



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-FT-LED-29-40-IL.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-7787
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/21/16
[TEST DATE]05/05/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XMR-FT-LED-29-40-IL
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER]TEST PROCEDURE: IESNA LM-79-08
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor
[OTHER]SCALED FROM ORIGINAL TEST DATA

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	21139
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	241.3
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	17991.173
Maximum Candela Angle	47.5H 70V
Maximum Candela (<90 Degrees Vertical)	17991.173
Maximum Candela Angle (<90 Degrees Vertical)	47.5H 70V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2888.61 (13.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1786.8	N.A.	8.5
FM - Front-Medium (30-60)	7768.2	N.A.	36.7
FH - Front-High (60-80)	8767.3	N.A.	41.5
FVH - Front-Very High (80-90)	230.1	N.A.	1.1
BL - Back-Low (0-30)	857.0	N.A.	4.1
BM - Back-Medium (30-60)	1343.7	N.A.	6.4
BH - Back-High (60-80)	379.9	N.A.	1.8
BVH - Back-Very High (80-90)	6.2	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	21139.2	N.A.	100.0
BUG Rating	B2-U0-G4		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>47.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002
2.5	3811.160	3807.320	3794.841	3795.801	3795.801	3789.081	3756.441	3767.001	3751.641	3720.921
5.0	3791.961	3786.201	3788.121	3809.240	3823.640	3847.640	3830.360	3862.040	3866.840	3833.240
7.5	3748.761	3742.041	3747.801	3776.601	3808.280	3859.160	3844.760	3902.359	3945.559	3951.319
10.0	3746.841	3743.001	3752.601	3790.041	3825.560	3890.840	3885.080	3953.239	4025.238	4071.318
12.5	3782.361	3778.521	3788.121	3829.400	3873.560	3946.519	3945.559	4022.358	4115.477	4198.996
15.0	3826.520	3827.480	3843.800	3888.920	3941.719	4028.118	4030.038	4111.637	4216.276	4326.675
17.5	3876.440	3880.280	3902.359	3954.199	4015.638	4115.477	4126.037	4212.436	4321.875	4450.514
20.0	3947.479	3958.039	3980.119	4032.918	4096.277	4204.756	4220.116	4308.435	4418.834	4560.913
22.5	4053.078	4054.038	4074.198	4126.037	4190.356	4289.235	4309.395	4391.954	4503.313	4645.392
25.0	4175.957	4175.957	4190.356	4234.516	4288.275	4371.795	4389.074	4462.994	4572.432	4708.751
27.5	4327.635	4326.675	4335.315	4363.155	4392.914	4451.474	4464.914	4523.473	4625.232	4753.871
30.0	4500.433	4499.473	4501.393	4510.033	4507.153	4537.873	4545.553	4577.232	4662.672	4779.790
32.5	4681.871	4681.871	4680.911	4676.111	4646.352	4643.472	4637.712	4639.632	4692.431	4787.470
35.0	4879.629	4891.149	4870.029	4851.790	4813.390	4773.070	4759.631	4719.311	4724.111	4786.510
37.5	5114.827	5126.347	5096.587	5060.107	5005.388	4946.829	4926.669	4843.150	4777.870	4792.270
40.0	5406.664	5418.184	5390.344	5340.425	5256.905	5174.346	5149.386	5030.348	4873.869	4822.990
