



IES ROAD REPORT
PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] LED-11675
[TESTLAB] LSI INDUSTRIES, INC.
[ISSUE DATE] 06/10/2020
[TEST DATE] 04/02/20
[MANUFACT] LSI INDUSTRIES, INC.
[LUMCAT] ENM4-PT-3-LED-18L-40
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18788
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	148.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	17963
Maximum Candela Angle	57.5H 65V
Maximum Candela (<90 Degrees Vertical)	17963
Maximum Candela Angle (<90 Degrees Vertical)	57.5H 65V
Maximum Candela At 90 Degrees Vertical	81 (0.4% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1185 (6.3% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-40.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	563.3	N.A.	3.0
FM - Front-Medium (30-60)	8072.4	N.A.	43.0
FH - Front-High (60-80)	6095.4	N.A.	32.4
FVH - Front-Very High (80-90)	147.2	N.A.	0.8
BL - Back-Low (0-30)	540.1	N.A.	2.9
BM - Back-Medium (30-60)	2193.2	N.A.	11.7
BH - Back-High (60-80)	1026.9	N.A.	5.5
BVH - Back-Very High (80-90)	98.5	N.A.	0.5
UL - Uplight-Low (90-100)	16.2	N.A.	0.1
UH - Uplight-High (100-180)	34.5	N.A.	0.2
Total	18787.7	N.A.	100.0
BUG Rating	B3-U2-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>57.5</u>	<u>65.0</u>	<u>75.0</u>
0.0	927	927	927	927	927	927	927	927	927	927
2.5	897	902	898	892	899	902	917	915	918	916
5.0	812	814	832	847	865	840	838	837	839	849
7.5	776	789	810	799	795	786	814	828	867	860
10.0	783	777	780	769	785	832	847	852	859	873
12.5	818	820	816	790	824	847	870	871	891	911
15.0	869	867	867	880	903	894	925	934	948	963
17.5	937	937	921	946	963	996	982	993	1010	1039
20.0	1087	1080	1057	1058	1076	1100	1117	1114	1109	1124
22.5	1212	1240	1251	1288	1275	1292	1322	1322	1264	1271
25.0	1528	1482	1529	1573	1590	1594	1649	1617	1569	1488
27.5	2014	2056	2057	1983	2000	2084	2057	2041	1999	1849
30.0	2650	2600	2551	2587	2536	2645	2611	2577	2507	2234
32.5	3377	3346	3168	3140	3201	3275	3257	3245	3083	2743
35.0	3949	3931	3845	3823	3842	4002	3945	3922	3659	3191
37.5	4765	4695	4549	4502	4538	4701	4589	4565	4167	3587
40.0	5451	5431	5359	5304	5296	5364	5151	5113	4615	3944
42.5	6223	6213	6147	6086	6048	5991	5749	5622	5036	4203
45.0	7218	7207	7169	7096	6905	6733	6257	6137	5406	4452
47.5	8493	8475	8497	8505	7993	7521	6808	6657	5794	4743
50.0	10046	10030	10124	10064	9408	8433	7492	7260	6272	5125
52.5	11619	11765	11893	11800	11093	9565	8326	8059	7036	5691
55.0	12447	12463	12899	13273	12916	11025	9471	9233	8043	6490
57.5	12208	12253	12901	13746	14328	12807	11006	10867	9433	7818
60.0	9972	10124	11554	13126	14734	14646	13220	13029	11400	9356
62.5	6098	6221	7547	10413	13999	15656	15914	15723	13556	10695
65.0	3032	3124	3986	6095	11133	15376	17933	17963	14773	11090
67.5	1519	1557	1883	3089	6641	13080	17683	17878	15302	10109
70.0	915	941	1146	1693	3446	8450	14884	15357	13347	7441
72.5	537	534	727	1155	2087	4441	9841	10644	8450	4113
75.0	370	385	495	856	1453	2385	4951	5474	4470	1680
77.5	277	288	389	726	1144	1448	2316	2536	1924	714
80.0	199	210	303	612	921	937	1084	1185	989	376
82.5	136	147	234	432	692	591	509	553	494	236
85.0	103	110	175	329	389	328	245	262	260	148
87.5	95	99	129	234	233	124	100	97	101	78
90.0	54	48	69	81	74	31	28	27	24	19
92.5	15	15	18	18	10	10	12	12	11	10
95.0	7	7	6	6	6	8	10	10	10	9
97.5	6	6	6	6	6	7	8	8	8	8
100.0	5	5	5	5	6	6	7	7	7	7
102.5	5	5	5	5	6	6	6	6	6	6
105.0	4	4	4	5	6	6	6	6	6	6
107.5	4	4	4	6	6	6	6	6	6	6
110.0	5	4	5	6	6	6	6	6	6	6
112.5	5	5	5	6	6	6	6	6	6	7
115.0	5	5	6	6	6	7	6	6	6	7
117.5	6	6	6	6	7	7	6	6	6	7
120.0	7	6	6	7	7	7	6	6	7	8
122.5	7	7	7	7	7	7	7	7	7	8
125.0	7	7	7	7	7	7	7	7	7	8
127.5	7	7	7	7	7	8	7	7	7	8
130.0	8	8	7	8	7	8	7	7	7	8

