



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ENM4-SAX-2-LED-10L-30-IL.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] LED-11792  
[TESTLAB] LSI INDUSTRIES, INC.  
[ISSUE DATE] 06/10/2020  
[TEST DATE] 05/01/20  
[MANUFACT] LSI INDUSTRIES, INC.  
[LUMCAT] ENM4-SAX-2-LED-10L-30-IL  
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER] TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Outdoor  
[FACTORED] SCALED FROM ORIGINAL TEST DATA

**CHARACTERISTICS**

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7746
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	78
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	7057
Maximum Candela Angle	75H 65V
Maximum Candela (<90 Degrees Vertical)	7057
Maximum Candela Angle (<90 Degrees Vertical)	75H 65V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	431 (5.6% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	754.4	N.A.	9.7
FM - Front-Medium (30-60)	3676.3	N.A.	47.5
FH - Front-High (60-80)	1822.9	N.A.	23.5
FVH - Front-Very High (80-90)	31.5	N.A.	0.4
BL - Back-Low (0-30)	496.5	N.A.	6.4
BM - Back-Medium (30-60)	740.0	N.A.	9.6
BH - Back-High (60-80)	222.3	N.A.	2.9
BVH - Back-Very High (80-90)	2.5	N.A.	0.0
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	7746.4	N.A.	100.0
BUG Rating	B1-U0-G2		

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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>55.0</b></u>	<u><b>65.0</b></u>	<u><b>75.0</b></u>	<u><b>77.5</b></u>
<b>0.0</b>	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
<b>2.5</b>	1453	1452	1458	1456	1452	1450	1446	1436	1437	1422
<b>5.0</b>	1495	1482	1485	1488	1486	1480	1479	1467	1458	1443
<b>7.5</b>	1516	1512	1518	1518	1521	1516	1515	1501	1496	1477
<b>10.0</b>	1539	1536	1546	1550	1553	1558	1557	1548	1532	1521
<b>12.5</b>	1575	1570	1576	1581	1597	1602	1604	1600	1586	1575
<b>15.0</b>	1597	1593	1606	1620	1640	1652	1659	1656	1644	1640
<b>17.5</b>	1619	1626	1643	1657	1683	1713	1729	1727	1723	1718
<b>20.0</b>	1660	1672	1683	1710	1736	1774	1793	1815	1813	1795
<b>22.5</b>	1726	1732	1753	1776	1810	1838	1880	1911	1904	1894
<b>25.0</b>	1810	1816	1834	1855	1883	1921	1972	2009	2017	2008
<b>27.5</b>	1900	1904	1920	1957	1993	2028	2061	2123	2136	2127
<b>30.0</b>	2020	2027	2049	2071	2118	2153	2194	2244	2260	2261
<b>32.5</b>	2161	2167	2184	2224	2260	2305	2329	2371	2402	2411
<b>35.0</b>	2308	2307	2340	2387	2444	2477	2487	2509	2544	2557
<b>37.5</b>	2464	2466	2494	2554	2626	2673	2662	2673	2707	2733
<b>40.0</b>	2621	2626	2660	2737	2833	2892	2886	2868	2899	2929
<b>42.5</b>	2749	2768	2815	2921	3053	3138	3122	3082	3098	3186
<b>45.0</b>	2843	2860	2937	3059	3235	3387	3396	3327	3357	3415
<b>47.5</b>	2878	2869	2966	3145	3375	3632	3735	3633	3647	3702
<b>50.0</b>	2777	2765	2878	3106	3471	3847	4077	4040	4029	4076
<b>52.5</b>	2534	2541	2658	2909	3381	4005	4469	4502	4493	4546
<b>55.0</b>	2162	2163	2299	2581	3120	4000	4838	4990	5006	5074
<b>57.5</b>	1678	1689	1838	2104	2661	3779	5094	5535	5630	5700
<b>60.0</b>	1135	1146	1283	1548	2088	3301	5146	6116	6290	6344
<b>62.5</b>	623	645	748	955	1406	2616	4934	6431	6791	6863
<b>65.0</b>	335	337	397	526	835	1883	4347	6265	7057	6995
<b>67.5</b>	205	210	229	314	496	1186	3346	5490	6621	6473
<b>70.0</b>	133	133	144	194	319	677	2254	4182	5072	4813
<b>72.5</b>	89	91	96	125	217	432	1320	2657	2999	2708
<b>75.0</b>	54	55	58	75	140	316	645	1585	1480	1220
<b>77.5</b>	29	30	31	39	80	219	339	870	753	598
<b>80.0</b>	25	26	25	26	37	123	199	368	431	350
<b>82.5</b>	27	27	25	26	29	49	93	132	251	218
<b>85.0</b>	21	21	20	21	26	38	44	61	112	104
<b>87.5</b>	14	13	12	13	15	23	27	39	39	38
<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>	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
<b>2.5</b>	1438	1431	1432	1424	1417	1416	1411	1408	1409	1412
<b>5.0</b>	1457	1446	1437	1421	1414	1403	1395	1388	1376	1374
<b>7.5</b>	1480	1465	1465	1433	1417	1390	1375	1363	1353	1346
<b>10.0</b>	1519	1508	1486	1445	1421	1389	1366	1342	1324	1313
<b>12.5</b>	1569	1547	1529	1469	1429	1388	1343	1311	1297	1282
<b>15.0</b>	1626	1602	1571	1502	1444	1373	1323	1295	1273	1265
<b>17.5</b>	1695	1659	1634	1529	1447	1368	1306	1269	1236	1198
<b>20.0</b>	1780	1740	1696	1574	1456	1357	1285	1210	1069	944
<b>22.5</b>	1871	1829	1774	1621	1462	1350	1233	995	788	632
<b>25.0</b>	1973	1914	1845	1665	1476	1320	1036	732	485	339
<b>27.5</b>	2091	2030	1947	1710	1479	1229	794	443	290	235

