

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: P299182

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299182
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-SL2-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23463.9 lumens
Efficiency: N/A
Efficacy: 111.7 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 - G4

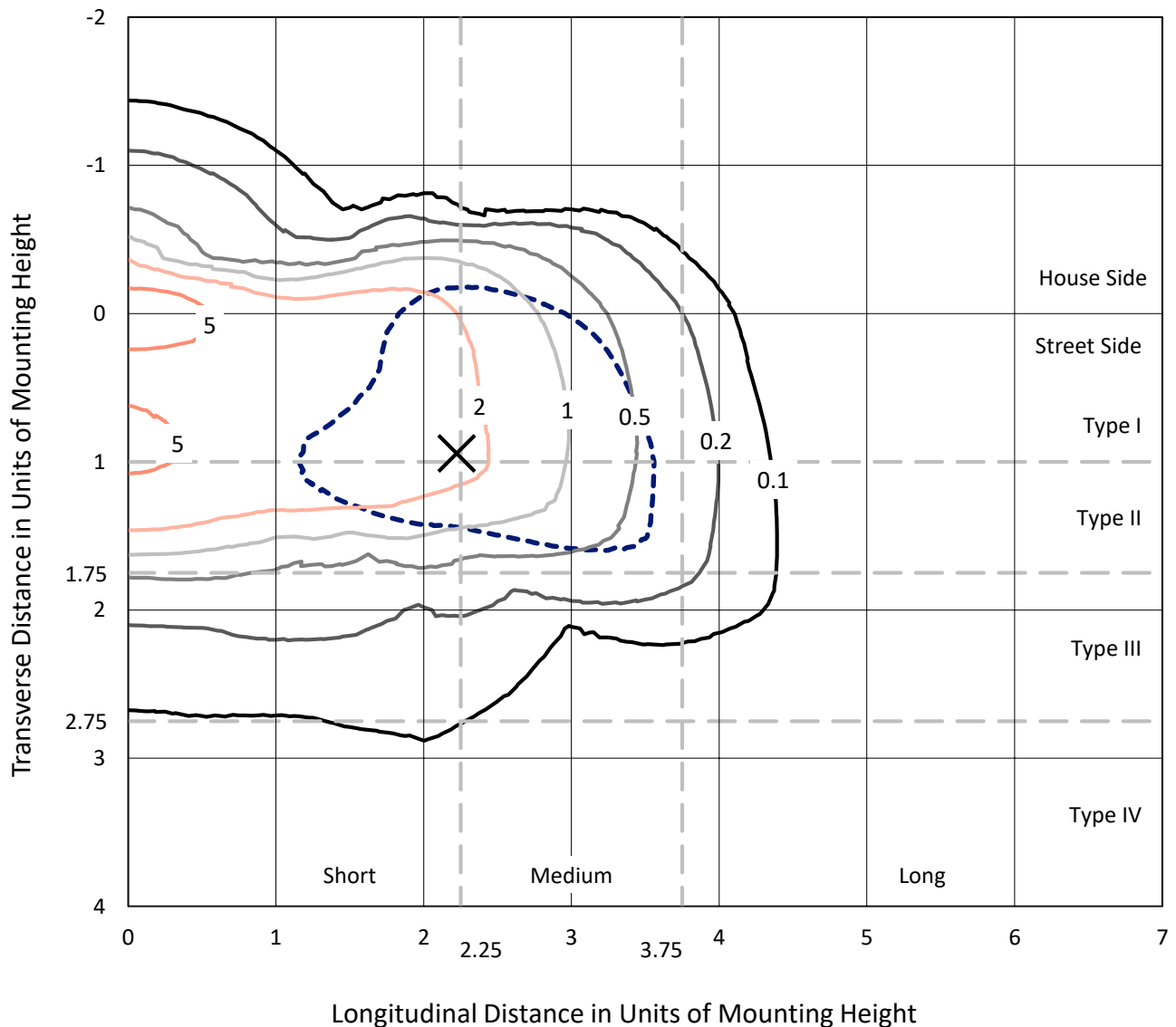
Input Watts (W): 210
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

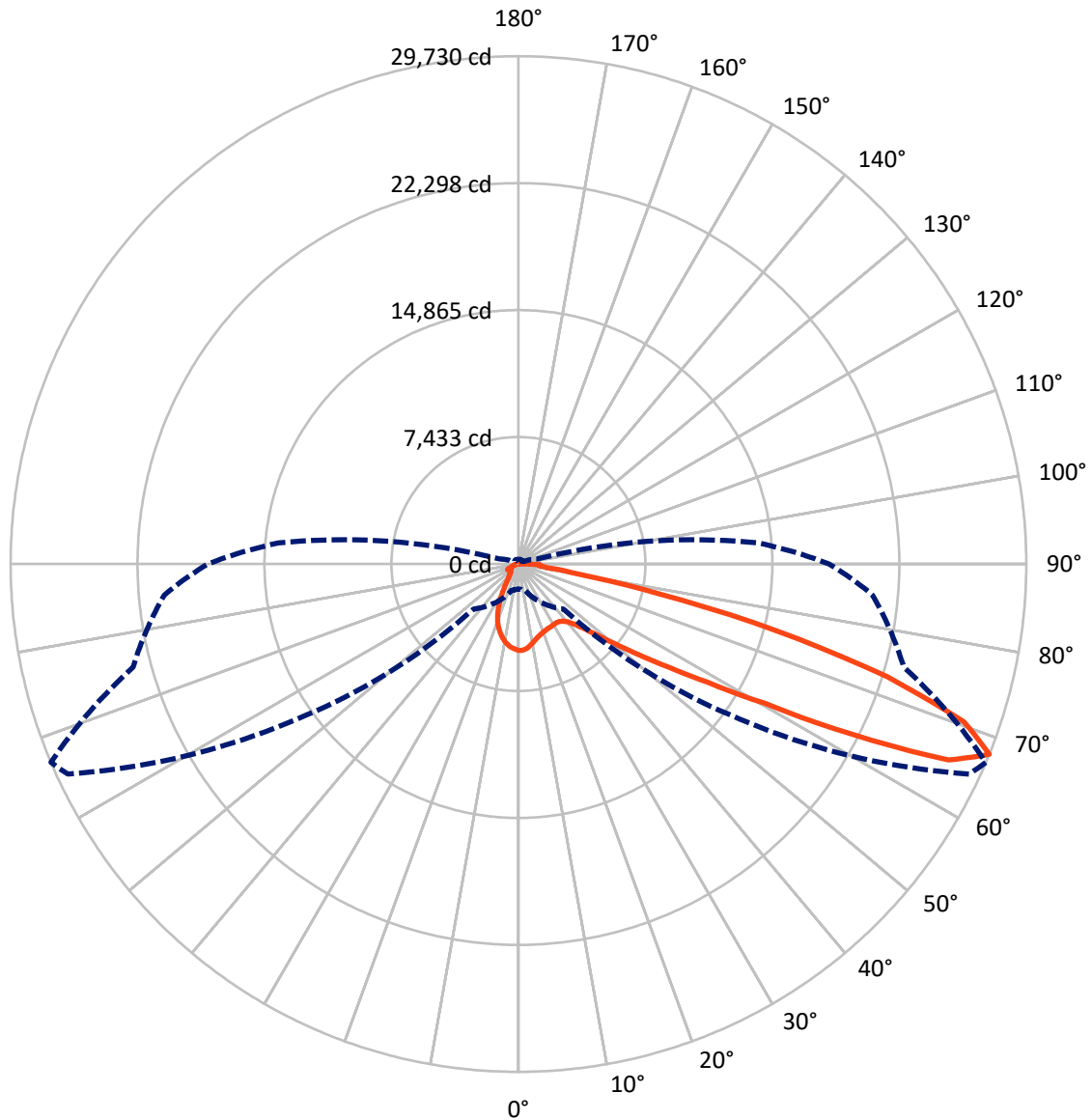
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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	3887.7	0.0	3887.7
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	19576.2	0.0	19576.2
	% Fixture	83.4	0.0	83.4
Total	Lumens	23463.9	0.0	23463.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.8	1.8
10°-20°	999.1	4.3
20°-30°	1354.3	5.8
30°-40°	1925.3	8.2
40°-50°	3221.0	13.7
50°-60°	5095.6	21.7
60°-70°	6491.3	27.7
70°-80°	3400.2	14.5
