

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P299179

Luminaire Tested: **GLNA-AF-05-LED-E1-SL2-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299179  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-SL2-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

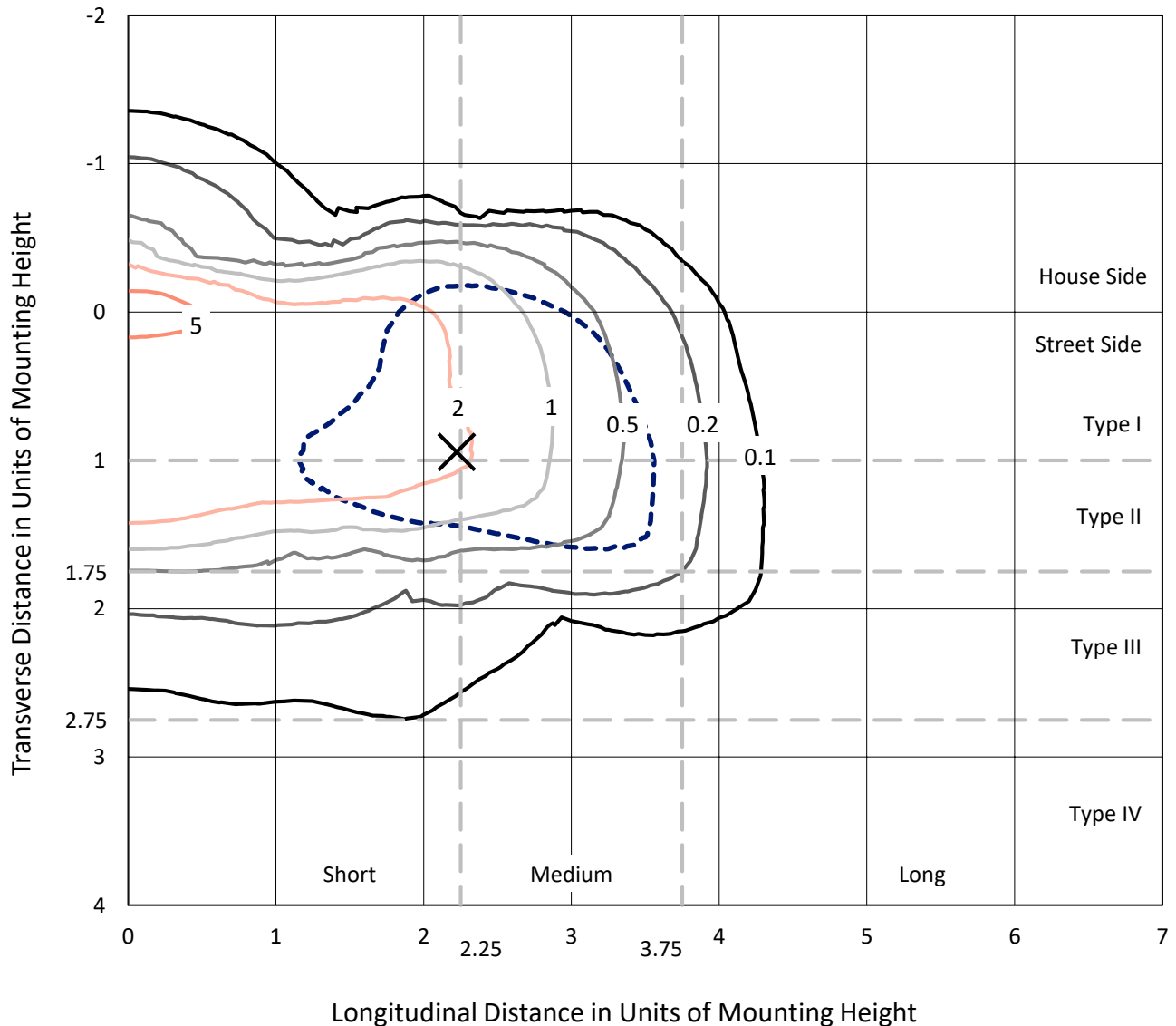
Lumens per Lamp: N/A  
Luminaire Lumens: 20386.3 lumens  
Efficiency: N/A  
Efficacy: 97.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

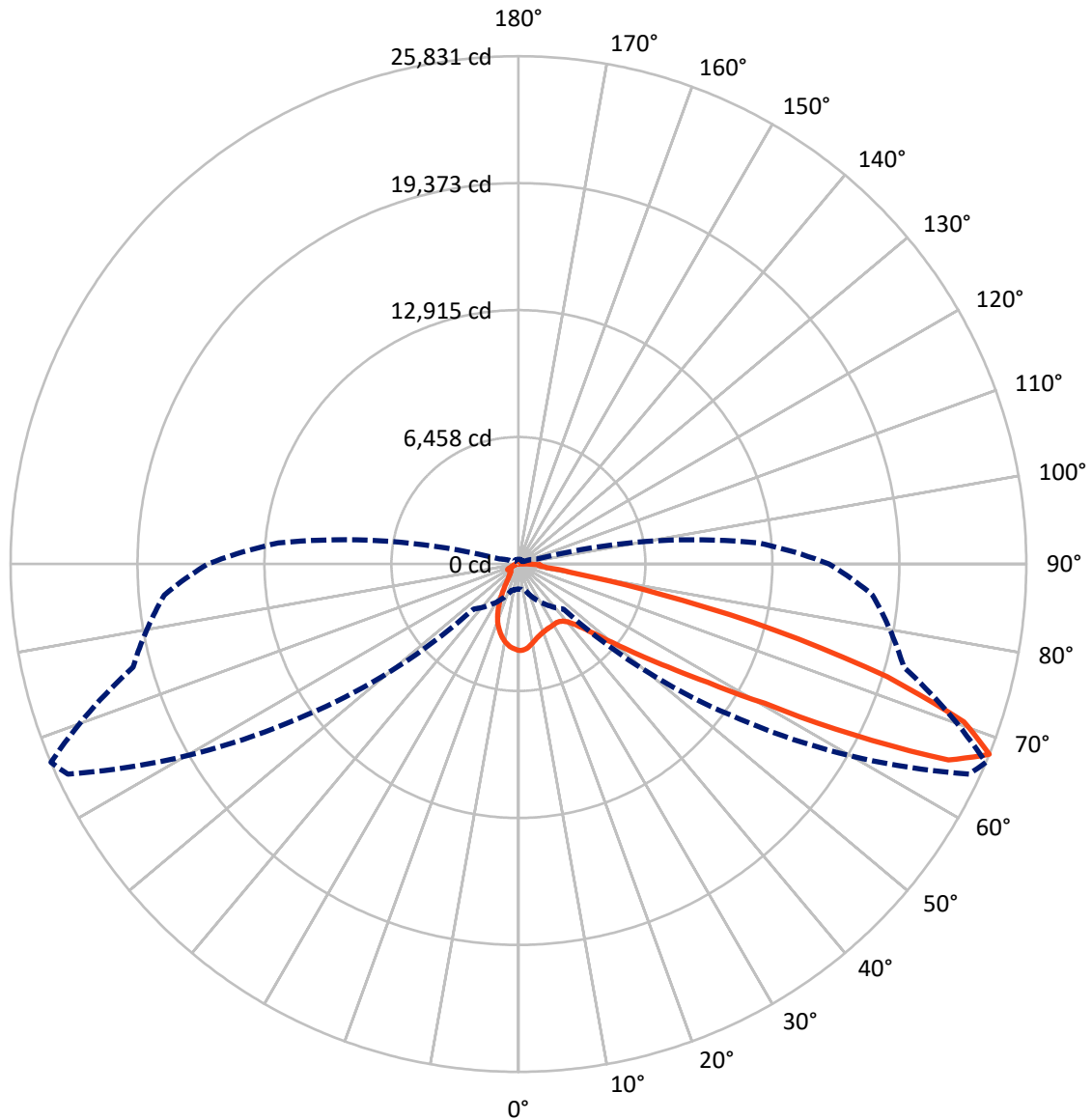
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3377.8	0.0	3377.8
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	17008.5	0.0	17008.5
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	20386.3	0.0	20386.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.2	1.8
10°-20°	868.0	4.3
20°-30°	1176.7	5.8
30°-40°	1672.7	8.2
40°-50°	2798.5	13.7
50°-60°	4427.3	21.7
60°-70°	5639.9	27.7
70°-80°	2954.2	14.5
80°-90°	473.8	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	20386.3	100.0
0°-180°	20386.3	100.0



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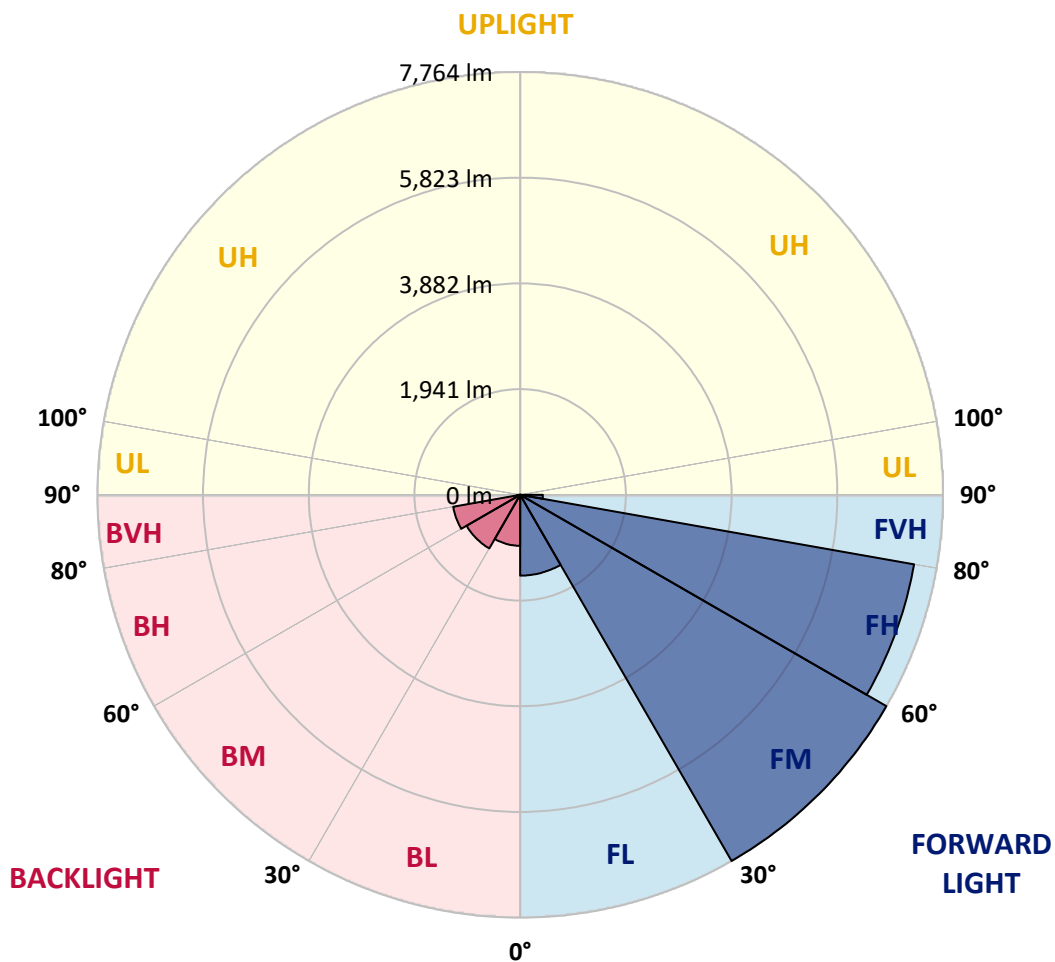
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1483.6	7.3			
FM (30°-60°)	7763.5	38.1			
FH (60°-80°)	7344.8	36.0			G3/7500
FVH (80°-90°)	416.6	2.0			G3/500
BL (0°-30°)	936.2	4.6	B2/1000		
BM (30°-60°)	1135.0	5.6	B2/2500		
BH (60°-80°)	1249.3	6.1	B3/2500		G3/2500
