



## IES ROAD REPORT

PHOTOMETRIC FILENAME : TXWP-13L-50.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] 3757

[TESTLAB] TUV SUD America

[ISSUE DATE] 8/10/2020

[TEST DATE] 8/22/2019 11:33:52 AM

[MANUFAC] LSI INDUSTRIES, INC.

[OTHER] TEST PROCEDURE: IESNA

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED

[OTHER] SCALED FROM ORIGINAL TEST DATA

[SEARCH\_SOURCETYPE] LED

[SEARCH\_APPLICATION] Outdoor

[LUMCAT] TXWP-13L-50

### CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	13171
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	115
Ballast Factor	1.00
Upward Waste Light Ratio	0.21
Maximum Candela	4555
Maximum Candela Angle	360H 60V
Maximum Candela (<90 Degrees Vertical)	4555
Maximum Candela Angle (<90 Degrees Vertical)	360H 60V
Maximum Candela At 90 Degrees Vertical	3421 (26.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	3933 (29.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : TXWP-13L-50.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1146.2	N.A.	8.7
FM - Front-Medium (30-60)	3554.3	N.A.	27.0
FH - Front-High (60-80)	2844.4	N.A.	21.6
FVH - Front-Very High (80-90)	1215.3	N.A.	9.2
BL - Back-Low (0-30)	604.8	N.A.	4.6
BM - Back-Medium (30-60)	788.2	N.A.	6.0
BH - Back-High (60-80)	209.3	N.A.	1.6
BVH - Back-Very High (80-90)	30.4	N.A.	0.2
UL - Uplight-Low (90-100)	1002.8	N.A.	7.6
UH - Uplight-High (100-180)	1775.2	N.A.	13.5
Total	13170.9	N.A.	100.0
BUG Rating	B2-U5-G5		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : TXWP-13L-50.IES**