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**CANDELA TABULATION - (Cont.)**

30.0	2222	2147	2040	1745	1486	1038	536	283	223	202
32.5	2363	2279	2152	1789	1443	815	334	226	197	183
35.0	2513	2417	2255	1826	1324	566	251	200	181	168
37.5	2685	2567	2388	1868	1144	361	214	181	165	150
40.0	2865	2741	2508	1894	916	263	192	165	146	128
42.5	3088	2929	2660	1883	636	224	173	147	122	100
45.0	3320	3126	2815	1821	393	199	154	123	92	72
47.5	3596	3372	2967	1668	282	179	134	96	66	50
50.0	3949	3649	3156	1427	233	155	110	69	46	35
52.5	4356	3994	3350	1101	200	132	82	47	31	23
55.0	4843	4353	3518	728	177	107	59	31	19	15
57.5	5371	4717	3634	470	162	84	39	19	12	8
60.0	5857	4923	3639	358	152	64	25	11	5	3
62.5	6185	4951	3394	286	140	48	15	5	3	2
65.0	6117	4656	2845	229	119	35	7	3	2	1
67.5	5231	3733	2011	175	83	21	3	2	1	1
70.0	3508	2334	1107	125	53	12	2	1	1	1
72.5	1622	1136	517	90	30	5	1	1	1	0
75.0	623	499	244	57	16	3	1	1	0	0
77.5	322	287	138	33	7	2	1	0	0	0
80.0	206	179	86	14	3	1	0	0	0	0
82.5	135	96	48	5	2	0	0	0	1	0
85.0	76	48	20	2	0	0	0	1	1	0
87.5	27	13	1	0	0	0	0	1	1	0
90.0	0	0	0	0	0	0	0	0	0	0

