



IES ROAD REPORT
PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-40.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
[MANUFACT] LSI INDUSTRIES, INC.
[LUMCAT] ENM4-PT-2-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 II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18129
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	148.7
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14620
Maximum Candela Angle	82.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	14620
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 62.5V
Maximum Candela At 90 Degrees Vertical	21 (0.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	819 (4.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : ENM4-PT-2-LED-18L-40.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1037.0	N.A.	5.7
FM - Front-Medium (30-60)	7107.2	N.A.	39.2
FH - Front-High (60-80)	3159.6	N.A.	17.4
FVH - Front-Very High (80-90)	81.4	N.A.	0.4
BL - Back-Low (0-30)	793.7	N.A.	4.4
BM - Back-Medium (30-60)	4268.4	N.A.	23.5
BH - Back-High (60-80)	1552.8	N.A.	8.6
BVH - Back-Very High (80-90)	104.1	N.A.	0.6
UL - Uplight-Low (90-100)	6.4	N.A.	0.0
UH - Uplight-High (100-180)	18.8	N.A.	0.1
Total	18129.4	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>65.0</u>	<u>75.0</u>	<u>82.5</u>
0.0	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581
2.5	1609	1614	1589	1582	1584	1596	1592	1573	1544	1545
5.0	1546	1567	1560	1576	1552	1549	1543	1493	1500	1483
7.5	1564	1589	1557	1586	1518	1583	1541	1539	1592	1533
10.0	1618	1612	1614	1592	1596	1639	1657	1636	1639	1620
12.5	1798	1774	1743	1723	1703	1758	1802	1811	1762	1770
15.0	1901	1838	1881	1911	1908	1943	1957	2009	1974	1873
17.5	1992	1950	2000	1986	2098	2143	2159	2195	2205	2121
20.0	2228	2190	2220	2182	2182	2306	2401	2395	2486	2443
22.5	2309	2384	2415	2470	2458	2501	2669	2683	2796	2774
25.0	2626	2652	2655	2686	2784	2778	2915	2995	3064	3158
27.5	3177	3097	3125	3116	3080	3141	3220	3361	3437	3565
30.0	3596	3640	3658	3601	3540	3493	3605	3714	3933	3995
32.5	4592	4409	4293	4080	4047	3976	4024	4116	4405	4431
35.0	5140	5176	4904	4849	4579	4568	4531	4675	4812	5016
37.5	6025	6018	5659	5351	5227	5232	5163	5108	5399	5640
40.0	6301	6300	6217	5987	5859	5923	5771	5781	5792	6136
42.5	6353	6377	6304	6270	6420	6396	6437	6442	6062	6439
45.0	6137	6219	6186	6273	6575	6860	7053	7155	6430	6827
47.5	5672	5744	5799	6022	6466	7052	7737	7996	7033	7486
50.0	4913	4999	5129	5430	6087	7008	8363	8993	7841	8301
52.5	4023	4098	4255	4575	5377	6624	8788	10121	8863	9380
55.0	3143	3202	3372	3641	4415	5909	8902	11198	10017	10751
57.5	2363	2407	2498	2759	3412	4910	8507	12031	11122	12234
60.0	1727	1732	1809	1982	2465	3676	7572	12383	12149	13658
62.5	1302	1302	1331	1427	1723	2543	6279	11932	12808	14620
65.0	1023	1021	1042	1096	1262	1685	4754	10595	12821	14548
67.5	799	808	829	883	1003	1196	3233	8235	11560	12622
70.0	628	640	646	713	819	922	2041	5587	8848	8295
72.5	455	474	473	547	645	741	1254	3395	5308	3902
75.0	280	306	274	353	464	584	808	2086	2580	1474
77.5	239	265	206	206	256	417	565	1310	1324	737
80.0	252	262	191	157	163	237	369	819	726	463
82.5	253	251	164	117	114	159	191	445	434	285
85.0	214	209	131	80	75	100	105	140	208	146
87.5	90	92	65	40	34	37	34	37	44	43
90.0	16	15	12	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	11	11	10	9	7	5	2	2	3	5
130.0	11	11	11	9	8	5	2	2	4	5

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CANDELA TABULATION - (Cont.)