**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<b><u>0.0</u></b>	<b><u>22.5</u></b>	<b><u>45.0</u></b>	<b><u>67.5</u></b>	<b><u>90.0</u></b>	<b><u>112.5</u></b>	<b><u>135.0</u></b>	<b><u>157.5</u></b>	<b><u>180.0</u></b>	<b><u>202.5</u></b>
<b>0.0</b>	2182	2182	2182	2182	2182	2182	2182	2182	2182	2182
<b>2.5</b>	2332	2281	2254	2218	2175	2127	2085	2059	2091	2059
<b>5.0</b>	2450	2389	2331	2253	2165	2070	1987	1931	1950	1931
<b>7.5</b>	2568	2492	2409	2285	2150	2008	1881	1798	1810	1798
<b>10.0</b>	2698	2601	2477	2314	2130	1940	1772	1659	1660	1659
<b>12.5</b>	2841	2718	2547	2337	2105	1868	1658	1519	1509	1519
<b>15.0</b>	2998	2850	2622	2352	2075	1791	1541	1376	1356	1376
<b>17.5</b>	3155	2986	2700	2363	2039	1710	1423	1237	1205	1237
<b>20.0</b>	3314	3124	2785	2370	1997	1627	1305	1139	1119	1139
<b>22.5</b>	3463	3262	2869	2374	1952	1542	1187	1064	1041	1064
<b>25.0</b>	3610	3389	2950	2375	1903	1454	1104	991	965	991
<b>27.5</b>	3746	3509	3023	2374	1850	1365	1038	920	892	920
<b>30.0</b>	3862	3617	3092	2372	1793	1275	973	851	818	851
<b>32.5</b>	3964	3711	3151	2368	1732	1187	910	783	749	783
<b>35.0</b>	4056	3791	3204	2360	1670	1098	849	719	682	719
<b>37.5</b>	4144	3861	3247	2353	1606	1009	789	655	620	655
<b>40.0</b>	4221	3926	3277	2342	1537	945	730	591	549	591
<b>42.5</b>	4286	3980	3296	2327	1467	889	674	520	483	520
<b>45.0</b>	4341	4020	3306	2307	1395	834	618	461	428	461
<b>47.5</b>	4396	4052	3309	2281	1323	780	559	406	371	406
<b>50.0</b>	4450	4085	3305	2249	1252	724	494	350	325	350
<b>52.5</b>	4497	4117	3292	2212	1178	669	435	303	283	303
<b>55.0</b>	4529	4138	3272	2166	1104	614	380	259	238	259
<b>57.5</b>	4550	4145	3248	2115	1031	560	323	221	200	221
<b>60.0</b>	4555	4138	3218	2057	954	505	275	180	157	180
<b>62.5</b>	4537	4117	3178	1997	878	450	231	142	126	142
<b>65.0</b>	4494	4078	3125	1934	798	392	195	107	100	107
<b>67.5</b>	4434	4017	3061	1866	718	335	164	78	69	78
<b>70.0</b>	4361	3944	2986	1793	636	282	132	46	34	46
<b>72.5</b>	4273	3857	2899	1715	552	232	100	8	1	8
<b>75.0</b>	4168	3758	2807	1629	471	190	63	1	0	1
<b>77.5</b>	4050	3652	2707	1540	390	154	36	0	1	0
<b>80.0</b>	3933	3539	2606	1448	315	124	31	1	1	1
<b>82.5</b>	3814	3426	2505	1358	247	102	28	1	1	1
<b>85.0</b>	3695	3308	2398	1267	192	91	25	1	1	1
<b>87.5</b>	3567	3187	2291	1175	153	82	23	1	1	1
<b>90.0</b>	3421	3051	2175	1085	135	76	20	1	1	1
<b>92.5</b>	3258	2911	2061	1001	126	70	18	1	2	1
<b>95.0</b>	3081	2756	1941	921	118	64	16	1	2	1
<b>97.5</b>	2894	2589	1818	845	112	59	14	1	2	1
<b>100.0</b>	2709	2426	1699	774	105	54	12	1	2	1
<b>102.5</b>	2548	2276	1586	707	98	50	11	1	2	1
<b>105.0</b>	2385	2129	1476	642	92	46	9	1	1	1
<b>107.5</b>	2214	1982	1368	581	86	43	8	1	1	1
<b>110.0</b>	2045	1839	1265	525	79	39	7	1	1	1
<b>112.5</b>	1871	1695	1166	473	73	36	5	1	2	1
<b>115.0</b>	1709	1546	1071	421	66	33	5	1	2	1
<b>117.5</b>	1549	1406	974	370	61	30	4	1	2	1
<b>120.0</b>	1417	1284	874	316	55	27	3	2	3	2
<b>122.5</b>	1282	1158	787	262	50	24	3	2	3	2
<b>125.0</b>	1152	1047	710	213	44	21	3	2	3	2
<b>127.5</b>	1051	953	631	170	40	19	3	3	4	3
<b>130.0</b>	946	855	555	127	36	17	3	3	4	3

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : TXWP-13L-50.IES**

**CANDELA TABULATION - (Cont.)**

132.5	849	764	483	89	31	15	3	4	5	4
135.0	756	675	419	55	28	13	4	4	5	4
137.5	663	590	357	36	23	11	4	5	5	5
140.0	576	518	295	28	20	10	4	5	6	5
142.5	501	444	240	23	16	8	4	5	6	5
145.0	426	376	187	19	11	7	5	6	7	6
147.5	363	315	131	16	7	6	5	6	7	6
150.0	302	256	72	13	5	5	5	6	7	6
152.5	235	191	22	10	4	5	5	6	6	6
155.0	158	116	7	8	4	5	6	6	7	6
157.5	70	38	5	6	4	5	6	6	6	6
160.0	7	4	4	4	4	5	6	7	6	7
162.5	3	3	4	4	4	5	6	6	7	6
165.0	3	4	4	4	5	5	6	6	6	6
167.5	4	4	4	5	5	6	6	6	7	6
170.0	4	4	5	5	5	6	6	6	6	6
172.5	4	5	5	5	5	6	6	7	6	7
175.0	5	5	6	6	6	6	6	6	6	6
177.5	5	5	5	6	6	6	6	6	6	6
180.0	5	5	5	5	5	5	5	5	5	5