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CANDELA TABULATION - (Cont.)

132.5	8	8	7	7	7	8	7	7	7	8
135.0	6	6	6	6	7	7	6	6	7	8
137.5	3	3	4	5	5	5	5	5	6	6
140.0	1	1	2	3	4	4	4	4	4	5
142.5	1	1	2	3	3	4	4	4	4	5
145.0	1	1	2	3	3	3	4	4	4	5
147.5	1	1	2	3	3	3	3	3	4	4
150.0	1	1	2	3	3	3	3	3	4	4
152.5	1	1	2	3	3	3	3	3	4	4
155.0	1	1	2	2	3	3	3	3	3	4
157.5	1	1	2	2	2	2	3	3	3	4
160.0	1	1	2	2	2	2	2	3	3	3
162.5	1	1	2	2	2	2	2	2	3	3
165.0	1	1	2	2	2	2	3	3	3	3
167.5	0	1	2	2	3	3	3	3	3	3
170.0	1	1	2	3	3	3	3	3	3	3
172.5	0	1	2	3	3	3	3	3	3	3
175.0	1	1	2	3	3	3	3	3	3	3
177.5	1	1	2	3	3	3	3	3	3	3
180.0	3	3	3	3	3	3	3	3	3	3

Vert. Angles	Horizontal Angles									
	<u>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	927	927	927	927	927	927	927	927	927	927
2.5	925	931	933	931	939	944	959	959	951	936
5.0	857	857	860	894	919	929	957	968	965	947
7.5	881	883	902	951	933	919	904	933	933	956
10.0	881	882	900	943	920	958	954	962	963	993
12.5	925	940	976	972	970	976	1003	1082	1084	1134
15.0	978	993	993	993	983	1057	1111	1186	1212	1199
17.5	1038	1030	1044	1053	1040	1164	1253	1278	1279	1283
20.0	1124	1115	1125	1068	1105	1241	1290	1355	1377	1377
22.5	1259	1222	1233	1177	1227	1338	1403	1413	1408	1436
25.0	1460	1405	1380	1249	1403	1451	1433	1455	1475	1502
27.5	1711	1597	1553	1398	1530	1538	1499	1525	1560	1590
30.0	2015	1862	1742	1520	1603	1669	1589	1597	1622	1659
32.5	2289	2101	1913	1640	1690	1782	1731	1691	1747	1863
35.0	2631	2347	2088	1742	1724	1858	1829	1808	1921	2053
37.5	2904	2555	2210	1791	1743	1899	1876	1945	2095	2283
40.0	3094	2669	2246	1807	1743	1915	1896	1982	2325	2398
42.5	3250	2756	2258	1757	1683	1894	1881	2001	2512	2367
45.0	3416	2848	2279	1700	1612	1821	1843	1950	2718	2242
47.5	3624	2988	2335	1657	1542	1745	1785	1895	2778	2130
50.0	3929	3215	2452	1637	1468	1671	1724	1845	2739	2081
52.5	4383	3532	2636	1647	1409	1604	1658	1776	2570	2050
55.0	4949	3958	2906	1668	1351	1524	1581	1685	2309	2006
57.5	5814	4538	3179	1669	1283	1417	1494	1568	1971	1917
60.0	6889	5084	3173	1584	1199	1285	1378	1412	1616	1870
62.5	7639	5311	2797	1386	1098	1149	1239	1261	1311	1810
65.0	7460	4916	2149	1151	995	1027	1091	1145	1089	1725
67.5	6129	4067	1523	936	881	903	970	1040	949	1566
70.0	3761	2518	966	761	756	767	842	948	866	1327
72.5	1708	1097	575	593	615	649	716	848	754	998
75.0	652	488	375	463	516	552	610	665	539	679
77.5	325	261	286	392	439	473	454	413	331	437