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

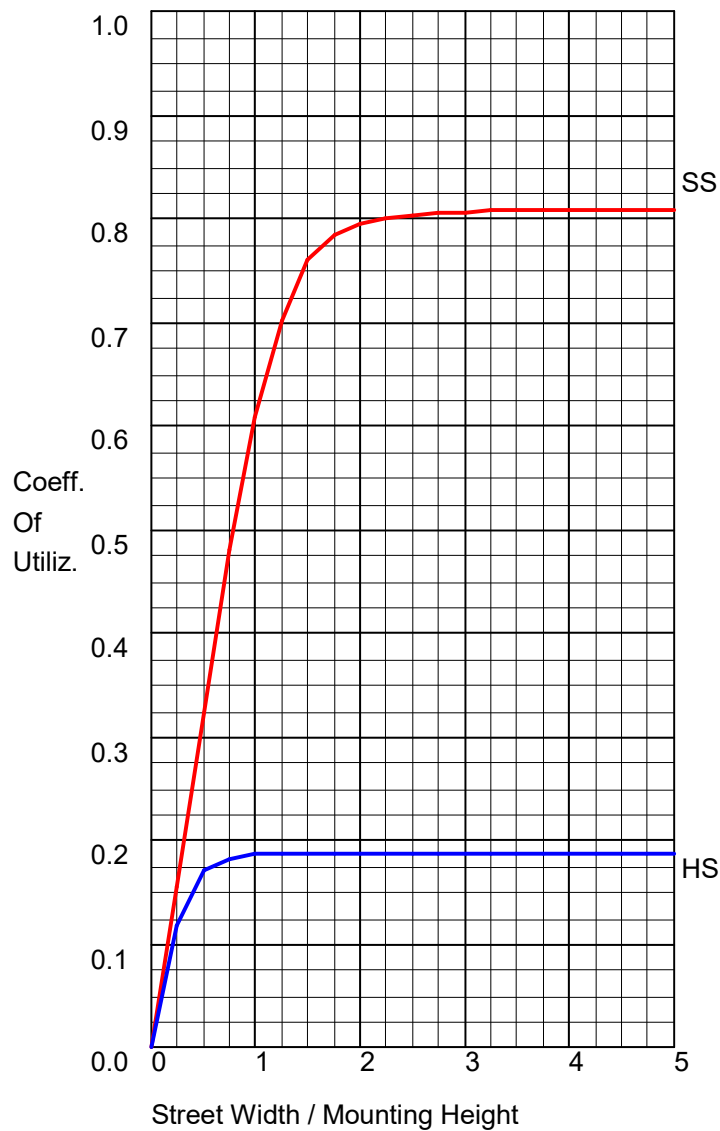
	<u>175.0</u>	<u>180.0</u>
0.0	1426	1426
2.5	1402	1402
5.0	1375	1370
7.5	1340	1333
10.0	1305	1300
12.5	1278	1278
15.0	1252	1247
17.5	1154	1142
20.0	868	858
22.5	538	527
25.0	296	293
27.5	219	217
30.0	193	192
32.5	176	174
35.0	159	159
37.5	142	140
40.0	119	117
42.5	91	88
45.0	64	62
47.5	44	43
50.0	29	29
52.5	20	19
55.0	13	12
57.5	6	5
60.0	2	2
62.5	1	0
65.0	0	0

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**CANDELA TABULATION - (Cont.)**

<b>67.5</b>	0	0
<b>70.0</b>	0	0
<b>72.5</b>	0	0
<b>75.0</b>	0	0
<b>77.5</b>	0	0
<b>80.0</b>	0	0
<b>82.5</b>	0	0
<b>85.0</b>	0	0
<b>87.5</b>	0	0
<b>90.0</b>	0	0

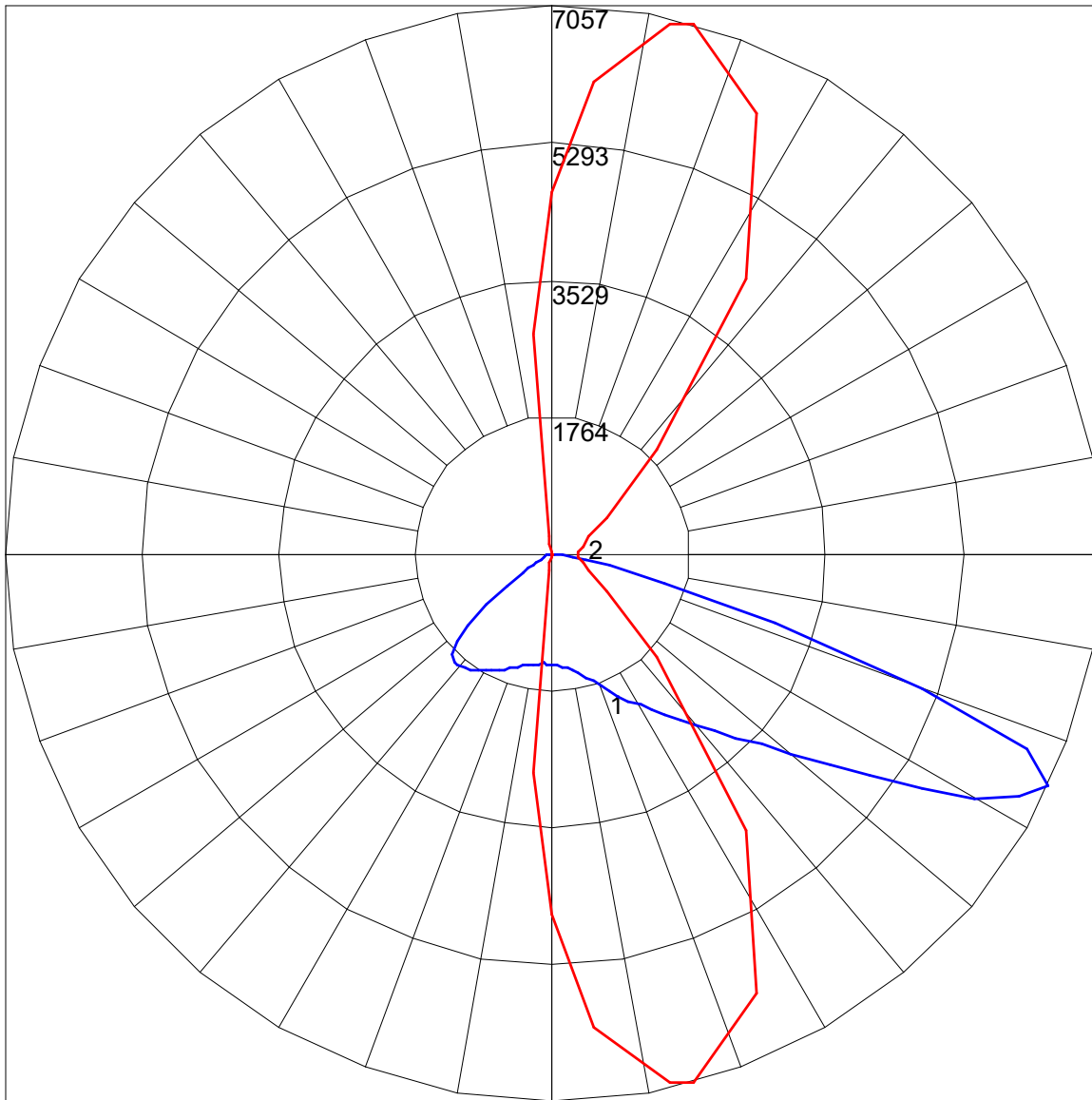
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

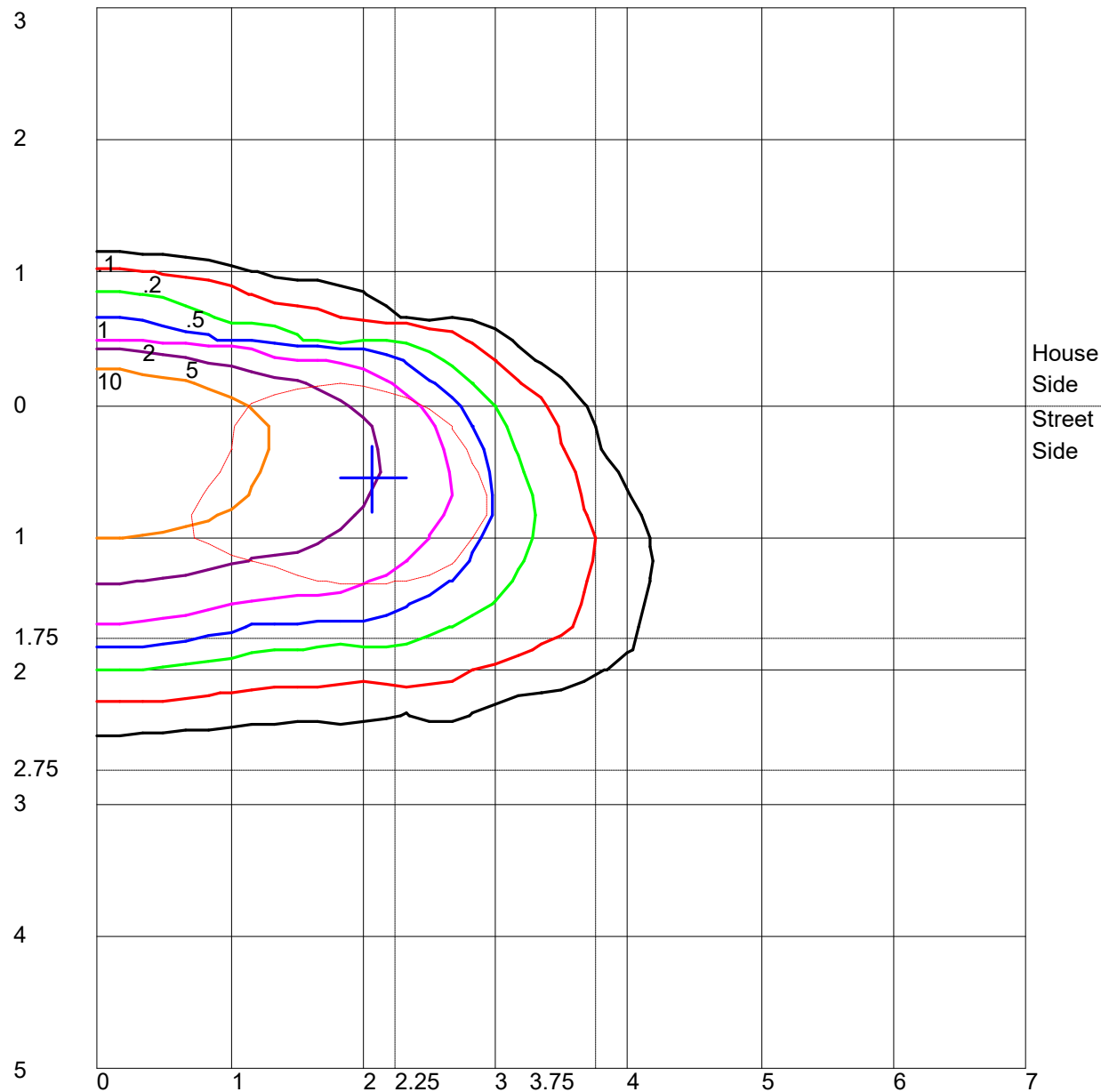
	Lumens	Percent Of Luminaire
Downward Street Side	6285.0	81.1
Downward House Side	1461.2	18.9
Downward Total	7746.3	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	7746.3	100.0

POLAR GRAPH



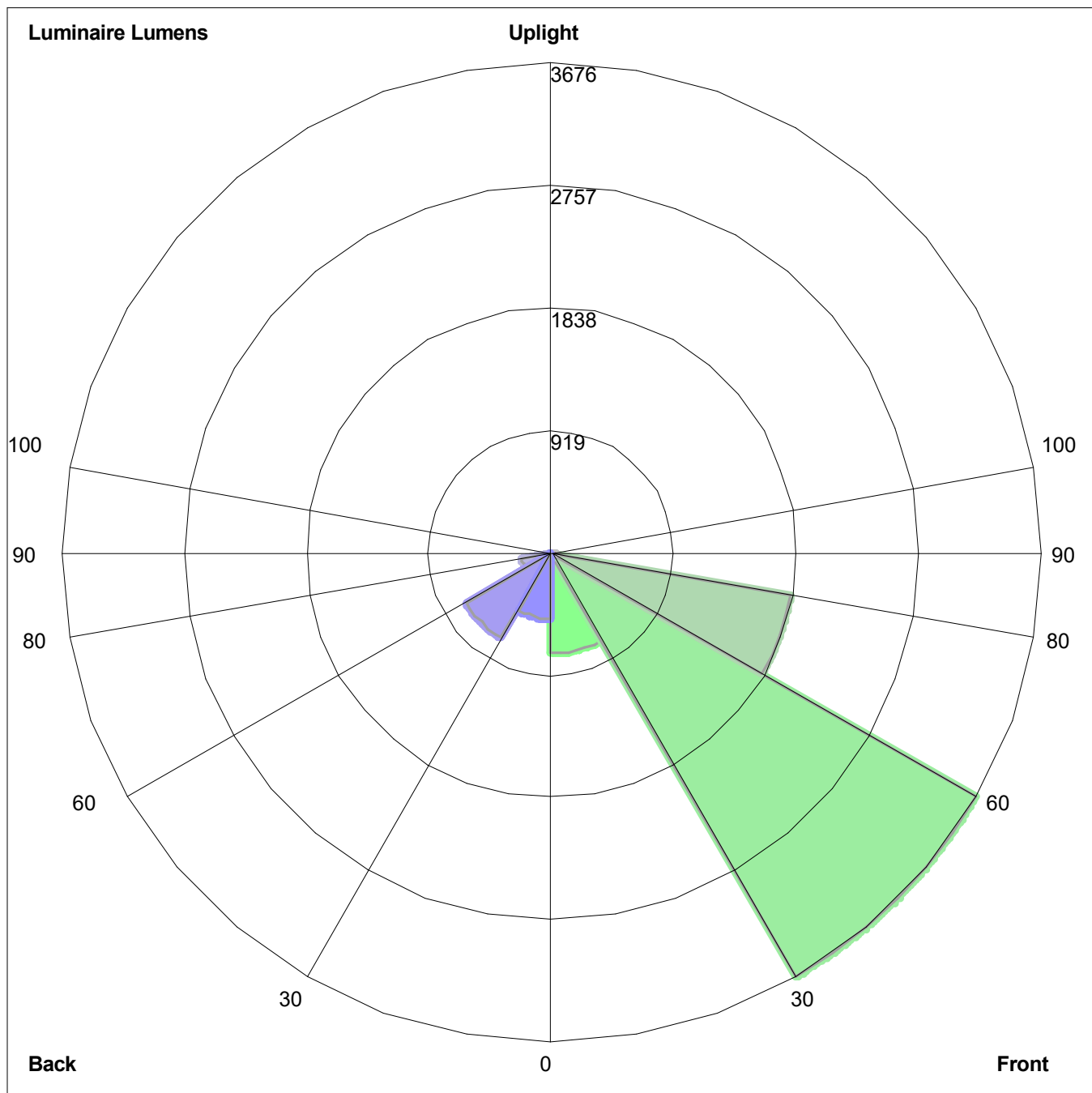
Maximum Candela = 7057 Located At Horizontal Angle = 75, Vertical Angle = 65  
# 1 - Vertical Plane Through Horizontal Angles (75 - 255) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=754.4, Medium=3676.3, High=1822.9, Very High=31.5  
Back: Low=496.5, Medium=740.0, High=222.3, Very High=2.5  
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G2