132.5	12	11	11	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	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581
2.5	1542	1564	1554	1556	1581	1556	1554	1547	1575	1578
5.0	1488	1503	1512	1436	1475	1459	1475	1461	1464	1425
7.5	1509	1519	1532	1506	1494	1427	1328	1343	1359	1359
10.0	1627	1583	1531	1558	1452	1414	1333	1322	1251	1287
12.5	1715	1721	1675	1650	1532	1396	1333	1357	1316	1352
15.0	1898	1876	1828	1723	1547	1472	1400	1414	1389	1356
17.5	2085	2047	1986	1834	1622	1535	1512	1456	1449	1434
20.0	2396	2312	2229	1961	1722	1617	1537	1545	1567	1584
22.5	2727	2622	2539	2188	1880	1749	1656	1653	1708	1809
25.0	3097	3004	2875	2473	2167	1848	1737	1817	1920	2062
27.5	3548	3471	3282	2851	2426	1970	1911	2055	2271	2404
30.0	3982	3925	3707	3134	2664	2187	2184	2337	2541	2711
32.5	4552	4433	4157	3516	2883	2499	2522	2630	2889	3164
35.0	5072	5011	4737	3925	3081	2775	2886	2981	3199	3466
37.5	5678	5571	5305	4386	3399	3118	3141	3293	3393	3715
40.0	6211	6099	5829	4808	3666	3409	3421	3482	3555	3777
42.5	6553	6506	6234	5041	3867	3635	3550	3575	3512	3616
45.0	6983	6973	6601	5192	3987	3692	3540	3466	3312	3308
47.5	7646	7590	7147	5334	4079	3660	3379	3233	3027	2934
50.0	8473	8433	7745	5447	4125	3575	3173	2902	2650	2533
52.5	9516	9473	8379	5519	4127	3424	2933	2585	2309	2200
55.0	10905	10666	8989	5523	4075	3236	2675	2334	2049	1940
57.5	12453	11817	9487	5411	3942	3013	2431	2136	1828	1725
60.0	13671	12413	9498	5093	3687	2739	2214	1933	1615	1510
62.5	14470	12278	8826	4491	3264	2378	1945	1716	1373	1273
65.0	13796	10935	7341	3584	2614	1939	1629	1455	1125	1013
67.5	11425	8272	5140	2479	1957	1493	1278	1166	867	755
70.0	7161	4834	3030	1628	1398	1114	999	897	670	606
72.5	3193	2136	1583	1113	1023	858	789	682	528	474
75.0	1208	958	898	809	767	682	633	516	378	324
77.5	622	565	581	623	607	555	474	352	249	231

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CANDELA TABULATION - (Cont.)

80.0	417	380	373	478	489	416	306	251	215	213
82.5	251	225	219	362	359	249	212	219	271	270
85.0	127	116	119	226	172	158	166	218	311	275
87.5	40	40	39	60	65	77	84	124	171	163
90.0	4	4	6	10	16	21	21	17	7	10
92.5	2	2	4	9	15	19	19	15	6	9
95.0	1	1	4	8	12	16	16	12	5	7
97.5	1	0	3	6	10	12	11	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	11
130.0	5	6	6	7	7	7	7	8	10	11
132.5	5	5	6	7	7	7	7	8	10	12
135.0	4	4	5	6	6	6	7	7	9	11
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	1581	1581
2.5	1584	1575
5.0	1436	1436
7.5	1365	1400
10.0	1294	1320
12.5	1351	1400
15.0	1415	1455
17.5	1515	1518
20.0	1689	1658
22.5	1831	1902
25.0	2130	2167

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CANDELA TABULATION - (Cont.)

