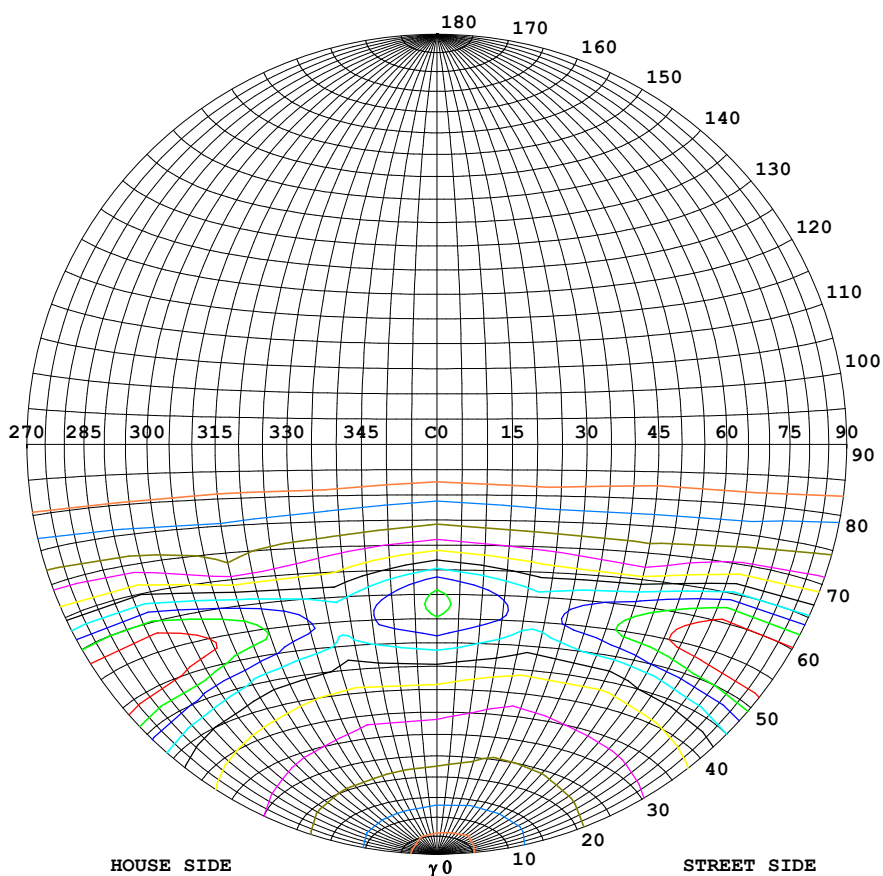
INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSMAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity: 65.0%
Test Distance: 9.630m [K=1.0000]
Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:



