



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-SAX-3-LED-18L-40-IL.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] LED-11790  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/10/2020  
[TEST DATE] 05/01/20  
[MANUFACT] LSI INDUSTRIES, INC.  
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER] TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[LUMCAT] ENM4-SAX-3-LED-18L-40-IL  
[FACTORED] SCALED FROM ORIGINAL TEST DATA

### CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	16962
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	149
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	18243
Maximum Candela Angle	52.5H 62.5V
Maximum Candela (<90 Degrees Vertical)	18243
Maximum Candela Angle (<90 Degrees Vertical)	52.5H 62.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	849 (5.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	869.7	N.A.	5.1
FM - Front-Medium (30-60)	8773.1	N.A.	51.7
FH - Front-High (60-80)	5482.5	N.A.	32.3
FVH - Front-Very High (80-90)	109.3	N.A.	0.6
BL - Back-Low (0-30)	484.4	N.A.	2.9
BM - Back-Medium (30-60)	1010.7	N.A.	6.0
BH - Back-High (60-80)	220.8	N.A.	1.3
BVH - Back-Very High (80-90)	11.6	N.A.	0.1
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	16962.1	N.A.	100.0
BUG Rating	B2-U0-G3		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0.0</b></u>	<u><b>5.0</b></u>	<u><b>15.0</b></u>	<u><b>25.0</b></u>	<u><b>35.0</b></u>	<u><b>45.0</b></u>	<u><b>52.5</b></u>	<u><b>55.0</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>
<b>0.0</b>	1553	1553	1553	1553	1553	1553	1553	1553	1553	1553
<b>2.5</b>	1533	1535	1536	1539	1534	1537	1535	1541	1546	1547
<b>5.0</b>	1511	1512	1516	1522	1525	1529	1529	1536	1541	1546
<b>7.5</b>	1469	1473	1482	1490	1506	1520	1523	1532	1542	1549
<b>10.0</b>	1438	1444	1455	1469	1486	1504	1519	1529	1550	1556
<b>12.5</b>	1433	1438	1448	1469	1488	1514	1531	1540	1570	1577
<b>15.0</b>	1463	1465	1479	1510	1541	1565	1581	1589	1607	1610
<b>17.5</b>	1548	1558	1571	1604	1646	1661	1679	1683	1684	1674
<b>20.0</b>	1715	1728	1738	1767	1806	1831	1842	1843	1826	1791
<b>22.5</b>	1978	1991	2014	2020	2058	2103	2098	2095	2062	2003
<b>25.0</b>	2309	2340	2355	2382	2429	2484	2473	2464	2416	2297
<b>27.5</b>	2737	2765	2797	2830	2899	2984	2988	2944	2871	2659
<b>30.0</b>	3184	3212	3270	3324	3451	3542	3544	3522	3372	3061
<b>32.5</b>	3633	3626	3713	3824	4017	4131	4128	4100	3880	3481
<b>35.0</b>	4088	4094	4178	4357	4575	4727	4724	4673	4412	3884
<b>37.5</b>	4621	4644	4736	4936	5139	5318	5316	5240	4898	4234
<b>40.0</b>	5288	5321	5402	5583	5738	5925	5895	5786	5319	4521
<b>42.5</b>	6091	6126	6216	6374	6509	6545	6476	6330	5683	4800
<b>45.0</b>	7132	7173	7242	7375	7395	7239	7054	6856	6041	5086
<b>47.5</b>	8431	8547	8743	8717	8591	8229	7733	7469	6454	5499
<b>50.0</b>	9646	9820	10059	10202	10011	9387	8647	8310	7056	6353
<b>52.5</b>	10583	10681	11399	12064	11917	10862	9941	9495	8239	7582
<b>55.0</b>	11130	11296	12098	13300	13572	12736	11890	11451	10033	8997
<b>57.5</b>	10159	10300	11712	13626	14835	14565	14298	14039	12567	9812
<b>60.0</b>	7699	7930	9556	12335	15082	16227	16851	16768	13945	10247
<b>62.5</b>	4427	4670	6219	9188	13567	16829	18243	18172	14646	10440
<b>65.0</b>	1820	1980	2896	5443	10168	15499	17959	18173	14768	9686
<b>67.5</b>	994	1041	1389	2540	6598	11975	15957	16659	13434	7569
<b>70.0</b>	612	644	803	1433	3344	7643	12094	13279	10080	5194
<b>72.5</b>	425	442	556	965	1928	3943	7028	8080	6367	2270
<b>75.0</b>	288	300	394	759	1394	1975	3128	3878	2737	889
<b>77.5</b>	204	211	286	602	1124	1175	1276	1495	1327	477
<b>80.0</b>	155	164	221	467	849	739	614	624	659	296
<b>82.5</b>	119	129	180	376	560	444	322	317	335	219
<b>85.0</b>	90	94	141	290	360	229	173	174	178	148
<b>87.5</b>	58	63	98	183	136	80	67	64	64	67
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>85.0</b></u>	<u><b>90.0</b></u>	<u><b>95.0</b></u>	<u><b>105.0</b></u>	<u><b>115.0</b></u>	<u><b>125.0</b></u>	<u><b>135.0</b></u>	<u><b>145.0</b></u>	<u><b>155.0</b></u>	<u><b>165.0</b></u>
<b>0.0</b>	1553	1553	1553	1553	1553	1553	1553	1553	1553	1553
<b>2.5</b>	1554	1563	1563	1563	1573	1579	1575	1576	1571	1571
<b>5.0</b>	1563	1567	1576	1576	1596	1611	1614	1615	1620	1620
<b>7.5</b>	1569	1573	1586	1595	1618	1641	1642	1634	1630	1620
<b>10.0</b>	1573	1583	1598	1613	1642	1655	1625	1558	1483	1418
<b>12.5</b>	1580	1586	1609	1629	1649	1616	1481	1314	1179	1069
<b>15.0</b>	1600	1604	1620	1640	1632	1469	1222	1031	913	843
<b>17.5</b>	1646	1630	1642	1650	1558	1256	985	864	783	733
<b>20.0</b>	1735	1699	1685	1664	1420	1056	857	772	717	668
<b>22.5</b>	1889	1822	1762	1662	1255	943	784	720	692	627
<b>25.0</b>	2095	1965	1864	1619	1112	876	732	690	708	652
<b>27.5</b>	2327	2131	1973	1536	1022	825	696	680	779	757