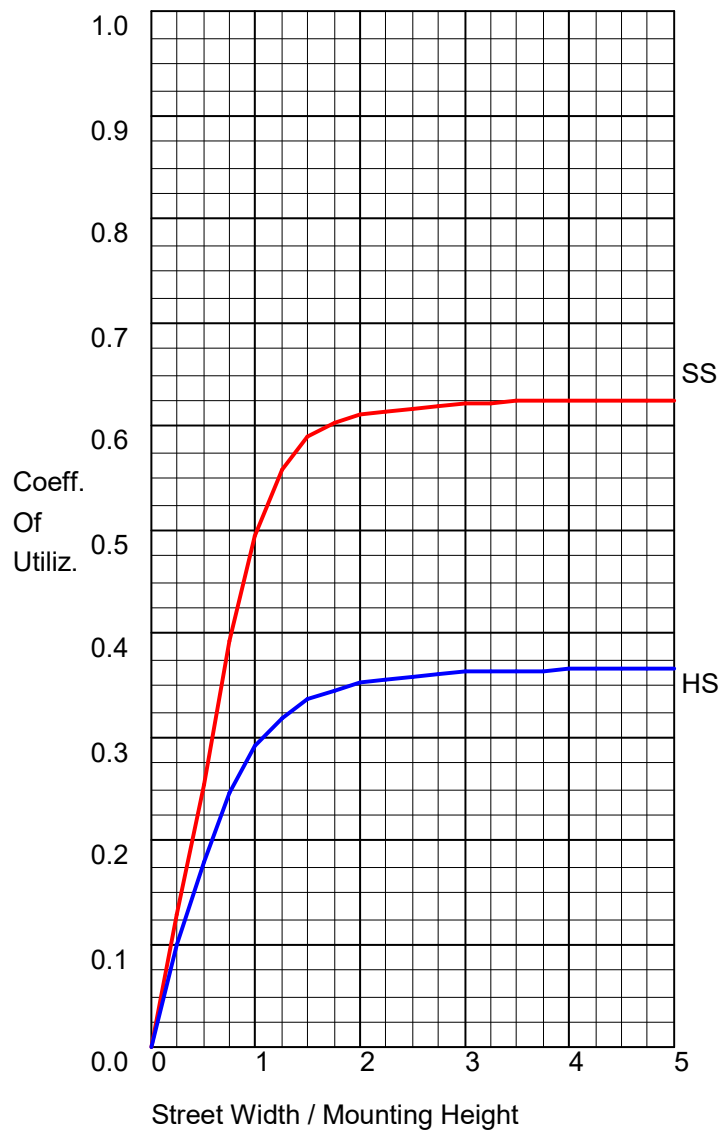
27.5	2475	2509
30.0	2807	2884
32.5	3274	3285
35.0	3617	3589
37.5	3889	3881
40.0	3862	3840
42.5	3659	3619
45.0	3332	3279
47.5	2906	2874
50.0	2498	2475
52.5	2171	2148
55.0	1905	1887
57.5	1691	1679
60.0	1460	1446
62.5	1211	1174
65.0	944	908
67.5	727	715
70.0	613	608
72.5	511	510
75.0	360	363
77.5	277	283
80.0	245	248
82.5	299	306
85.0	285	293
87.5	157	141
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	11	11
130.0	11	11
132.5	12	12
135.0	11	11
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