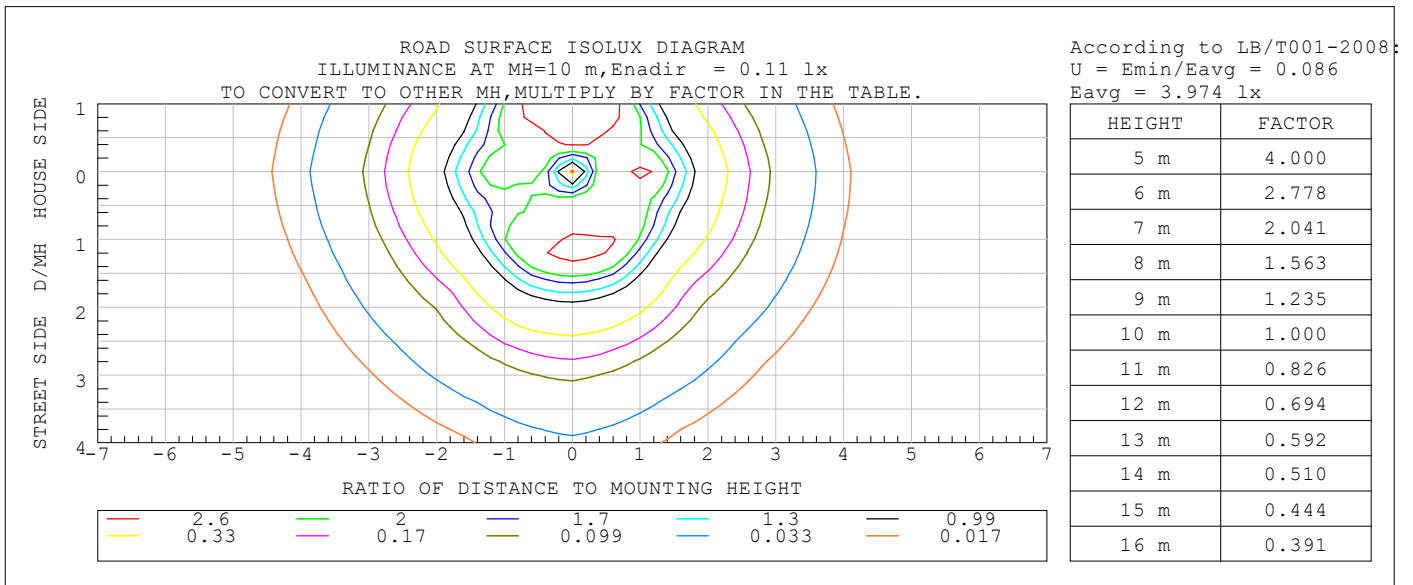
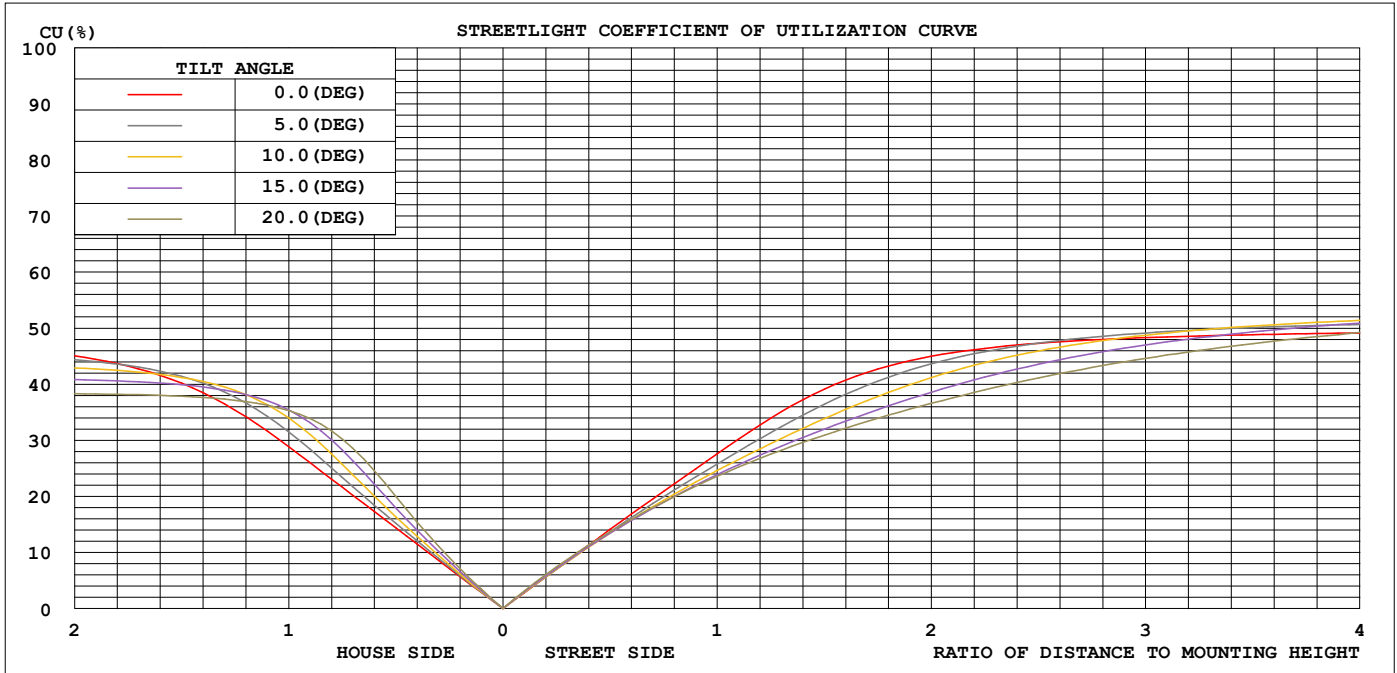
Classification:

