



IES ROAD REPORT

PHOTOMETRIC FILENAME : TLWP-LED-05L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 3755_scaled
[TESTLAB] TUV SUD America
[ISSUE DATE] 2/20/2020
[TEST DATE] 8/21/2019 10:36:42 AM
[MANUFAC] LSI INDUSTRIES, INC
[LUMCAT] TLWP-LED-05L-40
[OTHER] TEST PROCEDURE: IESNA
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[OTHER] SCALED FROM ORIGINAL TEST DATA
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5020
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	39
Ballast Factor	1.00
Upward Waste Light Ratio	0.22
Maximum Candela	1613
Maximum Candela Angle	360H 52.5V
Maximum Candela (<90 Degrees Vertical)	1613
Maximum Candela Angle (<90 Degrees Vertical)	360H 52.5V
Maximum Candela At 90 Degrees Vertical	1247 (24.8% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1413 (28.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	446.7	N.A.	8.9
FM - Front-Medium (30-60)	1320.9	N.A.	26.3
FH - Front-High (60-80)	1032.2	N.A.	20.6
FVH - Front-Very High (80-90)	448.6	N.A.	8.9
BL - Back-Low (0-30)	241.2	N.A.	4.8
BM - Back-Medium (30-60)	317.0	N.A.	6.3
BH - Back-High (60-80)	85.1	N.A.	1.7
BVH - Back-Very High (80-90)	16.7	N.A.	0.3
UL - Uplight-Low (90-100)	379.3	N.A.	7.6
UH - Uplight-High (100-180)	731.8	N.A.	14.6
Total	5019.5	N.A.	100.0
BUG Rating	B1-U4-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	856	856	856	856	856	856	856	856	856	856
2.5	928	905	893	874	853	830	812	799	813	799
5.0	982	954	929	893	849	805	769	746	754	746
7.5	1034	1001	964	909	844	779	728	698	700	698
10.0	1082	1046	996	922	836	751	688	651	645	651
12.5	1128	1086	1024	934	826	722	649	608	602	608
15.0	1177	1124	1050	942	814	695	613	565	558	565
17.5	1225	1166	1072	948	800	666	577	523	514	523
20.0	1270	1207	1093	951	785	636	540	482	468	482
22.5	1312	1245	1118	951	767	606	505	440	421	440
25.0	1353	1281	1138	949	749	577	471	397	374	397
27.5	1387	1312	1157	946	729	548	437	355	333	355
30.0	1414	1338	1174	940	709	519	403	319	299	319
32.5	1446	1359	1187	933	687	490	369	288	272	288
35.0	1472	1382	1198	930	666	462	336	261	248	261
37.5	1490	1403	1205	926	644	435	304	238	225	238
40.0	1515	1417	1209	920	622	408	275	217	208	217
42.5	1550	1433	1214	913	599	381	249	200	189	200
45.0	1568	1456	1217	904	575	354	225	182	172	182
47.5	1574	1469	1218	895	551	328	203	163	156	163
50.0	1589	1471	1218	885	525	302	185	146	139	146
52.5	1613	1478	1217	873	499	276	167	127	120	127
55.0	1612	1486	1210	858	471	252	150	108	101	108
57.5	1590	1478	1199	842	443	227	132	88	79	88
60.0	1565	1453	1183	823	413	204	114	68	57	68
62.5	1545	1425	1161	802	383	181	95	47	37	47
65.0	1529	1401	1132	780	353	160	77	25	16	25
67.5	1515	1380	1100	753	322	140	58	6	0	6
70.0	1502	1361	1068	721	290	120	40	0	0	0
72.5	1489	1343	1036	687	257	102	26	0	0	0
75.0	1471	1322	1006	652	223	85	21	0	0	0
77.5	1446	1297	976	616	189	71	19	0	0	0
80.0	1413	1267	944	578	157	61	17	0	0	0
82.5	1376	1232	909	540	130	55	16	0	0	0
85.0	1335	1194	873	502	108	51	14	0	0	0
87.5	1292	1154	836	466	92	48	13	0	0	0
90.0	1247	1110	797	431	83	46	12	0	0	0
92.5	1193	1062	757	398	77	43	11	0	0	0
95.0	1133	1009	714	368	73	40	10	0	0	0
97.5	1070	955	671	340	70	38	9	0	0	0
100.0	1007	899	629	315	66	36	8	0	0	0
102.5	949	842	588	290	63	33	8	0	0	0
105.0	888	789	548	265	60	31	7	0	0	0
107.5	825	733	510	244	57	29	6	0	0	0
110.0	761	680	471	224	53	27	5	0	0	0
112.5	700	626	433	206	50	25	4	0	0	0
115.0	642	574	399	189	47	23	3	0	0	0
117.5	586	525	365	174	43	21	2	0	0	0
120.0	533	479	334	160	39	19	2	0	0	0
122.5	485	436	305	147	35	18	2	0	0	0
125.0	439	397	279	134	29	16	1	0	0	0
127.5	396	361	255	121	23	14	1	0	0	0
130.0	358	327	233	109	17	12	0	0	0	0

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CANDELA TABULATION - (Cont.)

132.5	323	297	213	99	15	11	0	0	0	0
135.0	293	269	193	90	13	9	0	1	1	1
137.5	265	245	176	82	11	8	0	0	1	0
140.0	238	220	162	75	10	6	0	1	1	1
142.5	214	201	150	67	8	5	1	1	1	1
145.0	199	187	141	59	7	4	1	1	1	1
147.5	185	174	132	48	5	3	1	1	1	1
150.0	180	167	122	30	4	2	1	1	1	1
152.5	168	155	108	14	3	1	1	1	1	1
155.0	148	136	91	6	2	1	1	1	1	1
157.5	124	114	72	4	2	1	1	1	1	1
160.0	100	92	50	2	1	1	1	1	1	1
162.5	77	69	21	1	1	1	1	1	1	1
165.0	48	39	3	1	1	1	1	1	1	1
167.5	9	8	1	1	1	1	1	1	1	1
170.0	0	1	0	1	1	1	1	1	1	1
172.5	1	1	1	1	1	1	1	1	1	1
175.0	1	1	1	1	1	1	1	1	1	1
177.5	1	1	1	1	1	1	1	1	1	1
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Angles **Horizontal Angles**

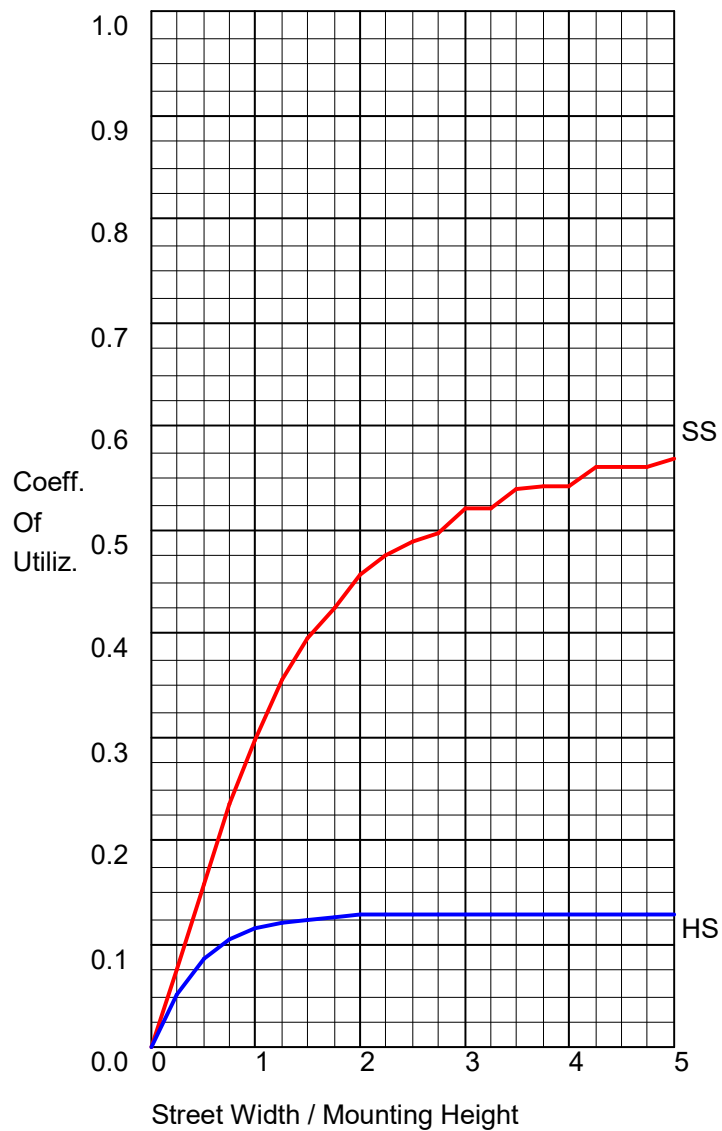
	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	856	856	856	856	856	856	856
2.5	812	830	853	874	893	905	928
5.0	769	805	849	893	929	954	982
7.5	728	779	844	909	964	1001	1034
10.0	688	751	836	922	996	1046	1082
12.5	649	722	826	934	1024	1086	1128
15.0	613	695	814	942	1050	1124	1177
17.5	577	666	800	948	1072	1166	1225
20.0	540	636	785	951	1093	1207	1270
22.5	505	606	767	951	1118	1245	1312
25.0	471	577	749	949	1138	1281	1353
27.5	437	548	729	946	1157	1312	1387
30.0	403	519	709	940	1174	1338	1414
32.5	369	490	687	933	1187	1359	1446
35.0	336	462	666	930	1198	1382	1472
37.5	304	435	644	926	1205	1403	1490
40.0	275	408	622	920	1209	1417	1515
42.5	249	381	599	913	1214	1433	1550
45.0	225	354	575	904	1217	1456	1568
47.5	203	328	551	895	1218	1469	1574
50.0	185	302	525	885	1218	1471	1589
52.5	167	276	499	873	1217	1478	1613
55.0	150	252	471	858	1210	1486	1612
57.5	132	227	443	842	1199	1478	1590
60.0	114	204	413	823	1183	1453	1565
62.5	95	181	383	802	1161	1425	1545
65.0	77	160	353	780	1132	1401	1529
67.5	58	140	322	753	1100	1380	1515
70.0	40	120	290	721	1068	1361	1502
72.5	26	102	257	687	1036	1343	1489
75.0	21	85	223	652	1006	1322	1471
77.5	19	71	189	616	976	1297	1446

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CANDELA TABULATION - (Cont.)

80.0	17	61	157	578	944	1267	1413
82.5	16	55	130	540	909	1232	1376
85.0	14	51	108	502	873	1194	1335
87.5	13	48	92	466	836	1154	1292
90.0	12	46	83	431	797	1110	1247
92.5	11	43	77	398	757	1062	1193
95.0	10	40	73	368	714	1009	1133
97.5	9	38	70	340	671	955	1070
100.0	8	36	66	315	629	899	1007
102.5	8	33	63	290	588	842	949
105.0	7	31	60	265	548	789	888
107.5	6	29	57	244	510	733	825
110.0	5	27	53	224	471	680	761
112.5	4	25	50	206	433	626	700
115.0	3	23	47	189	399	574	642
117.5	2	21	43	174	365	525	586
120.0	2	19	39	160	334	479	533
122.5	2	18	35	147	305	436	485
125.0	1	16	29	134	279	397	439
127.5	1	14	23	121	255	361	396
130.0	0	12	17	109	233	327	358
132.5	0	11	15	99	213	297	323
135.0	0	9	13	90	193	269	293
137.5	0	8	11	82	176	245	265
140.0	0	6	10	75	162	220	238
142.5	1	5	8	67	150	201	214
145.0	1	4	7	59	141	187	199
147.5	1	3	5	48	132	174	185
150.0	1	2	4	30	122	167	180
152.5	1	1	3	14	108	155	168
155.0	1	1	2	6	91	136	148
157.5	1	1	2	4	72	114	124
160.0	1	1	1	2	50	92	100
162.5	1	1	1	1	21	69	77
165.0	1	1	1	1	3	39	48
167.5	1	1	1	1	1	8	9
170.0	1	1	1	1	0	1	0
172.5	1	1	1	1	1	1	1
175.0	1	1	1	1	1	1	1
177.5	1	1	1	1	1	1	1
180.0	1	1	1	1	1	1	1

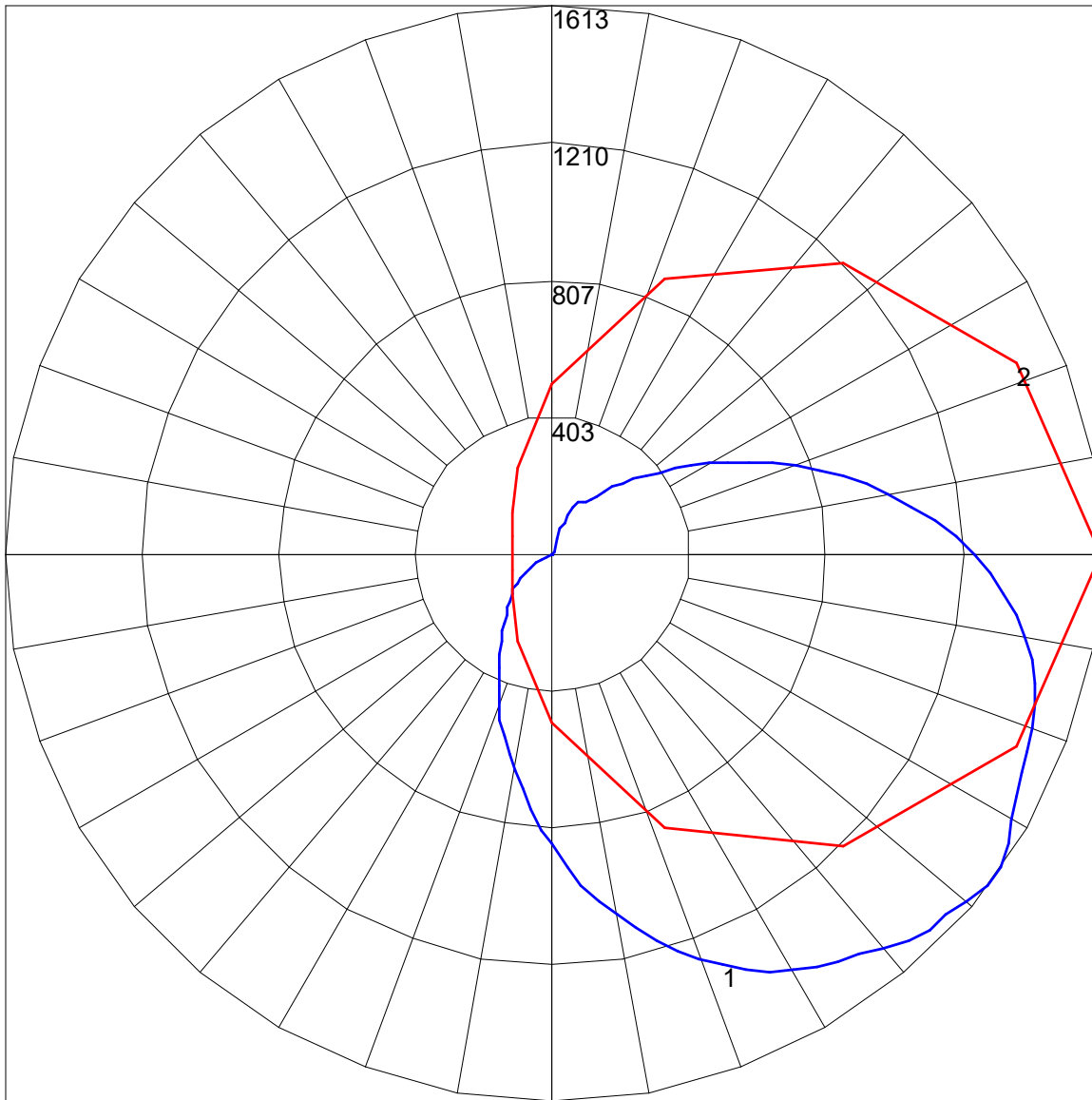
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

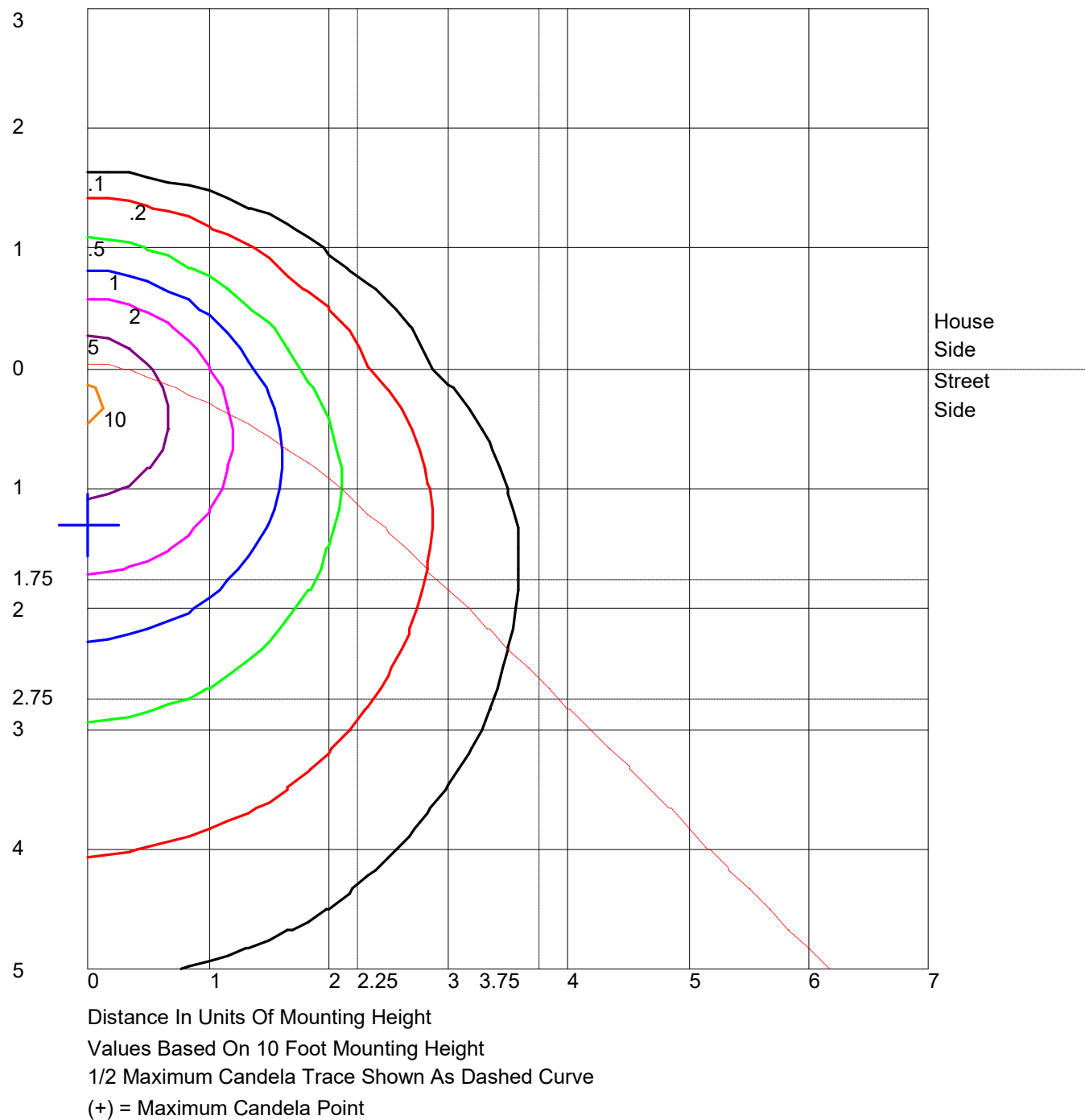
	Lumens	Percent Of Luminaire
Downward Street Side	3248.4	64.7
Downward House Side	660.0	13.1
Downward Total	3908.4	77.9
Upward Street Side	1077.7	21.5
Upward House Side	33.5	0.7
Upward Total	1111.2	22.1
Total Flux	5019.6	100.0

POLAR GRAPH

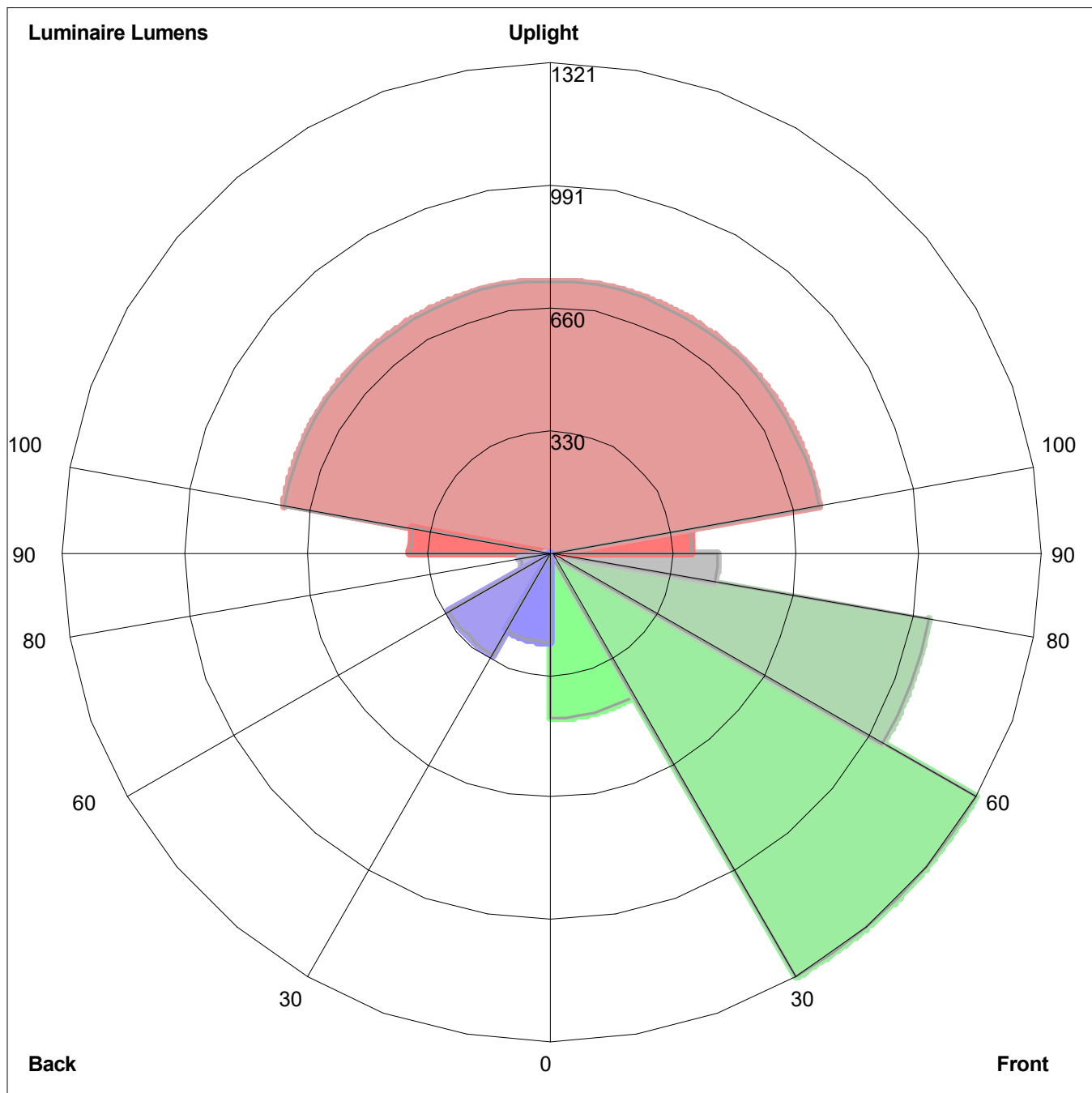


Maximum Candela = 1613 Located At Horizontal Angle = 360, Vertical Angle = 52.5
1 - Vertical Plane Through Horizontal Angles (360 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (52.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=446.7, Medium=1320.9, High=1032.2, Very High=448.6
Back: Low=241.2, Medium=317.0, High=85.1, Very High=16.7
Uplight: Low=379.3, High=731.8

BUG Rating : B1-U4-G3