



## IES ROAD REPORT

PHOTOMETRIC FILENAME : ALS HI 3 UV 850-EHS.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] Q2018032701 scaled from 112w  
[TESTLAB] QSSI  
[ISSUE DATE] 2018-3-27  
[MANUFAC] LumenFocus, LLC  
[LUMCAT] ALS HI 3 UV 850-EHS  
[LUMINAIRE] ALS WITH ONE 37W LED ARRAY, HOUSE SIDE SHIELD  
[LAMPCAT] SAMSUNG 351B-N WITH TYPE III OPTICS  
[LAMP] SAMSUNG 351B-N LEDs

### CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2990
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	40.3
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	1545.21
Maximum Candela Angle	360H 35V
Maximum Candela (<90 Degrees Vertical)	1545.21
Maximum Candela Angle (<90 Degrees Vertical)	360H 35V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	116.516 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	527.6	N.A.	17.6
FM - Front-Medium (30-60)	1462.0	N.A.	48.9
FH - Front-High (60-80)	575.2	N.A.	19.2
FVH - Front-Very High (80-90)	12.6	N.A.	0.4
BL - Back-Low (0-30)	171.1	N.A.	5.7
BM - Back-Medium (30-60)	214.7	N.A.	7.2
BH - Back-High (60-80)	25.5	N.A.	0.9
BVH - Back-Very High (80-90)	1.0	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	2989.7	N.A.	100.0
BUG Rating	B1-U0-G1		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
<b>0</b>	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616
<b>5</b>	1017.429	1015.157	996.975	977.278	954.298	908.338	865.661	797.226	734.095	659.094
<b>10</b>	1251.521	1244.956	1231.067	1204.299	1163.895	1116.672	1050.258	967.429	864.903	712.882
<b>15</b>	1387.128	1383.845	1373.744	1353.037	1316.673	1268.441	1208.844	1095.208	959.853	781.822
<b>20</b>	1474.250	1475.765	1471.977	1455.058	1428.795	1364.148	1273.491	1168.188	1022.985	829.550
<b>25</b>	1519.705	1530.563	1529.553	1522.482	1474.755	1403.795	1328.795	1211.370	1074.500	870.712
<b>30</b>	1531.573	1541.927	1534.856	1534.351	1469.957	1414.401	1343.694	1238.643	1093.945	873.237
<b>35</b>	1545.210	1535.109	1504.553	1464.654	1440.917	1384.351	1323.239	1220.208	1072.228	889.398
<b>40</b>	1516.675	1531.068	1479.806	1411.623	1388.644	1364.653	1277.279	1194.703	1032.076	866.419
<b>45</b>	1473.492	1524.250	1483.088	1394.704	1344.451	1289.148	1220.461	1115.157	1013.137	812.883
<b>50</b>	1480.058	1538.644	1482.331	1409.350	1348.492	1244.451	1132.834	1059.854	927.278	733.842
<b>55</b>	1428.795	1500.260	1487.129	1450.007	1338.138	1219.198	1073.490	951.520	794.448	647.478
<b>60</b>	1436.371	1500.008	1444.452	1377.532	1353.290	1176.269	1008.086	818.438	673.993	505.053
<b>65</b>	1131.824	1210.865	1213.895	1228.794	1161.117	1098.238	871.469	661.872	486.997	310.608
<b>70</b>	348.916	429.750	477.275	502.099	837.126	713.640	487.199	444.043	295.708	179.041
<b>75</b>	72.803	87.299	110.960	194.445	303.007	363.638	259.294	195.102	133.284	59.016
<b>80</b>	33.990	39.116	38.813	46.414	74.420	105.632	67.121	47.904	34.571	11.515
<b>85</b>	18.510	19.596	21.111	21.515	21.414	22.930	19.722	16.288	10.555	5.530
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>135</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>140</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>145</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>150</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>155</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>160</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>165</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>170</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>	<u>190</u>
<b>0</b>	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616
<b>5</b>	615.660	589.902	566.669	553.791	540.659	532.831	524.750	512.881	512.124	517.427
<b>10</b>	609.852	558.336	498.487	457.326	439.144	426.770	418.941	413.133	410.356	413.133
<b>15</b>	615.660	495.962	443.184	416.164	386.366	356.062	345.456	337.881	334.850	342.173
<b>20</b>	626.266	452.527	407.073	347.729	332.578	312.375	282.577	276.264	274.749	277.779
<b>25</b>	611.619	443.689	352.022	316.163	268.436	258.082	241.415	222.223	215.405	227.021
<b>30</b>	586.619	409.346	321.719	258.082	223.991	197.981	195.203	176.263	170.456	182.829
<b>35</b>	570.963	376.265	269.951	205.557	184.344	146.465	143.688	132.324	135.102	133.587
<b>40</b>	584.599	356.062	241.163	178.789	134.849	97.677	79.016	61.591	61.566	65.405
<b>45</b>	526.265	297.224	191.415	133.587	82.197	48.536	16.061	23.712	27.071	17.929
<b>50</b>	456.063	243.183	132.324	67.475	15.732	38.611	6.692	4.697	4.318	4.950
<b>55</b>	376.517	162.375	70.657	12.147	16.566	2.551	1.894	1.616	1.515	1.616

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : ALS HI 3 UV 850-EHS.IES**

**CANDELA TABULATION - (Cont.)**

60	247.729	84.192	17.323	7.576	1.869	2.349	1.616	3.788	7.045	3.030
65	130.809	20.884	39.748	1.869	1.970	6.616	1.490	1.641	1.591	1.515
70	31.515	9.495	1.995	14.823	1.869	1.818	4.419	1.364	1.263	1.288
75	8.839	2.147	4.647	2.551	2.071	3.258	1.540	1.364	1.313	1.338
80	6.010	3.182	1.919	2.475	2.096	2.046	1.768	1.692	1.540	1.667
85	1.591	1.793	1.995	2.147	2.197	2.248	2.121	2.046	1.995	2.046
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.  
Angles**

**Horizontal Angles**

	<u>200</u>	<u>210</u>	<u>220</u>	<u>230</u>	<u>240</u>	<u>250</u>	<u>260</u>	<u>270</u>	<u>280</u>	<u>290</u>
0	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616	660.616
5	521.215	532.073	540.912	549.498	566.669	583.336	611.872	649.246	703.539	767.428
10	416.164	423.992	437.376	455.305	511.619	549.245	598.993	697.226	826.772	938.136
15	344.951	356.568	393.184	412.123	440.154	509.346	597.983	741.670	923.490	1061.369
20	295.961	319.699	330.305	349.244	400.760	451.265	604.801	794.448	982.076	1135.864
25	253.789	257.830	272.476	321.719	353.032	436.366	622.983	823.236	1036.874	1179.551
30	199.243	202.274	241.668	262.628	326.012	425.507	618.185	835.863	1055.561	1206.572
35	145.203	150.253	184.597	234.597	277.527	380.810	568.437	829.550	1050.763	1197.481
40	87.500	131.566	136.869	180.304	248.991	360.355	584.094	825.004	1024.248	1186.370
45	17.020	50.758	82.955	134.344	197.223	327.527	536.366	794.196	1016.167	1118.945
50	10.101	36.440	36.086	74.899	139.647	251.769	504.296	707.074	950.005	1078.288
55	1.818	3.333	28.232	24.217	74.420	175.506	391.416	625.508	823.994	970.965
60	1.919	1.944	2.424	21.339	18.889	129.799	260.860	490.811	711.115	854.802
65	1.439	9.874	2.349	1.667	33.258	27.121	139.142	318.133	501.619	710.610
70	6.667	1.944	1.692	2.929	1.818	7.601	46.111	168.460	344.774	484.169
75	1.540	4.596	1.995	2.399	5.783	2.551	8.738	50.177	141.011	249.345
80	1.768	1.995	2.273	1.944	2.020	3.611	4.849	9.647	40.707	56.667
85	2.147	2.147	2.147	2.020	1.768	1.490	1.212	4.141	11.339	18.207
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**CANDELA TABULATION - (Cont.)**

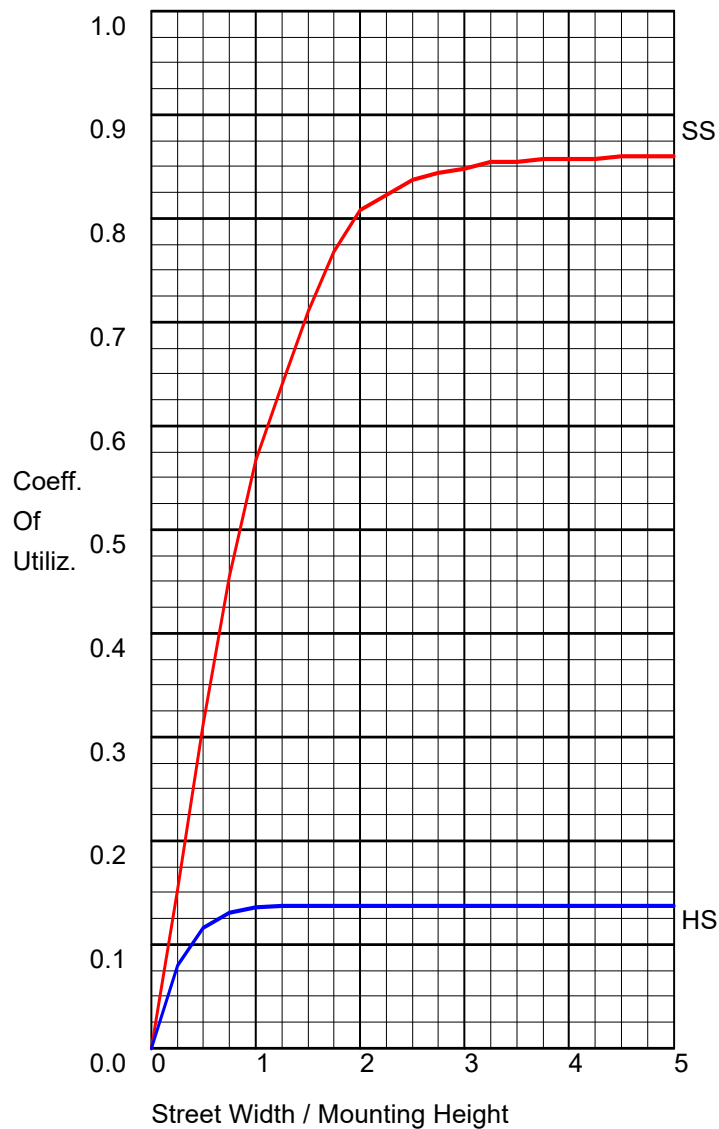
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.  
Angles**

**Horizontal Angles**

	<u>300</u>	<u>310</u>	<u>320</u>	<u>330</u>	<u>340</u>	<u>350</u>	<u>360</u>
0	660.616	660.616	660.616	660.616	660.616	660.616	660.616
5	828.792	888.388	925.510	965.409	997.732	1006.571	1017.429
10	1025.005	1089.399	1143.945	1192.178	1226.269	1241.673	1251.521
15	1173.491	1243.946	1292.431	1332.583	1357.330	1379.553	1387.128
20	1244.198	1337.633	1400.765	1432.836	1457.331	1474.250	1474.250
25	1298.744	1383.340	1458.846	1507.331	1521.472	1529.553	1519.705
30	1322.482	1397.987	1455.058	1528.038	1535.614	1542.432	1531.573
35	1316.168	1379.805	1434.603	1477.533	1506.068	1544.200	1545.210
40	1272.986	1366.674	1390.916	1418.189	1484.098	1537.382	1516.675
45	1220.208	1291.673	1350.765	1409.098	1487.129	1529.806	1473.492
50	1147.481	1256.320	1361.371	1428.542	1510.866	1531.321	1480.058
55	1100.763	1238.643	1351.522	1466.169	1513.897	1491.169	1428.795
60	1058.591	1221.218	1379.300	1382.583	1475.513	1489.907	1436.371
65	941.419	1138.137	1196.976	1248.491	1219.198	1191.925	1131.824
70	482.376	775.004	882.833	677.529	491.720	439.245	348.916
75	296.466	395.078	329.951	192.804	106.819	88.208	72.803
80	84.192	116.516	77.526	46.288	38.207	38.435	33.990
85	22.677	24.646	22.778	21.061	20.404	19.167	18.510
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000

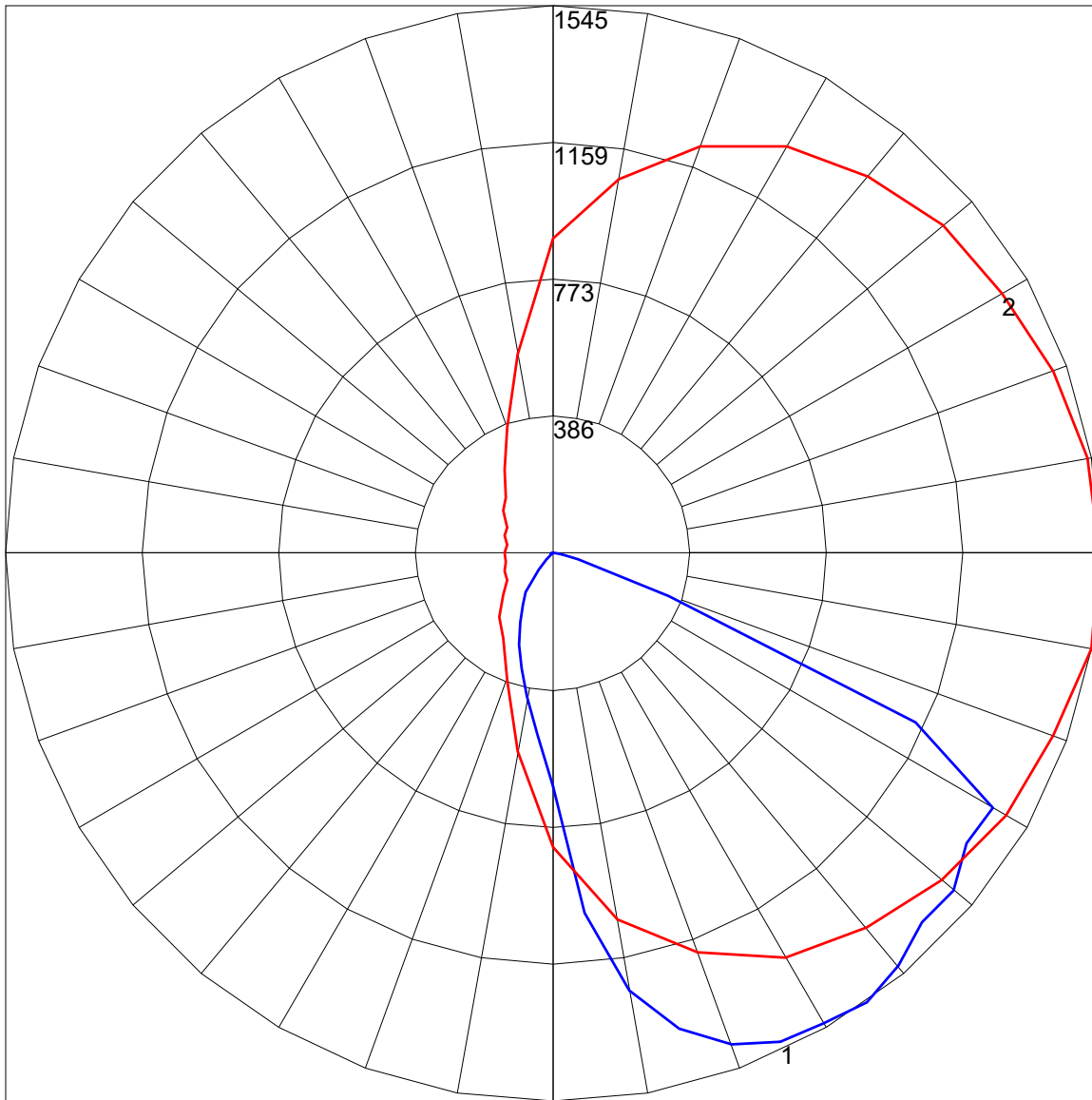
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

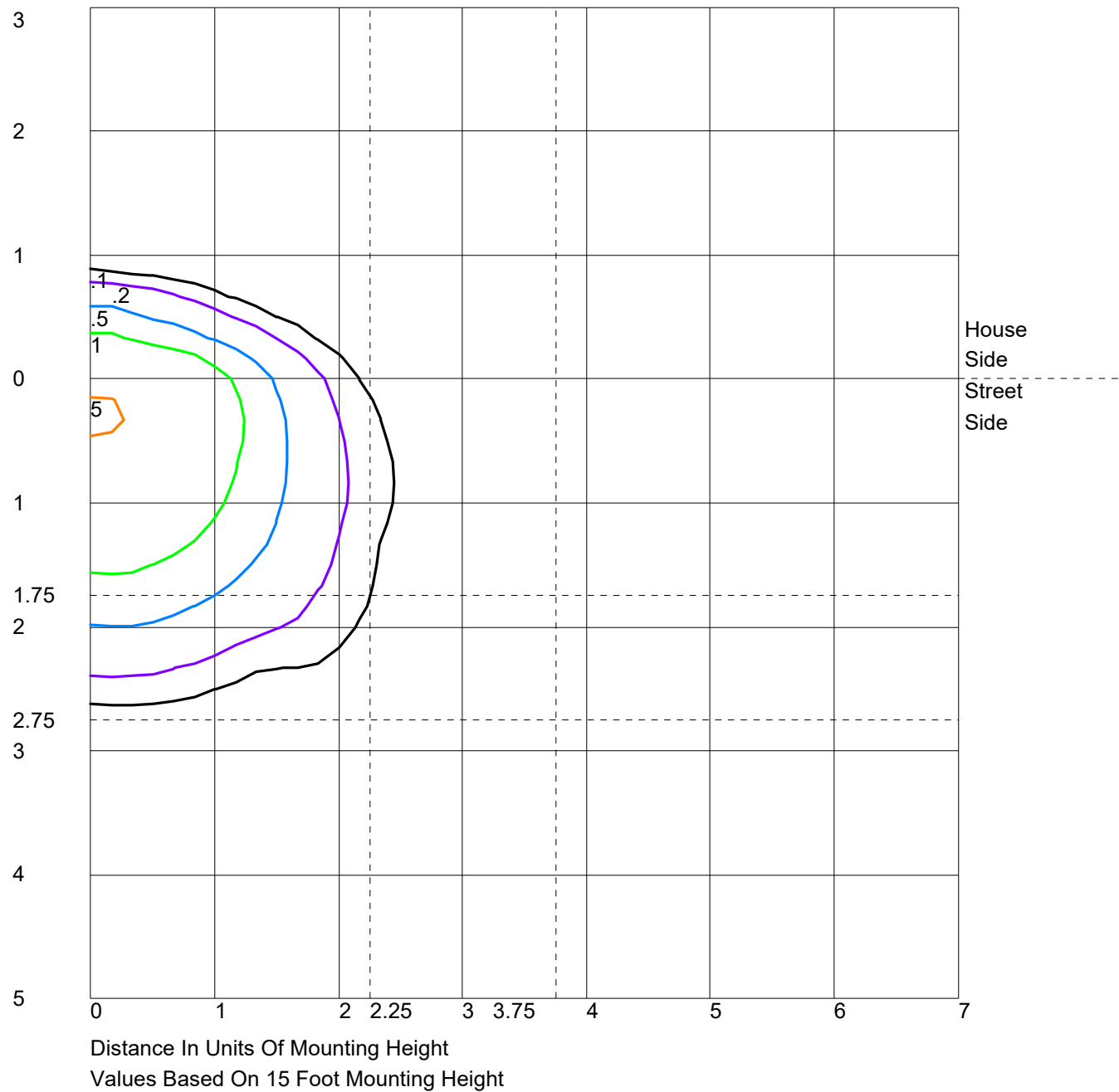
	Lumens	Percent Of Luminaire
Downward Street Side	2577.4	86.2
Downward House Side	412.4	13.8
Downward Total	2989.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	2989.8	100.0

POLAR GRAPH



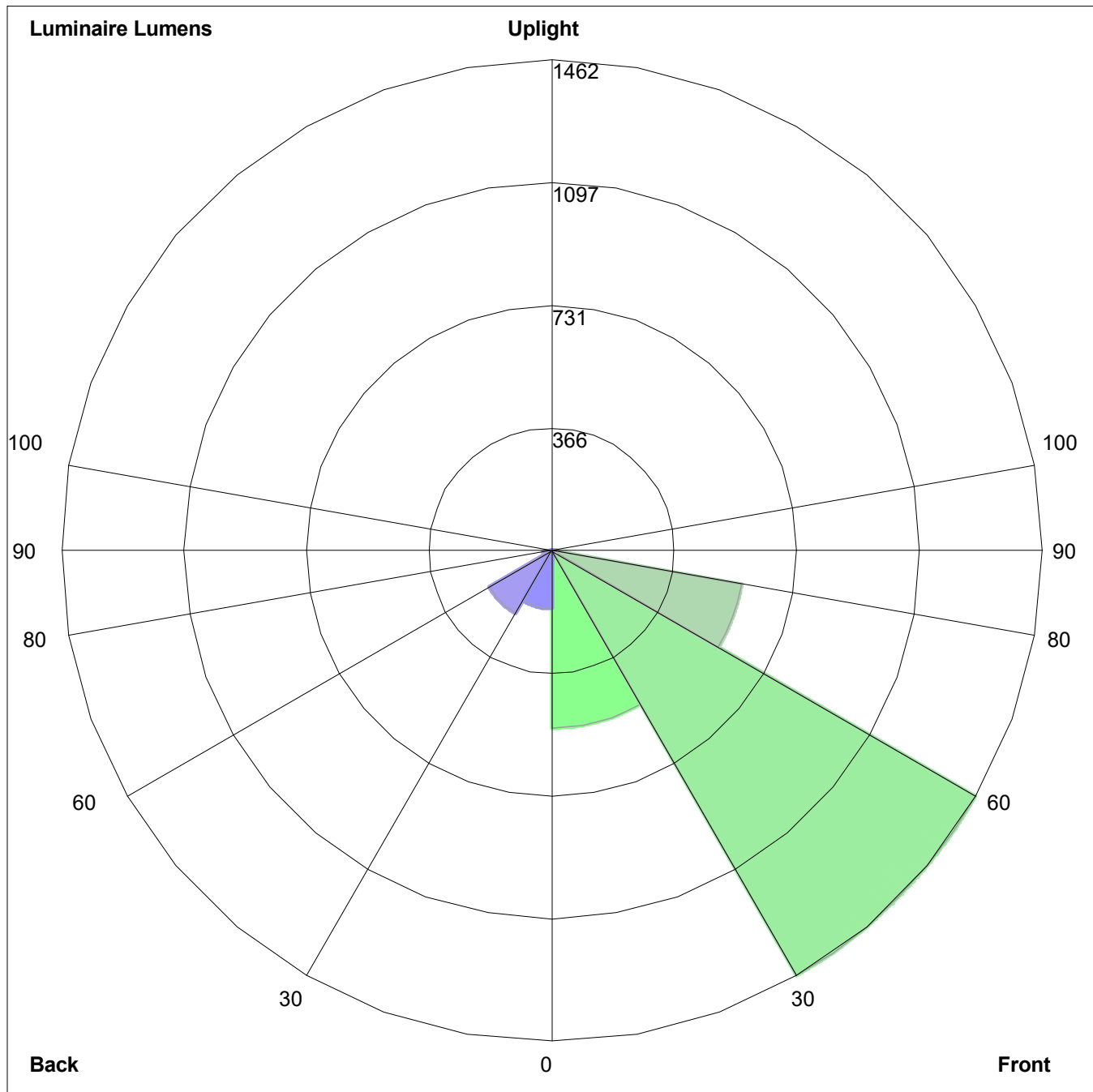
Maximum Candela = 1545.21 Located At Horizontal Angle = 360, Vertical Angle = 35  
# 1 - Vertical Plane Through Horizontal Angles (360 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (35) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=527.6, Medium= 1462.0, High=575.2, Very High=12.6  
Back: Low=171.1, Medium=214.7, High=25.5, Very High=1.0  
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G1