BVH (80°-90°)	57.2	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3
2.5°	4216.3	4223.4	4245.5	4259.6	4322.9	4350.0	4369.1	4388.2	4391.3	4400.3	4391.3
5°	3774.0	3789.1	3830.3	3876.5	3999.2	4095.7	4197.2	4302.8	4321.9	4390.2	4409.3
7.5°	3431.2	3427.1	3461.3	3516.6	3642.3	3776.0	3953.9	4164.0	4205.3	4359.1	4433.5
10°	3180.8	3177.8	3214.0	3271.3	3391.0	3517.6	3718.7	4006.2	4064.5	4309.8	4456.6
12.5°	2995.9	2996.9	3033.1	3096.4	3218.0	3345.7	3549.8	3853.4	3927.8	4252.5	4480.7
15°	2873.2	2881.3	2910.4	2977.8	3096.4	3224.1	3424.1	3738.8	3822.2	4207.3	4507.9
17.5°	2832.0	2845.1	2855.1	2904.4	3005.9	3133.6	3329.6	3654.4	3742.8	4176.1	4532.0
20°	2870.2	2885.3	2866.2	2883.3	2947.6	3060.2	3255.2	3588.0	3678.5	4140.9	4535.0
22.5°	3034.1	3048.1	2991.8	2942.6	2938.6	3006.9	3193.9	3535.7	3629.2	4114.8	4536.0
25°	3322.6	3331.6	3237.1	3122.5	3010.9	2987.8	3150.7	3499.5	3599.1	4091.7	4516.9
27.5°	3676.5	3683.5	3574.9	3406.0	3181.8	3033.1	3135.6	3478.4	3582.0	4071.6	4484.7
30°	4106.7	4139.9	3994.1	3781.0	3454.3	3166.8	3165.8	3467.4	3562.9	4037.4	4421.4
32.5°	4547.1	4561.2	4460.6	4244.5	3821.2	3402.0	3250.2	3475.4	3557.8	3996.2	4341.0
35°	4993.4	5011.5	4946.2	4772.3	4322.9	3746.8	3415.1	3522.7	3589.0	3982.1	4284.7
37.5°	5571.5	5595.6	5505.2	5304.1	4933.1	4214.3	3689.5	3641.3	3684.5	4022.3	4267.6
40°	6485.3	6474.3	6209.9	5910.3	5600.7	4812.5	4081.6	3842.3	3867.5	4152.0	4319.9
42.5°	7549.0	7521.8	7066.4	6595.9	6334.5	5536.3	4600.4	4191.2	4186.2	4407.3	4503.8
45°	8397.5	8375.3	7965.2	7385.1	7176.0	6360.7	5270.9	4710.9	4673.7	4812.5	4843.6
47.5°	8856.9	8857.9	8621.7	8148.1	8143.1	7408.2	6132.5	5462.9	5398.6	5463.9	5430.8
50°	8696.0	8717.2	8692.0	8541.2	9025.8	8781.5	7257.4	6511.5	6381.8	6446.1	6318.5
52.5°	7917.9	7945.1	8093.9	8325.1	9396.8	10441.3	8910.2	7814.4	7663.6	7640.5	7498.7
55°	6538.6	6571.8	6875.4	7503.7	9088.1	11556.2	11518.0	9475.2	9234.9	9016.7	8956.4
57.5°	4506.9	4562.2	5050.7	5983.7	8089.8	11893.0	14623.4	11842.7	11354.1	10592.1	10606.2
60°	2540.5	2604.8	3180.8	4028.3	6075.2	11527.0	16985.9	15428.7	14397.2	12436.9	12541.4
62.5°	1615.6	1684.9	2122.2	2798.8	3645.3	9556.6	17954.1	20414.1	19104.2	14710.9	14813.4
65°	1307.9	1338.1	1544.2	2310.2	2647.0	5757.5	17219.2	24520.8	24032.3	17597.2	17118.6
67.5°	1276.8	1286.8	1393.4	1939.3	2538.4	3236.1	13734.7	25288.9	25830.8	20292.5	18078.7
70°	1261.7	1296.9	1570.3	1850.8	2430.9	2729.5	8253.7	23183.8	24039.3	20997.2	16801.0
72.5°	612.2	610.2	790.2	1673.9	2738.5	2831.0	4240.5	18758.3	19616.9	18191.3	13806.1
75°	493.6	451.4	431.3	613.2	2632.9	2923.5	2702.3	12907.3	13528.6	12196.6	8486.9
77.5°	468.5	418.2	383.0	384.0	1112.9	3100.4	2289.1	7143.8	7324.8	5509.2	2325.3
80°	388.1	341.8	316.7	356.9	538.9	2952.6	2475.1	3233.1	2966.7	1353.2	774.1
82.5°	269.4	245.3	238.3	299.6	431.3	2104.1	2878.2	1737.2	1456.7	677.6	477.5
85°	171.9	146.8	162.9	218.2	335.8	971.1	2964.7	1354.2	1076.7	430.3	269.4
87.5°	79.4	64.3	80.4	120.6	219.2	334.8	2820.9	1521.1	1108.9	227.2	169.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3	4397.3
2.5°	4399.3	4380.2	4365.1	4337.0	4305.8	4275.6	4248.5	4214.3	4204.3	4195.2	4209.3
5°	4413.4	4394.3	4339.0	4252.5	4157.0	4067.5	3978.1	3901.7	3854.4	3828.3	3843.4
7.5°	4434.5	4407.3	4292.7	4133.9	3962.0	3805.1	3643.3	3513.6	3418.1	3372.9	3385.9
10°	4453.6	4401.3	4214.3	3976.1	3724.7	3491.5	3236.1	3025.0	2868.2	2785.8	2805.9
12.5°	4461.6	4378.2	4104.7	3779.0	3434.2	3092.4	2716.4	2400.7	2175.5	2093.1	2076.0
15°	4469.7	4352.0	3984.1	3554.8	3083.3	2599.8	2073.0	1695.0	1508.0	1466.8	1457.7
17.5°	4471.7	4306.8	3847.4	3311.5	2672.1	2013.7	1417.5	1177.2	1178.2	1244.6	1252.6
20°	4450.6	4239.4	3681.5	3008.9	2179.5	1392.4	973.2	931.9	1083.7	1249.6	1269.7
22.5°	4402.3	4150.0	3493.5	2656.1	1615.6	916.9	753.0	798.2	994.3	1197.3	1220.5
25°	4341.0	4041.4	3271.3	2246.9	1069.7	655.5	631.3	686.6	819.3	955.1	968.1
27.5°	4257.5	3912.7	3022.0	1778.4	694.7	539.9	555.9	593.1	647.4	707.7	713.8
30°	4150.0	3758.9	2755.6	1296.9	524.8	485.6	508.7	528.8	551.9	586.1	589.1
32.5°	4026.3	3611.1	2482.1	895.7	465.5	457.4	475.5	485.6	503.7	524.8	526.8
35°	3922.8	3470.4	2198.6	633.4	440.3	436.3	448.4	452.4	469.5	492.6	494.6
37.5°	3863.5	3355.8	1906.1	510.7	423.2	417.2	424.2	424.2	448.4	482.6	487.6
40°	3867.5	3292.4	1613.5	461.4	409.2	401.1	402.1	402.1	433.3	470.5	473.5