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CANDELA TABULATION - (Cont.)

80.0	197	175	234	338	372	337	278	311	242	318
82.5	138	125	194	291	276	219	202	226	151	230
85.0	85	83	155	225	177	154	145	121	71	141
87.5	41	43	107	139	103	83	57	52	31	67
90.0	14	10	37	55	43	38	26	16	7	9
92.5	9	9	18	30	37	33	24	12	3	2
95.0	8	8	16	27	34	31	22	12	3	2
97.5	7	8	14	23	29	26	19	11	4	2
100.0	6	8	11	19	24	22	17	10	4	2
102.5	7	8	10	16	20	19	15	10	5	3
105.0	7	8	10	14	17	16	13	9	5	3
107.5	7	8	10	12	14	14	13	9	5	3
110.0	7	9	10	11	13	13	12	9	6	4
112.5	8	9	10	11	13	13	12	10	6	4
115.0	8	9	10	11	13	13	12	10	7	5
117.5	8	9	10	11	13	13	12	10	7	5
120.0	8	10	10	11	13	13	12	10	7	5
122.5	9	10	10	12	14	14	13	11	8	6
125.0	9	10	11	12	13	14	13	11	8	6
127.5	9	10	10	11	13	14	13	11	8	7
130.0	9	10	10	11	13	13	13	11	8	7
132.5	9	10	10	11	12	13	12	10	8	6
135.0	9	9	10	11	11	11	10	9	7	5
137.5	7	8	8	9	10	10	9	7	5	3
140.0	6	7	7	8	8	8	7	6	3	2
142.5	6	6	7	7	8	7	6	5	3	1
145.0	5	6	6	7	7	7	6	4	2	1
147.5	5	6	6	6	7	7	5	4	2	0
150.0	5	6	6	6	7	6	5	4	2	0
152.5	5	6	6	6	6	6	5	3	1	0
155.0	5	5	6	6	6	6	5	3	1	0
157.5	4	5	5	6	6	5	4	2	1	0
160.0	4	5	5	5	5	5	4	2	0	0
162.5	4	4	5	5	5	5	3	2	0	0
165.0	4	4	5	5	5	4	3	2	0	0
167.5	4	4	4	5	5	4	3	2	0	0
170.0	4	4	5	5	5	4	3	2	0	0
172.5	4	4	4	5	5	4	3	2	0	0
175.0	4	4	4	4	4	4	3	2	1	0
177.5	4	4	4	4	4	4	3	2	1	0
180.0	3	3	3	3	3	3	3	3	3	3

Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	927	927
2.5	936	940
5.0	944	959
7.5	958	974
10.0	1026	1033
12.5	1145	1154
15.0	1244	1274
17.5	1324	1341
20.0	1409	1415
22.5	1430	1477
25.0	1520	1542

IES ROAD REPORT
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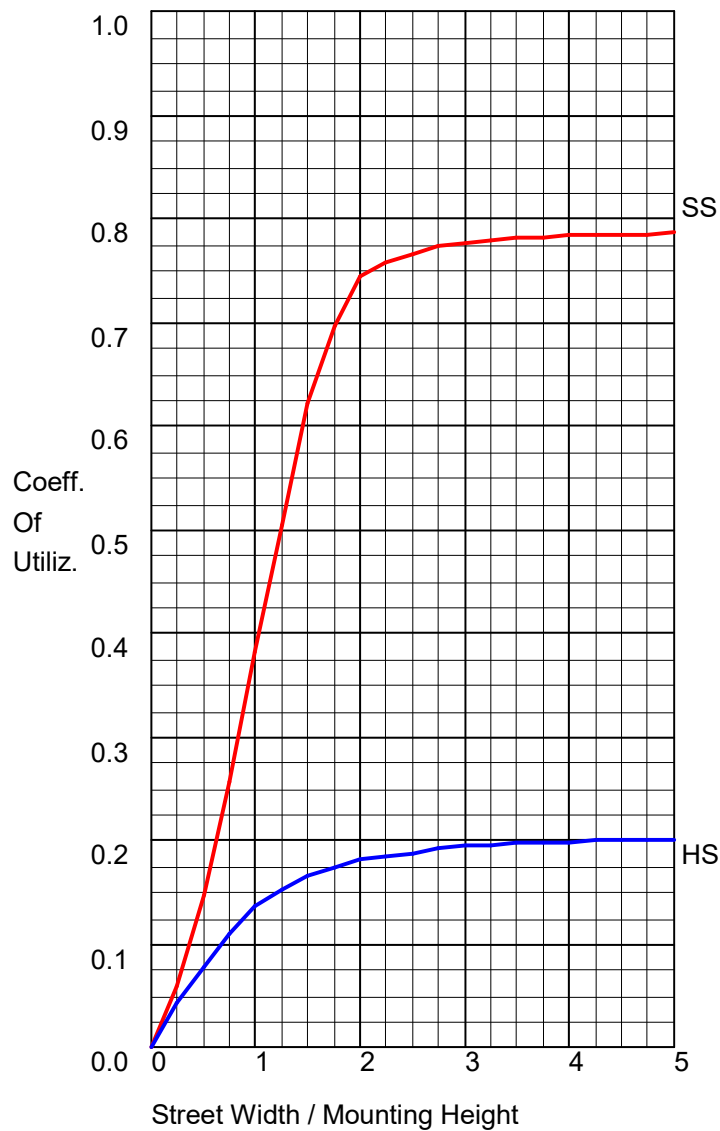
CANDELA TABULATION - (Cont.)

27.5	1591	1623
30.0	1691	1740
32.5	1898	1925
35.0	2127	2146
37.5	2301	2296
40.0	2165	2125
42.5	1912	1867
45.0	1738	1689
47.5	1637	1579
50.0	1556	1494
52.5	1479	1400
55.0	1375	1277
57.5	1292	1166
60.0	1284	1108
62.5	1333	1109
65.0	1433	1179
67.5	1569	1328
70.0	1664	1522
72.5	1514	1555
75.0	1226	1454
77.5	1020	1229
80.0	763	889
82.5	530	598
85.0	369	403
87.5	266	397
90.0	13	1
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	1	0
105.0	1	0
107.5	1	1
110.0	2	1
112.5	2	2
115.0	3	2
117.5	3	3
120.0	4	3
122.5	4	4
125.0	4	4
127.5	5	4
130.0	5	5
132.5	5	4
135.0	3	3
137.5	1	1
140.0	0	0
142.5	0	0
145.0	0	0
147.5	0	0
150.0	0	0
152.5	0	0
155.0	0	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-3-LED-18L-40.IES****CANDELA TABULATION - (Cont.)**

167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	3	3

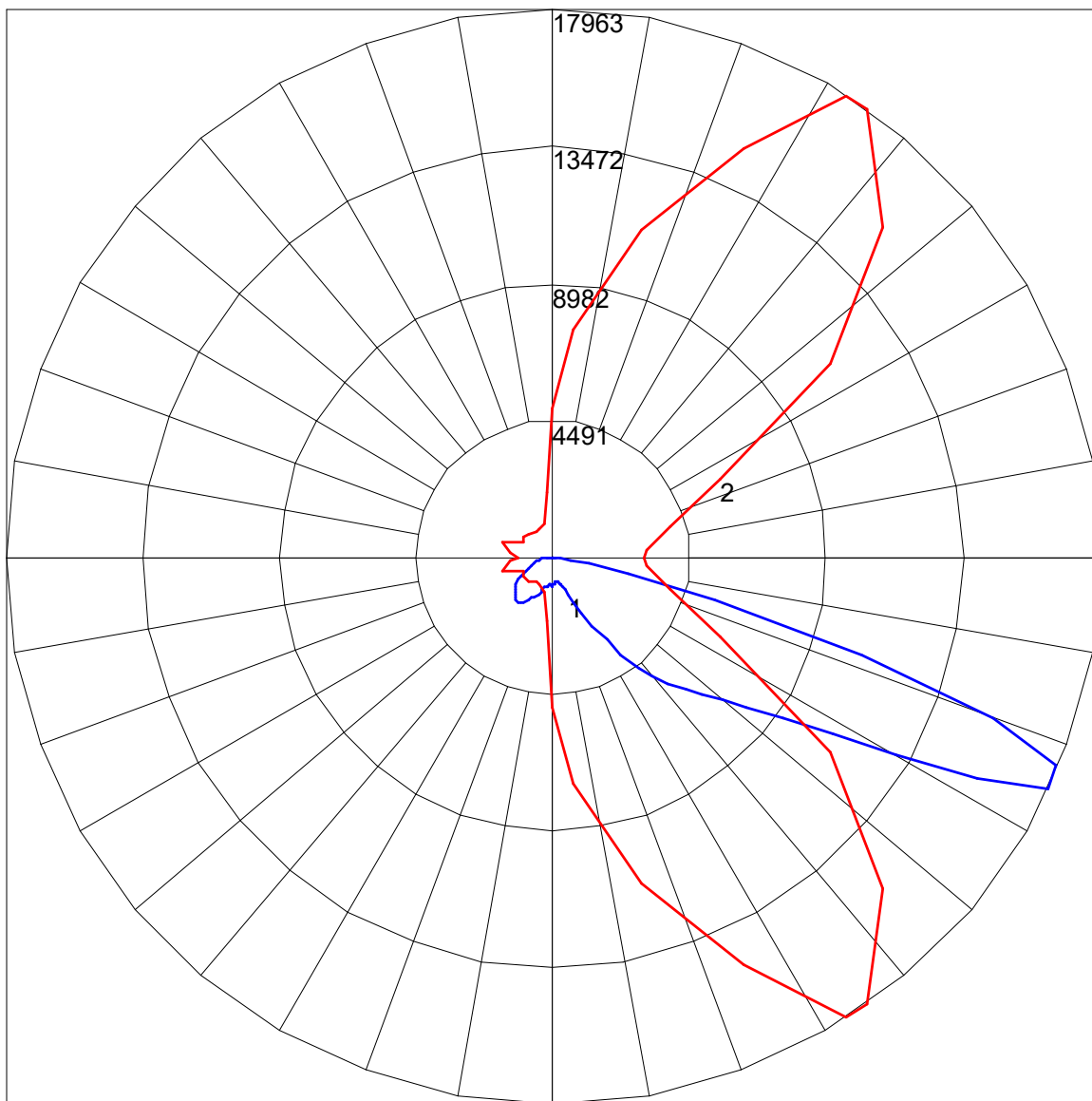
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

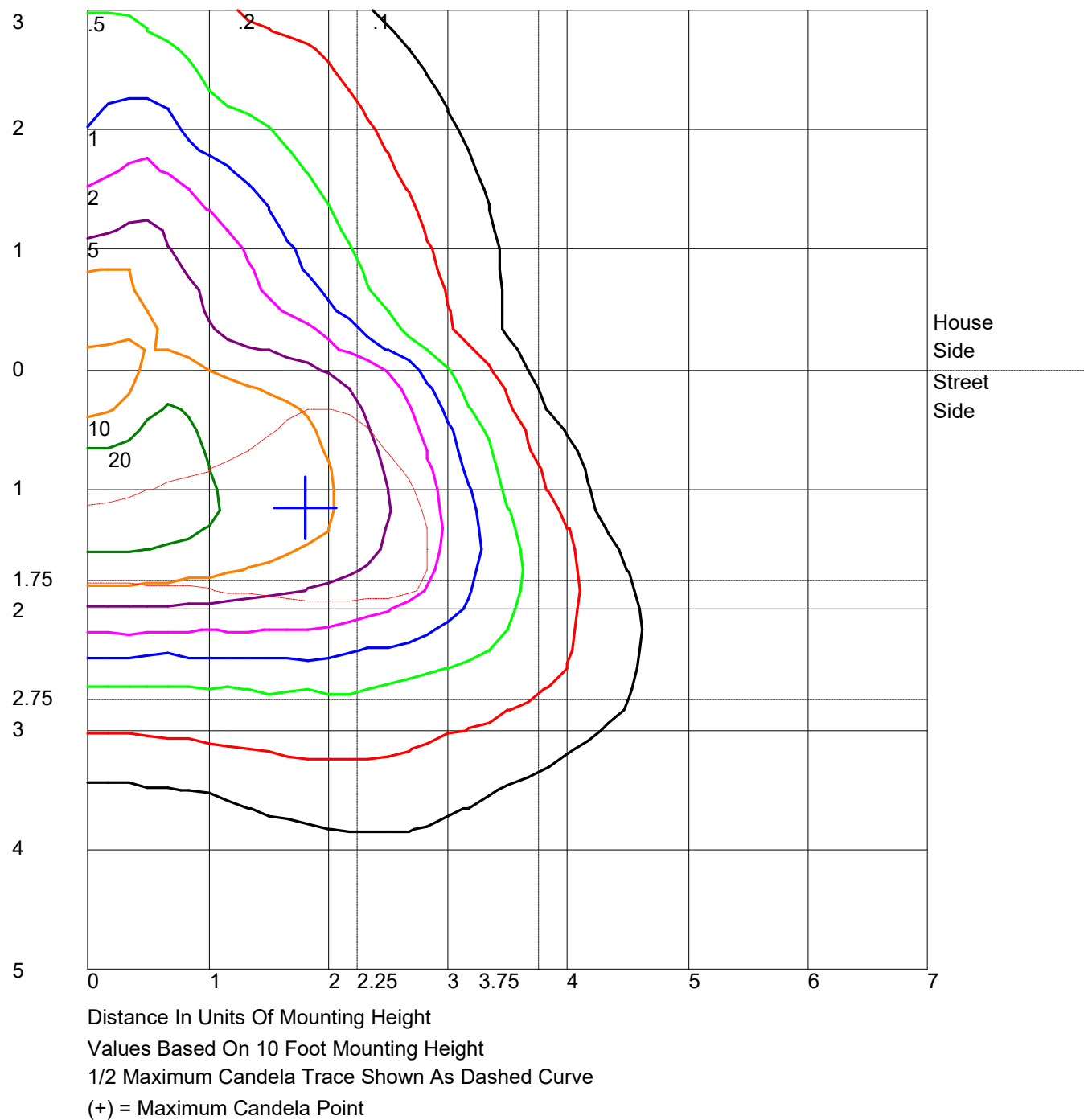
	Lumens	Percent Of Luminaire
Downward Street Side	14878.2	79.2
Downward House Side	3858.7	20.5
Downward Total	18736.9	99.7
Upward Street Side	21.3	0.1
Upward House Side	29.4	0.2
Upward Total	50.7	0.3
Total Flux	18787.6	100.0

POLAR GRAPH

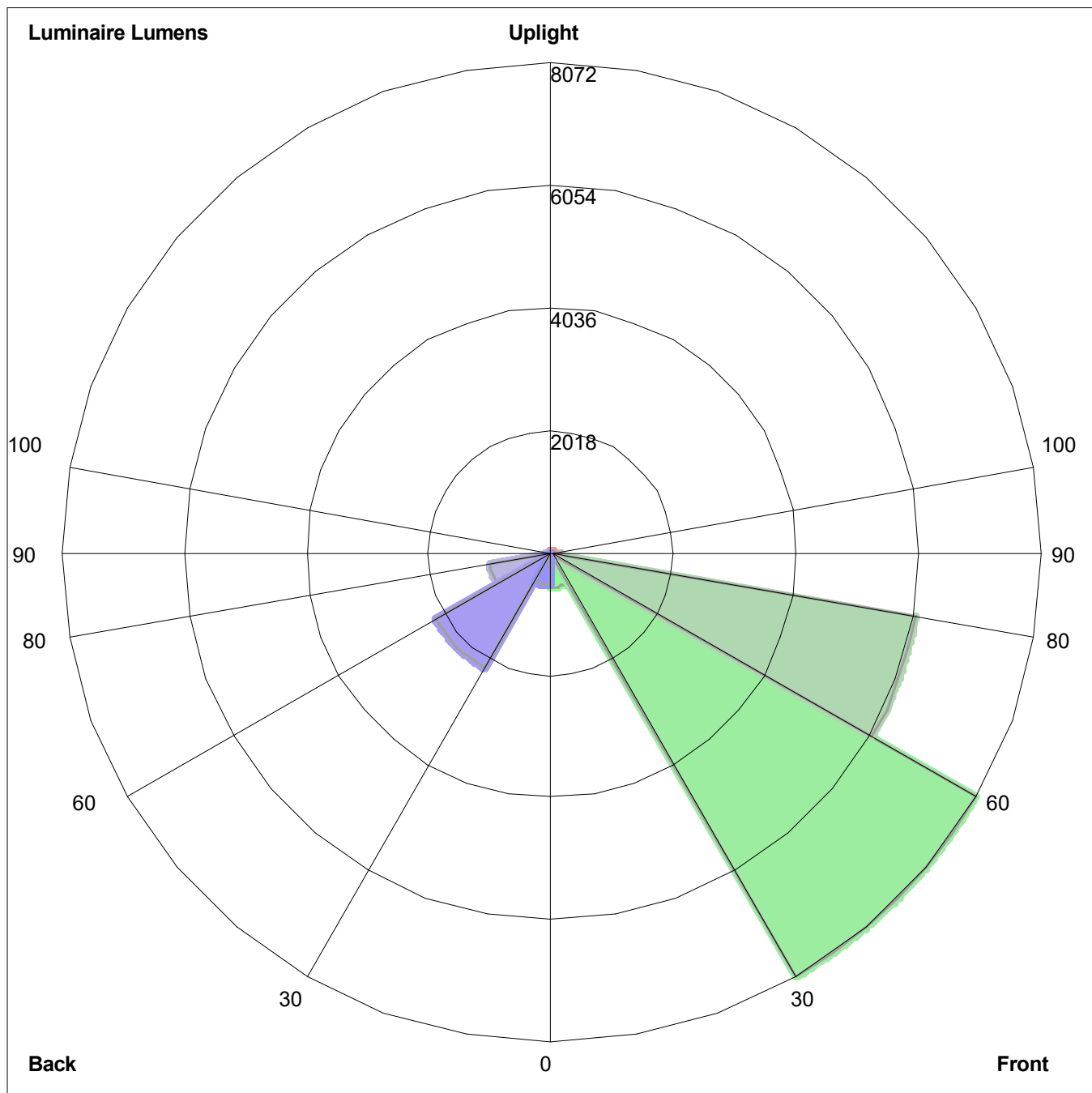


Maximum Candela = 17963 Located At Horizontal Angle = 57.5, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (57.5 - 237.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=563.3, Medium=8072.4, High=6095.4, Very High=147.2
Back: Low=540.1, Medium=2193.2, High=1026.9, Very High=98.5
Uplight: Low=16.2, High=34.5

BUG Rating : B3-U2-G3