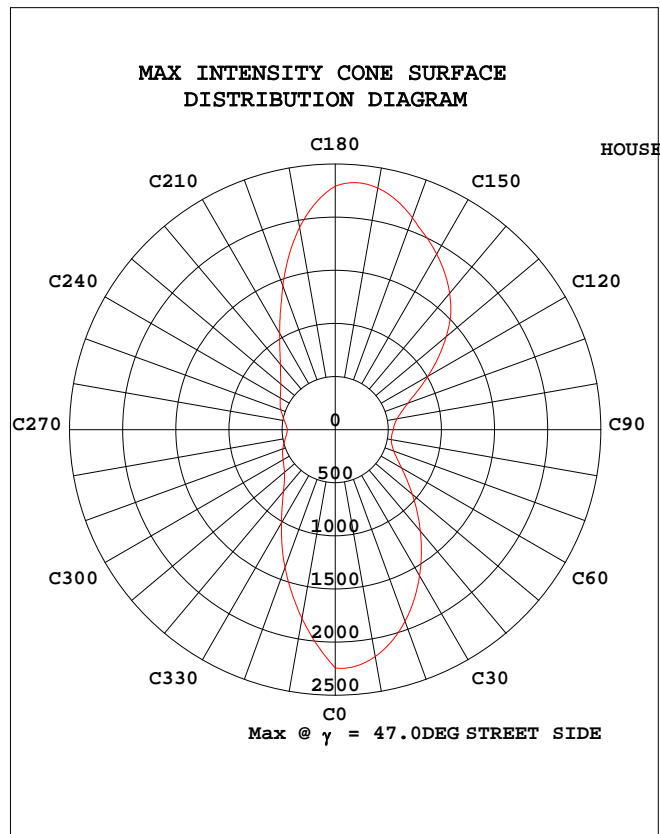
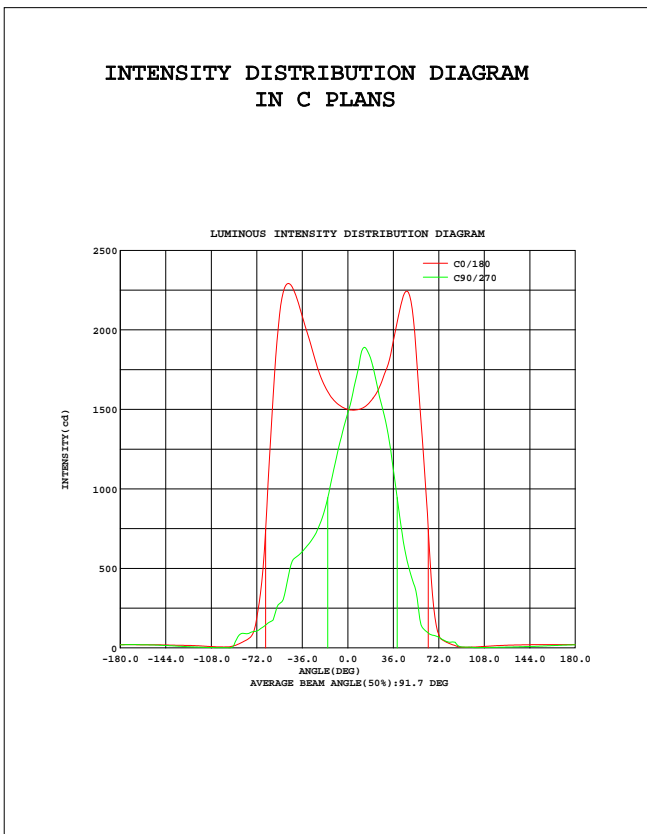


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:229.7V I:0.2130A P:48.50W PF:0.9900 Lamp Flux:4402.64x1 lm		
NAME: 01ST-RA-50W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 90.78 lm/W			
MODEL		I _{max} (cd)	2292	η street_up(%)	0.8
NOMINAL POWER(W)	18	LOR(%)	100.0	η street_down(%)	49.9
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	4403	η house_up(%)	0.6
NOMINAL FLUX(lm)	4402.64	MAXIMUM @(C,γ)	180,47.0	η house_down(%)	48.7
LAMPS INSIDE	1	η up(%)	1.4	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	230	η down(%)	98.6	SLI	15.789

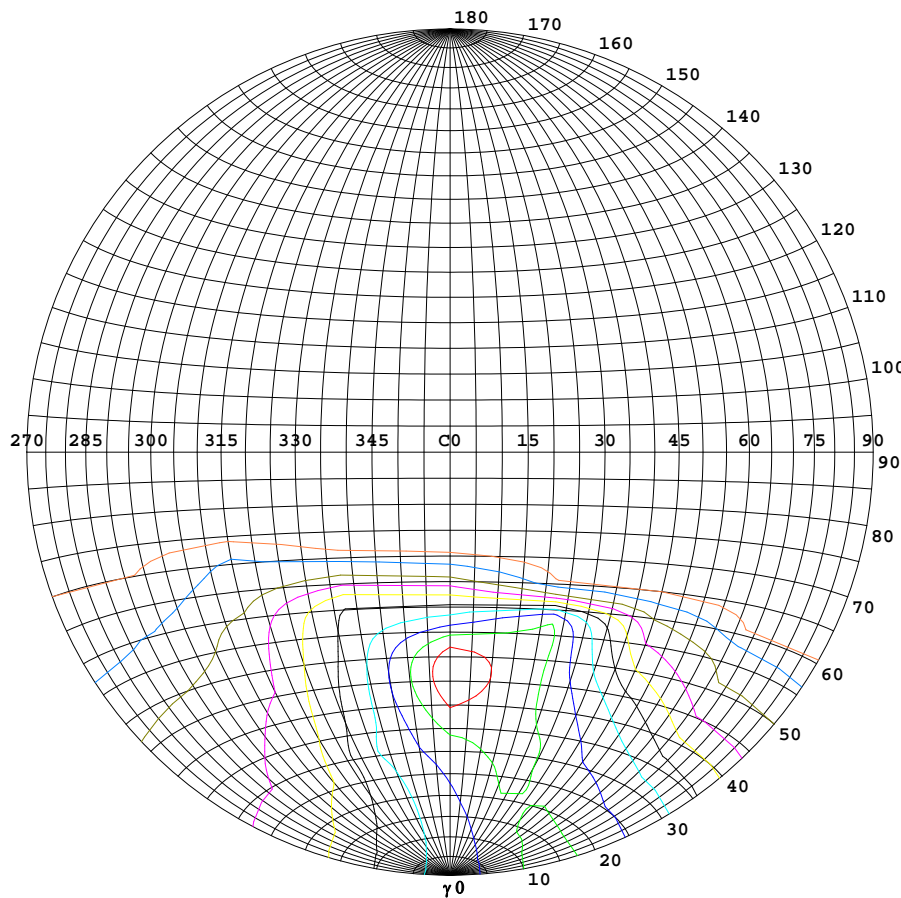


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:7.580m [K=1.0000]
 Remarks:

Note: SLI:Specific Luminaire Index

STREETLIGHT ISOCANDELA DIAGRAM



Classification:

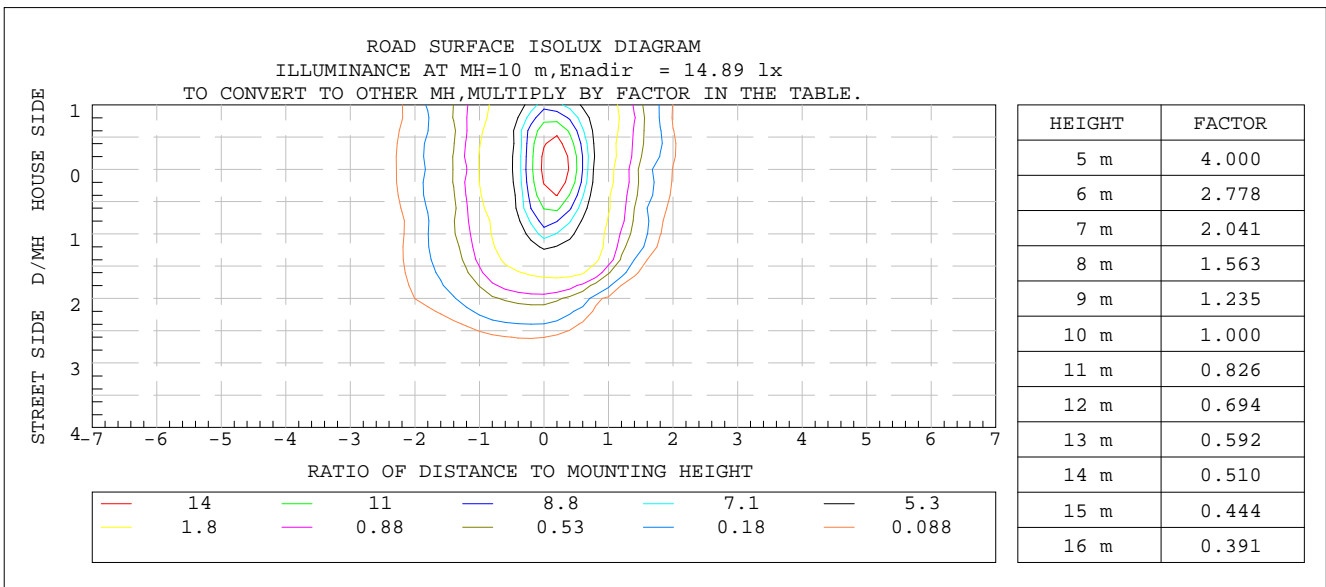
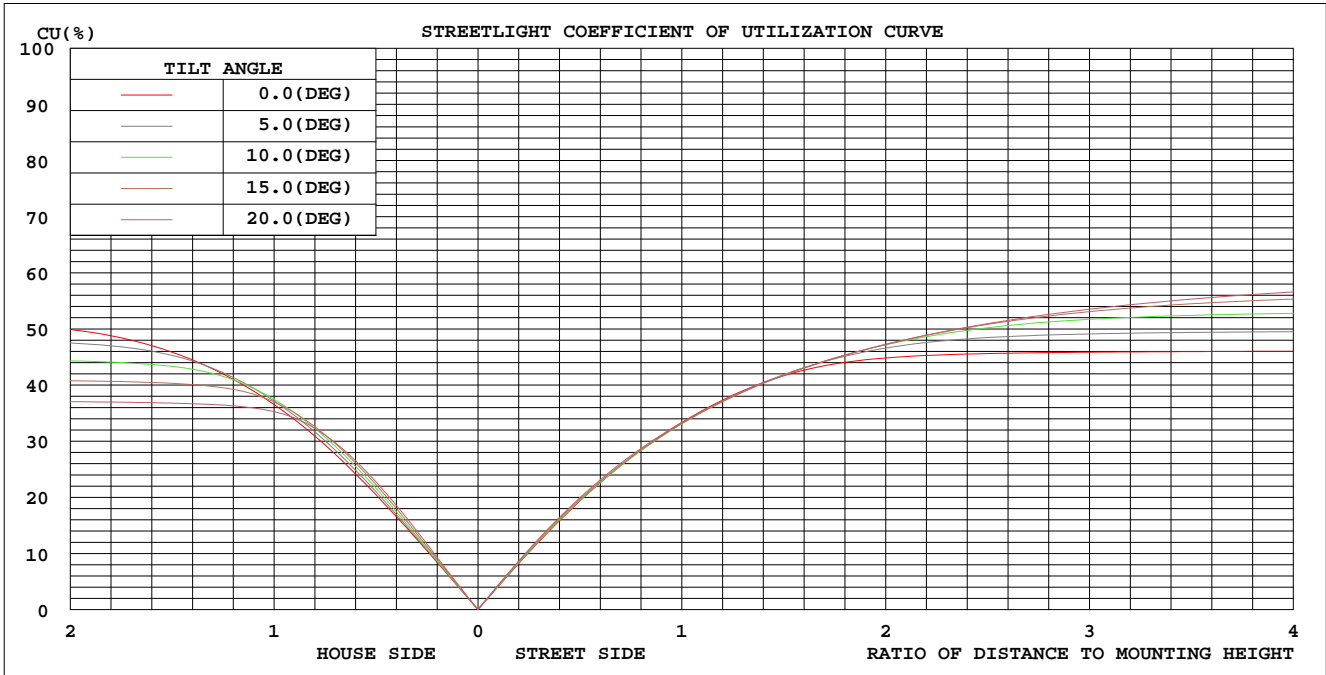
IES:Type II - Short
 CIE:Average - Short
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:20.16cd/klm
 Max.At90:4.877cd/klm
 Max.80-90:20.90cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	2292
90%	2063
80%	1833
70%	1604
60%	1375
50%	1146
40%	917
30%	688
20%	458
10%	229
5%	115

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:04 September 2018

gamma Range: 0 - 180DEG
 gamma Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:7.580m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 7.580m [K=1.0000]
Remarks:

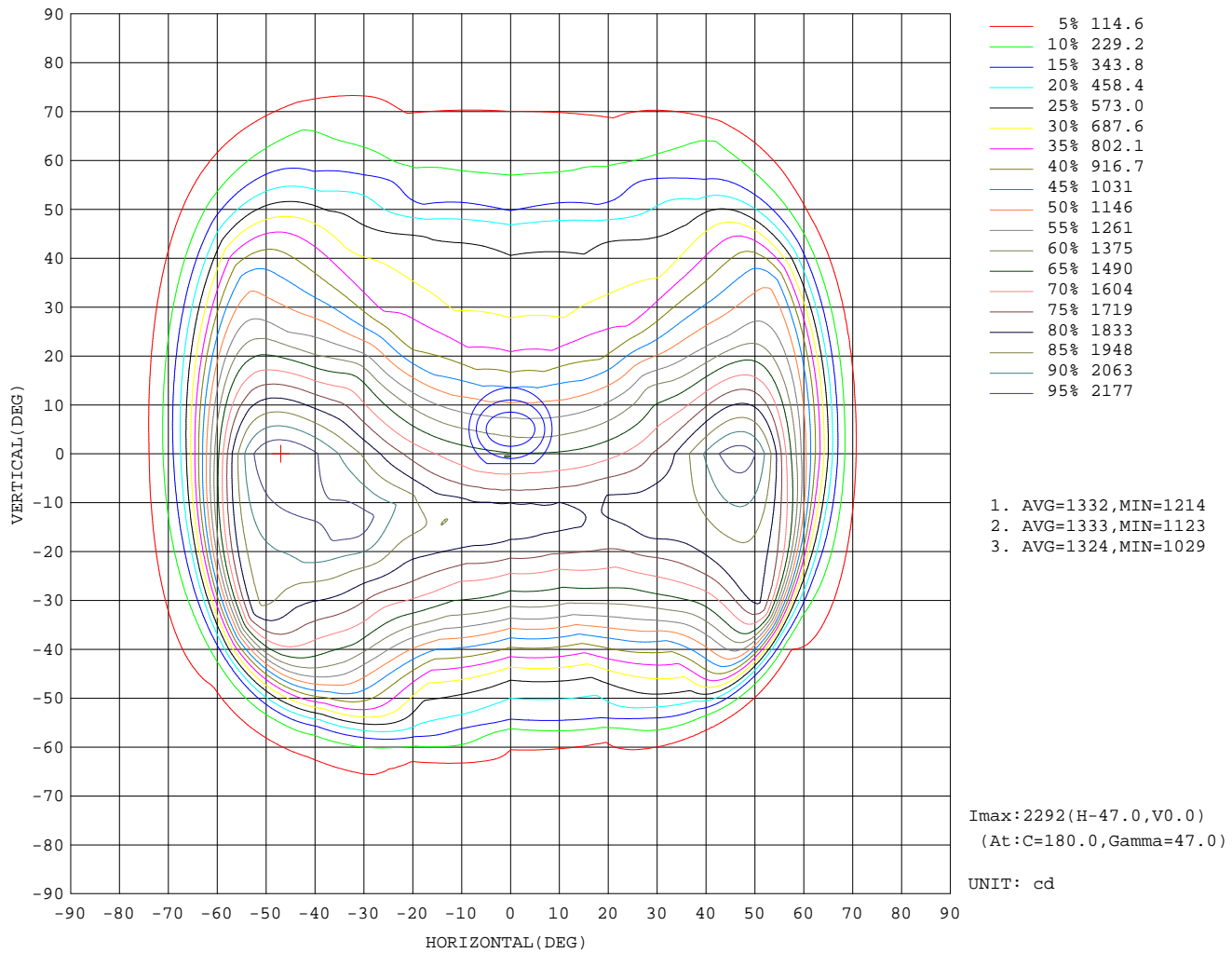
ZONAL FLUX DIAGRAM

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1502	1717	1832	1732	1549	1291	1159	1265	0- 10	142.4	142.4	3.23,3.23
20	1570	1842	1767	1950	1679	1075	821.6	1047	10- 20	424.1	566.5	12.9,12.9
30	1742	1633	1424	1825	1930	899.7	662.2	867.9	20- 30	660.7	1227	27.9,27.9
40	2084	1397	891.0	1647	2193	782.1	576.4	739.4	30- 40	844.5	2072	47.1,47.1
50	2181	933.9	457.6	1459	2263	705.7	333.3	646.5	40- 50	922.6	2994	68,68
60	1200	446.0	119.2	833.8	1448	543.7	169.3	492.7	50- 60	844.0	3838	87.2,87.2
70	141.1	68.04	74.35	106.8	284.5	262.3	114.7	248.1	60- 70	377.5	4216	95.8,95.8
80	28.93	25.90	36.21	39.19	49.97	76.10	88.75	54.70	70- 80	91.85	4308	97.8,97.8
90	5.214	6.041	5.896	8.288	13.35	21.47	16.72	8.561	80- 90	32.10	4340	98.6,98.6
100	5.625	2.970	1.583	2.642	6.220	3.320	1.418	3.569	90-100	5.824	4346	98.7,98.7
110	10.40	5.108	2.716	4.609	9.530	5.015	2.752	7.051	100-110	4.705	4350	98.8,98.8
120	15.03	7.625	4.261	7.149	13.92	8.663	5.408	10.85	110-120	7.371	4358	99,99
130	17.77	10.35	6.025	9.531	16.21	12.89	9.255	15.09	120-130	9.470	4367	99.2,99.2
140	19.52	12.79	8.073	11.47	17.83	15.65	13.64	18.57	130-140	10.30	4378	99.4,99.4
150	20.41	14.91	10.63	13.32	19.34	18.09	17.38	20.75	140-150	9.881	4387	99.7,99.7
160	20.44	16.84	13.88	15.10	19.78	19.43	19.58	20.97	150-160	8.091	4395	99.8,99.8
170	20.52	18.69	17.18	17.28	20.27	20.29	20.41	20.42	160-170	5.303	4401	100,100
180	20.73	20.17	19.71	19.38	20.84	20.22	19.73	19.39	170-180	1.866	4403	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:7.580m [K=1.0000]
 Remarks:

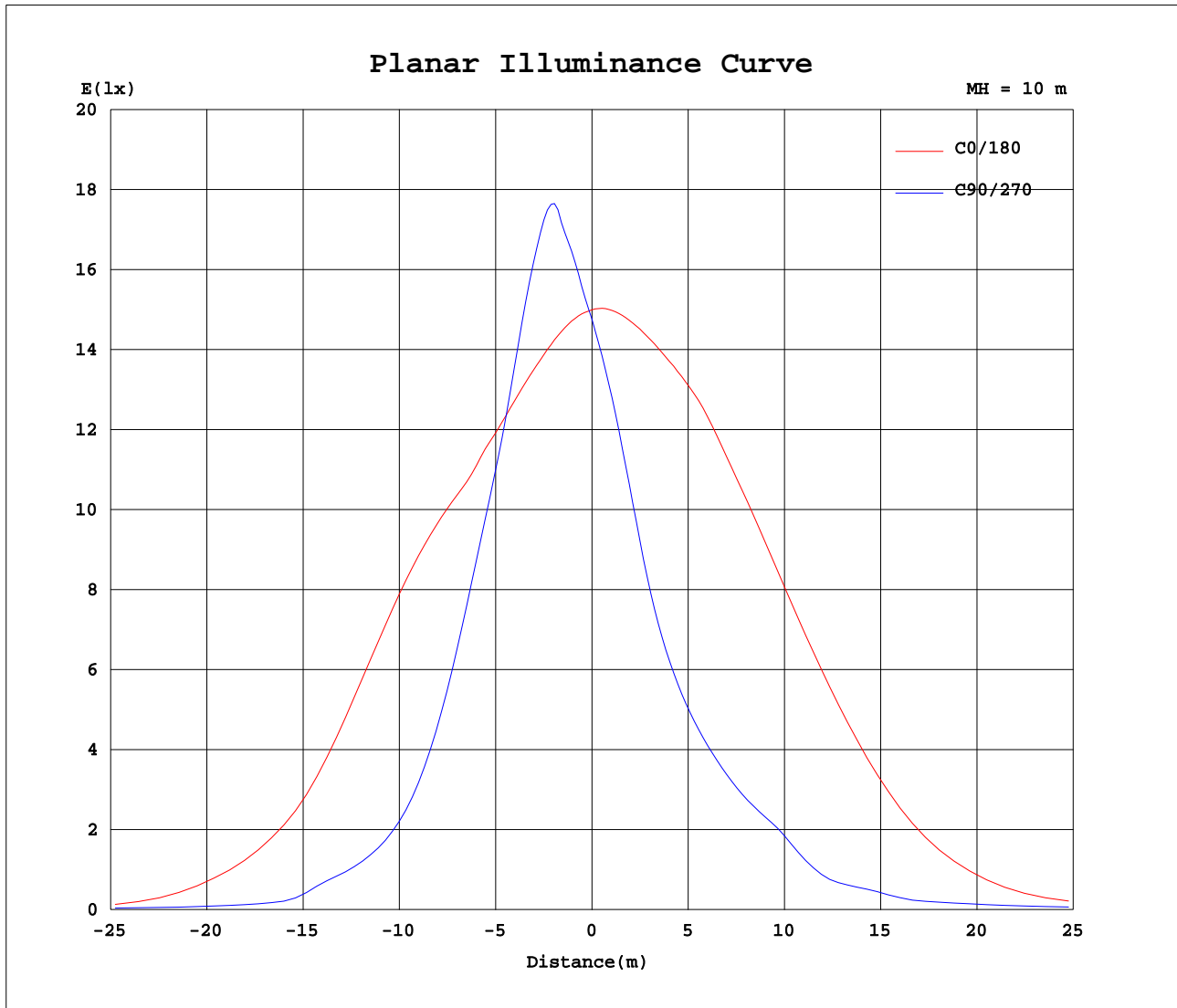
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity: 65.0%
 Test Distance: 7.580m [K=1.0000]
 Remarks:

Planar Illuminance Curve



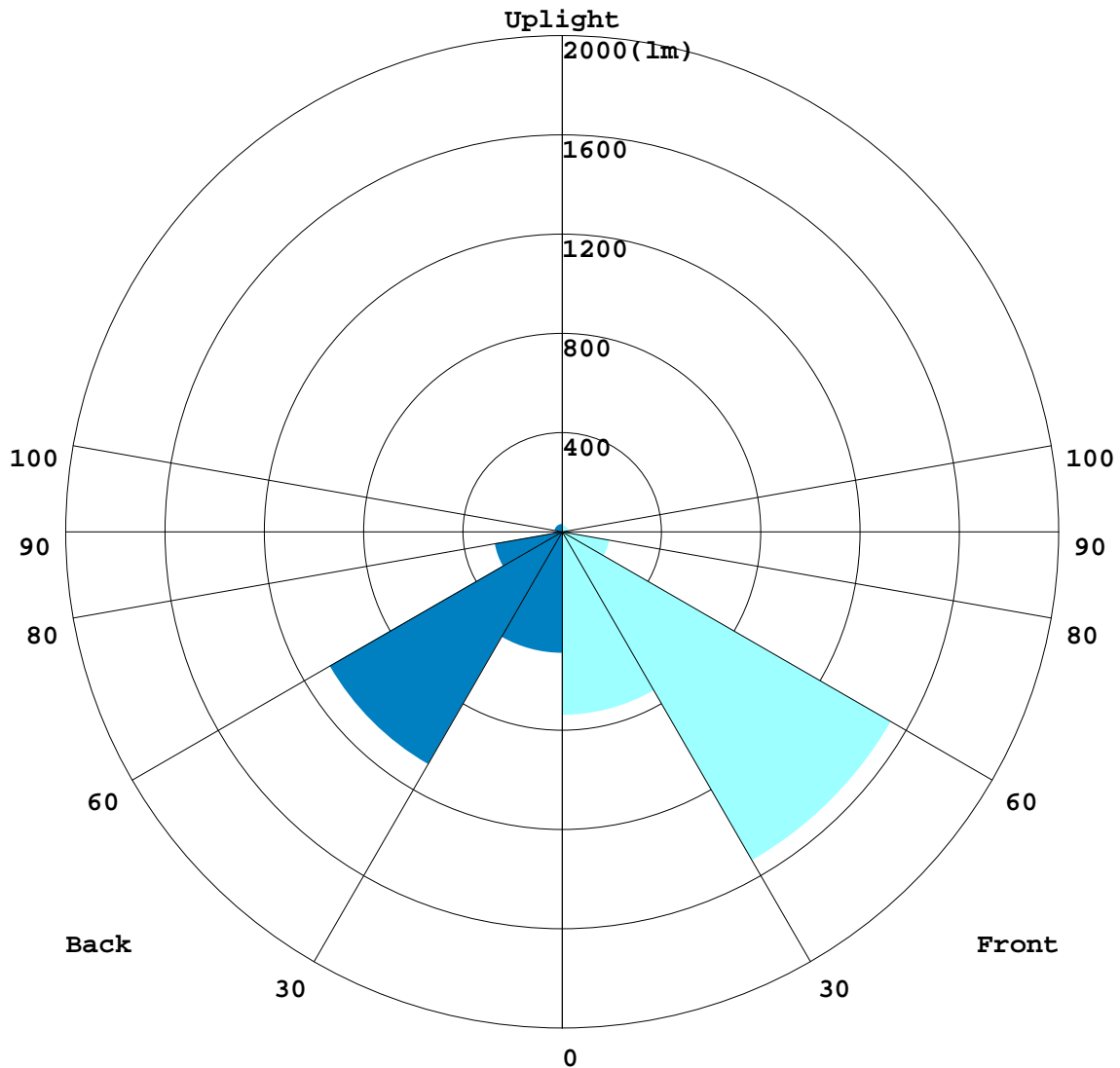
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity: 65.0%
 Test Distance: 7.580m [K=1.0000]
 Remarks:

LCS REPORT

Test:U:229.7V I:0.2130A P:48.50W PF:0.9900 Lamp Flux:4402.64x1 lm		
NAME: 01ST-RA-50W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:7.580m [K=1.0000]
 Remarks:

BUG REPORT

Test:U:229.7V I:0.2130A P:48.50W PF:0.9900 Lamp Flux:4402.64x1 lm		
NAME: 01ST-RA-50W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	738.65	16.8
FM - Front-Medium(30-60)	1529.8	34.7
FH - Front-High(60-80)	193.41	4.4
FVH - Front-Very High(80-90)	10.736	0.2
Total Forward Light	2500.9	56.8

BL - Back-Low(0-30)	488.59	11.1
BM - Back-Medium(30-60)	1081.3	24.6
BH - Back-High(60-80)	275.96	6.3
BVH - Back-Very High(80-90)	21.366	0.5
Total Back Light	1901.8	43.2

UL - Uplight-Low(90-100)	5.8239	0.1
UH - Uplight-High(100-180)	56.987	1.3
Total Up Light	62.811	1.4

BUG(Back,Up,Glare) Rating	B2-U3-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1867.2	34.536	1901.8
Street Side	2472.6	28.275	2500.9

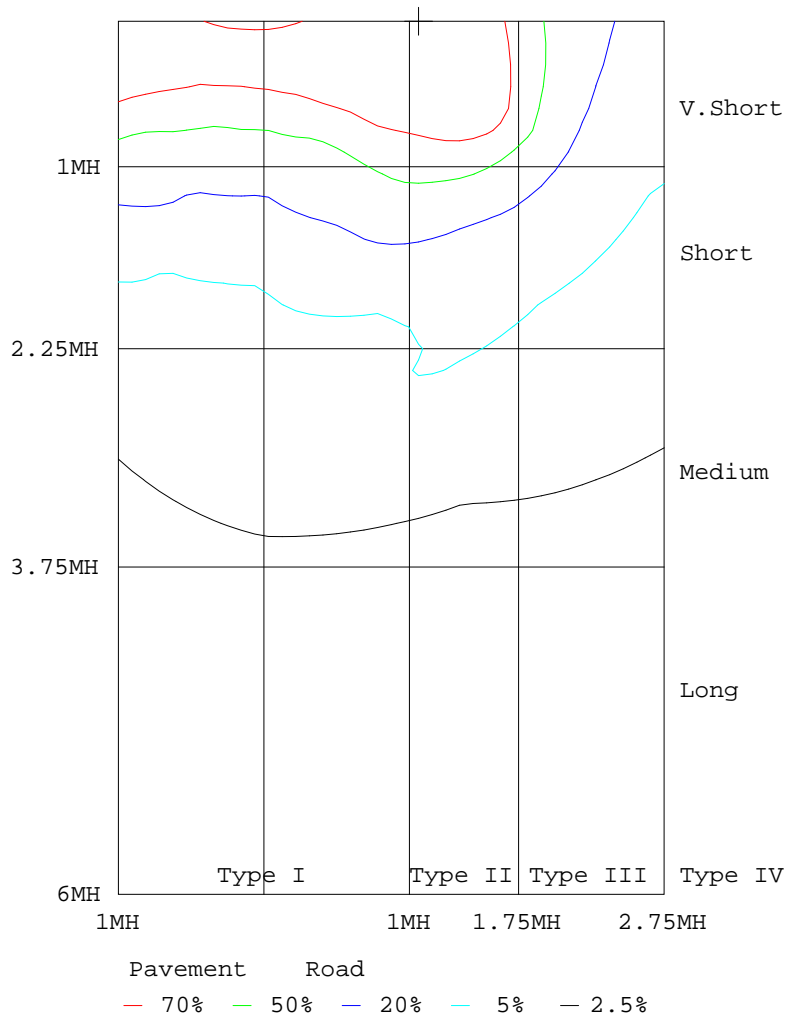
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:7.580m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:229.7V I:0.2130A P:48.50W PF:0.9900 Lamp Flux:4402.64x1 lm		
NAME: 01ST-RA-50W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:7.580m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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	1500	1490	1484	1478	1476	1472	1470	1470	1500	1490	1484	1478	1476	1472	1470	1470			
5	1495	1540	1592	1624	1638	1624	1588	1539	1518	1448	1390	1345	1329	1335	1367	1413			
10	1502	1615	1717	1794	1832	1799	1732	1635	1549	1414	1291	1193	1159	1184	1265	1367			
15	1525	1700	1852	1872	1877	1910	1908	1748	1601	1390	1180	1027	972	1015	1154	1335			
20	1570	1811	1842	1782	1767	1839	1950	1900	1679	1390	1075	877	822	863	1047	1321			
25	1638	1880	1761	1616	1585	1691	1904	2052	1790	1419	978	772	724	757	941	1333			
30	1742	1926	1633	1464	1424	1549	1825	2168	1930	1472	900	701	662	684	868	1390			
35	1886	1904	1524	1261	1186	1385	1753	2249	2059	1531	851	650	614	633	796	1364			
40	2084	1853	1397	977	891	1154	1647	2179	2193	1443	782	615	576	594	739	1325			
45	2232	1843	1199	698	625	875	1577	2101	2282	1357	744	582	522	558	695	1300			
50	2181	1854	934	504	458	654	1459	2010	2263	1268	706	466	333	456	646	1257			
55	1765	1887	701	386	312	520	1269	1996	2012	1206	656	295	273	292	594	1223			
60	1200	1406	446	131	119	335	834	1750	1448	1142	544	241	169	244	493	1156			
65	574	136	114	89.3	86.1	111	284	736	741	860	373	152	143	146	331	660			
70	141	69.4	68.0	64.9	74.3	108	107	131	285	408	262	123	115	116	248	185			
75	49.7	45.7	53.1	48.4	53.0	54.7	63.6	75.9	90.8	136	170	91.5	102	82.8	96.4	60.6			
80	28.9	24.5	25.9	32.8	36.2	38.2	39.2	44.5	50.0	68.5	76.1	70.5	88.8	60.2	54.7	34.3			
85	14.2	10.3	11.2	21.9	35.9	24.1	19.8	21.8	29.6	34.0	45.9	42.8	87.1	35.2	30.7	15.7			
90	5.21	5.28	6.04	13.0	5.90	13.4	8.29	10.0	13.4	15.3	21.5	18.1	16.7	9.27	8.56	7.41			
95	4.57	3.88	2.47	3.42	4.32	4.67	3.62	5.58	6.45	7.80	7.07	3.19	1.03	2.29	4.17	4.95			
100	5.62	4.51	2.97	1.95	1.58	1.79	2.64	4.62	6.22	5.82	3.32	1.49	1.42	1.93	3.57	5.08			
105	7.87	6.16	3.99	2.58	2.08	2.41	3.53	5.37	7.28	5.93	3.45	2.08	1.96	2.83	5.15	7.16			
110	10.4	8.02	5.11	3.31	2.72	3.14	4.61	7.09	9.53	8.00	5.01	2.97	2.75	4.12	7.05	9.69			
115	12.9	9.91	6.31	4.11	3.45	3.95	5.81	8.88	11.9	10.3	6.78	4.23	3.91	5.67	8.97	12.2			
120	15.0	11.6	7.62	5.00	4.26	4.80	7.15	10.6	13.9	12.3	8.66	5.82	5.41	7.41	10.9	14.4			
125	16.6	13.1	8.98	5.98	5.10	5.71	8.45	12.1	15.3	14.0	10.8	7.71	7.20	9.35	12.9	16.3			
130	17.8	14.5	10.3	7.03	6.02	6.67	9.53	13.2	16.2	15.3	12.9	9.81	9.26	11.5	15.1	17.7			
135	18.7	15.9	11.6	8.15	7.00	7.66	10.5	13.8	17.0	16.1	14.4	11.9	11.5	13.6	17.0	18.7			
140	19.5	17.1	12.8	9.34	8.07	8.72	11.5	14.6	17.8	17.0	15.7	13.9	13.6	15.6	18.6	19.8			
145	20.2	18.0	13.9	10.5	9.25	9.87	12.4	15.3	18.8	18.2	17.0	15.6	15.7	17.4	20.0	20.9			
150	20.4	18.6	14.9	11.8	10.6	11.2	13.3	15.9	19.3	19.0	18.1	17.1	17.4	18.7	20.7	21.4			
155	20.4	18.9	15.9	13.3	12.2	12.6	14.2	16.4	19.6	19.5	18.8	18.3	18.6	19.6	21.0	21.3			
160	20.4	19.2	16.8	14.8	13.9	14.0	15.1	16.8	19.8	19.8	19.4	19.3	19.6	20.2	21.0	21.0			
165	20.5	19.6	17.8	16.3	15.6	15.4	16.1	17.3	20.0	20.0	19.9	19.9	20.2	20.5	20.8	20.6			
170	20.5	19.9	18.7	17.7	17.2	17.0	17.3	18.0	20.3	20.3	20.3	20.3	20.4	20.5	20.4	20.1			
175	20.6	20.2	19.5	18.9	18.6	18.3	18.4	18.6	20.6	20.4	20.4	20.3	20.3	20.1	20.0	19.7			
180	20.7	20.5	20.2	19.9	19.7	19.5	19.4	19.3	20.8	20.4	20.2	19.9	19.7	19.5	19.4	19.3			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 04 September 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity: 65.0%
 Test Distance: 7.580m [K=1.0000]
 Remarks: