



IES ROAD REPORT

PHOTOMETRIC FILENAME : XMR-2-LED-29-50.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-8225_SCALED
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/21/2016
[TEST DATE]10/17/16
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XMR-2-LED-29-50
[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 II
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	28577
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	241
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	21971.08
Maximum Candela Angle	82.5H 67.5V
Maximum Candela (<90 Degrees Vertical)	21971.08
Maximum Candela Angle (<90 Degrees Vertical)	82.5H 67.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1432.54 (5.0% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2007.8	N.A.	7.0
FM - Front-Medium (30-60)	9948.9	N.A.	34.8
FH - Front-High (60-80)	6397.9	N.A.	22.4
FVH - Front-Very High (80-90)	130.3	N.A.	0.5
BL - Back-Low (0-30)	1637.8	N.A.	5.7
BM - Back-Medium (30-60)	5945.4	N.A.	20.8
BH - Back-High (60-80)	2397.8	N.A.	8.4
BVH - Back-Very High (80-90)	111.0	N.A.	0.4
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	28576.9	N.A.	100.0
BUG Rating	B4-U0-G3		

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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>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>82.5</u>
0.0	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64
2.5	4076.22	4075.40	4063.92	4073.76	4068.02	4057.36	4046.70	4052.44	4037.68	4023.74
5.0	4127.06	4125.42	4117.22	4125.42	4120.50	4107.38	4097.54	4100.00	4080.32	4061.46
7.5	4180.36	4179.54	4173.80	4186.10	4180.36	4166.42	4163.96	4163.14	4144.28	4118.86
10.0	4254.16	4252.52	4252.52	4264.00	4261.54	4250.88	4251.70	4251.70	4233.66	4204.14
12.5	4323.04	4325.50	4330.42	4353.38	4364.04	4363.22	4373.06	4385.36	4351.74	4317.30
15.0	4364.86	4368.14	4380.44	4432.10	4472.28	4499.34	4526.40	4551.00	4511.64	4477.20
17.5	4381.26	4388.64	4413.24	4491.14	4566.58	4642.02	4710.90	4750.26	4705.98	4668.26
20.0	4405.86	4412.42	4452.60	4549.36	4658.42	4776.50	4905.24	4977.40	4931.48	4880.64
22.5	4439.48	4448.50	4499.34	4619.06	4751.08	4898.68	5100.40	5232.42	5194.70	5134.84
25.0	4487.86	4496.88	4555.92	4690.40	4842.92	5016.76	5270.14	5504.66	5496.46	5434.96
27.5	4565.76	4575.60	4638.74	4785.52	4952.80	5142.22	5432.50	5793.30	5871.20	5792.48
30.0	4698.60	4703.52	4767.48	4915.08	5092.20	5302.94	5603.88	6081.94	6267.26	6199.20
32.5	4923.28	4934.76	4970.02	5099.58	5284.08	5502.20	5797.40	6367.30	6686.28	6642.82
35.0	5252.10	5260.30	5266.86	5377.56	5521.88	5741.64	6045.86	6646.92	7115.14	7117.60
37.5	5710.48	5715.40	5715.40	5750.66	5840.86	6048.32	6344.34	6919.16	7574.34	7626.00
40.0	6378.78	6377.96	6368.12	6282.02	6282.02	6459.14	6708.42	7205.34	8016.32	8168.84
42.5	7268.48	7309.48	7227.48	7103.66	6920.80	7010.18	7163.52	7544.82	8442.72	8730.54
45.0	8234.44	8273.80	8193.44	8078.64	7844.94	7795.74	7746.54	7886.76	8859.28	9349.64
47.5	8996.22	9024.10	8974.90	8960.96	8961.78	8908.48	8571.46	8323.00	9302.90	10040.08
50.0	9448.86	9441.48	9441.48	9567.76	9851.48	10293.46	9829.34	8933.90	9819.50	10778.08
52.5	9315.20	9347.18	9434.92	9748.16	10418.92	11384.88	11434.90	9800.64	10427.12	11600.54
55.0	8685.44	8742.84	8915.04	9380.80	10439.42	12217.18	13438.98	11044.58	11089.68	12840.38
57.5	7625.18	7648.14	7913.82	8362.36	9721.10	12146.66	15219.20	13083.10	12144.20	14314.74
60.0	6122.12	6127.86	6199.20	6659.22	8154.08	11022.44	16342.60	15593.94	13320.08	16024.44
62.5	4215.62	4198.40	4013.90	4421.44	5753.94	8774.82	16615.66	18207.28	15169.18	18044.92
65.0	2603.50	2534.62	2420.64	2451.80	3327.56	5428.40	15339.74	19739.04	17181.46	20487.70
67.5	1612.94	1584.24	1557.18	1514.54	1848.28	2731.42	11457.86	19639.82	19260.98	21971.08
70.0	1023.36	1015.98	1035.66	1040.58	1226.72	1568.66	5961.40	16810.00	19607.84	20678.76
72.5	635.50	664.20	683.88	757.68	887.24	1067.64	2682.22	10988.00	15602.96	13250.38
75.0	455.10	474.78	467.40	543.66	646.16	808.52	1457.96	5393.14	8350.06	4719.92
77.5	346.86	362.44	357.52	403.44	464.94	600.24	938.90	2595.30	3313.62	1433.36
80.0	292.74	306.68	282.90	304.22	341.94	443.62	574.00	1324.30	1432.54	766.70
82.5	261.58	255.02	212.38	219.76	239.44	326.36	362.44	655.18	700.28	399.34
85.0	183.68	177.94	144.32	142.68	150.88	210.74	218.12	262.40	354.24	198.44
87.5	86.92	87.74	76.26	73.80	71.34	92.66	91.84	87.74	90.20	74.62
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64	4019.64
2.5	4020.46	4008.16	4021.28	4008.16	4014.72	4015.54	4009.80	4004.88	3995.04	3985.20
5.0	4056.54	4036.86	4046.70	4020.46	4004.06	3981.92	3952.40	3926.98	3898.28	3864.66
7.5	4112.30	4085.24	4090.16	4045.06	3995.86	3934.36	3859.74	3784.30	3718.70	3664.58
10.0	4197.58	4169.70	4159.86	4086.88	3990.94	3867.12	3730.18	3596.52	3507.14	3436.62
12.5	4309.10	4273.84	4253.34	4145.92	3983.56	3781.02	3577.66	3416.94	3324.28	3275.90
15.0	4458.34	4414.06	4389.46	4223.82	3977.00	3683.44	3434.98	3293.94	3247.20	3235.72
17.5	4635.46	4579.70	4540.34	4314.84	3967.16	3583.40	3330.84	3258.68	3277.54	3311.16
20.0	4841.28	4780.60	4714.18	4412.42	3942.56	3485.00	3289.02	3306.24	3383.32	3448.92
22.5	5087.28	5016.76	4927.38	4535.42	3909.76	3410.38	3319.36	3409.56	3534.20	3630.14
25.0	5389.86	5298.02	5183.22	4674.82	3871.22	3393.16	3407.92	3559.62	3732.64	3868.76
27.5	5739.18	5637.50	5489.90	4839.64	3848.26	3451.38	3547.32	3762.98	4004.88	4200.86