IES:Type V - Very Short
CIE:Broad - Short
IES:Cut-off
CIE:Semi-cut-off
Max.At80:38.89cd/klm
Max.At90:2.135cd/klm
Max.80-90:38.89cd/klm
NRB 5101:Limited[7.1%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1262
90%	1136
80%	1010
70%	883
60%	757
50%	631
40%	505
30%	379
20%	252
10%	126
5%	63

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity: 65.0%
Test Distance: 9.630m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:

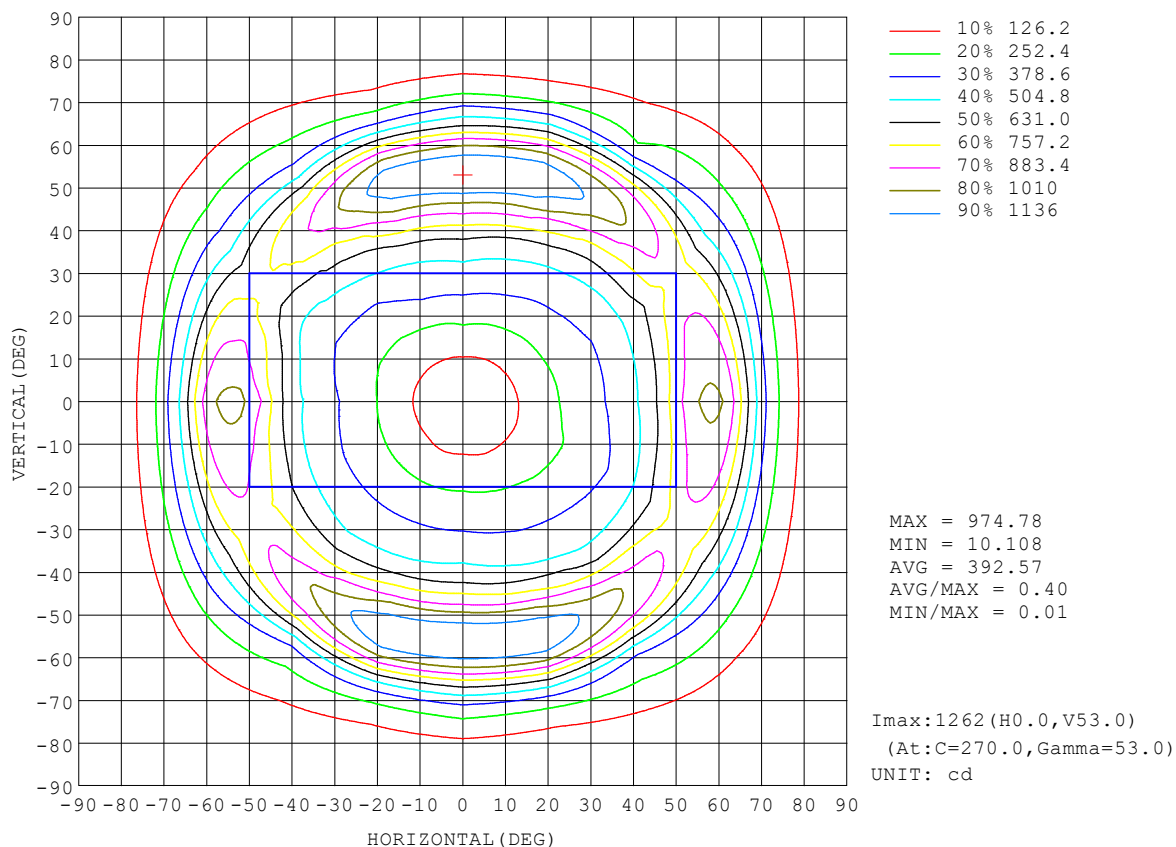
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	94.94	86.57	106.1	106.0	104.3	104.5	119.5	102.5	0- 10	7.152	7.152	0.26,0.26
20	209.2	193.7	228.1	234.2	251.8	243.9	299.8	244.2	10- 20	50.47	57.62	2.1,2.1
30	340.4	320.1	372.8	372.4	394.6	371.4	454.2	389.3	20- 30	145.2	202.8	7.38,7.38
40	480.8	446.8	563.3	507.2	579.5	561.6	704.3	531.7	30- 40	283.2	486.1	17.7,17.7
50	821.5	806.7	1053	867.1	974.8	893.1	1174	932.9	40- 50	556.8	1043	38,38
60	1030	927.7	1151	797.7	933.0	600.1	1003	850.8	50- 60	884.4	1927	70.2,70.2