80°-90°	545.3	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°	23463.9	100.0
0°-180°	23463.9	100.0



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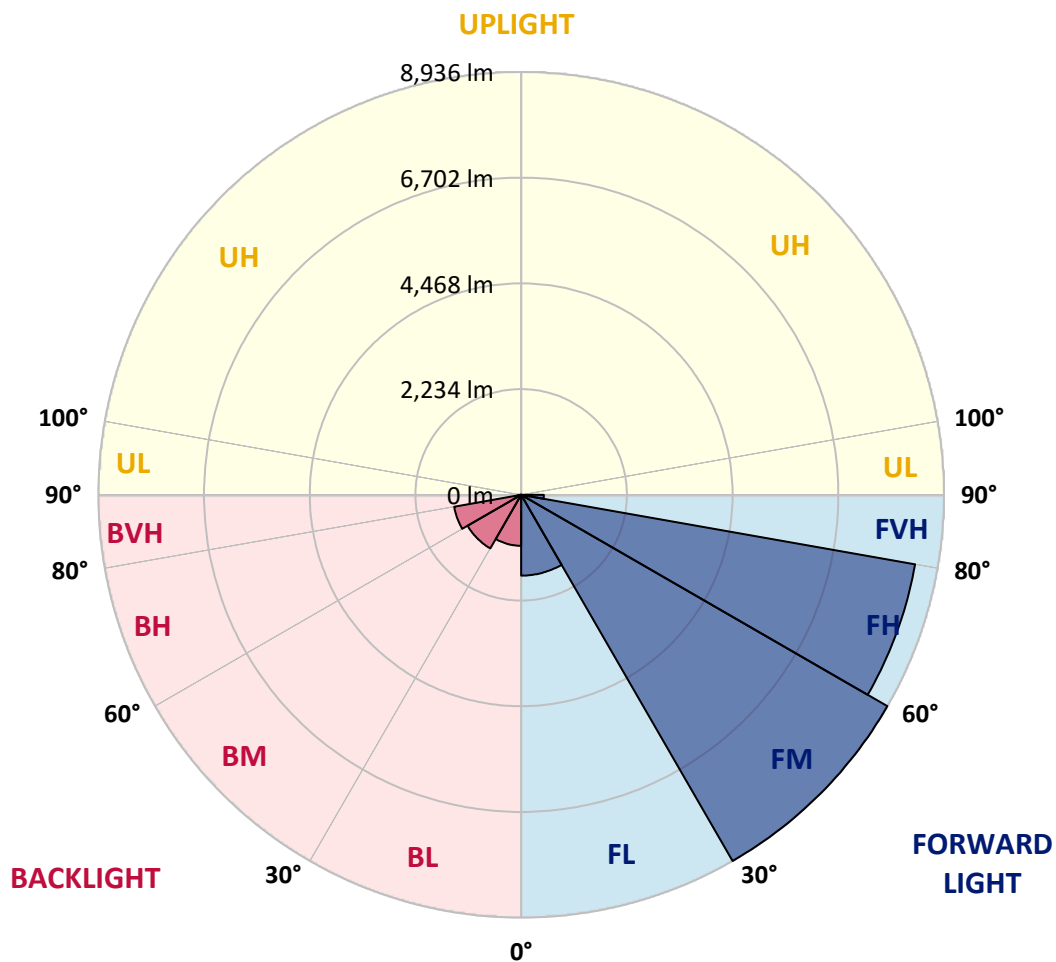
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1707.6	7.3			
FM	(30°-60°)	8935.5	38.1			
FH	(60°-80°)	8453.5	36.0			G4/12000
FVH	(80°-90°)	479.5	2.0			G3/500
BL	(0°-30°)	1077.6	4.6	B3/2500		
BM	(30°-60°)	1306.4	5.6	B2/2500		
BH	(60°-80°)	1437.9	6.1	B3/2500		G3/2500
BVH	(80°-90°)	65.8	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°	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1
2.5°	4852.8	4860.9	4886.4	4902.6	4975.5	5006.7	5028.7	5050.7	5054.2	5064.6	5054.2
5°	4343.7	4361.1	4408.5	4461.7	4602.9	4714.0	4830.8	4952.3	4974.3	5053.0	5075.0
7.5°	3949.1	3944.5	3983.9	4047.5	4192.1	4346.0	4550.8	4792.7	4840.1	5017.1	5102.8
10°	3661.0	3657.6	3699.2	3765.2	3902.9	4048.7	4280.1	4611.0	4678.1	4960.4	5129.4
12.5°	3448.1	3449.3	3490.9	3563.8	3703.8	3850.8	4085.7	4435.1	4520.7	4894.5	5157.1
15°	3307.0	3316.2	3349.8	3427.3	3563.8	3710.8	3941.0	4303.2	4399.3	4842.4	5188.4
17.5°	3259.5	3274.6	3286.1	3342.8	3459.7	3606.6	3832.3	4206.0	4307.8	4806.5	5216.2
20°	3303.5	3320.8	3298.9	3318.5	3392.6	3522.2	3746.7	4129.6	4233.8	4766.0	5219.6
22.5°	3492.1	3508.3	3443.5	3386.8	3382.2	3460.9	3676.1	4069.5	4177.1	4736.0	5220.8
25°	3824.2	3834.6	3725.8	3593.9	3465.5	3438.9	3626.3	4027.8	4142.4	4709.4	5198.8
27.5°	4231.5	4239.6	4114.6	3920.2	3662.2	3490.9	3609.0	4003.5	4122.7	4686.2	5161.8
30°	4726.7	4764.9	4597.1	4351.8	3975.8	3644.8	3643.7	3990.8	4100.7	4646.9	5088.9
32.5°	5233.5	5249.7	5134.0	4885.2	4398.1	3915.6	3740.9	4000.1	4094.9	4599.4	4996.3
35°	5747.3	5768.1	5692.9	5492.7	4975.5	4312.5	3930.6	4054.4	4130.8	4583.2	4931.5
37.5°	6412.6	6440.4	6336.2	6104.8	5677.8	4850.5	4246.5	4191.0	4240.7	4629.5	4911.8
40°	7464.4	7451.7	7147.3	6802.5	6446.1	5539.0	4697.8	4422.4	4451.3	4778.8	4972.0