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CANDELA TABULATION - (Cont.)

30.0	6165.58	6036.02	5853.98	5012.66	3856.46	3567.82	3753.96	4043.42	4372.24	4621.52
32.5	6611.66	6470.62	6251.68	5197.98	3913.86	3753.14	4022.92	4400.12	4786.34	5079.90
35.0	7093.82	6939.66	6668.24	5361.98	4040.14	4008.98	4350.92	4767.48	5175.02	5475.14
37.5	7609.60	7439.86	7125.80	5518.60	4242.68	4308.28	4667.44	5105.32	5535.00	5819.54
40.0	8159.00	8005.66	7594.02	5674.40	4499.34	4602.66	4928.20	5373.46	5801.50	6077.02
42.5	8731.36	8575.56	8086.02	5828.56	4769.94	4844.56	5120.08	5530.90	5908.92	6091.78
45.0	9342.26	9174.16	8610.00	5967.96	4992.16	5005.28	5211.92	5481.70	5647.34	5662.10
47.5	10023.68	9874.44	9140.54	6081.12	5133.20	5055.30	5104.50	5097.94	5060.22	4994.62
50.0	10787.10	10614.08	9701.42	6161.48	5170.92	4940.50	4737.96	4521.48	4359.12	4243.50
52.5	11670.24	11396.36	10281.98	6208.22	5117.62	4605.94	4246.78	3903.20	3662.12	3544.04
55.0	12910.08	12399.22	10873.20	6257.42	4997.90	4208.24	3683.44	3317.72	3090.58	2969.22
57.5	14409.86	13720.24	11456.22	6326.30	4847.84	3799.06	3208.66	2892.96	2644.50	2595.30
60.0	16096.60	15067.50	12022.02	6428.80	4724.84	3431.70	2858.52	2642.86	2336.18	2282.88
62.5	18049.84	16370.48	12655.88	6464.06	4607.58	3137.32	2601.86	2457.54	1981.94	1890.10
65.0	20044.90	17406.14	12555.84	6233.64	4346.82	2827.36	2338.64	2137.74	1583.42	1438.28
67.5	21019.06	16951.04	10839.58	5340.66	3717.06	2307.48	1893.38	1688.38	1149.64	1002.86
70.0	18925.60	13356.98	7046.26	3540.76	2678.12	1676.08	1396.46	1203.76	833.94	753.58
72.5	11373.40	7207.80	3416.94	1973.74	1621.96	1096.34	998.76	849.52	602.70	528.90
75.0	3636.70	2519.86	1626.88	1057.80	960.22	791.30	705.20	581.38	429.68	384.58
77.5	1195.56	932.34	835.58	680.60	650.26	616.64	482.98	407.54	336.20	296.84
80.0	626.48	510.04	466.58	507.58	507.58	423.12	332.10	293.56	371.46	303.40
82.5	329.64	267.32	250.10	373.92	355.88	255.84	231.24	231.24	526.44	504.30
85.0	186.96	143.50	133.66	240.26	150.88	153.34	158.26	265.68	554.32	346.86
87.5	76.26	52.48	46.74	50.84	50.84	48.38	36.90	29.52	113.16	16.40
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Horizontal Angles
Angles

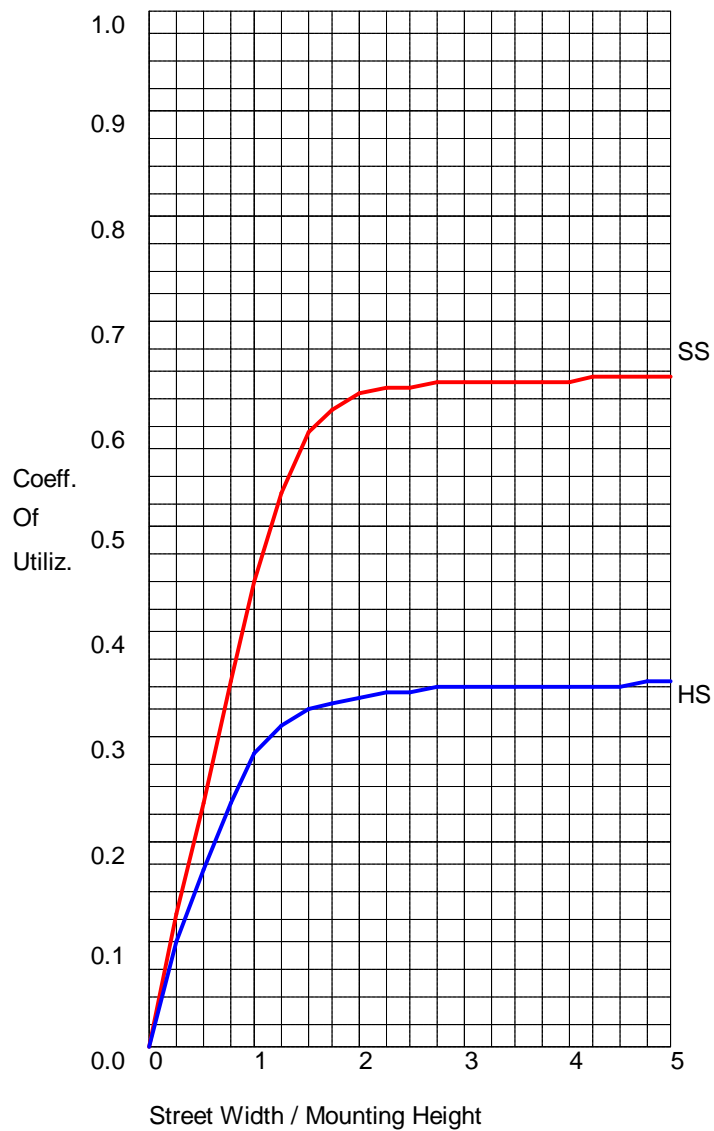
	<u>175.0</u>	<u>180.0</u>
0.0	4019.64	4019.64
2.5	3980.28	3973.72
5.0	3856.46	3849.08
7.5	3642.44	3634.24
10.0	3406.28	3397.26
12.5	3255.40	3246.38
15.0	3235.72	3227.52
17.5	3326.74	3320.18
20.0	3488.28	3474.34
22.5	3685.90	3671.96
25.0	3948.30	3930.26
27.5	4311.56	4327.96
30.0	4751.08	4767.48
32.5	5210.28	5197.98
35.0	5594.86	5577.64
37.5	5920.40	5899.90
40.0	6145.08	6123.76
42.5	6081.94	6049.96
45.0	5612.90	5574.36
47.5	4913.44	4910.16
50.0	4159.86	4163.14
52.5	3454.66	3386.60
55.0	2863.44	2835.56
57.5	2537.90	2512.48
60.0	2196.78	2168.90
62.5	1787.60	1755.62
65.0	1306.26	1268.54

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CANDELA TABULATION - (Cont.)

67.5	946.28	926.60
70.0	715.04	678.96
72.5	532.18	529.72
75.0	386.22	413.28
77.5	284.54	290.28
80.0	266.50	268.96
82.5	326.36	321.44
85.0	149.24	141.86
87.5	0.82	0.00
90.0	0.00	0.00

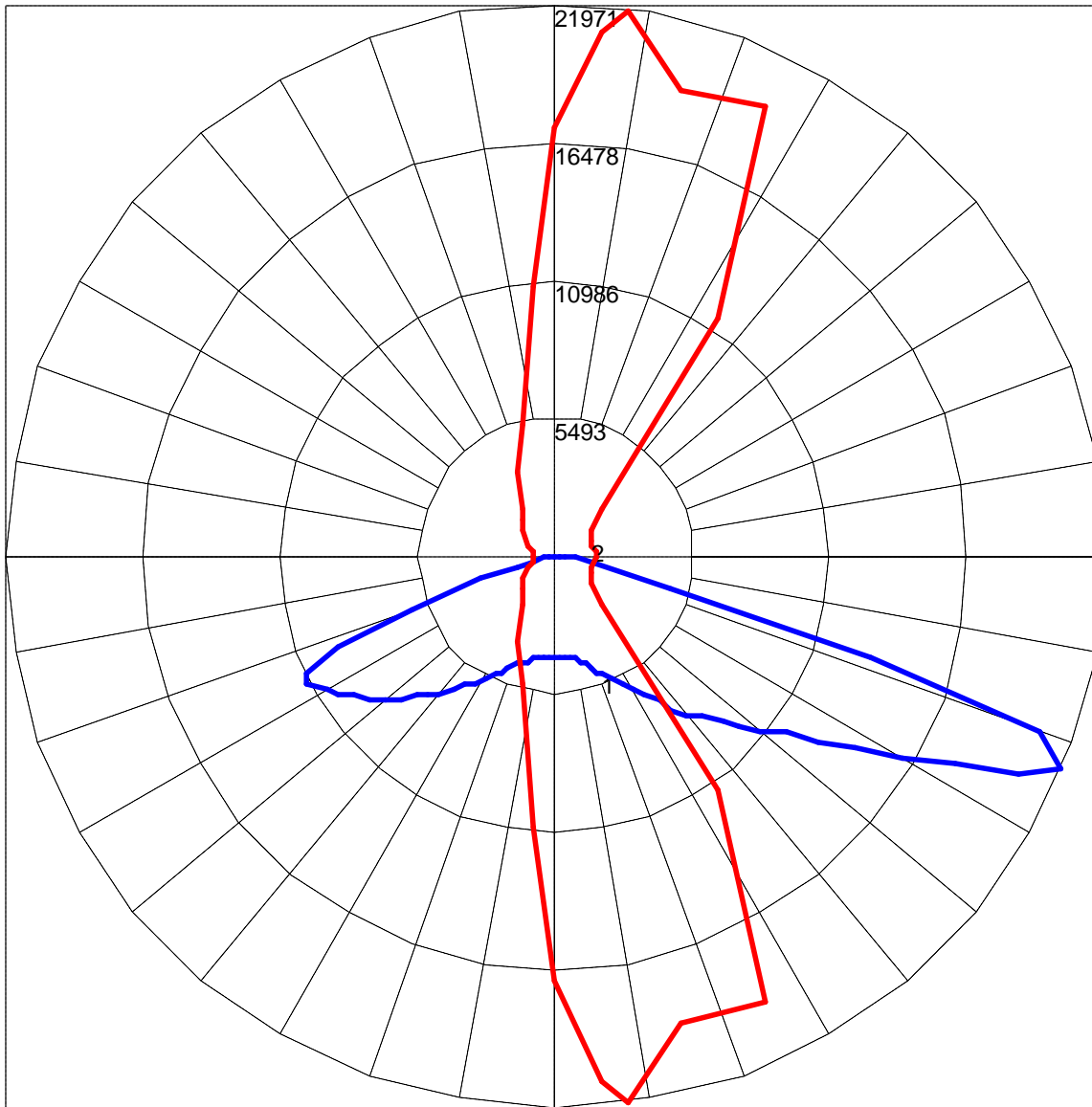
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