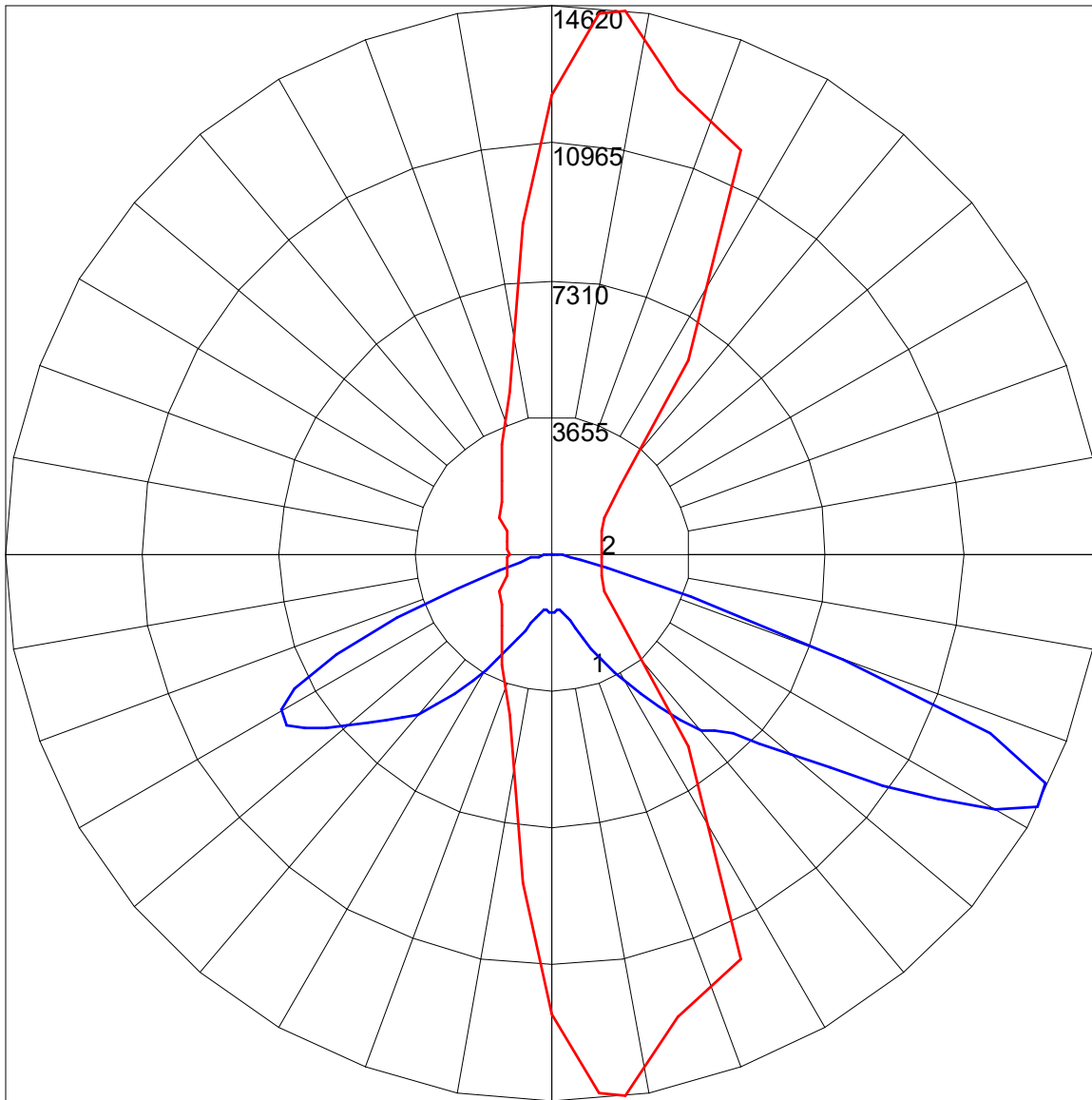
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	11385.1	62.8
Downward House Side	6718.9	37.1
Downward Total	18104.0	99.9
Upward Street Side	7.8	0.0
Upward House Side	17.4	0.1
Upward Total	25.2	0.1
Total Flux	18129.2	100.0