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**CANDELA TABULATION - (Cont.)**

30.0	2579	2313	2079	1437	952	786	664	696	906	912
32.5	2840	2488	2174	1350	874	759	646	722	1049	1049
35.0	3086	2642	2247	1283	812	737	621	728	1209	1179
37.5	3284	2762	2301	1210	754	707	595	712	1368	1382
40.0	3448	2863	2341	1139	703	661	564	676	1523	1420
42.5	3643	2979	2377	1095	662	618	528	614	1585	1036
45.0	3906	3195	2488	1109	625	574	480	546	1294	717
47.5	4476	3584	2690	1157	591	521	421	462	716	528
50.0	5242	4106	2915	1202	537	428	339	384	395	414
52.5	6134	4636	3133	1237	449	298	234	269	259	344
55.0	6726	4918	3182	1205	331	198	167	176	180	284
57.5	7076	4986	3059	1077	242	158	132	125	136	232
60.0	7315	4847	2674	902	207	140	109	97	107	193
62.5	7066	4221	1949	687	188	126	94	77	88	166
65.0	5969	3381	1363	488	166	109	80	63	72	140
67.5	4347	2429	860	312	133	85	61	50	53	118
70.0	2277	1249	464	193	96	62	42	36	37	94
72.5	848	539	268	136	68	43	28	24	23	68
75.0	415	313	205	114	50	29	18	15	12	45
77.5	237	206	167	101	38	21	11	11	7	29
80.0	178	157	141	87	28	13	9	8	6	18
82.5	129	116	114	67	18	11	9	6	5	11
85.0	82	77	82	41	11	9	9	6	4	6
87.5	38	32	40	17	8	8	7	6	4	4
90.0	0	0	0	0	0	0	0	0	0	0