**Vert. Angles**      **Horizontal Angles**

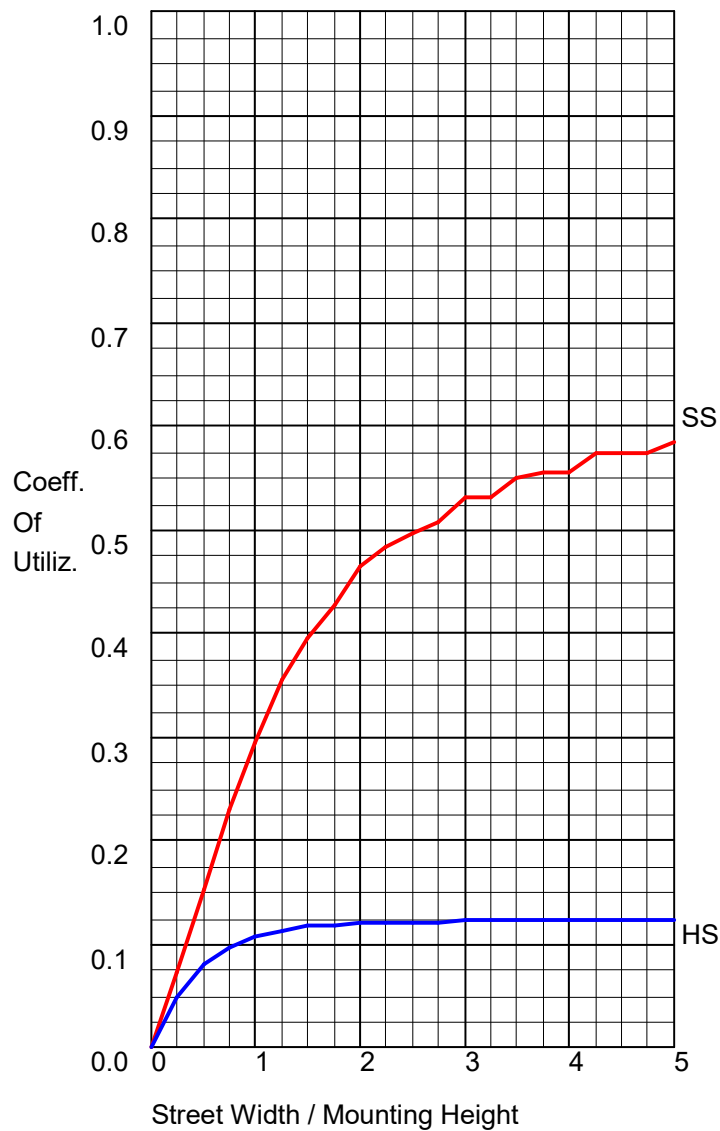
	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	2182	2182	2182	2182	2182	2182	2182
2.5	2085	2127	2175	2218	2254	2281	2332
5.0	1987	2070	2165	2253	2331	2389	2450
7.5	1881	2008	2150	2285	2409	2492	2568
10.0	1772	1940	2130	2314	2477	2601	2698
12.5	1658	1868	2105	2337	2547	2718	2841
15.0	1541	1791	2075	2352	2622	2850	2998
17.5	1423	1710	2039	2363	2700	2986	3155
20.0	1305	1627	1997	2370	2785	3124	3314
22.5	1187	1542	1952	2374	2869	3262	3463
25.0	1104	1454	1903	2375	2950	3389	3610
27.5	1038	1365	1850	2374	3023	3509	3746
30.0	973	1275	1793	2372	3092	3617	3862
32.5	910	1187	1732	2368	3151	3711	3964
35.0	849	1098	1670	2360	3204	3791	4056
37.5	789	1009	1606	2353	3247	3861	4144
40.0	730	945	1537	2342	3277	3926	4221
42.5	674	889	1467	2327	3296	3980	4286
45.0	618	834	1395	2307	3306	4020	4341
47.5	559	780	1323	2281	3309	4052	4396
50.0	494	724	1252	2249	3305	4085	4450
52.5	435	669	1178	2212	3292	4117	4497
55.0	380	614	1104	2166	3272	4138	4529
57.5	323	560	1031	2115	3248	4145	4550
60.0	275	505	954	2057	3218	4138	4555
62.5	231	450	878	1997	3178	4117	4537
65.0	195	392	798	1934	3125	4078	4494
67.5	164	335	718	1866	3061	4017	4434
70.0	132	282	636	1793	2986	3944	4361
72.5	100	232	552	1715	2899	3857	4273
75.0	63	190	471	1629	2807	3758	4168
77.5	36	154	390	1540	2707	3652	4050