70	434.4	284.1	437.4	238.8	336.4	220.3	339.9	226.8	60- 70	572.0	2499	91,91
80	101.3	88.85	106.8	73.00	70.38	61.35	69.43	73.10	70- 80	180.2	2679	97.5,97.5
90	3.101	4.922	4.451	4.849	3.388	5.833	5.444	5.865	80- 90	33.30	2713	98.7,98.7
100	3.828	4.833	5.324	5.287	4.923	6.794	7.300	6.781	90-100	5.705	2718	99,99
110	5.178	5.502	7.180	5.355	6.449	6.839	9.228	7.581	100-110	6.664	2725	99.2,99.2
120	6.105	3.808	6.482	4.365	5.730	5.067	7.815	5.216	110-120	6.260	2731	99.4,99.4
130	5.768	4.976	5.085	5.241	6.138	5.313	4.964	5.515	120-130	4.872	2736	99.6,99.6
140	5.502	5.236	4.865	5.521	5.146	4.794	4.437	4.451	130-140	4.284	2741	99.8,99.8
150	4.769	4.768	5.430	5.300	4.146	4.386	4.502	4.159	140-150	3.007	2744	99.9,99.9
160	4.671	4.872	5.411	5.165	3.847	4.061	4.210	3.977	150-160	2.162	2746	99.9,99.9
170	4.075	4.211	4.485	4.256	3.484	3.510	3.594	3.529	160-170	1.210	2747	100,100
180	3.529	3.568	3.653	3.555	3.516	3.562	3.633	3.536	170-180	0.3568	2747	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