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

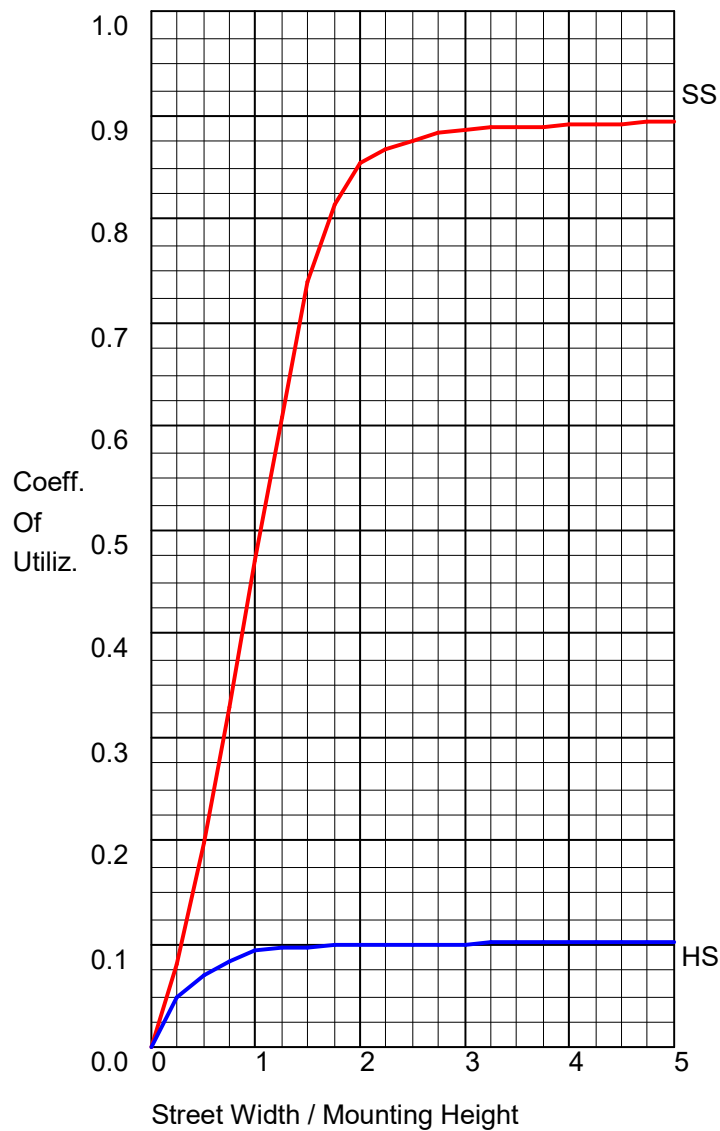
	<u>175.0</u>	<u>180.0</u>
0.0	1553	1553
2.5	1564	1573
5.0	1607	1615
7.5	1599	1593
10.0	1371	1346
12.5	1017	1005
15.0	810	803
17.5	705	702
20.0	636	633
22.5	587	582
25.0	587	578
27.5	639	619
30.0	730	690
32.5	774	726
35.0	844	792
37.5	844	756
40.0	649	568
42.5	461	408
45.0	353	320
47.5	293	259
50.0	261	217
52.5	243	187
55.0	232	174
57.5	234	179
60.0	243	197
62.5	251	217
65.0	251	233

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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	239	228
<b>70.0</b>	208	202
<b>72.5</b>	166	164
<b>75.0</b>	119	122
<b>77.5</b>	82	91
<b>80.0</b>	58	64
<b>82.5</b>	40	43
<b>85.0</b>	24	27
<b>87.5</b>	13	14
<b>90.0</b>	0	0

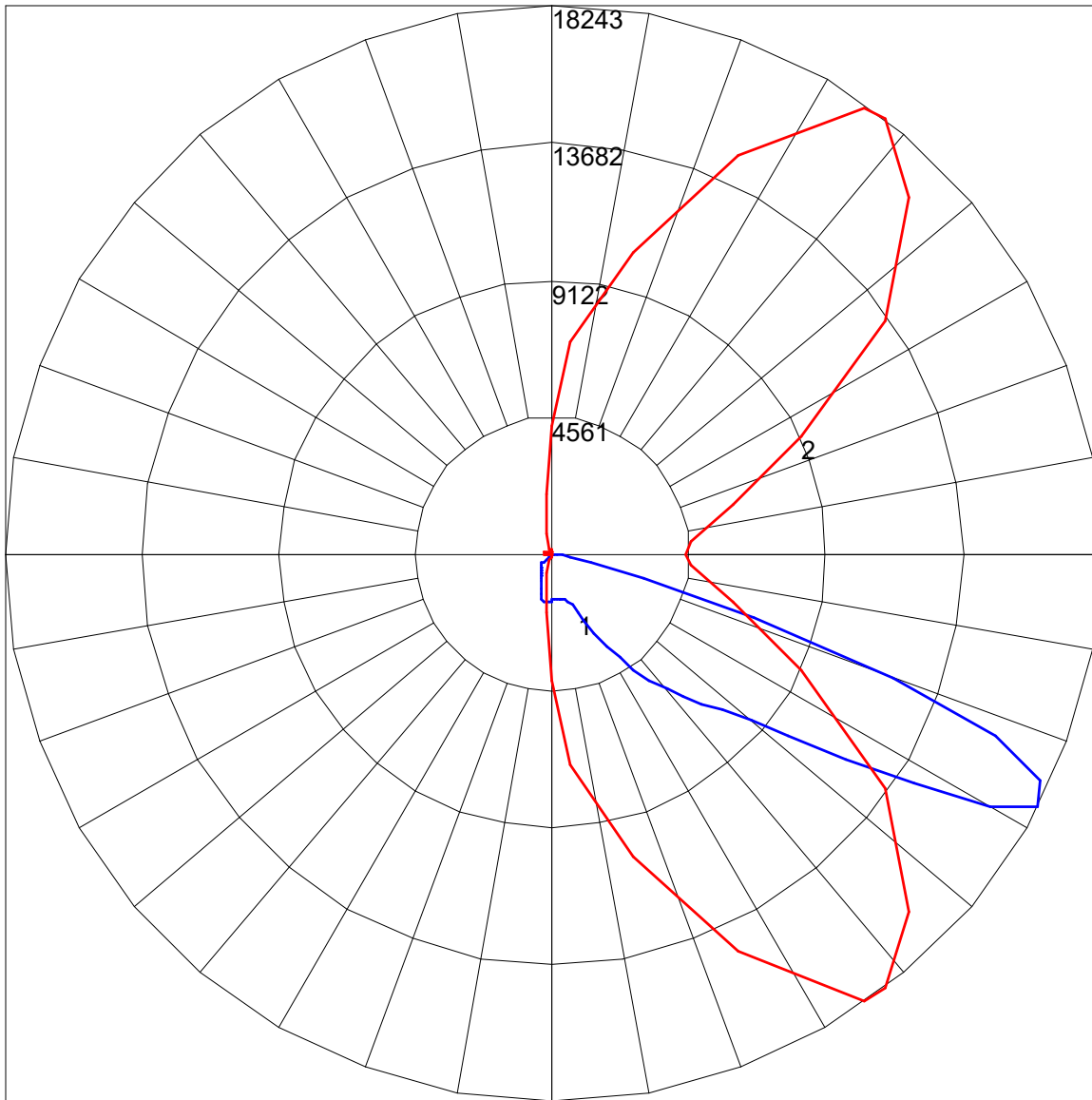
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