POLAR GRAPH

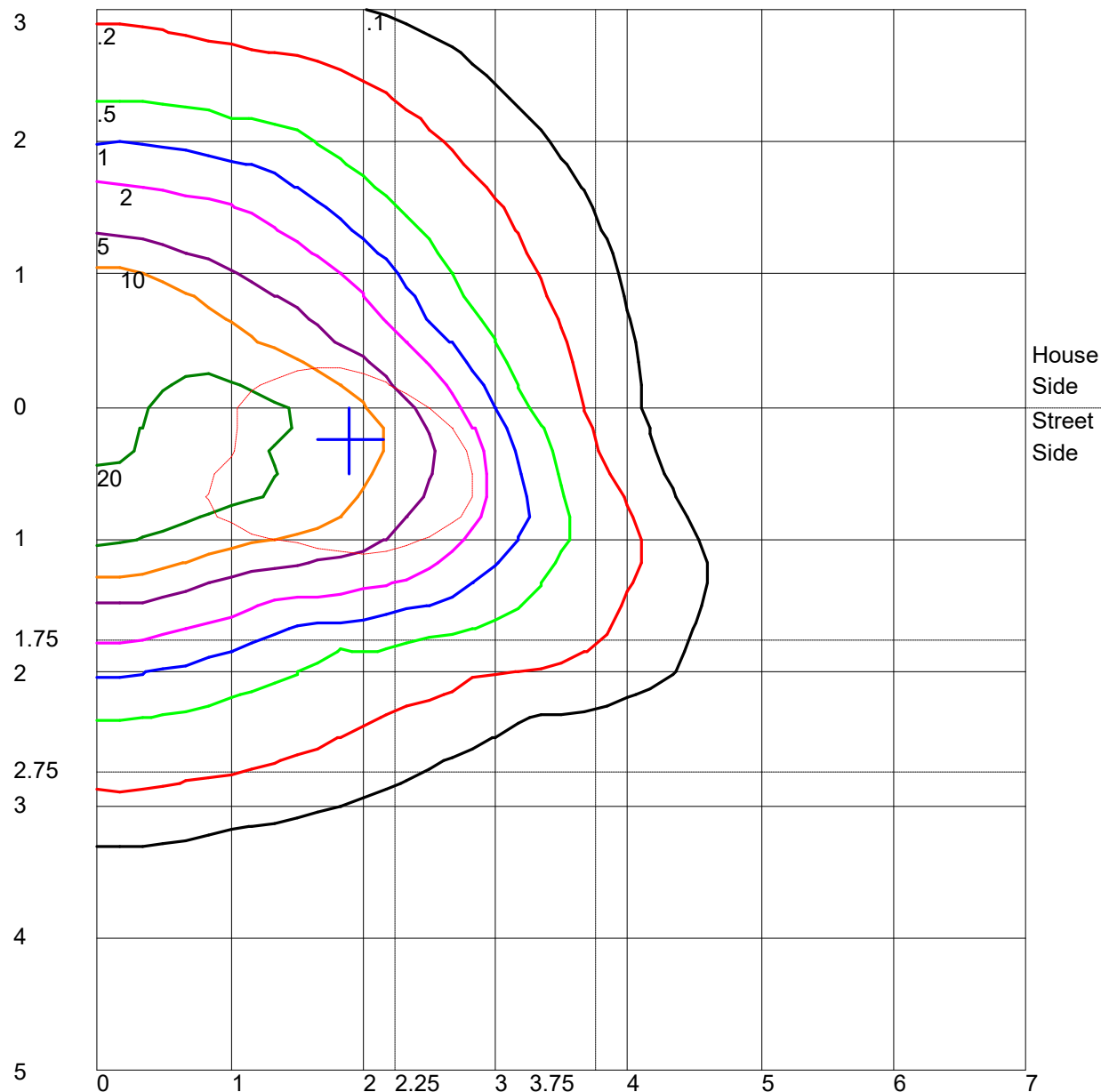


Maximum Candela = 14620 Located At Horizontal Angle = 82.5, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

IES ROAD REPORT

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ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



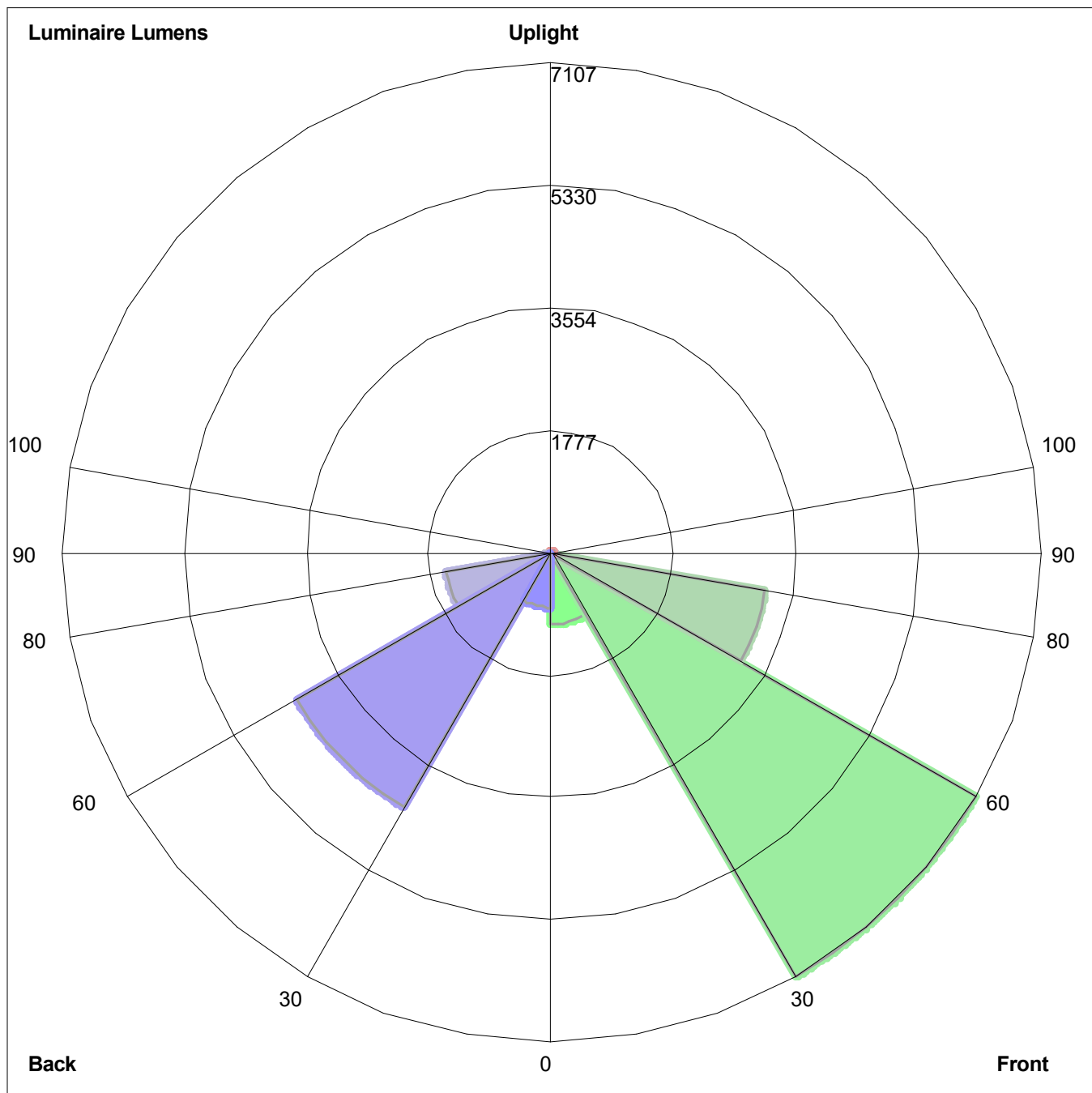
Distance In Units Of Mounting Height

Values Based On 10 Foot Mounting Height

1/2 Maximum Candela Trace Shown As Dashed Curve

(+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low= 1037.0, Medium=7107.2, High=3159.6, Very High=81.4
Back: Low=793.7, Medium=4268.4, High=1552.8, Very High=104.1
Uplight: Low=6.4, High=18.8

BUG Rating : B3-U2-G3