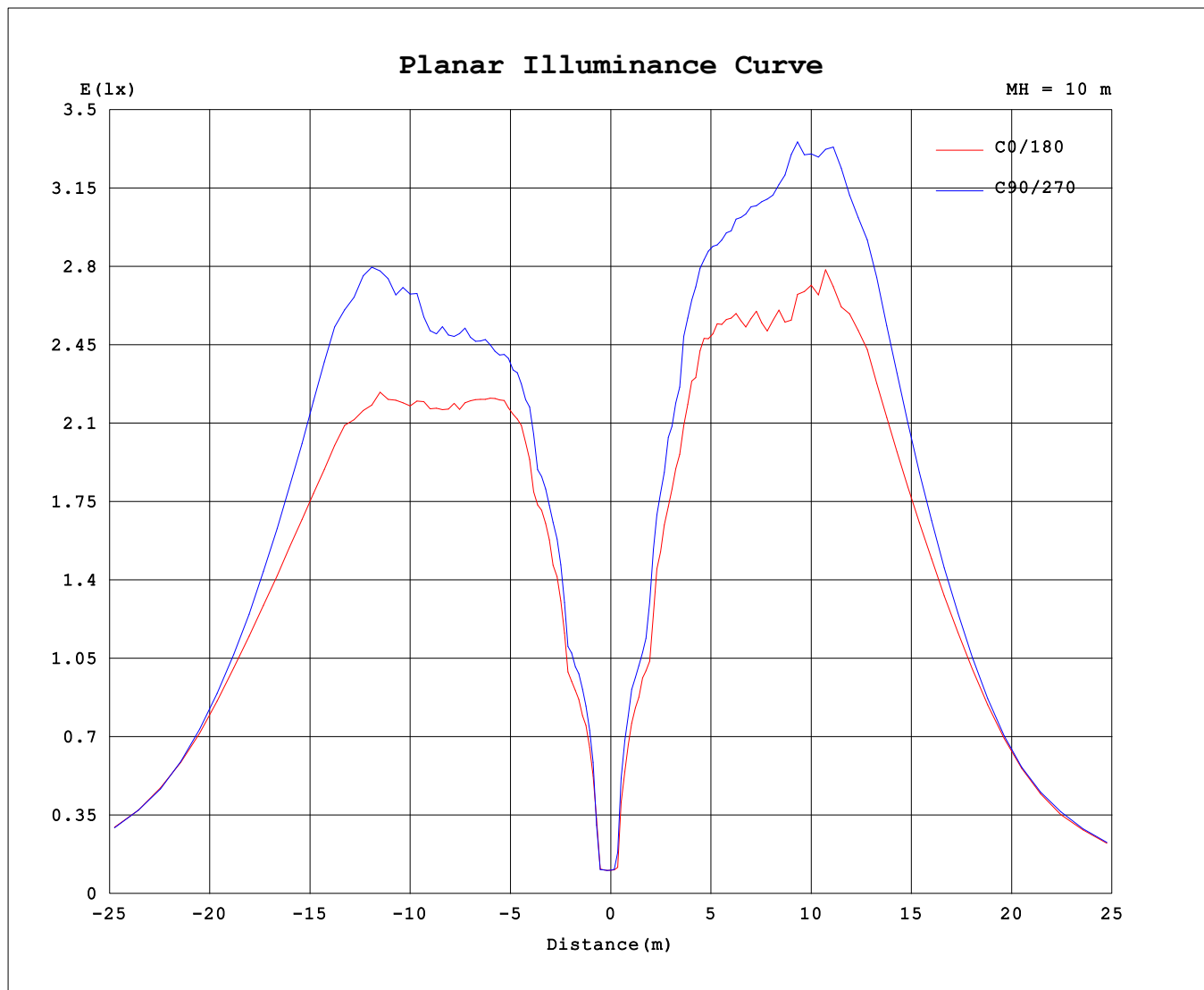
Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