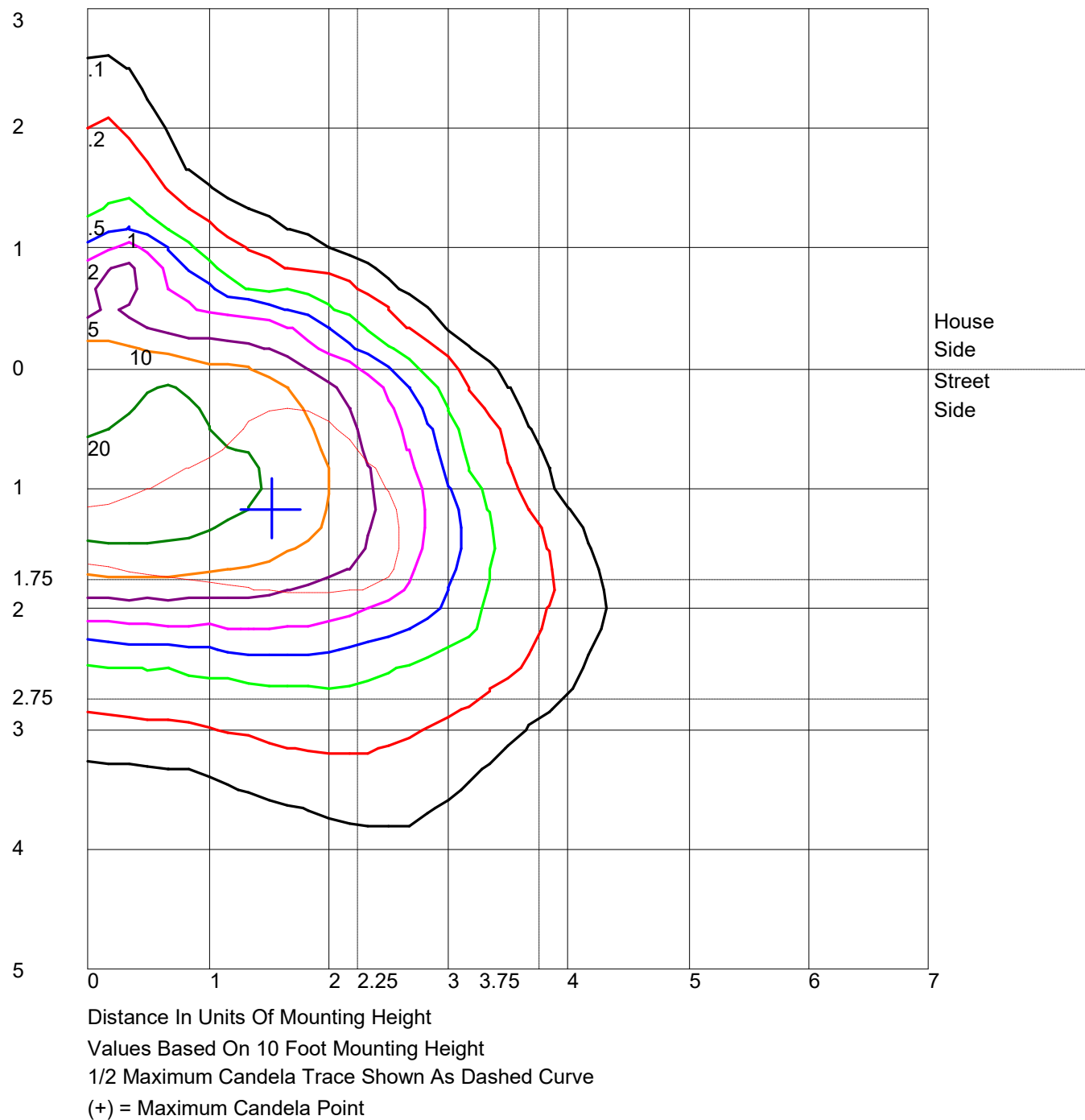
	Lumens	Percent Of Luminaire
Downward Street Side	15234.6	89.8
Downward House Side	1727.5	10.2
Downward Total	16962.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	16962.1	100.0