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : TXWP-13L-50.IES**

**CANDELA TABULATION - (Cont.)**

80.0	31	124	315	1448	2606	3539	3933
82.5	28	102	247	1358	2505	3426	3814
85.0	25	91	192	1267	2398	3308	3695
87.5	23	82	153	1175	2291	3187	3567
90.0	20	76	135	1085	2175	3051	3421
92.5	18	70	126	1001	2061	2911	3258
95.0	16	64	118	921	1941	2756	3081
97.5	14	59	112	845	1818	2589	2894
100.0	12	54	105	774	1699	2426	2709
102.5	11	50	98	707	1586	2276	2548
105.0	9	46	92	642	1476	2129	2385
107.5	8	43	86	581	1368	1982	2214
110.0	7	39	79	525	1265	1839	2045
112.5	5	36	73	473	1166	1695	1871
115.0	5	33	66	421	1071	1546	1709
117.5	4	30	61	370	974	1406	1549
120.0	3	27	55	316	874	1284	1417
122.5	3	24	50	262	787	1158	1282
125.0	3	21	44	213	710	1047	1152
127.5	3	19	40	170	631	953	1051
130.0	3	17	36	127	555	855	946
132.5	3	15	31	89	483	764	849
135.0	4	13	28	55	419	675	756
137.5	4	11	23	36	357	590	663
140.0	4	10	20	28	295	518	576
142.5	4	8	16	23	240	444	501
145.0	5	7	11	19	187	376	426
147.5	5	6	7	16	131	315	363
150.0	5	5	5	13	72	256	302
152.5	5	5	4	10	22	191	235
155.0	6	5	4	8	7	116	158
157.5	6	5	4	6	5	38	70
160.0	6	5	4	4	4	4	7
162.5	6	5	4	4	4	3	3
165.0	6	5	5	4	4	4	3
167.5	6	6	5	5	4	4	4
170.0	6	6	5	5	5	4	4
172.5	6	6	5	5	5	5	4
175.0	6	6	6	6	6	5	5
177.5	6	6	6	6	5	5	5
180.0	5	5	5	5	5	5	5

