

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: P299197

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299197
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-08-LED-E1-SL2-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 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: 32689.4 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

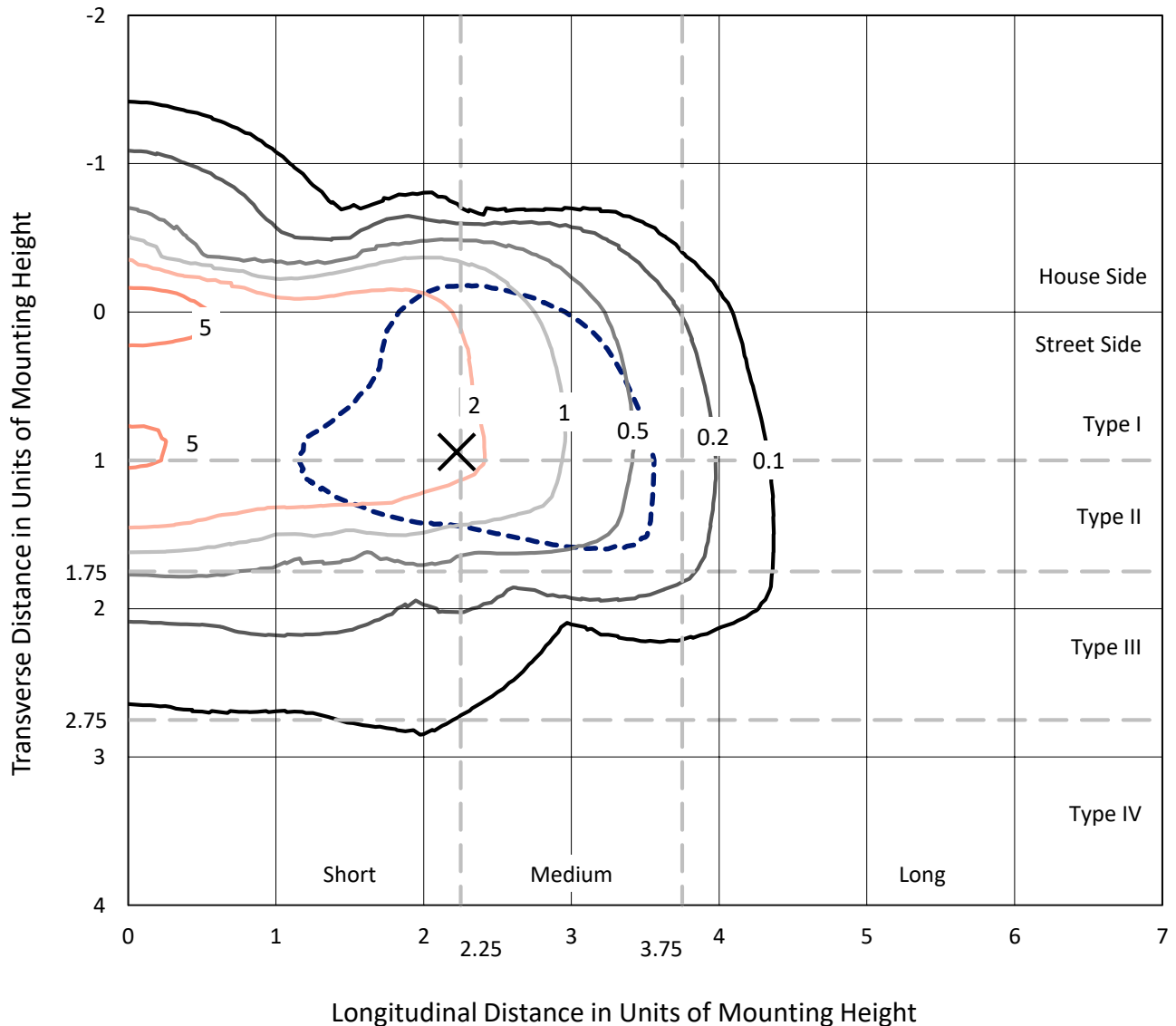
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

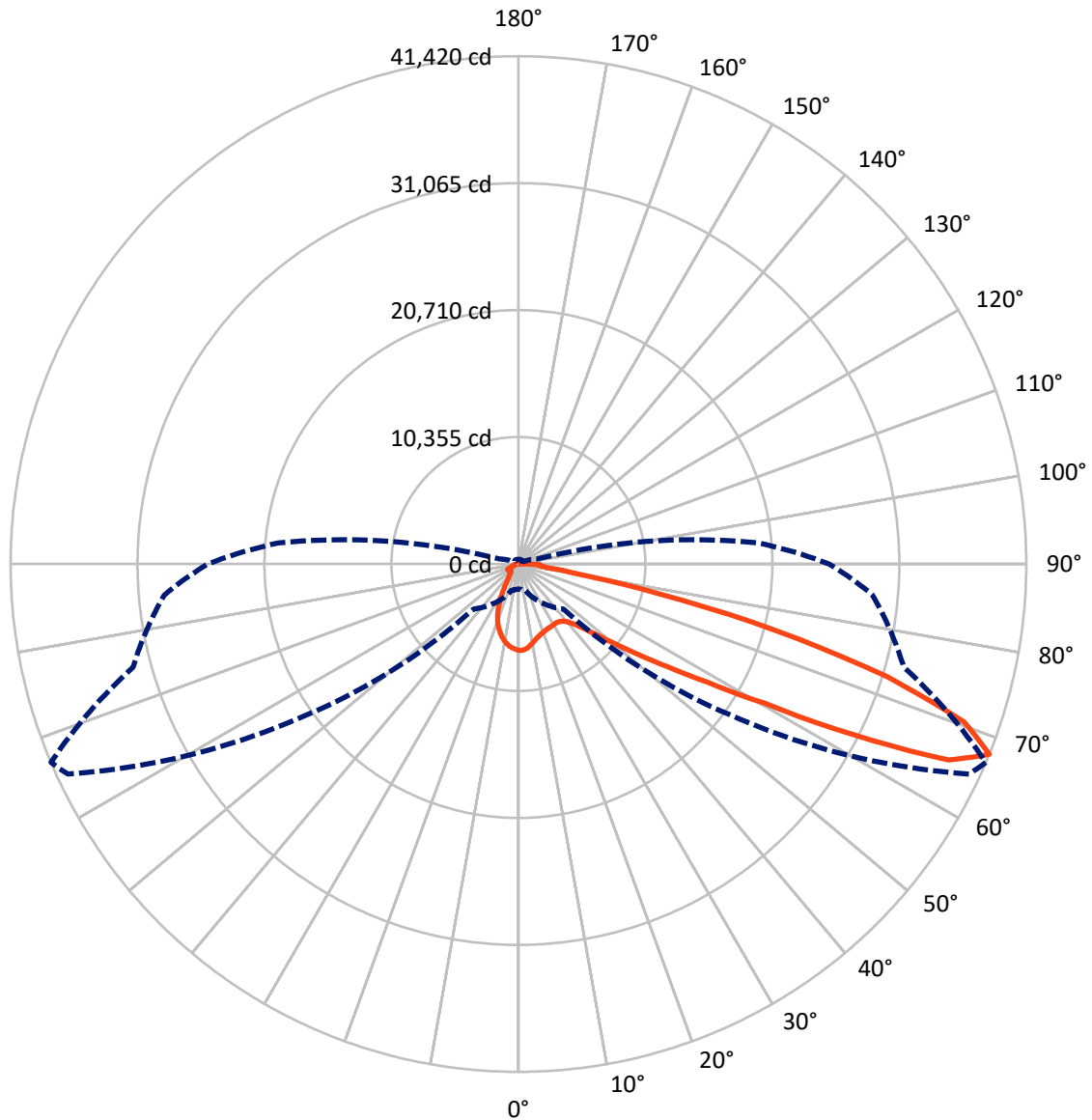
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.8 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
House Side	Lumens	5416.3	0.0	5416.3
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	27273.1	0.0	27273.1
	% Fixture	83.4	0.0	83.4
Total	Lumens	32689.4	0.0	32689.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.6	1.8
10°-20°	1391.9	4.3
20°-30°	1886.8	5.8
30°-40°	2682.2	8.2
40°-50°	4487.5	13.7
50°-60°	7099.1	21.7
60°-70°	9043.6	27.7
70°-80°	4737.0	14.5
80°-90°	759.7	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°	32689.4	100.0
0°-180°	32689.4	100.0



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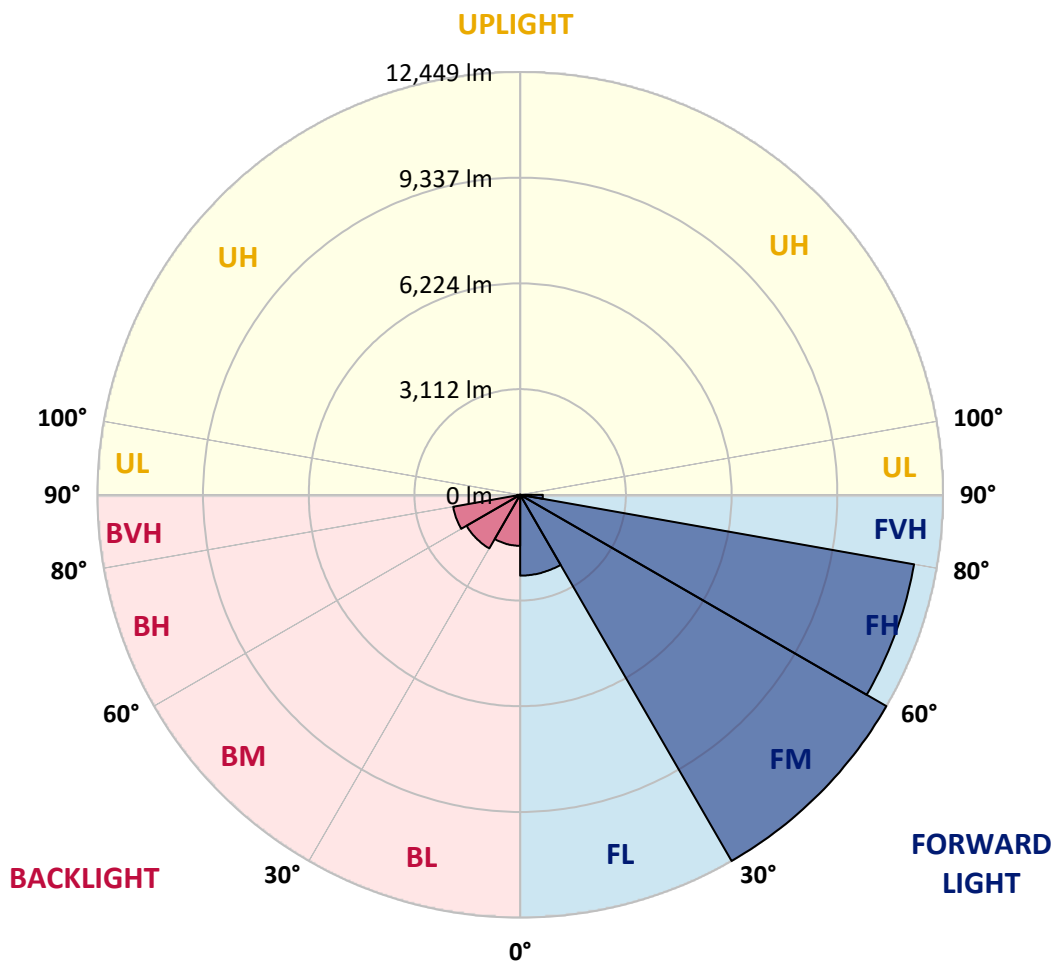
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2379.0	7.3			
FM (30°-60°)	12448.8	38.1			
FH (60°-80°)	11777.3	36.0			G4/12000
FVH (80°-90°)	668.0	2.0			G4/750
BL (0°-30°)	1501.2	4.6	B3/2500		
BM (30°-60°)	1820.0	5.6	B2/2500		
BH (60°-80°)	2003.3	6.1	B3/2500		G3/2500
BVH (80°-90°)	91.7	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-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0
2.5°	6760.9	6772.1	6807.6	6830.2	6931.7	6975.3	7005.9	7036.5	7041.3	7055.9	7041.3
5°	6051.6	6075.7	6141.8	6216.0	6412.7	6567.4	6730.2	6899.5	6930.1	7039.7	7070.4
7.5°	5501.9	5495.4	5550.2	5638.9	5840.4	6054.8	6340.1	6677.0	6743.1	6989.8	7109.1
10°	5100.5	5095.6	5153.7	5245.5	5437.4	5640.5	5962.9	6423.9	6517.4	6910.8	7146.1
12.5°	4803.8	4805.5	4863.5	4965.1	5160.1	5364.8	5692.1	6178.9	6298.2	6818.9	7184.8
15°	4607.2	4620.1	4666.8	4774.8	4965.1	5169.8	5490.6	5995.1	6128.9	6746.3	7228.3
17.5°	4541.1	4562.0	4578.2	4657.2	4820.0	5024.7	5339.0	5859.7	6001.6	6696.4	7267.0
20°	4602.3	4626.5	4595.9	4623.3	4726.5	4907.0	5219.8	5753.3	5898.4	6640.0	7271.9
22.5°	4865.1	4887.7	4797.4	4718.4	4712.0	4821.6	5121.4	5669.5	5819.4	6598.0	7273.5
25°	5327.8	5342.3	5190.7	5007.0	4828.0	4791.0	5052.1	5611.5	5771.1	6561.0	7242.8
27.5°	5895.2	5906.5	5732.4	5461.6	5102.1	4863.5	5027.9	5577.6	5743.7	6528.7	7191.3
30°	6585.1	6638.3	6404.6	6062.8	5538.9	5077.9	5076.3	5559.9	5713.0	6473.9	7089.7
32.5°	7291.2	7313.8	7152.6	6806.0	6127.3	5455.1	5211.7	5572.8	5705.0	6407.8	6960.7
35°	8007.0	8036.0	7931.2	7652.3	6931.7	6008.0	5476.1	5648.6	5754.9	6385.2	6870.5
37.5°	8933.9	8972.6	8827.5	8505.1	7910.2	6757.6	5916.1	5838.8	5908.1	6449.7	6843.1
40°	10399.2	10381.5	9957.5	9477.1	8980.6	7716.8	6544.8	6161.2	6201.5	6657.7	6926.9
42.5°	12104.7	12061.2	11331.0	10576.5	10157.4	8877.4	7376.6	6720.6	6712.5	7067.1	7221.9
45°	13465.3	13429.8	12772.1	11842.0	11506.7	10199.3	8451.9	7554.0	7494.3	7716.8	7766.8
47.5°	14202.0	14203.6	13824.8	13065.5	13057.4	11879.0	9833.4	8759.8	8656.6	8761.4	8708.2
50°	13944.1	13977.9	13937.6	13695.8	14472.8	14081.1	11637.2	10441.1	10233.2	10336.3	10131.6
52.5°	12696.3	12739.9	12978.5	13349.2	15067.6	16742.5	14287.4	12530.3	12288.5	12251.4	12024.1
55°	10484.6	10537.8	11024.7	12032.2	14572.7	18530.3	18469.0	15193.4	14808.1	14458.3	14361.6
57.5°	7226.7	7315.4	8098.8	9594.8	12972.0	19070.3	23448.6	18989.7	18206.3	16984.3	17006.9
60°	4073.6	4176.8	5100.5	6459.4	9741.5	18483.5	27236.9	24739.8	23085.9	19942.4	20110.1
62.5°	2590.5	2701.8	3403.0	4487.9	5845.2	15324.0	28789.2	32733.9	30633.4	23588.8	23753.3
65°	2097.3	2145.6	2476.1	3704.4	4244.5	9232.1	27610.8	39319.0	38535.6	28217.0	27449.6
67.5°	2047.3	2063.4	2234.3	3109.6	4070.4	5189.1	22023.6	40550.6	41419.5	32538.8	28989.1
70°	2023.1	2079.5	2518.0	2967.7	3897.9	4376.7	13234.8	37175.0	38546.9	33668.9	26940.2
72.5°	981.7	978.5	1267.1	2684.0	4391.2	4539.5	6799.5	30078.9	31455.5	29169.7	22138.0
75°	791.5	723.8	691.6	983.3	4221.9	4687.8	4333.1	20696.8	21693.1	19557.1	13608.8
77.5°	751.2	670.6	614.2	615.8	1784.5	4971.5	3670.6	11455.1	11745.2	8833.9	3728.6
80°	622.2	548.1	507.8	572.3	864.0	4734.5	3968.8	5184.3	4757.1	2169.8	1241.3
82.5°	432.0	393.3	382.1	480.4	691.6	3374.0	4615.2	2785.6	2335.8	1086.5	765.7
85°	275.7	235.4	261.1	349.8	538.4	1557.2	4753.9	2171.4	1726.5	689.9	432.0
87.5°	127.4	103.2	129.0	193.4	351.4	536.8	4523.4	2439.0	1778.1	364.3	272.4
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°	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0	7051.0
2.5°	7054.2	7023.6	6999.4	6954.3	6904.3	6856.0	6812.4	6757.6	6741.5	6727.0	6749.6
5°	7076.8	7046.2	6957.5	6818.9	6665.7	6522.3	6378.8	6256.3	6180.5	6138.6	6162.8
7.5°	7110.7	7067.1	6883.4	6628.7	6353.0	6101.5	5842.0	5634.0	5480.9	5408.4	5429.3
10°	7141.3	7057.5	6757.6	6375.6	5972.6	5598.6	5189.1	4850.6	4599.1	4466.9	4499.2
12.5°	7154.2	7020.4	6581.9	6059.6	5506.7	4958.6	4355.7	3849.5	3488.4	3356.2	3328.8
15°	7167.1	6978.5	6388.5	5700.1	4944.1	4168.7	3324.0	2717.9	2418.0	2352.0	2337.4
17.5°	7170.3	6905.9	6169.2	5310.0	4284.8	3228.9	2273.0	1887.7	1889.3	1995.7	2008.6
20°	7136.5	6797.9	5903.3	4824.8	3494.9	2232.7	1560.4	1494.4	1737.8	2003.8	2036.0
22.5°	7059.1	6654.5	5601.8	4259.0	2590.5	1470.2	1207.4	1280.0	1594.3	1919.9	1957.0
25°	6960.7	6480.4	5245.5	3602.9	1715.2	1051.0	1012.4	1101.0	1313.8	1531.4	1552.4
27.5°	6826.9	6274.0	4845.8	2851.7	1113.9	865.7	891.5	951.1	1038.1	1134.9	1144.5
30°	6654.5	6027.4	4418.6	2079.5	841.5	778.6	815.7	847.9	885.0	939.8	944.6
32.5°	6456.2	5790.4	3980.1	1436.3	746.4	733.5	762.5	778.6	807.6	841.5	844.7
35°	6290.1	5564.7	3525.5	1015.6	706.1	699.6	719.0	725.4	752.8	789.9	793.1
37.5°	6195.0	5381.0	3056.4	818.9	678.7	669.0	680.3	680.3	719.0	773.8	781.8
40°	6201.5	5279.4	2587.3	739.9	656.1	643.2	644.8	644.8	694.8	754.4	759.3
42.5°	6377.2	5305.2	2171.4	709.3	638.4	623.9	615.8	620.6	662.5	701.2	704.5
45°	6789.9	5487.3	1781.3	689.9	620.6	615.8	598.1	596.5	612.6	630.3	630.3
47.5°	7466.9	5846.8	1516.9	677.1	606.1	604.5	583.6	562.6	561.0	567.4	567.4
50°	8567.9	6465.9	1339.6	662.5	596.5	583.6	559.4	527.1	515.8	520.7	520.7
52.5°	10218.7	7570.1	1271.9	643.2	575.5	554.5	527.1	494.9	485.2	486.8	486.8
55°	12383.6	9265.9	1262.2	620.6	552.9	519.1	496.5	472.3	461.0	464.3	464.3
57.5°	15029.0	11611.5	1434.7	585.2	522.3	483.6	470.7	454.6	446.5	451.4	449.8
60°	18245.0	14680.8	2127.9	548.1	491.7	451.4	451.4	438.5	432.0	436.9	435.2
62.5°	21949.4	18206.3	2991.9	520.7	459.4	425.6	432.0	425.6	419.1	422.4	420.7
65°	25234.7	20503.4	2801.7	499.7	427.2	401.4	412.7	409.5	404.6	407.8	406.2
67.5°	25329.8	19652.3	1573.3	477.2	396.6	377.2	393.3	391.7	388.5	391.7	390.1
70°	22605.5	16594.2	886.6	435.2	364.3	348.2	370.8	369.2	365.9	372.4	370.8
72.5°	18111.2	12041.9	648.0	383.7	332.1	317.6	343.4	341.8	341.8	351.4	346.6
75°	10421.8	6196.6	517.5	328.9	298.2	286.9	309.5	311.1	314.3	327.2	317.6
77.5°	2971.0	1931.2	422.4	278.9	256.3	251.5	274.0	277.3	278.9	293.4	280.5
80°	1104.2	889.8	348.2	233.7	209.6	211.2	232.1	237.0	238.6	253.1	237.0
82.5°	704.5	586.8	282.1	180.5	164.4	162.8	188.6	195.1	195.1	196.7	187.0
85°	411.1	351.4	212.8	130.6	116.1	111.2	140.2	151.5	146.7	143.5	137.0
87.5°	275.7	241.8	130.6	72.5	62.9	59.6	82.2	90.3	87.0	82.2	77.4
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)