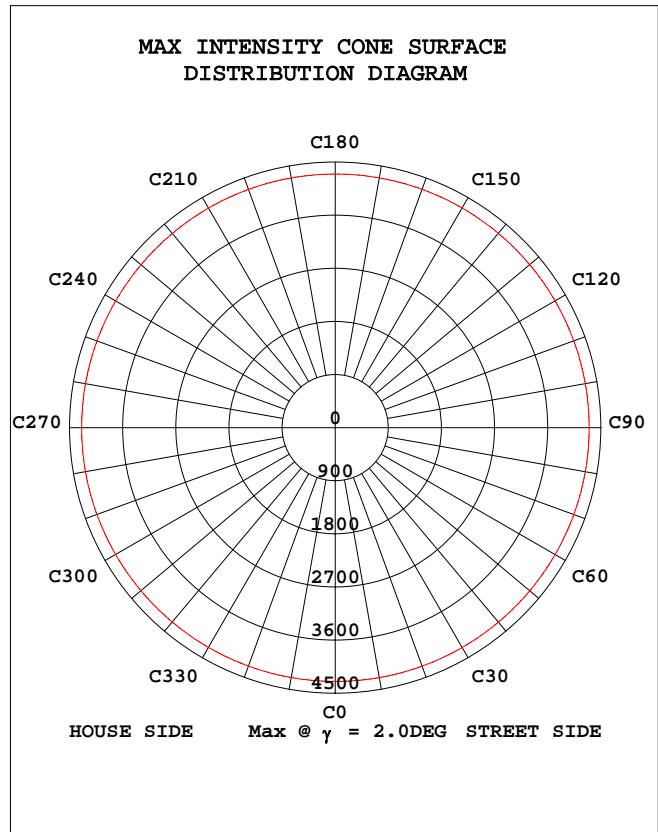
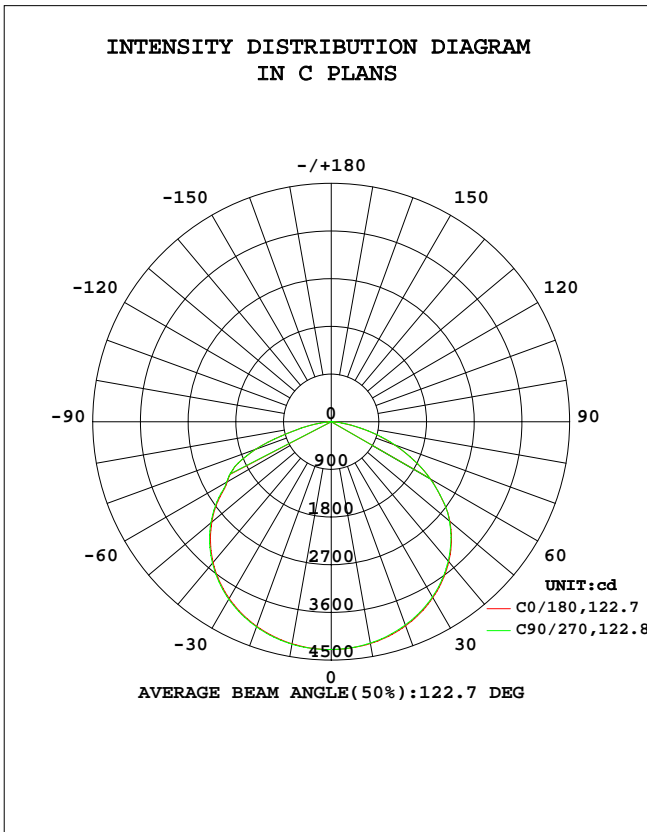


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway Luminaire	TYPE: N/A	WEIGHT: N/A
SPEC.: N/A	DIM.: N/A	SERIAL No.: N/A
MFR.: Bbier	SUR.: N/A	Shielding Angle: N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.80 lm/W			
MODEL	RSZ161025523-10	I _{max} (cd)	4301	η street_up(%)	0.1
NOMINAL POWER(W)	100	LOR(%)	100.0	η street_down(%)	50.7
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	13420	η house_up(%)	0.0
NOMINAL FLUX(lm)	13419.5	MAXIMUM @(C,γ)	90,2.0	η house_down(%)	49.2
LAMPS INSIDE	1	η up(%)	0.1	76 FLASHAREA(m2)	0.05000
TEST VOLTAGE(V)	120	η down(%)	99.9	SLI	22.092



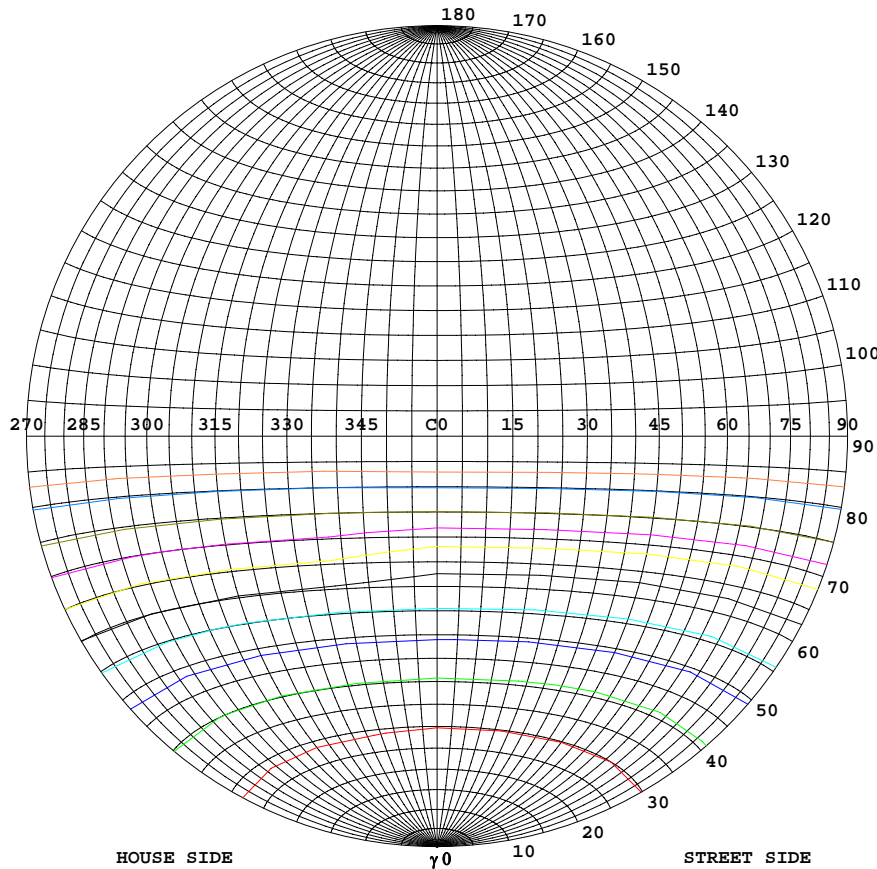
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.2DEG
 Operators: ben
 Test Date: 2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 46%
 Test Distance: 2.437m [K=1.0000]
 Remarks:

Note: SLI: Specific Luminaire Index

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	TYPE: IES	WEIGHT: N/A
SPEC.: N/A	DIM.: N/A	SERIAL No.: N/A
MFR.: Bbier	SUR.: N/A	Shielding Angle: N/A



Classification:

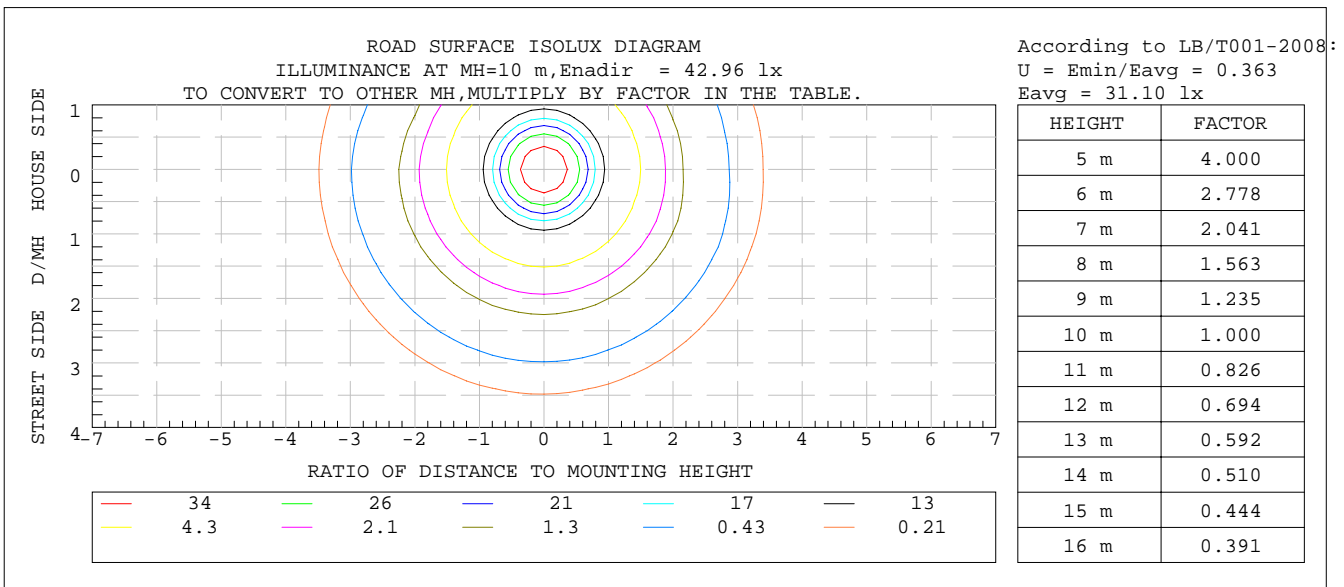
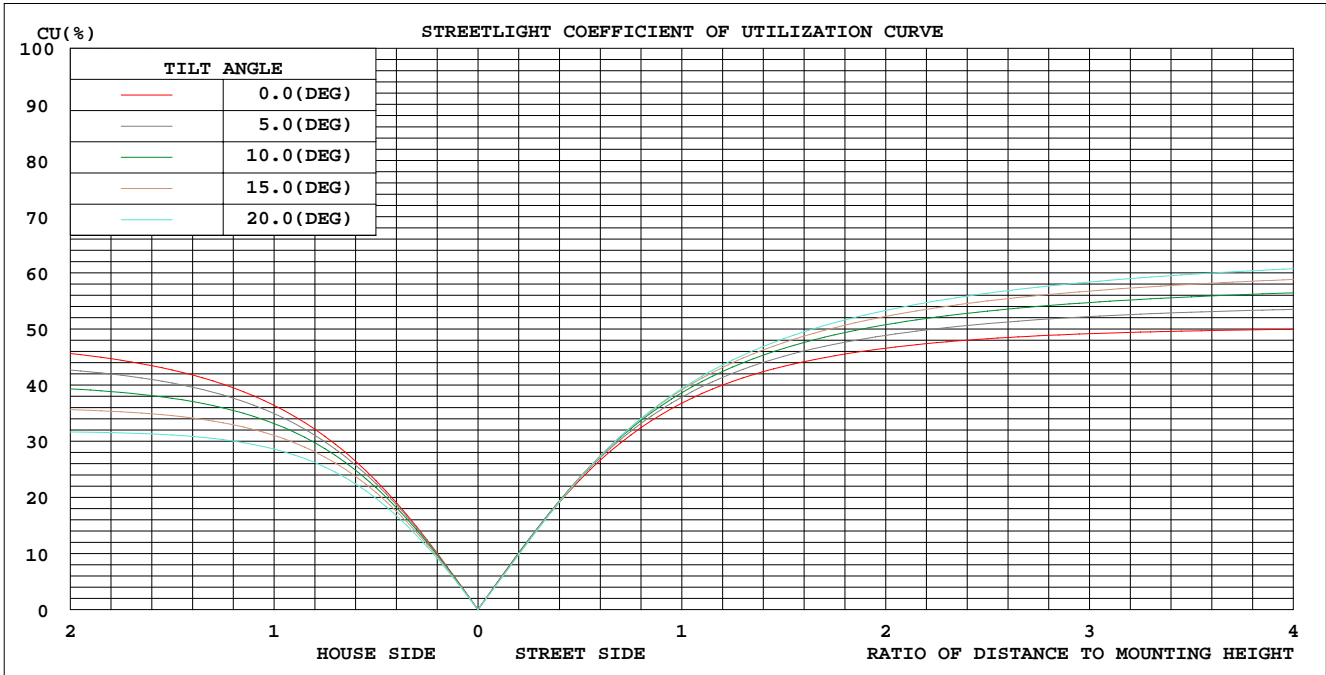
IES: Type V - Very Short
 CIE: Narrow - Short
 IES: Cut-off
 CIE: Semi-cut-off
 Max. At 80: 32.13cd/klm
 Max. At 90: 1.130cd/klm
 Max. 80-90: 32.13cd/klm
 NRB 5101: Limited[5.6%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	4301
90%	3871
80%	3441
70%	3011
60%	2581
50%	2151
40%	1721
30%	1290
20%	860
10%	430
5%	215

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.2DEG
 Operators: ben
 Test Date: 2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 46%
 Test Distance: 2.437m [K=1.0000]
 Remarks:

**COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM**



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.2DEG
 Operators: ben
 Test Date: 2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 46%
 Test Distance: 2.437m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	LUMINA	WEIGHT:N/A
SPEC.:N/A	DIM.: N/A	SERIAL No.:N/A
MFR.: Bbier	SUR.:N/A	Shielding Angle:N/A

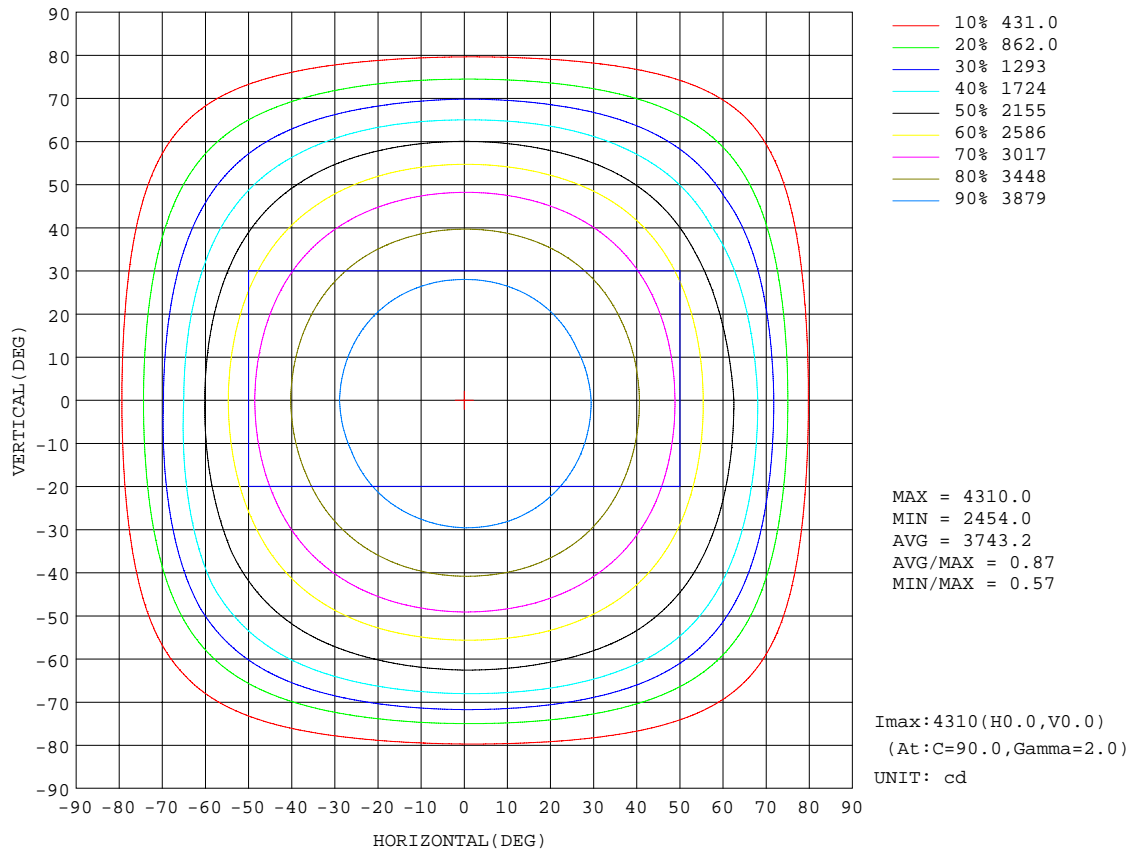
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum,lamp
10	4256	4264	4264	4257	4251	4244	4243	4248	0- 10	408.3	408.3	3.04,3.04
20	4110	4121	4122	4109	4099	4085	4083	4096	10- 20	1185	1593	11.9,11.9
30	3852	3864	3868	3850	3835	3823	3817	3834	20- 30	1840	3433	25.6,25.6
40	3468	3490	3487	3465	3451	3436	3435	3455	30- 40	2296	5729	42.7,42.7
50	2942	2961	2965	2937	2925	2904	2912	2933	40- 50	2481	8210	61.2,61.2
60	2270	2293	2281	2243	2163	2146	2158	2183	50- 60	2311	10521	78.4,78.4
70	1515	1535	1523	1486	1265	1253	1276	1305	60- 70	1823	12344	92,92
80	411.9	421.7	408.2	381.3	381.7	381.9	401.9	421.4	70- 80	906.9	13251	98.7,98.7
90	10.76	12.56	12.28	9.075	7.358	8.252	11.84	15.17	80- 90	155.2	13406	99.9,99.9
100	1.188	1.195	1.206	1.235	0.7157	0.7403	0.7376	0.7199	90-100	2.049	13408	99.9,99.9
110	1.457	1.484	1.476	1.493	1.057	1.101	1.078	1.060	100-110	1.200	13409	99.9,99.9
120	1.603	1.556	1.623	1.623	1.508	1.525	1.531	1.460	110-120	1.399	13410	99.9,99.9
130	2.130	2.044	2.180	2.170	2.024	1.995	1.987	1.908	120-130	1.597	13412	99.9,99.9
140	3.038	3.101	3.217	3.243	2.530	2.558	2.487	2.459	130-140	1.858	13414	100,100
150	4.327	4.655	4.788	4.780	2.951	2.989	3.154	2.989	140-150	2.093	13416	100,100
160	5.464	5.471	5.481	5.799	3.479	3.486	3.601	3.352	150-160	1.951	13418	100,100
170	5.204	5.142	5.108	5.349	3.779	3.600	3.653	3.608	160-170	1.293	13419	100,100
180	4.440	4.324	4.208	4.559	4.493	4.435	4.228	4.379	170-180	0.4186	13420	100,100
DEG	LUMINOUS INTENSITY:cd Less than 25% Percent = 8.1 %									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.2DEG
 Operators:ben
 Test Date:2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:46%
 Test Distance:2.437m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

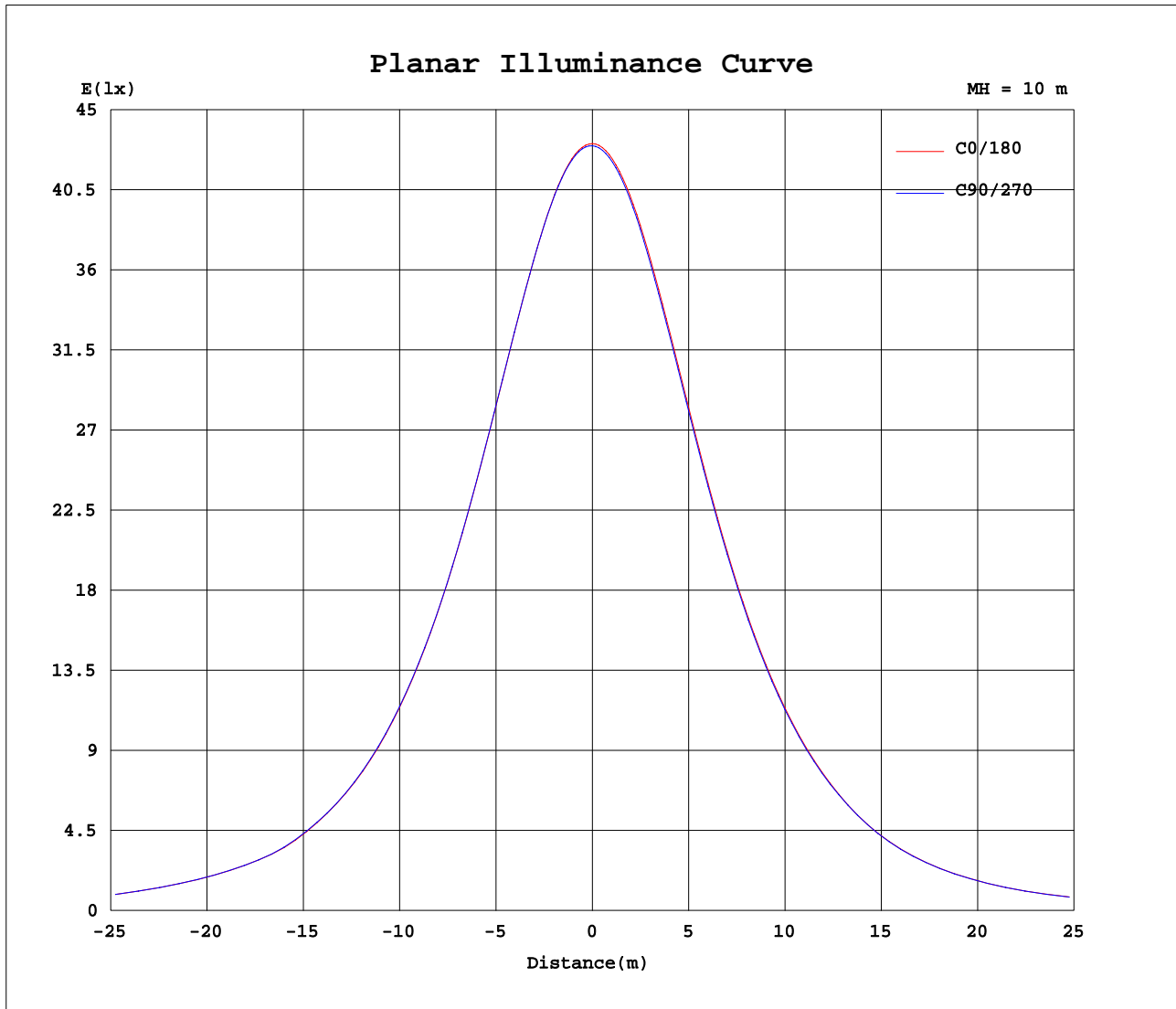
Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway Luminaire	TYPE: N/A	WEIGHT: N/A
SPEC.: N/A	DIM.: N/A	SERIAL No.: N/A
MFR.: Bbier	SUR.: N/A	Shielding Angle: N/A



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.2DEG
 Operators: ben
 Test Date: 2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 46%
 Test Distance: 2.437m [K=1.0000]
 Remarks:

Planar Illuminance Curve



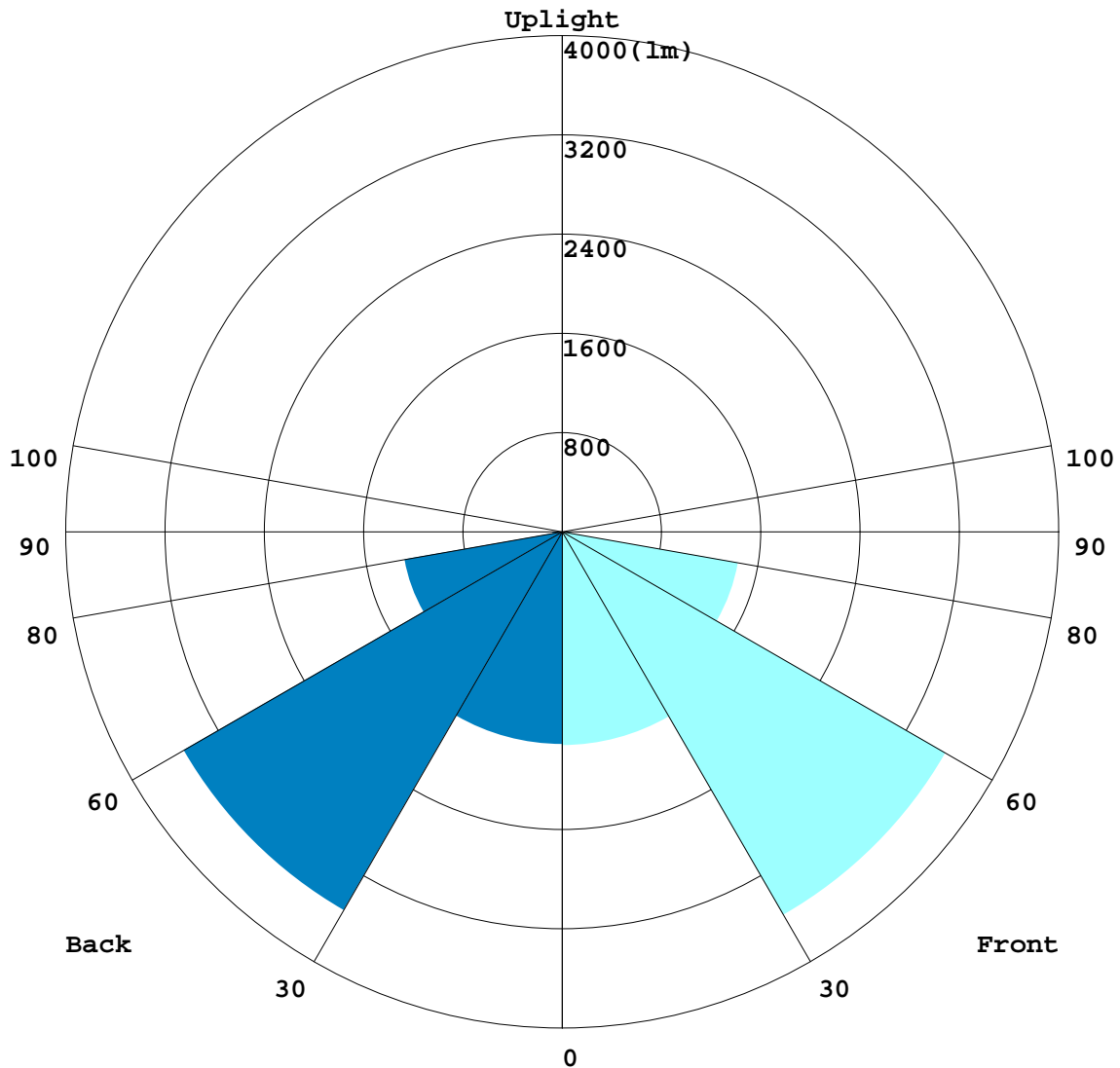
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.2DEG
 Operators: ben
 Test Date: 2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 46%
 Test Distance: 2.437m [K=1.0000]
 Remarks:

LCS REPORT

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	LUMINAIRE	WEIGHT:N/A
SPEC.:N/A	DIM.: N/A	SERIAL No.:N/A
MFR.: Bbier	SUR.:N/A	Shielding Angle:N/A

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.2DEG
 Operators:ben
 Test Date:2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:46%
 Test Distance:2.437m [K=1.0000]
 Remarks:

BUG REPORT

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	LUMINAIRE	WEIGHT:N/A
SPEC.:N/A	DIM.: N/A	SERIAL No.:N/A
MFR.: Bbier	SUR.:N/A	Shielding Angle:N/A

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1721.1	12.8
FM - Front-Medium(30-60)	3566.8	26.6
FH - Front-High(60-80)	1439.4	10.7
FVH - Front-Very High(80-90)	77.29	0.6
Total Forward Light	6812.6	50.8

BL - Back-Low(0-30)	1711.5	12.8
BM - Back-Medium(30-60)	3521.6	26.2
BH - Back-High(60-80)	1290.1	9.6
BVH - Back-Very High(80-90)	77.877	0.6
Total Back Light	6606.9	49.2

UL - Uplight-Low(90-100)	2.0487	0.0
UH - Uplight-High(100-180)	11.81	0.1
Total Up Light	13.858	0.1

BUG(Back,Up,Glare) Rating	B3-U2-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6601.1	5.8762	6606.9
Street Side	6804.6	7.9823	6812.6

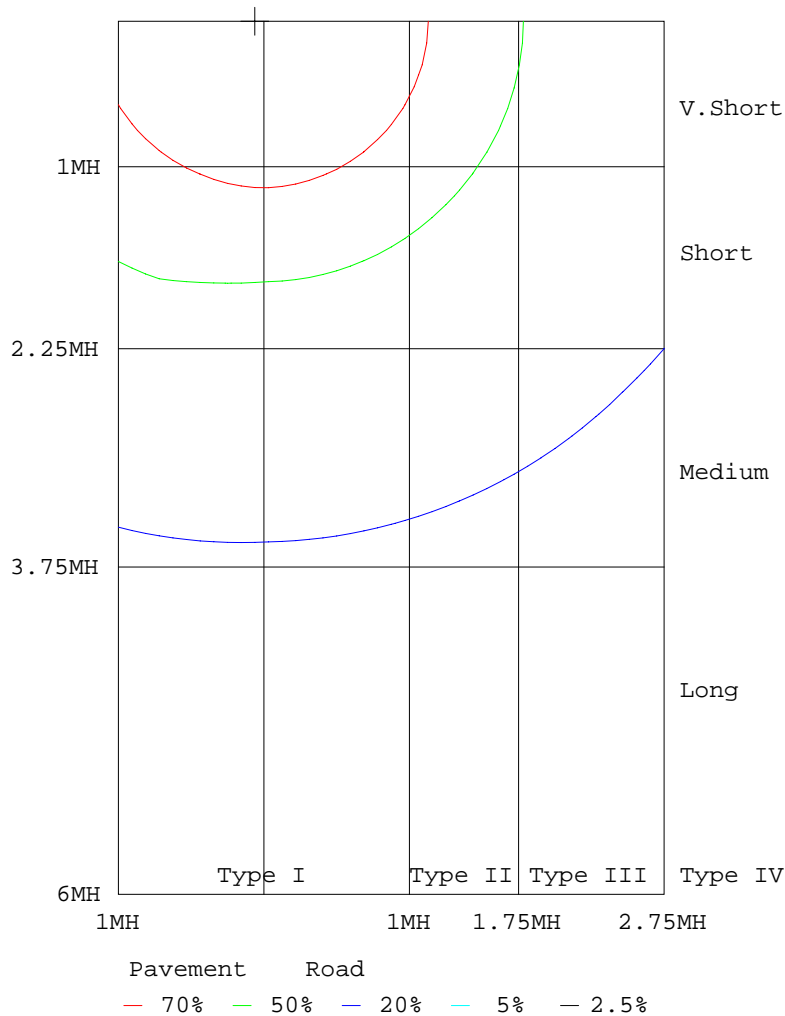
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.2DEG
 Operators:ben
 Test Date:2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:46%
 Test Distance:2.437m [K=1.0000]
 Remarks:

ROAD ISOCANDELA REPORT

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	LUMINANCE	WEIGHT:N/A
SPEC.:N/A	DIM.: N/A	SERIAL No.:N/A
MFR.: Bbier	SUR.:N/A	Shielding Angle:N/A

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.2DEG
 Operators:ben
 Test Date:2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:46%
 Test Distance:2.437m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.1V I:0.7981A P:95.31W PF:0.9945 Lamp Flux:13419.5x1 lm		
NAME: Outdoor Pole/Arm-mounted Area and Roadway	LUMINANCE	WEIGHT:N/A
SPEC.:N/A	DIM.: N/A	SERIAL No.:N/A
MFR.: Bbier	SUR.:N/A	Shielding Angle:N/A

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	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300	4300			
5	4290	4293	4294	4295	4295	4293	4290	4289	4286	4285	4284	4283	4283	4284	4286	4289			
10	4256	4261	4264	4266	4264	4261	4257	4254	4251	4248	4244	4243	4243	4244	4248	4253			
15	4196	4202	4206	4208	4207	4202	4196	4193	4190	4184	4177	4175	4176	4180	4186	4193			
20	4110	4116	4121	4123	4122	4115	4109	4104	4099	4091	4085	4083	4083	4087	4096	4104			
25	3995	4004	4008	4009	4010	4001	3995	3988	3982	3973	3969	3965	3966	3969	3978	3987			
30	3852	3859	3864	3869	3868	3859	3850	3843	3835	3829	3823	3818	3817	3826	3834	3843			
35	3678	3684	3693	3699	3693	3685	3674	3666	3658	3653	3645	3642	3643	3651	3660	3671			
40	3468	3478	3490	3492	3487	3479	3465	3454	3451	3441	3436	3430	3435	3443	3455	3466			
45	3224	3237	3246	3249	3246	3238	3222	3214	3209	3197	3190	3187	3192	3201	3214	3224			
50	2942	2960	2961	2967	2965	2953	2937	2929	2925	2912	2904	2904	2912	2921	2933	2949			
55	2612	2636	2640	2647	2635	2623	2590	2562	2556	2541	2536	2552	2562	2570	2592	2611			
60	2270	2281	2293	2297	2281	2263	2243	2215	2163	2154	2146	2151	2158	2158	2183	2208			
65	2008	2022	2026	2020	2014	1997	1971	1948	1723	1714	1708	1723	1725	1749	1758	1789			
70	1515	1521	1535	1529	1523	1498	1486	1461	1265	1255	1253	1254	1276	1285	1305	1324			
75	862	870	874	873	862	845	826	811	801	793	793	806	811	824	841	860			
80	412	418	422	418	408	393	381	365	382	380	382	390	402	410	421	431			
85	107	112	116	116	110	102	92.3	82.2	89.9	90.7	96.1	103	118	125	127	129			
90	10.8	11.9	12.6	13.3	12.3	11.5	9.08	6.29	7.36	7.35	8.25	10.8	11.8	14.2	15.2	14.6			
95	0.94	0.93	0.94	0.94	0.95	0.96	0.97	0.98	0.56	0.56	0.57	0.58	0.58	0.57	0.56	0.54			
100	1.19	1.18	1.20	1.20	1.21	1.22	1.23	1.24	0.72	0.72	0.74	0.74	0.74	0.73	0.72	0.70			
105	1.37	1.37	1.40	1.40	1.40	1.43	1.43	1.41	0.87	0.89	0.91	0.91	0.91	0.89	0.87	0.85			
110	1.46	1.48	1.48	1.49	1.48	1.50	1.49	1.50	1.06	1.07	1.10	1.10	1.08	1.08	1.06	1.04			
115	1.50	1.51	1.52	1.55	1.56	1.54	1.55	1.53	1.27	1.28	1.32	1.33	1.30	1.30	1.27	1.24			
120	1.60	1.57	1.56	1.61	1.62	1.60	1.62	1.62	1.51	1.50	1.52	1.56	1.53	1.51	1.46	1.45			
125	1.83	1.81	1.78	1.80	1.82	1.82	1.84	1.86	1.77	1.76	1.76	1.78	1.76	1.72	1.65	1.68			
130	2.13	2.10	2.04	2.11	2.18	2.13	2.17	2.18	2.02	1.99	2.00	1.98	1.99	1.89	1.91	1.90			
135	2.55	2.54	2.46	2.60	2.65	2.62	2.62	2.57	2.27	2.25	2.26	2.27	2.30	2.22	2.15	2.15			
140	3.04	3.04	3.10	3.13	3.22	3.24	3.24	3.08	2.53	2.53	2.56	2.51	2.49	2.49	2.46	2.50			
145	3.72	3.75	3.93	3.96	4.07	4.11	4.02	3.79	2.77	2.76	2.78	2.84	2.86	2.81	2.78	2.77			
150	4.33	4.54	4.65	4.77	4.79	4.90	4.78	4.52	2.95	2.93	2.99	3.11	3.15	3.08	2.99	3.01			
155	4.97	5.20	5.14	5.22	5.25	5.41	5.35	5.20	3.25	3.11	3.29	3.40	3.42	3.33	3.17	3.38			
160	5.46	5.52	5.47	5.64	5.48	5.76	5.80	5.60	3.48	3.40	3.49	3.55	3.60	3.44	3.35	3.58			
165	5.52	5.53	5.52	5.51	5.51	5.69	5.79	5.61	3.62	3.57	3.57	3.71	3.71	3.52	3.57	3.70			
170	5.20	5.20	5.14	5.10	5.11	5.24	5.35	5.31	3.78	3.76	3.60	3.62	3.65	3.49	3.61	3.77			
175	5.09	5.00	4.95	4.80	4.75	4.97	5.14	5.14	4.00	3.98	3.86	3.81	3.80	3.63	3.84	3.96			
180	4.44	4.42	4.32	4.21	4.21	4.32	4.56	4.60	4.49	4.48	4.44	4.36	4.23	4.23	4.38	4.60			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.2DEG
 Operators:ben
 Test Date:2016-11-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:46%
 Test Distance:2.437m [K=1.0000]
 Remarks: