



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VALS-18L-4F-30K8-IS.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] LED-15005  
[TESTLAB] LSI INDUSTRIES, INC.  
[TESTDATE] 08/22/24  
[ISSUE DATE] 09/23/24  
[MANUFAC] LSI INDUSTRIES, INC.  
[LUMCAT] VALS-18L-4F-30K8-IS  
[ ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[TEST PROCEDURE] IESNA LM-79-19  
[ FACTORED] SCALED FROM ORIGINAL TEST DATA  
[ SEARCH\_SOURCETYPE] LED  
[ SEARCH\_APPLICATION] Outdoor  
[ SEARCH\_COLORTEMP] 3000

**CHARACTERISTICS**

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10823
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	111
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14939
Maximum Candela Angle	35H 72.5V
Maximum Candela (<90 Degrees Vertical)	14939
Maximum Candela Angle (<90 Degrees Vertical)	35H 72.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	5500 (50.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)



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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	480.2	N.A.	4.4
FM - Front-Medium (30-60)	3454.8	N.A.	31.9
FH - Front-High (60-80)	6319.9	N.A.	58.4
FVH - Front-Very High (80-90)	384.5	N.A.	3.6
BL - Back-Low (0-30)	61.8	N.A.	0.6
BM - Back-Medium (30-60)	90.3	N.A.	0.8
BH - Back-High (60-80)	30.1	N.A.	0.3
BVH - Back-Very High (80-90)	1.5	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	10823.1	N.A.	100.0
BUG Rating	B0-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>37.5</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>
<b>0.0</b>	379	379	379	379	379	379	379	379	379	379
<b>2.5</b>	477	471	470	470	465	456	454	438	431	415
<b>5.0</b>	653	655	650	630	613	598	583	543	513	468
<b>7.5</b>	817	817	813	790	769	757	726	669	608	534
<b>10.0</b>	921	924	924	909	900	890	867	819	725	619
<b>12.5</b>	987	988	989	981	983	984	984	956	871	725
<b>15.0</b>	1045	1040	1043	1037	1047	1048	1065	1078	1027	861
<b>17.5</b>	1085	1080	1085	1084	1105	1111	1143	1190	1194	1031
<b>20.0</b>	1108	1104	1111	1120	1162	1175	1231	1307	1361	1213
<b>22.5</b>	1108	1105	1118	1144	1224	1243	1331	1440	1529	1403
<b>25.0</b>	1089	1085	1102	1152	1296	1327	1452	1594	1696	1587
<b>27.5</b>	1061	1056	1070	1146	1370	1423	1610	1773	1857	1754
<b>30.0</b>	1049	1042	1048	1137	1445	1530	1797	1981	2017	1907
<b>32.5</b>	1118	1101	1068	1152	1525	1636	1993	2217	2179	2034
<b>35.0</b>	1261	1247	1174	1216	1643	1773	2197	2451	2378	2142
<b>37.5</b>	1425	1409	1335	1343	1823	1975	2423	2691	2610	2234
<b>40.0</b>	1647	1623	1521	1523	2090	2262	2714	2917	2855	2315
<b>42.5</b>	1874	1860	1737	1747	2442	2677	3100	3188	3097	2415
<b>45.0</b>	2131	2087	1960	2015	2855	3135	3562	3511	3294	2554
<b>47.5</b>	2362	2313	2180	2276	3325	3665	4101	3879	3486	2749
<b>50.0</b>	2619	2565	2414	2539	3857	4255	4687	4283	3721	2953
<b>52.5</b>	2933	2911	2813	2854	4464	4922	5353	4724	4003	3174
<b>55.0</b>	3322	3386	3718	3430	5265	5691	6123	5235	4331	3395
<b>57.5</b>	3989	4164	5183	4593	6164	6550	6967	5844	4728	3654
<b>60.0</b>	5234	5564	6679	5976	7311	7536	7732	6495	5293	3936
<b>62.5</b>	6562	7026	7942	7253	8530	8684	8447	7108	5975	4386
<b>65.0</b>	7296	7741	8642	8241	10147	10198	9455	7734	6646	4813
<b>67.5</b>	7550	7940	8944	9152	11733	11858	10844	7994	6417	4572
<b>70.0</b>	6949	7371	8706	10013	13895	14202	11703	6921	5462	3849
<b>72.5</b>	6064	6451	8069	10045	14939	14927	10202	5397	4374	2544
<b>75.0</b>	5136	5406	7209	9467	13124	12825	7228	3902	2682	935
<b>77.5</b>	3264	3474	5323	8099	9500	8769	4500	2234	997	225
<b>80.0</b>	1672	1795	3380	4984	5500	4859	2063	733	304	160
<b>82.5</b>	970	983	1509	2653	2913	2400	742	190	183	122
<b>85.0</b>	416	412	675	1763	1482	1065	196	81	112	78
<b>87.5</b>	210	205	364	702	381	221	53	34	51	39
<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>	379	379	379	379	379	379	379	379	379	379
<b>2.5</b>	399	389	380	360	345	325	312	298	287	283
<b>5.0</b>	421	396	372	323	283	242	215	193	177	170
<b>7.5</b>	454	410	369	291	229	183	158	146	139	136
<b>10.0</b>	500	436	375	263	185	152	140	135	130	128
<b>12.5</b>	561	472	384	235	158	138	131	125	119	115
<b>15.0</b>	641	516	397	207	143	130	121	111	102	96
<b>17.5</b>	735	569	403	181	132	120	106	95	89	86
<b>20.0</b>	837	614	399	158	124	108	93	86	81	79
<b>22.5</b>	944	650	384	141	115	96	86	80	75	73
<b>25.0</b>	1040	676	359	130	106	89	81	74	70	68
<b>27.5</b>	1127	690	324	120	98	84	76	70	65	63

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**CANDELA TABULATION - (Cont.)**

30.0	1202	685	285	114	92	80	73	65	61	60
32.5	1261	668	249	109	86	75	67	61	58	56
35.0	1306	643	215	103	81	70	62	58	54	53
37.5	1342	617	190	98	77	66	58	54	51	50
40.0	1379	594	175	93	73	61	54	51	46	46
42.5	1419	580	169	89	69	58	51	46	43	41
45.0	1462	572	171	83	65	54	47	43	39	37
47.5	1517	571	179	78	61	51	45	39	35	32
50.0	1588	583	196	74	58	48	41	36	31	28
52.5	1696	613	217	69	53	45	38	32	26	23
55.0	1816	663	240	65	50	41	34	28	20	17
57.5	1958	739	269	60	46	37	29	23	14	11
60.0	2144	886	307	54	40	32	24	16	8	5
62.5	2417	1122	327	46	35	26	18	10	4	3
65.0	2532	1137	192	38	28	19	11	4	1	0
67.5	2059	623	71	30	22	13	5	2	0	0
70.0	1280	194	46	25	17	7	3	0	0	0
72.5	543	102	41	19	12	4	2	0	0	0
75.0	172	63	35	15	6	3	1	1	0	0
77.5	85	49	30	12	4	3	3	2	1	0
80.0	64	38	23	7	4	4	4	4	4	1
82.5	46	26	15	4	3	3	3	3	3	0
85.0	32	14	6	2	2	3	3	3	1	0
87.5	18	6	3	1	1	2	3	3	1	0
90.0	0	0	0	0	0	0	0	0	0	0

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

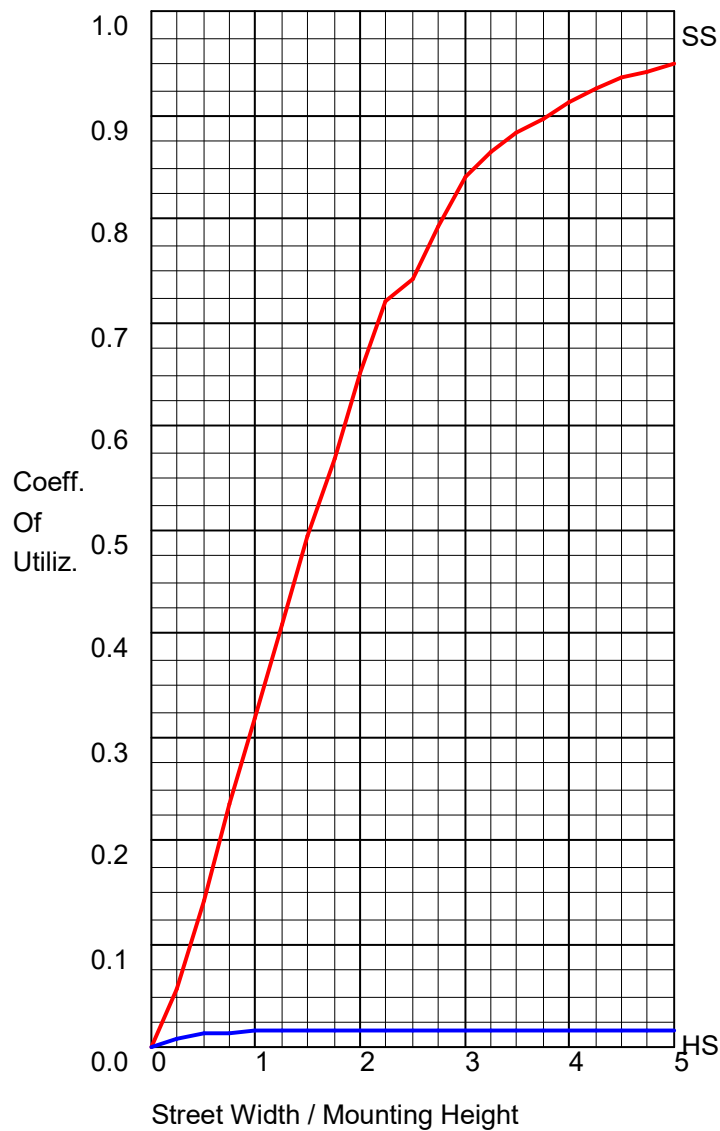
	<u>175.0</u>	<u>180.0</u>
0.0	379	379
2.5	284	285
5.0	165	160
7.5	133	133
10.0	125	125
12.5	112	112
15.0	96	96
17.5	86	85
20.0	78	78
22.5	72	72
25.0	67	67
27.5	63	63
30.0	60	60
32.5	57	58
35.0	54	54
37.5	51	51
40.0	46	46
42.5	41	41
45.0	37	37
47.5	32	32
50.0	27	27
52.5	21	21
55.0	16	16
57.5	10	10
60.0	4	4
62.5	0	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

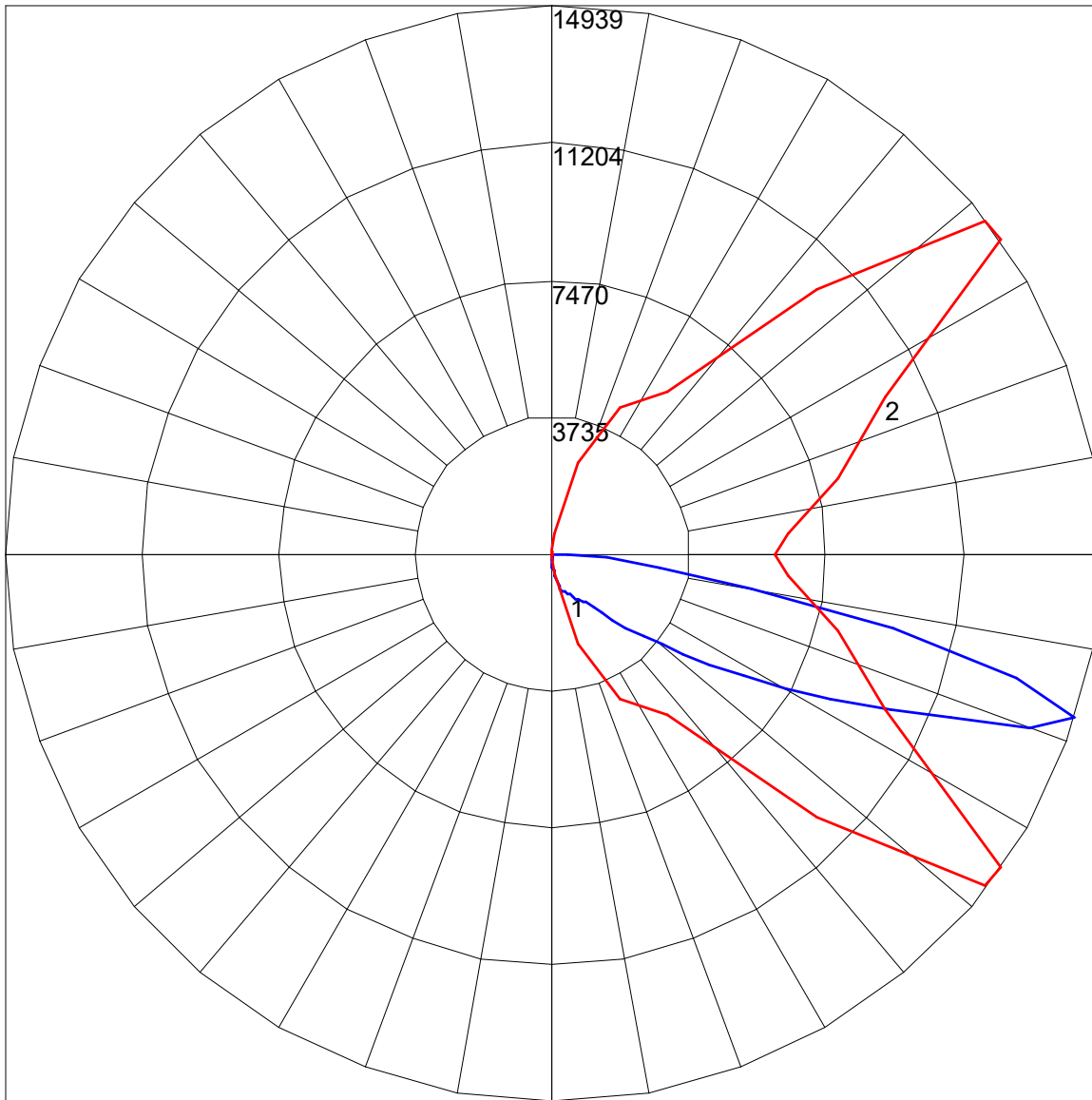
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

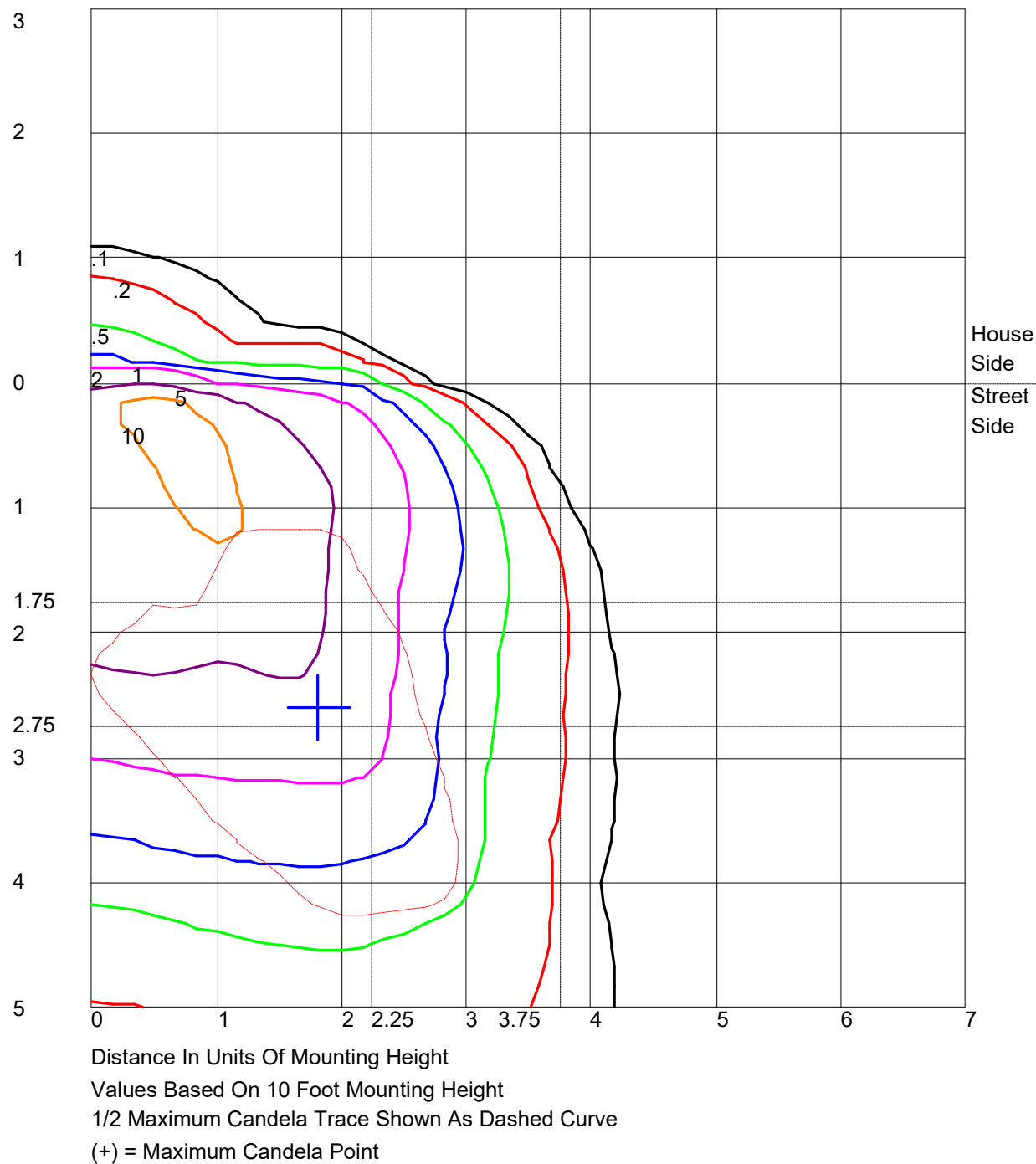
	Lumens	Percent Of Luminaire
Downward Street Side	10639.4	98.3
Downward House Side	183.7	1.7
Downward Total	10823.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	10823.1	100.0

POLAR GRAPH



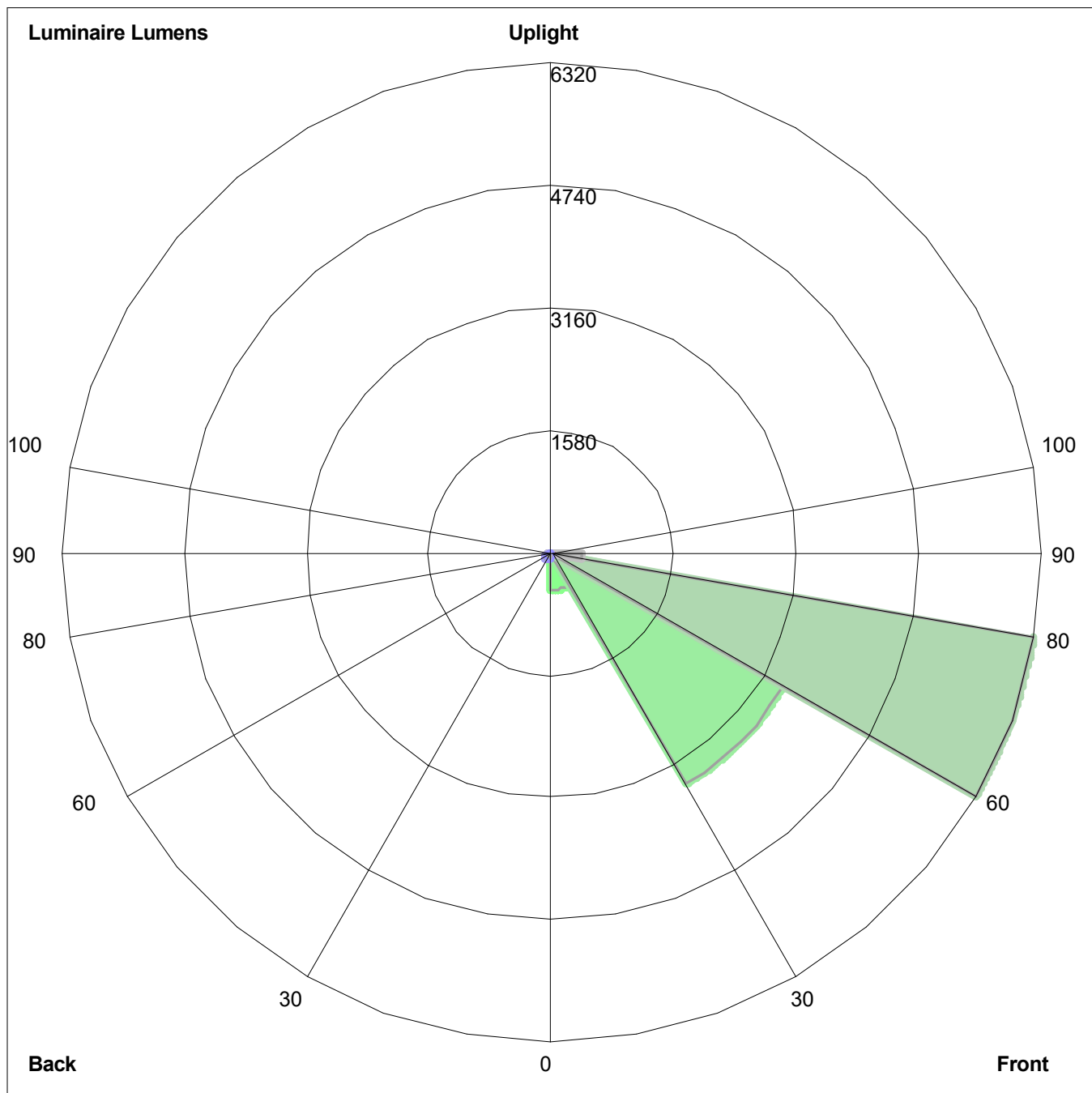
Maximum Candela = 14939 Located At Horizontal Angle = 35, Vertical Angle = 72.5  
# 1 - Vertical Plane Through Horizontal Angles (35 - 215) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=480.2, Medium=3454.8, High=6319.9, Very High=384.5  
Back: Low=61.8, Medium=90.3, High=30.1, Very High=1.5  
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G3