Planar Illuminance Curve



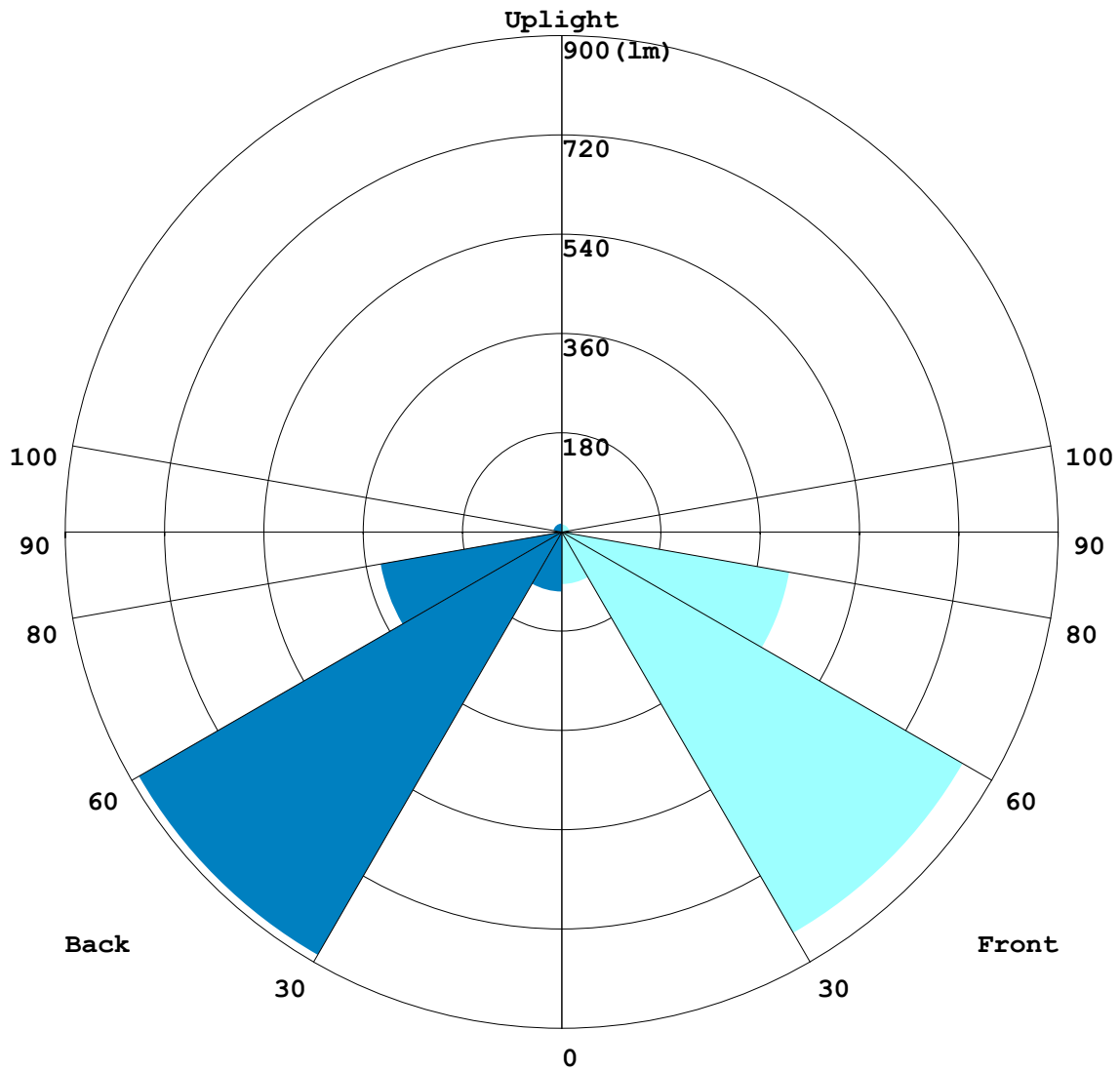
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: DAMIN
Test Date: 2025-08-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity: 65.0%
Test Distance: 9.630m [K=1.0000]
Remarks:

LCS REPORT

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

BUG REPORT

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	94.799	3.5
FM - Front-Medium(30-60)	839.3	30.6
FH - Front-High(60-80)	418.89	15.2
FVH - Front-Very High(80-90)	19.242	0.7
Total Forward Light	1388.5	50.5

BL - Back-Low(0-30)	108.04	3.9
BM - Back-Medium(30-60)	885.12	32.2
BH - Back-High(60-80)	333.29	12.1
BVH - Back-Very High(80-90)	14.062	0.5
Total Back Light	1358.8	49.5

UL - Uplight-Low(90-100)	5.7049	0.2
UH - Uplight-High(100-180)	28.814	1.0
Total Up Light	34.519	1.3

BUG(Back,Up,Glare) Rating	B1-U2-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1340.5	18.246	1358.8
Street Side	1372.2	16.274	1388.5