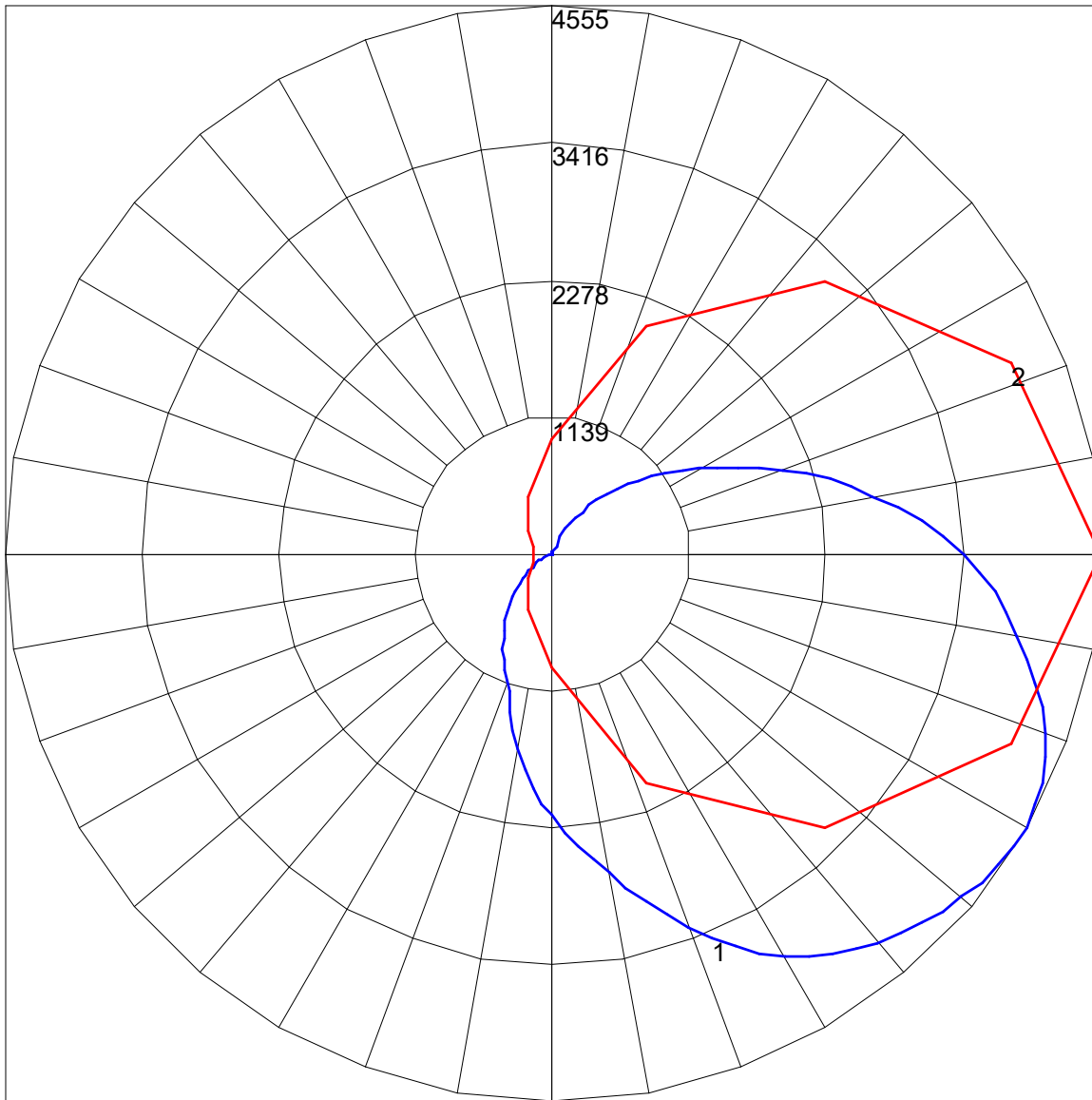
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

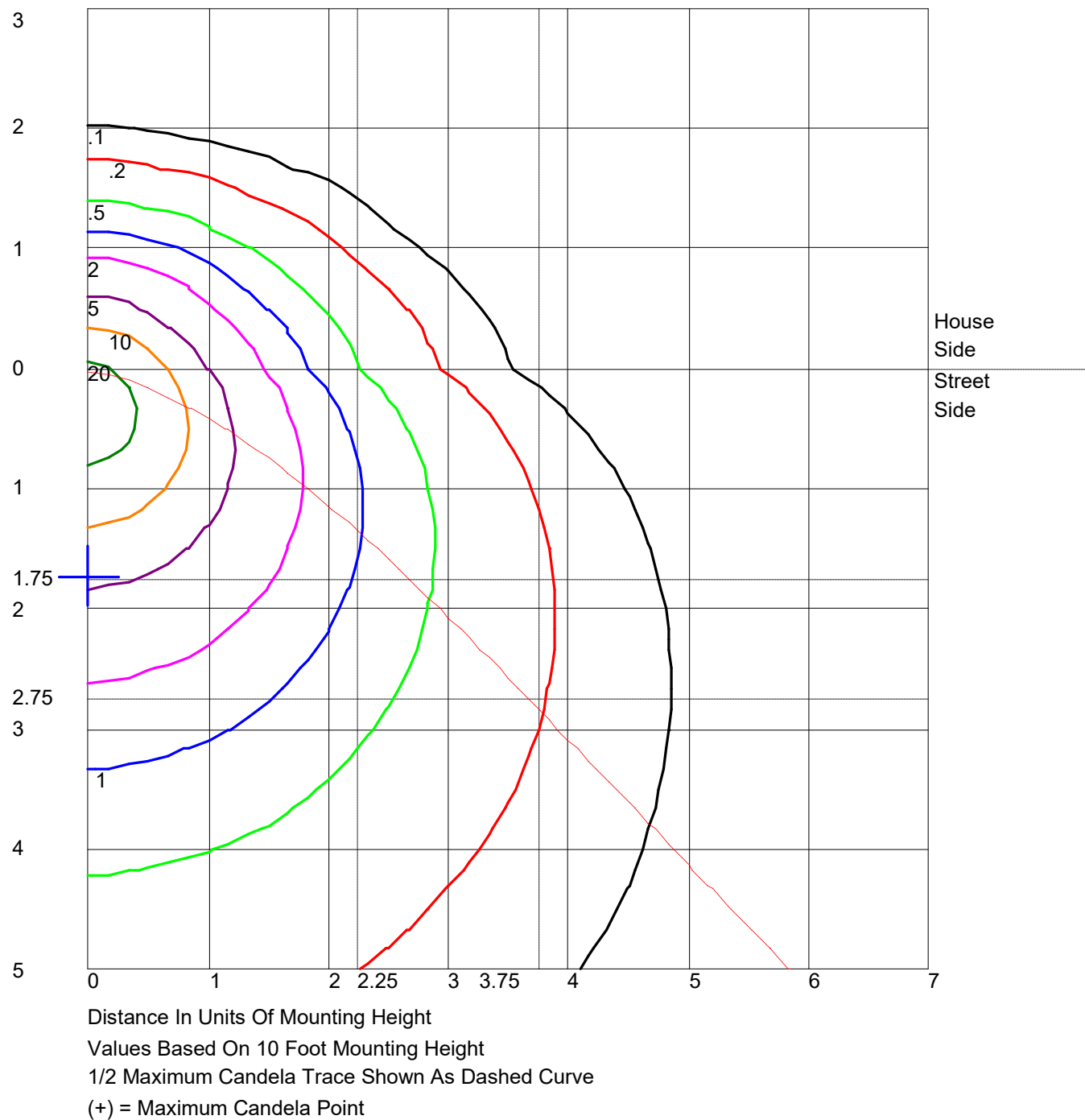
	Lumens	Percent Of Luminaire
Downward Street Side	8760.1	66.5
Downward House Side	1632.7	12.4
Downward Total	10392.8	78.9
Upward Street Side	2722.0	20.7
Upward House Side	56.0	0.4
Upward Total	2778.0	21.1
Total Flux	13170.8	100.0

POLAR GRAPH



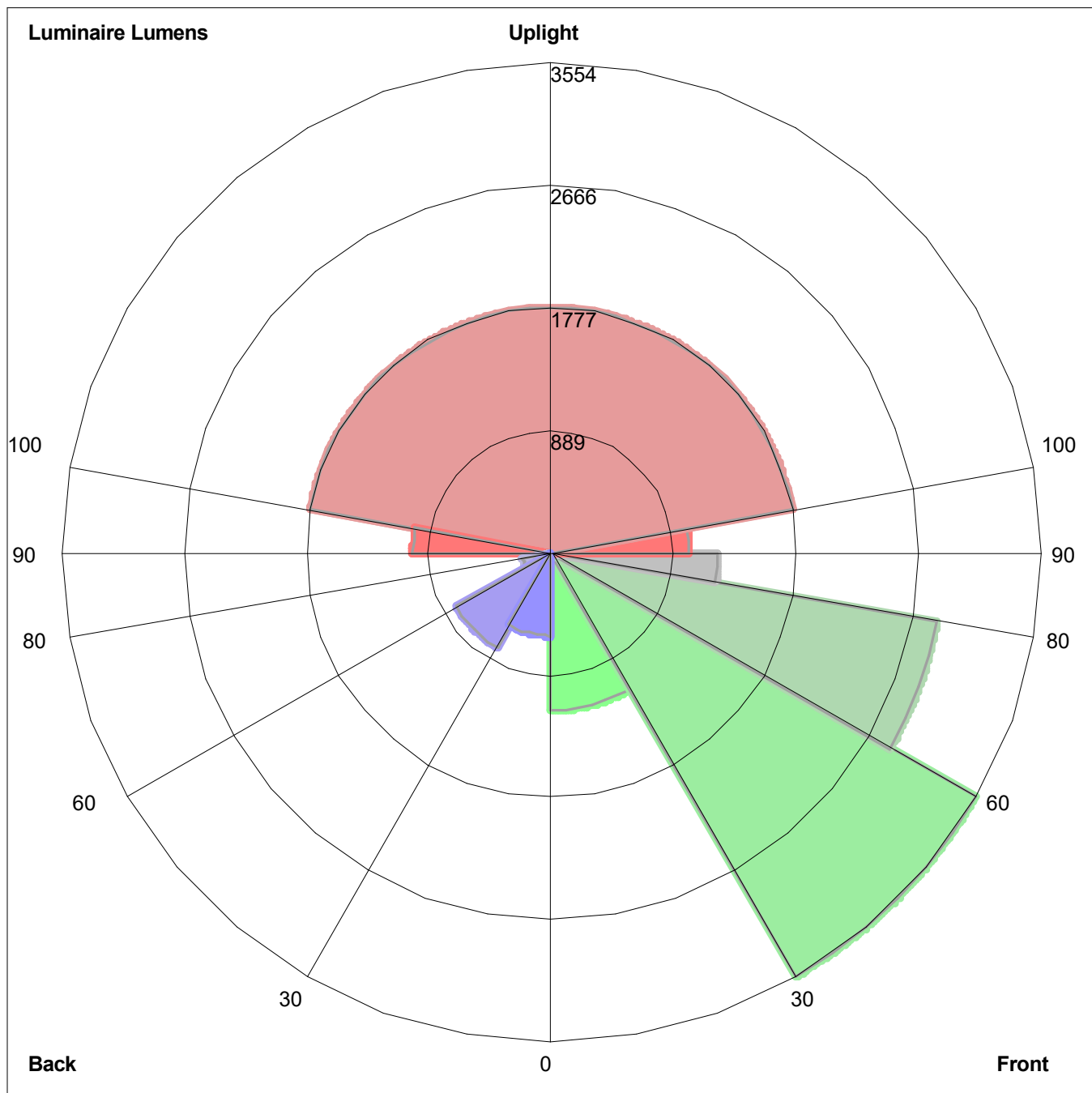
Maximum Candela = 4555 Located At Horizontal Angle = 360, Vertical Angle = 60  
# 1 - Vertical Plane Through Horizontal Angles (360 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1146.2, Medium=3554.3, High=2844.4, Very High=1215.3  
Back: Low=604.8, Medium=788.2, High=209.3, Very High=30.4  
Uplight: Low=1002.8, High=1775.2

BUG Rating : B2-U5-G5