42.5°	3977.1	3308.5	1354.2	442.3	398.1	389.1	384.0	387.0	413.2	437.3	439.3
45°	4234.4	3422.1	1110.9	430.3	387.0	384.0	373.0	372.0	382.0	393.1	393.1
47.5°	4656.7	3646.3	946.0	422.2	378.0	377.0	363.9	350.9	349.9	353.9	353.9
50°	5343.3	4032.4	835.4	413.2	372.0	363.9	348.8	328.7	321.7	324.7	324.7
52.5°	6372.7	4721.0	793.2	401.1	358.9	345.8	328.7	308.6	302.6	303.6	303.6
55°	7722.9	5778.6	787.2	387.0	344.8	323.7	309.6	294.6	287.5	289.5	289.5
57.5°	9372.6	7241.3	894.7	364.9	325.7	301.6	293.6	283.5	278.5	281.5	280.5
60°	11378.2	9155.5	1327.0	341.8	306.6	281.5	281.5	273.4	269.4	272.4	271.4
62.5°	13688.5	11354.1	1865.9	324.7	286.5	265.4	269.4	265.4	261.4	263.4	262.4
65°	15737.3	12786.7	1747.3	311.7	266.4	250.3	257.4	255.4	252.3	254.3	253.3
67.5°	15796.6	12255.9	981.2	297.6	247.3	235.2	245.3	244.3	242.3	244.3	243.3
70°	14097.6	10348.8	552.9	271.4	227.2	217.1	231.2	230.2	228.2	232.2	231.2
72.5°	11294.8	7509.8	404.1	239.3	207.1	198.0	214.1	213.1	213.1	219.2	216.1
75°	6499.4	3864.5	322.7	205.1	186.0	178.9	193.0	194.0	196.0	204.1	198.0
77.5°	1852.8	1204.4	263.4	173.9	159.8	156.8	170.9	172.9	173.9	183.0	174.9
80°	688.6	554.9	217.1	145.8	130.7	131.7	144.8	147.8	148.8	157.8	147.8
82.5°	439.3	365.9	175.9	112.6	102.5	101.5	117.6	121.6	121.6	122.6	116.6
85°	256.4	219.2	132.7	81.4	72.4	69.4	87.5	94.5	91.5	89.5	85.5
87.5°	171.9	150.8	81.4	45.2	39.2	37.2	51.3	56.3	54.3	51.3	48.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)