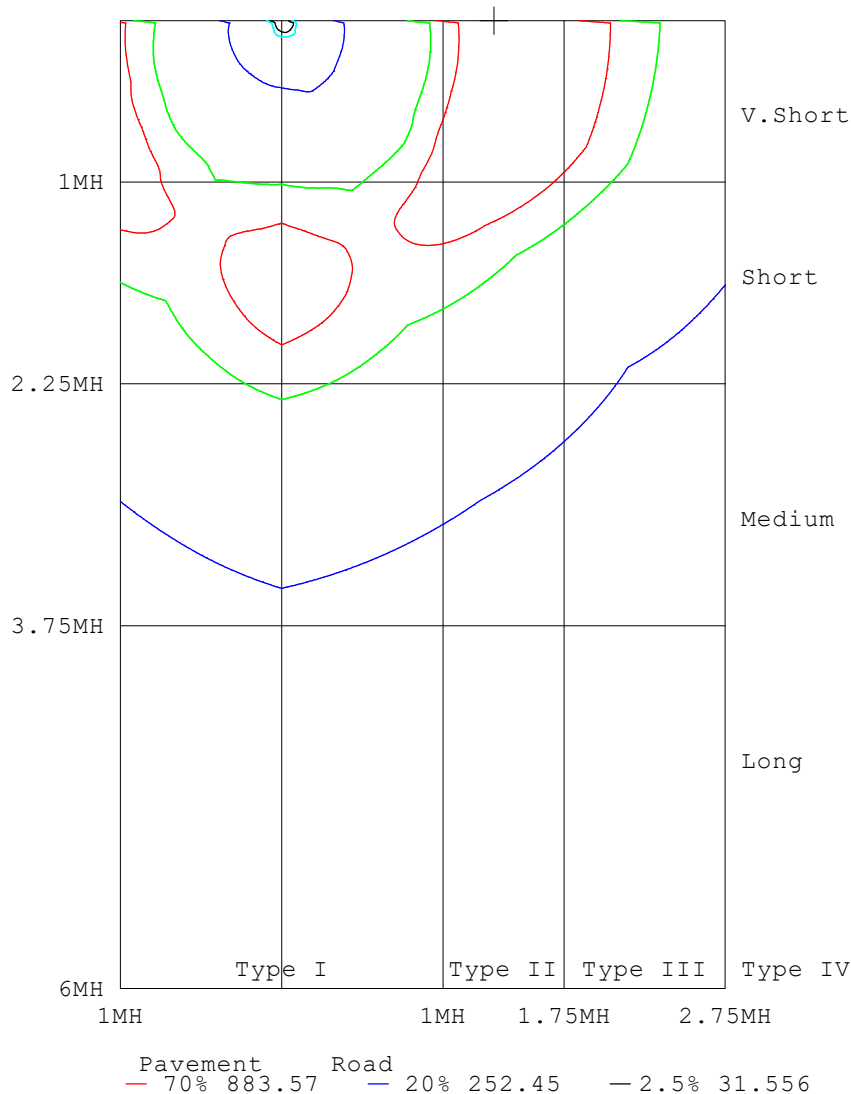
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.28V I:0.1983A P:23.660W PF:0.9921 Freq:60.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:2747.27x1 lm		
NAME: BR06E-24L-S2D3C3	TYPE: 24W	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.: 1
MFR.:	SUR.: 0.18	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.6	10.5	10.5	10.5			
5	53.1	46.7	49.1	52.6	59.3	62.1	63.6	69.2	67.2	70.2	66.8	75.6	80.4	82.4	71.5	59.7			
10	94.9	91.0	86.6	93.9	106	99.0	106	109	104	103	105	110	120	116	103	101			
15	157	139	150	160	176	175	181	186	183	163	178	198	209	204	188	162			
20	209	191	194	210	228	225	234	248	252	232	244	286	300	276	244	220			
25	285	246	261	293	312	316	311	317	333	289	309	371	380	360	316	292			
30	340	301	320	348	373	375	372	375	395	341	371	436	454	423	389	340			
35	400	354	385	411	452	439	443	442	467	407	478	522	558	502	452	404			
40	481	416	447	495	563	534	507	526	579	473	562	665	704	626	532	479			
45	616	544	576	693	757	741	652	657	768	577	706	914	934	875	706	609			
50	822	682	807	986	1053	1050	867	760	975	667	893	1143	1174	1135	933	730			
55	1004	818	1035	1234	1258	1241	1006	829	1045	688	866	1182	1231	1233	1052	813			
60	1030	785	928	1159	1151	1114	798	720	933	572	600	901	1003	1020	851	718			
65	777	574	550	783	782	694	408	502	591	388	346	484	601	618	420	494			
70	434	344	284	402	437	338	239	295	336	231	220	231	340	313	227	320			
75	223	181	167	177	232	160	134	149	157	117	118	114	162	143	133	166			
80	101	85.5	88.8	83.9	107	78.6	73.0	67.4	70.4	52.2	61.3	55.9	69.4	67.3	73.1	79.8			
85	35.5	29.1	36.4	33.7	37.3	28.7	25.3	20.3	22.0	17.2	20.5	19.1	23.1	22.6	25.8	26.3			
90	3.10	4.76	4.92	4.64	4.45	4.56	4.85	4.79	3.39	5.32	5.83	5.60	5.44	5.61	5.86	5.85			