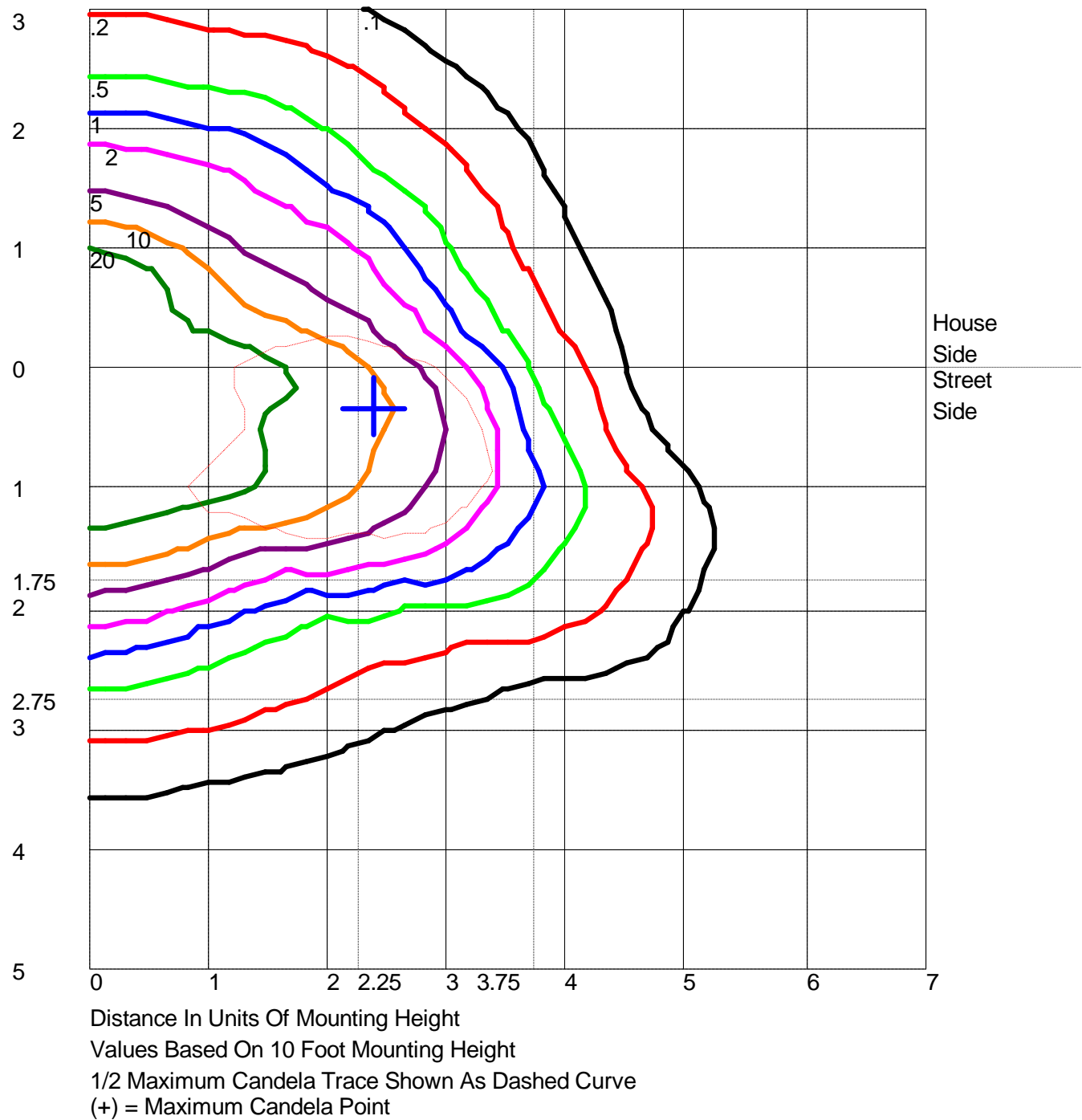
	Lumens	Percent Of Luminaire
Downward Street Side	18484.9	64.7
Downward House Side	10092.1	35.3
Downward Total	28577.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	28577.0	100.0

POLAR GRAPH

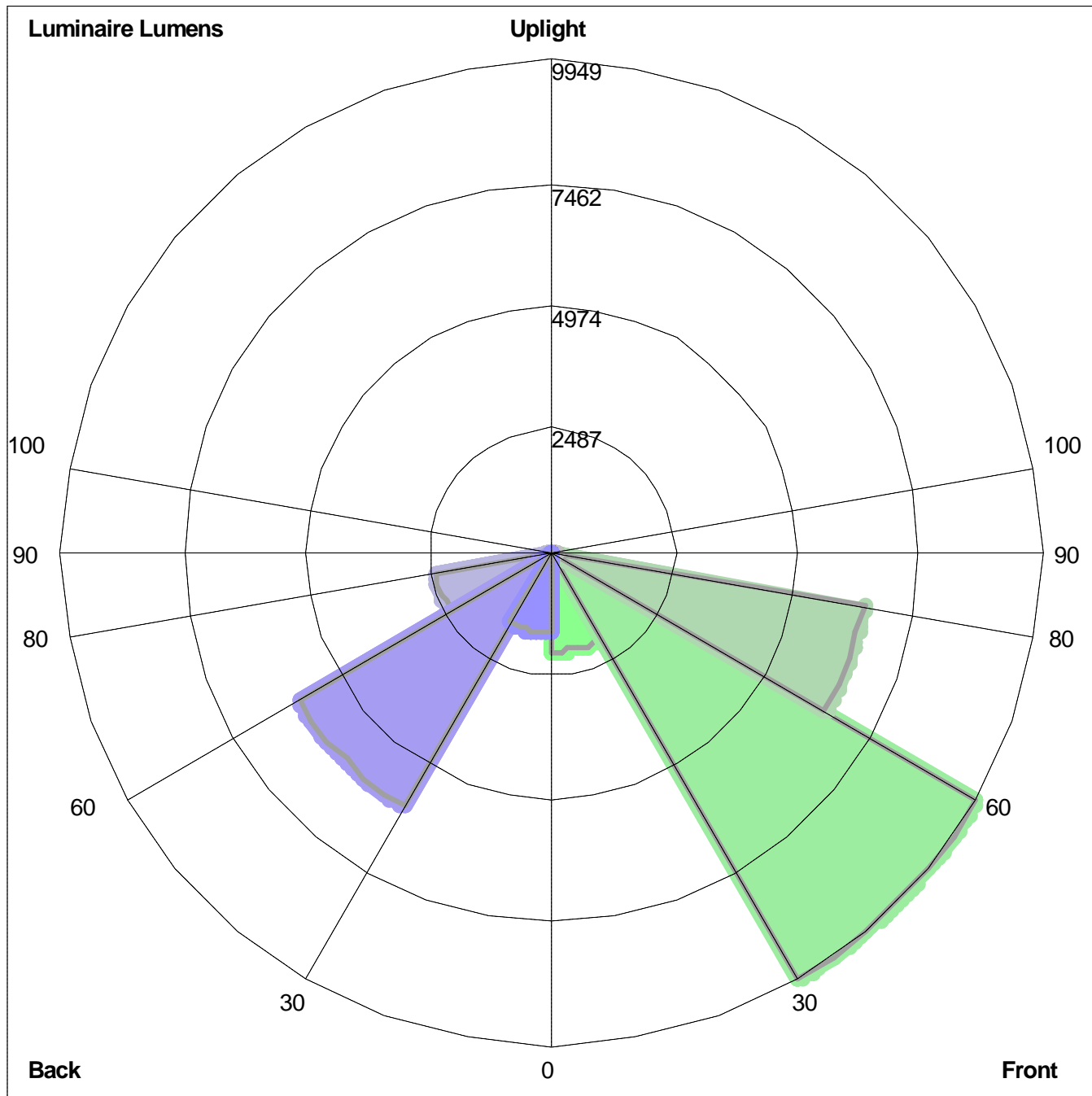


Maximum Candela = 21971.08 Located At Horizontal Angle = 82.5, Vertical Angle = 67.5
1 - Vertical Plane Through Horizontal Angles (82.5 - 262.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2007.8, Medium=9948.9, High=6397.9, Very High=130.3
Back: Low=1637.8, Medium=5945.4, High=2397.8, Very High=111.0
Uplight: Low=0.0, High=0.0

BUG Rating : B4-U0-G3