42.5	5769.540	5784.900	5750.340	5687.941	5595.782	5488.263	5477.703	5319.305	5035.148	4895.949
45.0	6266.815	6289.855	6243.775	6197.696	6061.377	5914.499	5928.898	5720.581	5303.945	5054.347
47.5	7004.087	6993.527	6964.728	6903.288	6752.570	6510.652	6526.012	6311.934	5708.101	5310.665
50.0	7803.759	7797.039	7791.279	7793.199	7628.081	7344.884	7309.364	7075.126	6277.375	5676.421
52.5	8647.590	8658.150	8732.069	8855.908	8689.830	8366.313	8331.753	8061.996	7027.127	6217.855
55.0	9391.582	9441.502	9647.900	10010.776	9946.457	9625.820	9609.500	9293.663	8020.717	6873.529
57.5	9983.896	10106.775	10435.092	11106.125	11328.842	11201.164	11119.564	10803.728	9181.345	7716.400
60.0	10356.372	10509.011	10999.566	12057.475	12767.867	12804.347	12764.987	12460.671	110500.371	8607.271
62.5	10531.091	10673.169	11437.321	12824.507	13916.975	14573.609	14804.966	14362.411	11924.036	9371.423
65.0	10083.735	10216.214	11277.963	13278.582	15123.683	16241.111	16605.907	16244.951	12958.905	9725.659
67.5	8645.670	8675.430	10125.975	12980.985	16047.193	17488.138	17731.976	17069.583	13146.103	9172.705
70.0	6099.777	6358.974	7838.319	11538.120	15649.757	17964.293	17991.173	16628.947	11942.276	7289.204
72.5	2554.533	2759.971	3952.279	7550.322	13359.221	16435.989	16616.467	13972.655	8661.030	4193.236
75.0	1179.828	1246.067	1791.341	3197.727	7956.397	12473.150	12496.190	10241.174	4430.354	1850.861
77.5	780.472	815.992	1297.907	2009.259	3307.166	6319.614	6959.928	5287.625	1952.620	1038.709
80.0	533.754	565.434	985.910	1543.664	1952.620	2888.610	2860.770	2158.058	1055.029	671.033
82.5	401.276	431.036	812.152	1184.628	1095.349	837.111	695.993	535.674	520.315	409.916
85.0	250.557	252.477	404.156	421.436	371.516	281.277	212.158	148.798	181.438	205.438
87.5	68.159	76.799	120.959	163.198	91.199	68.159	65.279	67.199	75.839	92.159
90.0	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>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002	3647.002
2.5	3695.002	3693.082	3669.082	3615.322	3601.883	3574.043	3537.563	3501.084	3474.204	3455.004
5.0	3772.761	3745.881	3693.082	3568.283	3470.364	3350.365	3209.247	3080.608	2974.049	2897.250
7.5	3884.120	3832.280	3745.881	3526.043	3288.926	3018.209	2729.252	2488.294	2306.856	2188.777
10.0	4024.278	3948.439	3822.680	3477.084	3069.088	2619.813	2230.057	1959.340	1784.621	1688.622
12.5	4182.677	4085.718	3913.879	3413.725	2796.451	2220.457	1850.861	1644.463	1520.624	1443.825
15.0	4347.795	4233.556	4007.958	3333.085	2526.694	1933.420	1647.343	1471.665	1373.746	1314.226
17.5	4503.313	4376.595	4091.477	3227.486	2282.856	1773.102	1522.544	1374.706	1286.387	1234.547
20.0	4641.552	4503.313	4160.597	3098.848	2104.298	1682.863	1445.745	1315.186	1228.787	1171.188
22.5	4758.671	4606.032	4206.676	2962.529	2001.579	1619.503	1399.665	1269.107	1170.228	1109.748
25.0	4839.310	4685.711	4222.036	2842.530	1941.100	1572.464	1359.346	1215.347	1106.868	1018.549
27.5	4892.109	4731.791	4209.556	2749.411	1906.540	1540.784	1315.186	1144.308	972.470	844.791

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CANDELA TABULATION - (Cont.)

30.0	4917.069	4741.391	4165.397	2688.932	1867.181	1504.304	1259.507	1009.910	782.392	647.993
32.5	4913.229	4721.231	4099.157	2650.532	1829.741	1460.145	1160.628	827.511	617.274	538.554
35.0	4889.229	4678.991	4016.598	2621.733	1785.581	1406.385	993.590	675.833	542.394	474.235
37.5	4862.349	4630.992	3946.519	2599.653	1737.582	1313.266	829.431	599.994	476.155	401.276
40.0	4846.030	4586.832	3897.559	2580.453	1676.143	1146.228	718.073	527.995	410.876	357.116
42.5	4862.349	4573.392	3891.800	2565.093	1579.184	947.510	620.154	449.275	361.916	364.796
45.0	4930.509	4612.752	3934.999	2556.453	1374.706	732.472	488.635	373.436	337.916	354.236
47.5	5076.427	4717.391	4052.118	2530.534	1060.789	533.754	370.556	302.397	306.237	290.877
50.0	5290.505	4883.469	4224.916	2443.175	728.632	390.716	293.757	255.357	259.197	210.238
52.5	5658.181	5182.026	4454.354	2301.096	505.915	329.277	251.517	219.838	216.958	187.198
55.0	6081.537	5539.142	4712.591	2068.779	420.476	298.557	223.678	191.038	191.038	215.998
57.5	6583.612	5908.739	4965.068	1756.782	389.756	269.757	195.838	175.678	204.478	183.358
60.0	7115.446	6286.015	5099.467	1426.545	363.836	226.558	164.158	180.478	136.319	121.919
62.5	7454.323	6453.053	4885.389	1092.469	318.717	181.438	170.878	122.879	95.999	89.279
65.0	7280.564	6073.857	4016.598	811.192	227.518	165.118	141.119	91.199	78.719	94.079
67.5	6461.693	5043.788	2536.294	605.754	163.198	153.598	101.759	81.599	81.599	70.079
70.0	4438.994	3279.326	1199.028	341.756	122.879	110.399	83.519	78.719	59.519	49.919
72.5	2066.859	1416.945	536.634	176.638	100.799	74.879	74.879	60.479	47.040	34.560
75.0	898.551	605.754	263.037	108.479	73.919	58.559	52.799	44.160	16.320	13.440
77.5	550.074	372.476	169.918	73.919	46.080	41.280	33.600	19.200	8.640	8.640
80.0	364.796	239.038	113.279	49.919	27.840	25.920	13.440	6.720	5.760	5.760
82.5	215.998	140.159	70.079	24.960	14.400	10.560	7.680	6.720	5.760	1.920
85.0	117.119	69.119	30.720	9.600	6.720	6.720	5.760	2.880	0.960	0.000
87.5	50.879	21.120	9.600	4.800	5.760	5.760	4.800	2.880	0.960	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles
Angles

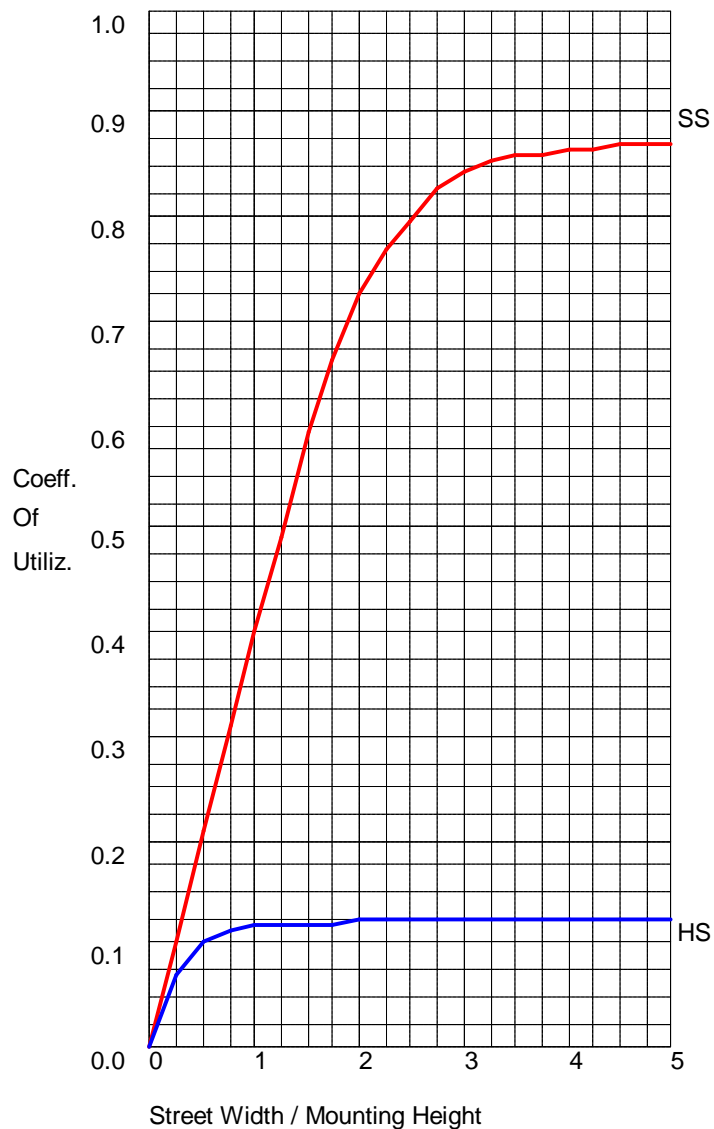
	175.0	180.0
0.0	3647.002	3647.002
2.5	3439.644	3438.684
5.0	2855.010	2867.490
7.5	2132.138	2138.858
10.0	1647.343	1646.383
12.5	1411.185	1390.066
15.0	1287.347	1272.947
17.5	1207.667	1198.068
20.0	1143.348	1134.708
22.5	1081.909	1074.229
25.0	969.590	959.030
27.5	778.552	766.072
30.0	594.234	585.594
32.5	513.595	510.715
35.0	443.515	436.795
37.5	371.516	368.636
40.0	343.676	340.796
42.5	399.356	374.396
45.0	289.917	260.157
47.5	219.838	216.958
50.0	197.758	196.798
52.5	195.838	195.838
55.0	232.318	231.358
57.5	160.318	150.718
60.0	103.679	99.839
62.5	76.799	74.879
65.0	85.439	83.519

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CANDELA TABULATION - (Cont.)

67.5	59.519	57.599
70.0	42.240	40.320
72.5	24.960	23.040
75.0	14.400	12.480
77.5	3.840	0.000
80.0	0.960	0.000
82.5	0.000	0.000
85.0	0.000	0.000
87.5	0.000	0.000
90.0	0.000	0.000

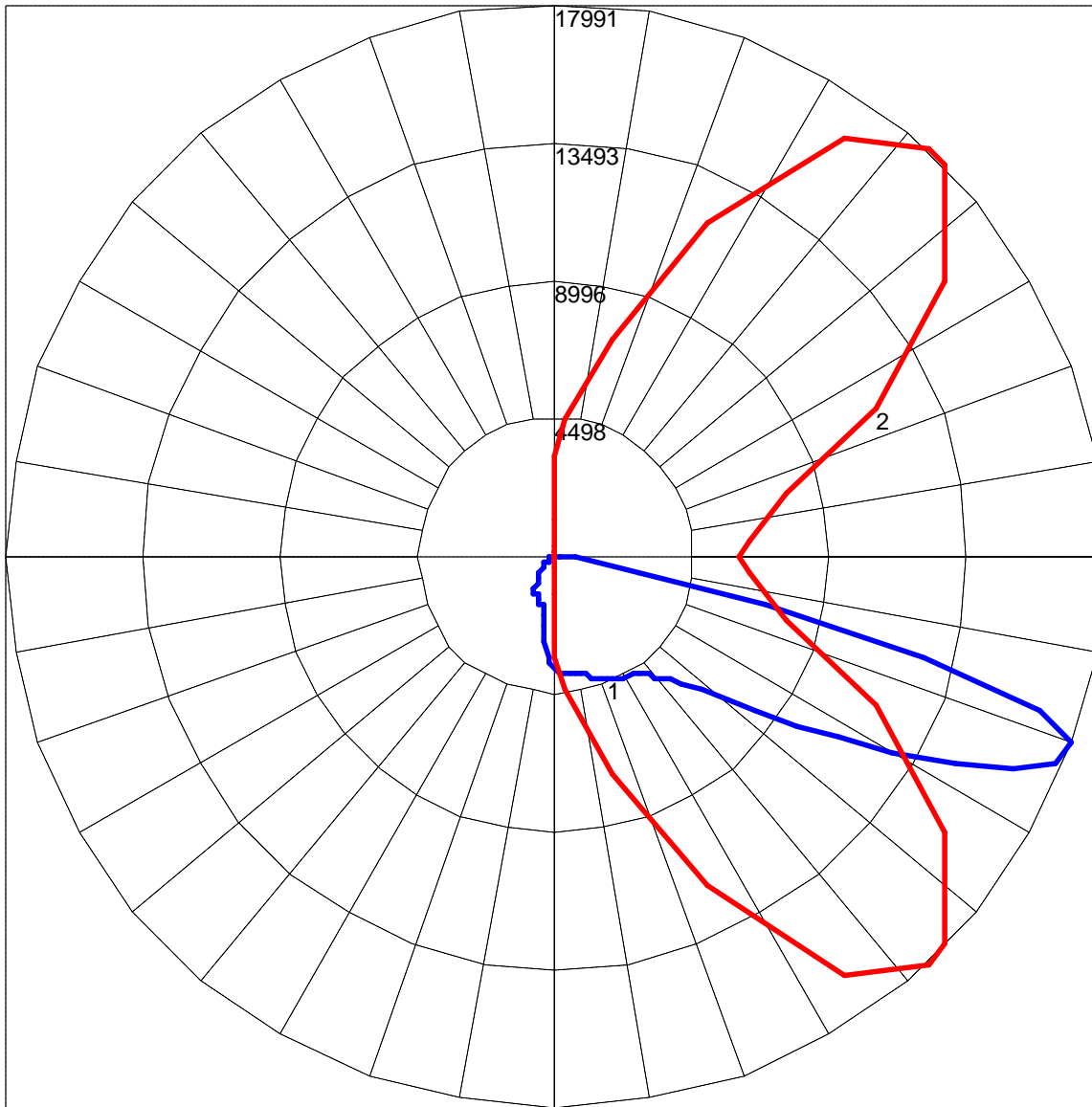
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

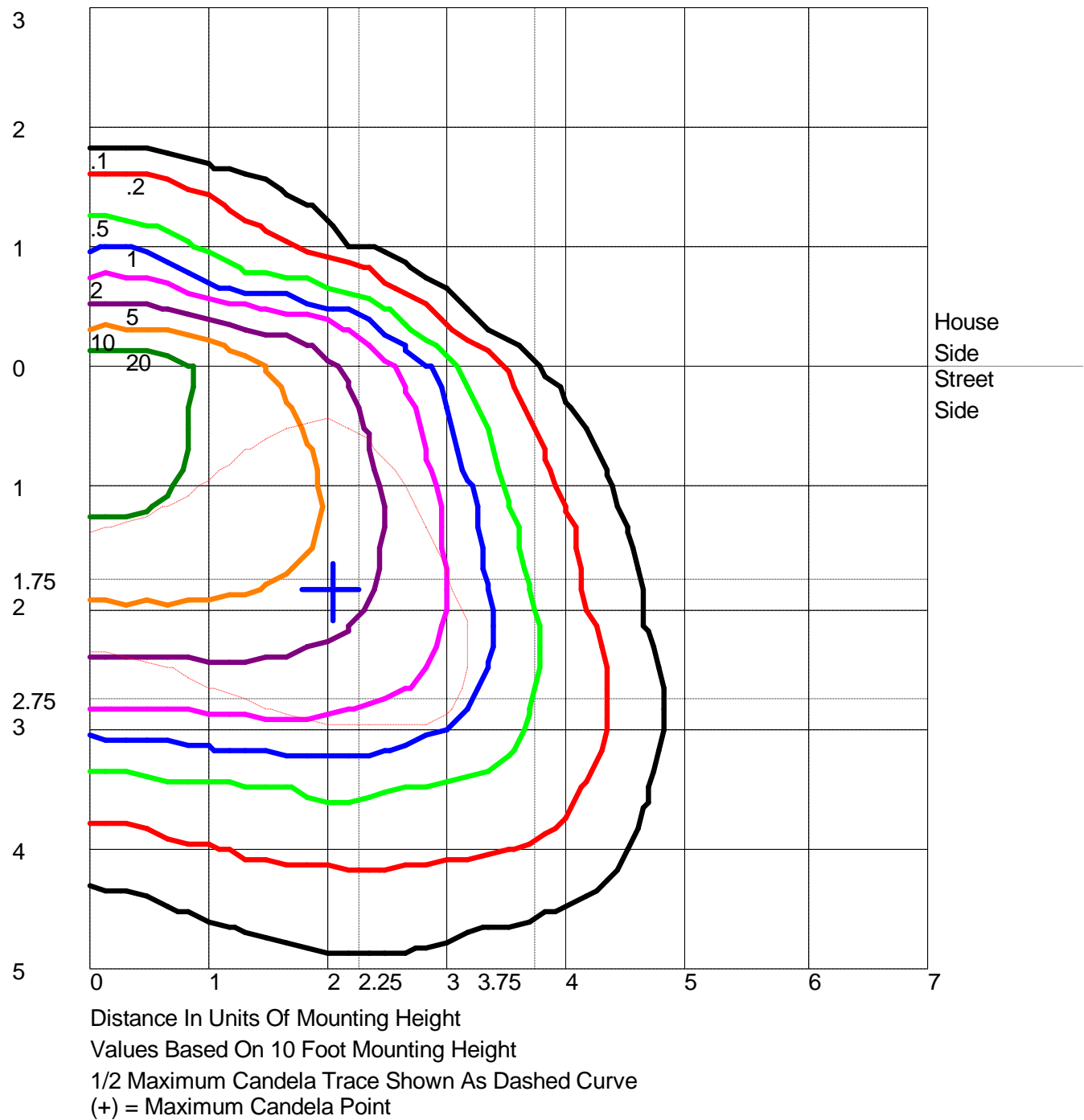
	Lumens	Percent Of Luminaire
Downward Street Side	18552.5	87.8
Downward House Side	2586.8	12.2
Downward Total	21139.3	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	21139.3	100.0

POLAR GRAPH

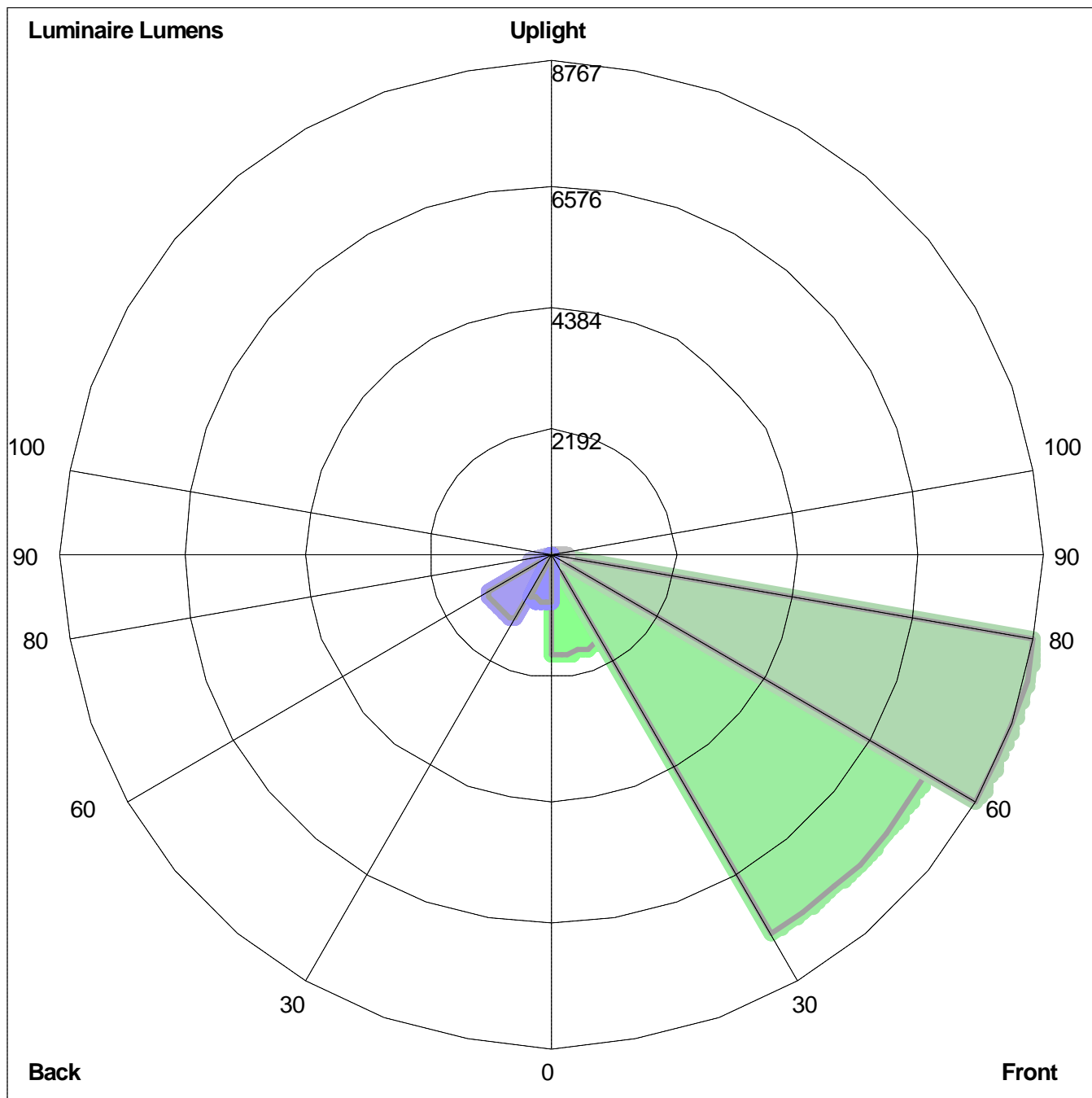


Maximum Candela = 17991.173 Located At Horizontal Angle = 47.5, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (47.5 - 227.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1786.8, Medium=7768.2, High=8767.3, Very High=230.1
Back: Low=857.0, Medium=1343.7, High=379.9, Very High=6.2
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G4