95	3.17	4.51	4.55	4.65	4.57	4.78	4.94	4.65	4.11	5.61	6.31	6.42	6.33	6.38	6.25	5.96			
100	3.83	4.60	4.83	5.24	5.32	5.41	5.29	4.68	4.92	5.73	6.79	7.23	7.30	7.23	6.78	6.20			
105	4.50	4.72	5.35	5.95	6.19	6.22	5.88	4.89	5.71	5.88	7.46	8.14	8.29	8.11	7.43	6.46			
110	5.18	5.07	5.50	6.73	7.18	7.15	5.36	5.25	6.45	6.09	6.84	8.96	9.23	8.89	7.58	6.78			
115	5.83	5.37	3.98	6.63	7.63	7.12	3.93	4.59	6.57	5.36	5.05	8.54	9.42	8.48	5.85	6.90			
120	6.10	5.24	3.81	5.15	6.48	5.57	4.37	4.58	5.73	5.20	5.07	6.61	7.82	6.59	5.22	6.45			
125	5.91	5.45	4.56	4.49	4.92	4.92	5.16	5.63	6.10	5.97	5.43	5.43	5.57	5.31	5.51	6.25			
130	5.77	6.27	4.98	4.61	5.09	5.24	5.24	6.57	6.14	6.53	5.31	5.13	4.96	4.90	5.51	6.57			
135	6.21	6.78	5.44	4.52	5.38	4.97	5.57	6.81	6.30	6.51	5.25	4.72	5.07	4.53	5.55	6.56			
140	5.50	5.88	5.24	4.61	4.87	5.00	5.52	5.92	5.15	5.40	4.79	4.54	4.44	4.39	4.45	5.41			
145	4.82	5.00	4.89	4.74	5.16	5.19	5.31	5.20	4.25	4.50	4.52	4.48	4.48	4.24	4.33	4.42			
150	4.77	4.75	4.77	5.05	5.43	5.48	5.30	5.13	4.15	4.33	4.39	4.48	4.50	4.28	4.16	4.12			
155	4.83	4.79	4.91	5.29	5.54	5.55	5.33	5.06	4.05	4.20	4.27	4.42	4.41	4.29	4.09	4.06			
160	4.67	4.68	4.87	5.21	5.41	5.35	5.17	4.85	3.85	3.96	4.06	4.20	4.21	4.15	3.98	3.94			
165	4.41	4.46	4.61	4.90	5.00	4.90	4.77	4.50	3.65	3.72	3.76	3.85	3.89	3.86	3.78	3.78			
170	4.07	4.09	4.21	4.41	4.48	4.37	4.26	4.07	3.48	3.53	3.51	3.57	3.59	3.59	3.53	3.61			
175	3.75	3.78	3.82	3.91	3.96	3.89	3.82	3.74	3.45	3.48	3.47	3.47	3.52	3.48	3.47	3.56			
180	3.53	3.56	3.57	3.59	3.65	3.59	3.56	3.56	3.52	3.55	3.56	3.59	3.63	3.58	3.54	3.55			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:DAMIN
Test Date:2025-08-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.461
Humidity:65.0%
Test Distance:9.630m [K=1.0000]
Remarks: