



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11674

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/02/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-2-LED-18L-50

[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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18979
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	128
Total Luminaire Watts	148.7
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	15306
Maximum Candela Angle	82.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	15306
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 62.5V
Maximum Candela At 90 Degrees Vertical	22 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	857 (4.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-50.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1085.6	N.A.	5.7
FM - Front-Medium (30-60)	7440.5	N.A.	39.2
FH - Front-High (60-80)	3307.7	N.A.	17.4
FVH - Front-Very High (80-90)	85.3	N.A.	0.4
BL - Back-Low (0-30)	831.0	N.A.	4.4
BM - Back-Medium (30-60)	4468.5	N.A.	23.5
BH - Back-High (60-80)	1625.6	N.A.	8.6
BVH - Back-Very High (80-90)	109.0	N.A.	0.6
UL - Uplight-Low (90-100)	6.6	N.A.	0.0
UH - Uplight-High (100-180)	18.9	N.A.	0.1
Total	18978.7	N.A.	100.0
BUG Rating	B3-U2-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	82.5
0.0	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
2.5	1684	1690	1664	1656	1658	1671	1667	1647	1616	1617
5.0	1619	1640	1633	1650	1625	1622	1615	1563	1570	1553
7.5	1637	1664	1630	1660	1589	1657	1613	1611	1667	1605
10.0	1694	1688	1690	1667	1671	1716	1735	1713	1716	1696
12.5	1882	1857	1825	1804	1783	1840	1887	1896	1845	1853
15.0	1990	1924	1969	2001	1997	2034	2049	2103	2067	1961
17.5	2085	2041	2094	2079	2196	2244	2260	2298	2308	2220
20.0	2332	2293	2324	2284	2284	2414	2514	2507	2603	2558
22.5	2417	2496	2528	2586	2573	2618	2794	2809	2927	2904
25.0	2749	2776	2780	2812	2915	2908	3052	3135	3208	3306
27.5	3326	3242	3272	3262	3224	3288	3371	3519	3598	3732
30.0	3765	3811	3830	3770	3706	3657	3774	3888	4117	4182
32.5	4807	4616	4494	4271	4237	4162	4213	4309	4612	4639
35.0	5381	5419	5134	5076	4794	4782	4744	4894	5038	5251
37.5	6308	6300	5924	5602	5472	5477	5405	5348	5652	5905
40.0	6597	6595	6509	6268	6134	6201	6042	6052	6064	6424
42.5	6651	6676	6600	6564	6721	6696	6739	6744	6346	6741
45.0	6425	6511	6476	6567	6883	7182	7384	7491	6732	7147
47.5	5938	6013	6071	6304	6769	7383	8100	8371	7363	7837
50.0	5143	5233	5370	5685	6372	7337	8755	9415	8209	8690
52.5	4212	4290	4455	4790	5629	6935	9200	10596	9279	9820
55.0	3290	3352	3530	3812	4622	6186	9320	11723	10487	11255
57.5	2474	2520	2615	2888	3572	5140	8906	12595	11644	12808
60.0	1808	1813	1894	2075	2581	3848	7927	12964	12719	14299
62.5	1363	1363	1393	1494	1804	2662	6573	12492	13409	15306
65.0	1071	1069	1091	1147	1321	1764	4977	11092	13422	15230
67.5	836	846	868	924	1050	1252	3385	8621	12102	13214
70.0	657	670	676	746	857	965	2137	5849	9263	8684
72.5	476	496	495	573	675	776	1313	3554	5557	4085
75.0	293	320	287	370	486	611	846	2184	2701	1543
77.5	250	277	216	216	268	437	591	1371	1386	772
80.0	264	274	200	164	171	248	386	857	760	485
82.5	265	263	172	122	119	166	200	466	454	298
85.0	224	219	137	84	79	105	110	147	218	153
87.5	94	96	68	42	36	39	36	39	46	45
90.0	17	16	13	7	2	1	0	1	4	5
92.5	7	7	6	4	1	0	0	0	2	2
95.0	7	6	6	4	1	0	0	0	0	1
97.5	6	6	5	3	1	0	0	0	0	1
100.0	5	5	4	3	1	0	0	0	0	0
102.5	5	5	4	3	1	0	0	0	0	1
105.0	5	5	4	3	2	0	0	0	0	0
107.5	5	5	4	3	2	1	0	0	0	1
110.0	6	6	5	4	2	1	0	0	0	1
112.5	6	6	5	5	3	1	0	0	0	1
115.0	7	7	6	5	3	2	0	0	1	1
117.5	8	8	7	6	4	2	0	0	1	2
120.0	9	9	8	7	5	3	1	1	2	2
122.5	10	9	9	8	5	3	1	1	2	2
125.0	10	10	10	8	6	4	2	1	3	4
127.5	12	12	10	9	7	5	2	2	3	5
130.0	12	12	12	9	8	5	2	2	4	5

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CANDELA TABULATION - (Cont.)

132.5	13	12	12	9	8	5	2	2	4	5
135.0	10	10	9	7	6	4	2	1	3	4
137.5	4	5	4	3	2	1	0	0	0	1
140.0	2	2	1	1	0	0	0	0	0	0
142.5	2	1	1	0	0	0	0	0	0	0
145.0	1	1	1	0	0	0	0	0	0	0
147.5	1	1	1	0	0	0	0	0	0	0
150.0	1	1	0	0	0	0	0	0	0	0
152.5	1	1	0	0	0	0	0	0	0	0
155.0	1	1	0	0	0	0	0	0	0	0
157.5	1	1	0	0	0	0	0	0	0	0
160.0	1	1	0	0	0	0	0	0	0	0
162.5	1	1	0	0	0	0	0	0	0	0
165.0	1	1	0	0	0	0	0	0	0	0
167.5	1	1	0	0	0	0	0	0	0	0
170.0	1	1	0	0	0	0	0	0	0	0
172.5	1	1	0	0	0	0	0	0	0	0
175.0	1	1	1	0	0	0	0	0	0	0
177.5	1	1	1	1	0	0	0	0	0	0
180.0	1	1	1	1	1	1	1	1	1	1

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	1655	1655	1655	1655	1655	1655	1655	1655	1655	1655
2.5	1614	1637	1627	1629	1655	1629	1627	1620	1649	1652
5.0	1558	1573	1583	1503	1544	1527	1544	1530	1533	1492
7.5	1580	1590	1604	1577	1564	1494	1390	1406	1423	1423
10.0	1703	1657	1603	1631	1520	1480	1396	1384	1310	1347
12.5	1795	1802	1754	1727	1604	1461	1396	1421	1378	1415
15.0	1987	1964	1914	1804	1620	1541	1466	1480	1454	1420
17.5	2183	2143	2079	1920	1698	1607	1583	1524	1517	1501
20.0	2508	2420	2334	2053	1803	1693	1609	1617	1640	1658
22.5	2855	2745	2658	2291	1968	1831	1734	1731	1788	1894
25.0	3242	3145	3010	2589	2269	1935	1818	1902	2010	2159
27.5	3714	3634	3436	2985	2540	2062	2001	2151	2378	2517
30.0	4169	4109	3881	3281	2789	2290	2286	2447	2660	2838
32.5	4765	4641	4352	3681	3018	2616	2640	2753	3024	3312
35.0	5310	5246	4959	4109	3225	2905	3021	3121	3349	3629
37.5	5944	5832	5554	4592	3558	3264	3288	3447	3552	3889
40.0	6502	6385	6102	5033	3838	3569	3581	3645	3722	3954
42.5	6860	6811	6526	5277	4048	3805	3716	3743	3677	3786
45.0	7311	7300	6911	5436	4174	3865	3706	3629	3467	3463
47.5	8005	7946	7482	5584	4270	3832	3537	3385	3169	3072
50.0	8870	8829	8108	5702	4318	3743	3322	3038	2774	2652
52.5	9962	9917	8772	5778	4321	3585	3071	2706	2417	2303
55.0	11416	11166	9411	5782	4266	3388	2800	2443	2145	2031
57.5	13037	12371	9932	5665	4127	3154	2545	2236	1914	1806
60.0	14312	12995	9943	5332	3860	2867	2318	2024	1691	1581
62.5	15149	12854	9240	4702	3417	2490	2036	1796	1437	1333
65.0	14443	11448	7685	3752	2737	2030	1705	1523	1178	1061
67.5	11961	8660	5381	2595	2049	1563	1338	1221	908	790
70.0	7497	5061	3172	1704	1464	1166	1046	939	701	634
72.5	3343	2236	1657	1165	1071	898	826	714	553	496
75.0	1265	1003	940	847	803	714	663	540	396	339
77.5	651	591	608	652	635	581	496	369	261	242

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CANDELA TABULATION - (Cont.)

80.0	437	398	390	500	512	436	320	263	225	223
82.5	263	236	229	379	376	261	222	229	284	283
85.0	133	121	125	237	180	165	174	228	326	288
87.5	42	42	41	63	68	81	88	130	179	171
90.0	4	4	6	10	17	22	22	18	7	10
92.5	2	2	4	9	16	20	20	16	6	9
95.0	1	1	4	8	13	17	17	13	5	7
97.5	1	0	3	6	10	13	12	9	4	6
100.0	0	1	2	5	7	8	7	6	3	6
102.5	1	1	2	5	6	6	5	5	3	5
105.0	0	1	2	4	5	5	4	4	4	5
107.5	1	1	2	4	4	4	4	4	4	5
110.0	1	2	3	4	5	4	4	4	4	6
112.5	1	2	3	4	5	4	4	4	4	6
115.0	1	2	3	4	5	5	4	4	5	6
117.5	2	3	3	4	5	5	5	5	5	7
120.0	2	3	4	5	6	6	6	6	6	8
122.5	3	4	5	6	6	6	6	6	7	9
125.0	4	5	6	6	6	7	7	7	8	10
127.5	5	6	6	6	6	6	7	8	9	12
130.0	5	6	6	7	7	7	7	8	10	12
132.5	5	5	6	7	7	7	7	8	10	13
135.0	4	4	5	6	6	6	7	7	9	12
137.5	1	2	2	3	3	4	4	5	7	8
140.0	0	0	0	0	1	2	2	3	4	5
142.5	0	0	0	0	1	2	2	3	4	5
145.0	0	0	0	0	1	2	2	3	4	5
147.5	0	0	0	0	1	2	2	3	4	4
150.0	0	0	0	0	1	2	2	4	4	4
152.5	0	0	0	0	1	2	2	4	4	4
155.0	0	0	0	0	1	2	3	3	4	4
157.5	0	0	0	0	1	2	3	3	4	4
160.0	0	0	0	0	1	2	2	3	4	3
162.5	0	0	0	0	0	1	2	3	3	3
165.0	0	0	0	0	0	1	2	3	3	3
167.5	0	0	0	0	0	1	2	2	3	3
170.0	0	0	0	0	0	1	2	2	3	3
172.5	0	0	0	0	0	1	1	2	2	3
175.0	0	0	0	0	0	1	1	2	2	3
177.5	0	0	0	0	0	1	1	2	2	3
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Horizontal Angles
Angles

	<u>175.0</u>	<u>180.0</u>
0.0	1655	1655
2.5	1658	1649
5.0	1503	1503
7.5	1429	1466
10.0	1355	1382
12.5	1414	1466
15.0	1481	1523
17.5	1586	1589
20.0	1768	1736
22.5	1917	1991
25.0	2230	2269

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CANDELA TABULATION - (Cont.)

27.5	2591	2627
30.0	2939	3019
32.5	3428	3439
35.0	3787	3757
37.5	4071	4063
40.0	4043	4020
42.5	3831	3789
45.0	3488	3433
47.5	3042	3009
50.0	2615	2591
52.5	2273	2249
55.0	1994	1976
57.5	1770	1758
60.0	1528	1514
62.5	1268	1229
65.0	988	951
67.5	761	749
70.0	642	637
72.5	535	534
75.0	377	380
77.5	290	296
80.0	256	260
82.5	313	320
85.0	298	307
87.5	164	148
90.0	8	8
92.5	7	7
95.0	7	7
97.5	7	6
100.0	6	6
102.5	6	6
105.0	6	6
107.5	6	6
110.0	6	6
112.5	6	6
115.0	7	7
117.5	8	7
120.0	8	8
122.5	9	9
125.0	10	10
127.5	12	12
130.0	12	12
132.5	13	13
135.0	12	12
137.5	8	8
140.0	6	6
142.5	5	6
145.0	5	5
147.5	5	5
150.0	5	5
152.5	5	5
155.0	4	4
157.5	4	4
160.0	3	3
162.5	3	3
165.0	3	3

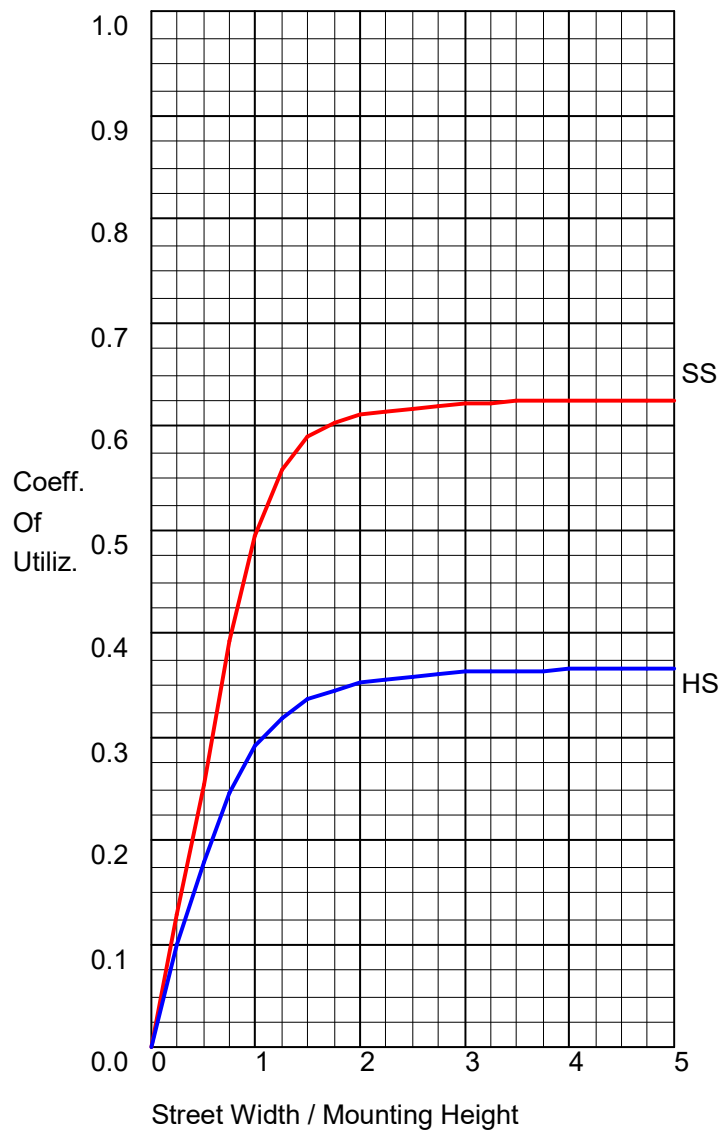
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CANDELA TABULATION - (Cont.)

167.5	2	2
170.0	2	3
172.5	3	3
175.0	3	3
177.5	3	3
180.0	1	1

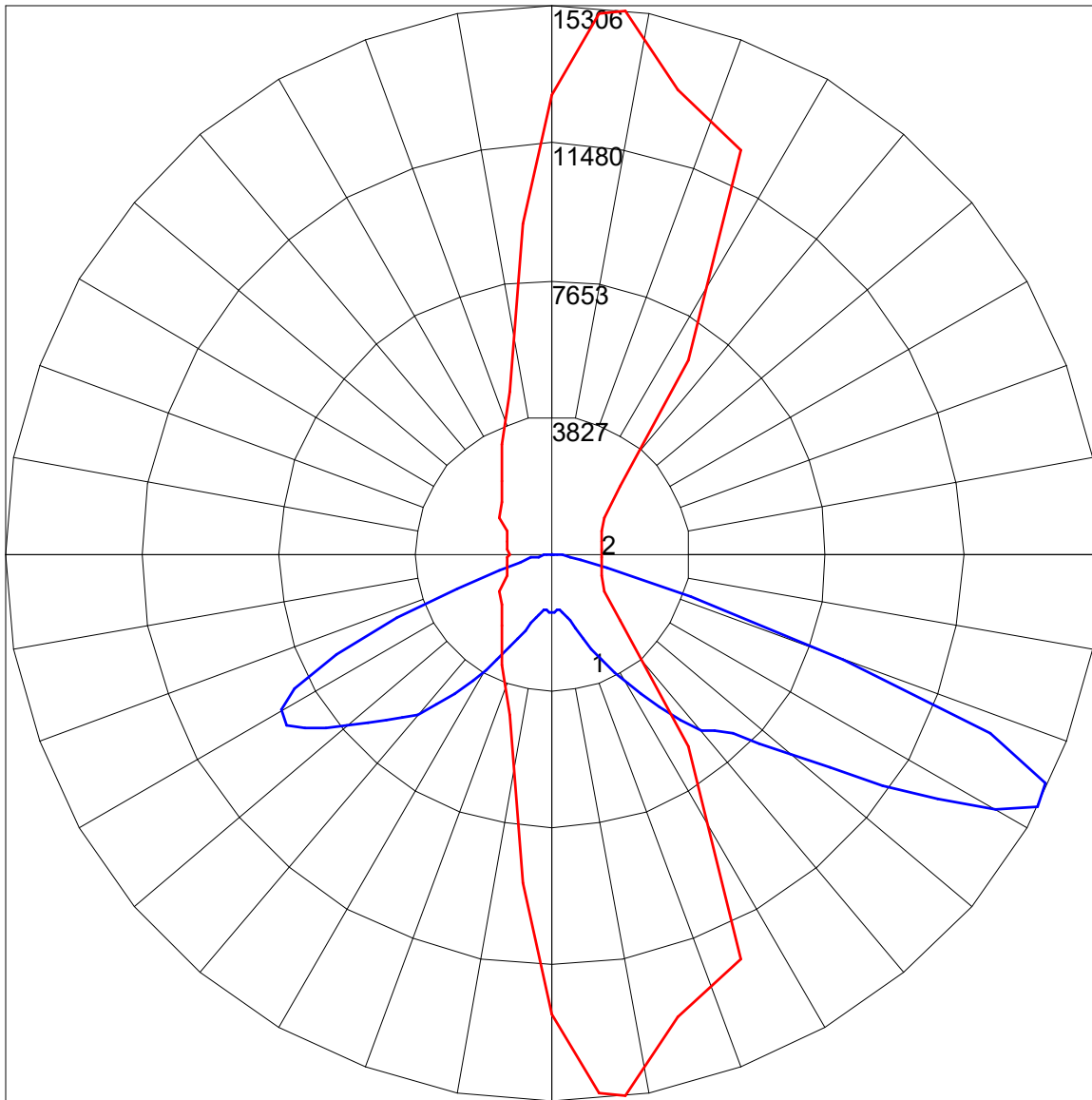
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

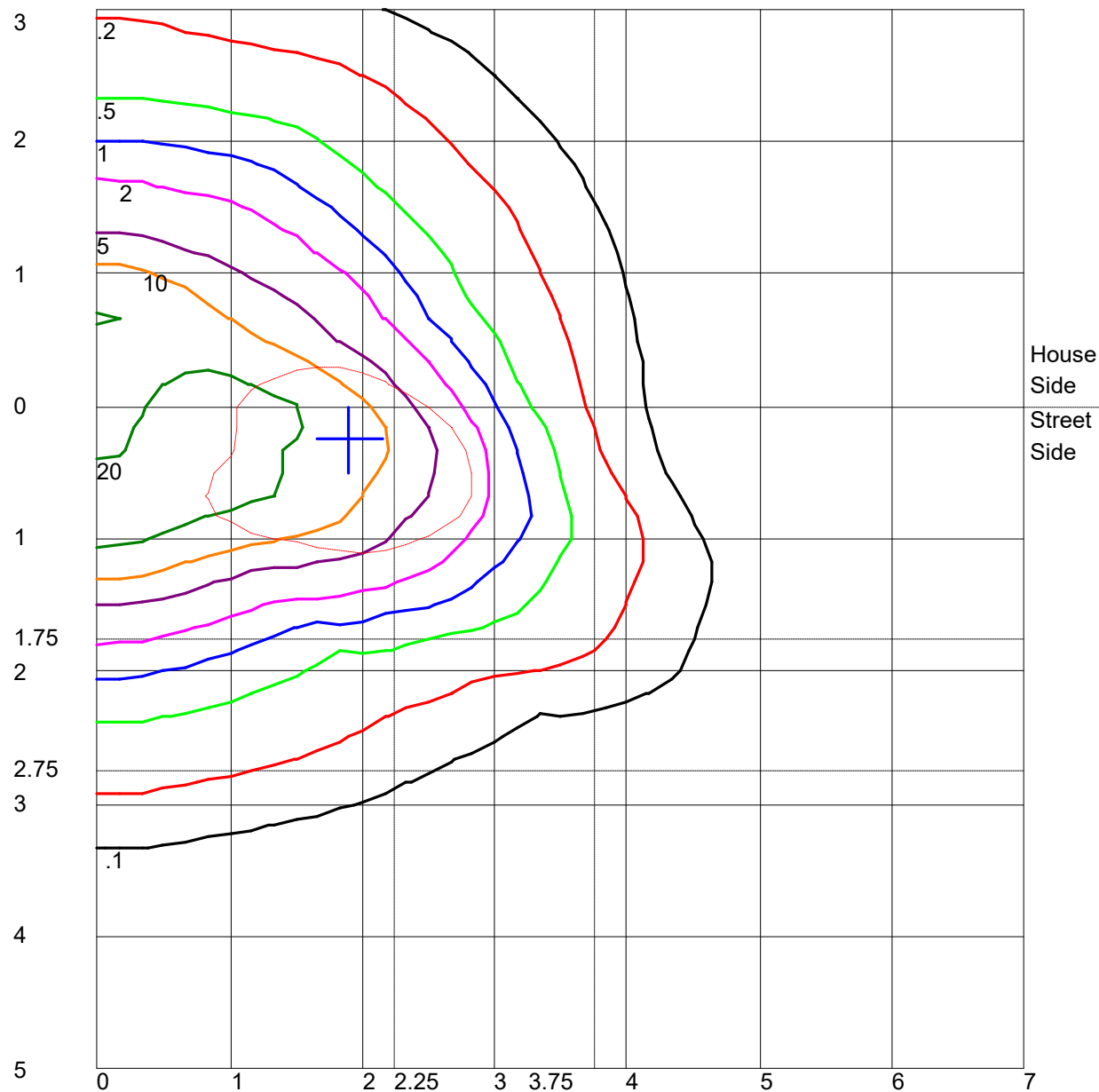
	Lumens	Percent Of Luminaire
Downward Street Side	11919.1	62.8
Downward House Side	7034.0	37.1
Downward Total	18953.1	99.9
Upward Street Side	7.9	0.0
Upward House Side	17.7	0.1
Upward Total	25.6	0.1
Total Flux	18978.7	100.0

POLAR GRAPH

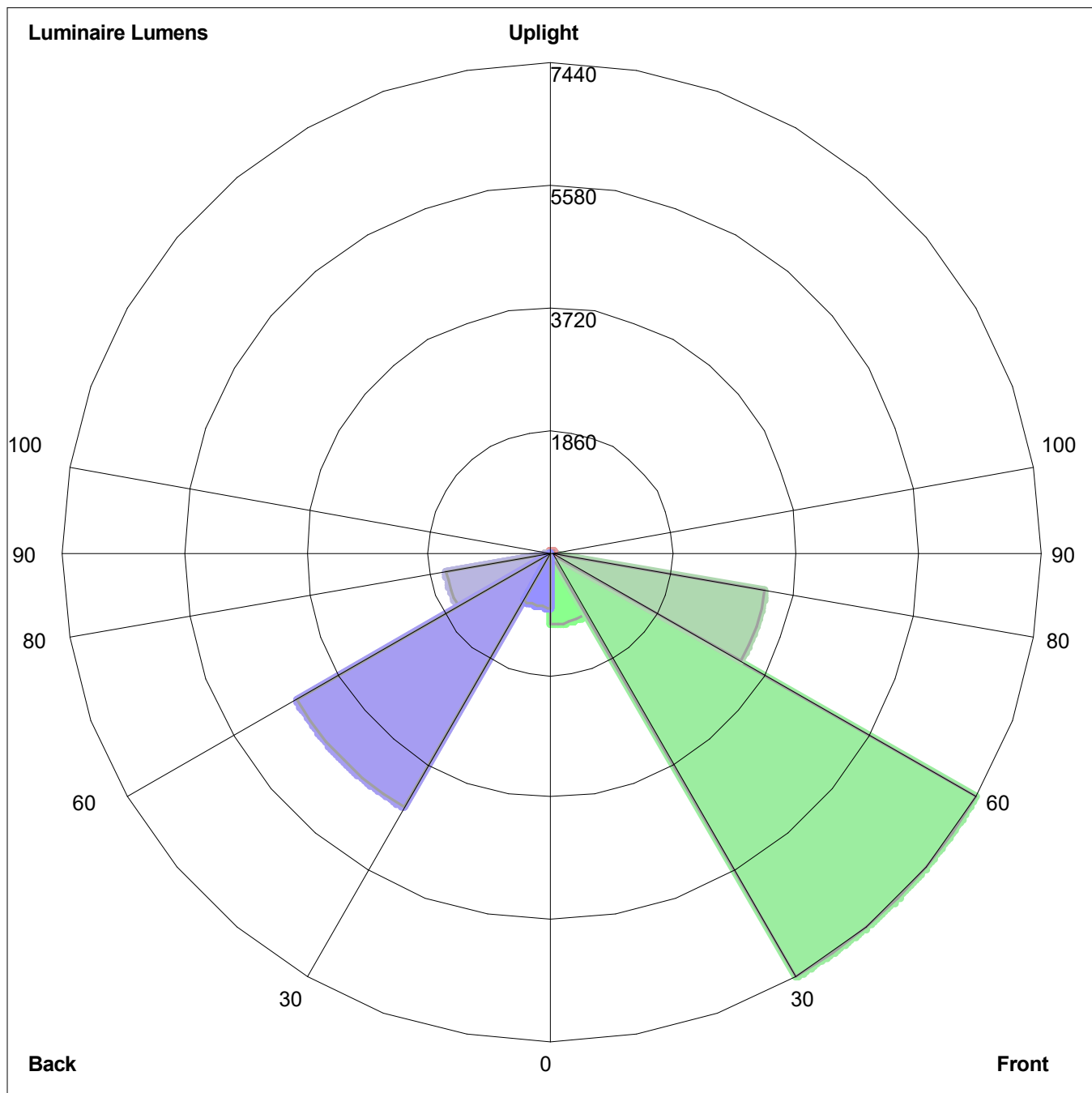


Maximum Candela = 15306 Located At Horizontal Angle = 82.5, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1085.6, Medium=7440.5, High=3307.7, Very High=85.3
Back: Low=831.0, Medium=4468.5, High=1625.6, Very High=109.0
Uplight: Low=6.6, High=18.9

BUG Rating : B3-U2-G3