POLAR GRAPH



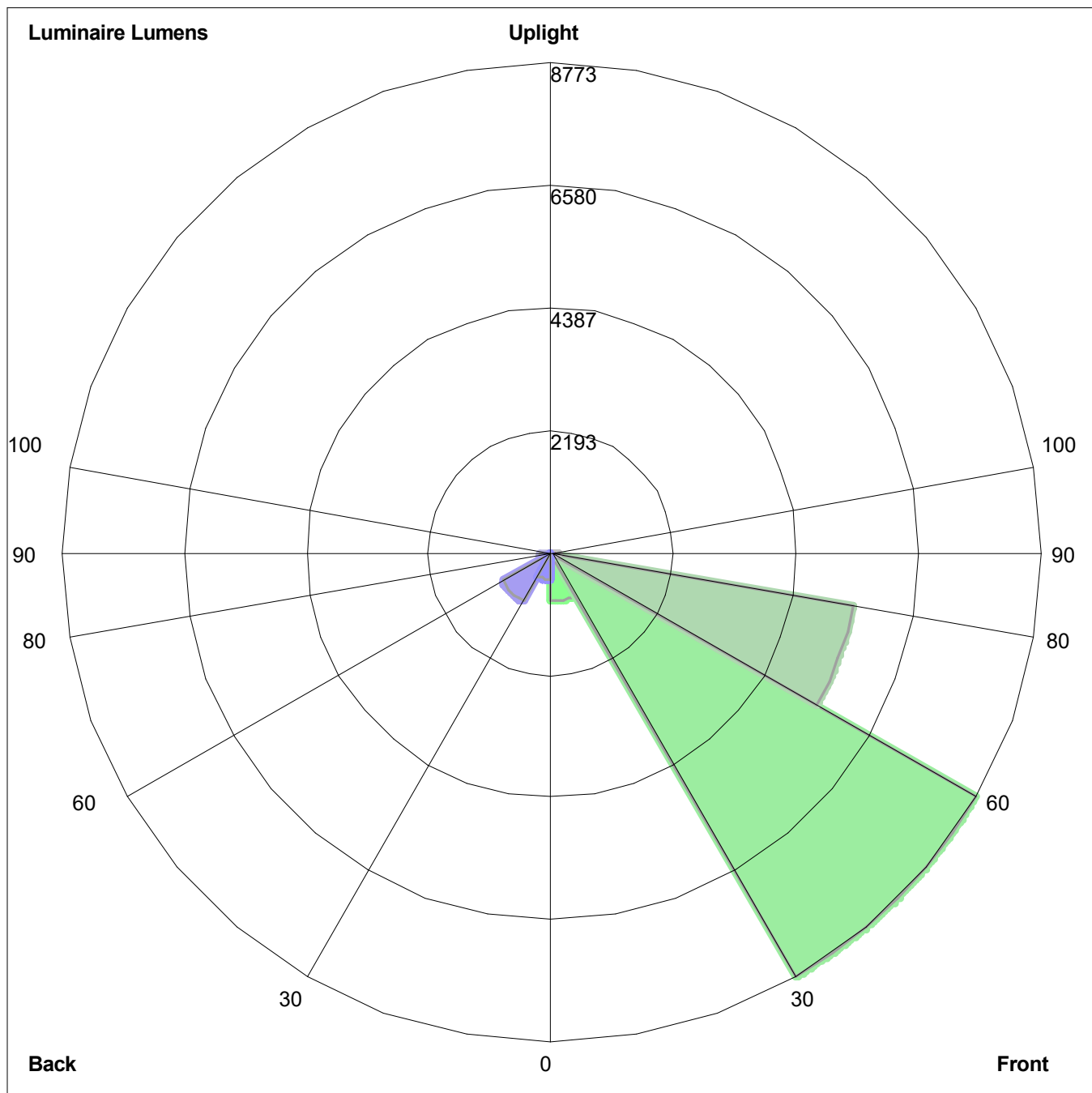
Maximum Candela = 18243 Located At Horizontal Angle = 52.5, Vertical Angle = 62.5  
# 1 - Vertical Plane Through Horizontal Angles (52.5 - 232.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=869.7, Medium=8773.1, High=5482.5, Very High=109.3  
Back: Low=484.4, Medium=1010.7, High=220.8, Very High=11.6  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G3