42.5°	8688.6	8657.3	8133.2	7591.7	7290.8	6372.1	5294.8	4823.9	4818.1	5072.7	5183.8
45°	9665.2	9639.7	9167.6	8500.0	8259.3	7320.9	6066.6	5422.1	5379.3	5539.0	5574.9
47.5°	10194.0	10195.1	9923.2	9378.2	9372.4	8526.6	7058.2	6287.6	6213.6	6288.8	6250.6
50°	10008.8	10033.1	10004.2	9830.6	10388.3	10107.2	8353.0	7494.5	7345.2	7419.3	7272.3
52.5°	9113.2	9144.5	9315.7	9581.9	10815.3	12017.5	10255.3	8994.0	8820.5	8793.9	8630.7
55°	7525.7	7563.9	7913.3	8636.5	10460.1	13300.7	13256.8	10905.6	10629.0	10377.9	10308.5
57.5°	5187.2	5250.9	5813.2	6887.0	9311.1	13688.4	16831.0	13630.5	13068.2	12191.1	12207.3
60°	2924.0	2998.0	3661.0	4636.5	6992.3	13267.2	19550.2	17757.8	16570.7	14314.3	14434.7
62.5°	1859.4	1939.3	2442.6	3221.3	4195.6	10999.3	20664.4	23495.8	21988.2	16931.7	17049.7
65°	1505.4	1540.1	1777.3	2659.0	3046.6	6626.6	19818.6	28222.5	27660.2	20253.7	19702.9
67.5°	1469.5	1481.1	1603.7	2232.0	2921.6	3724.7	15808.1	29106.6	29730.2	23355.8	20807.9
70°	1452.1	1492.6	1807.4	2130.2	2797.8	3141.5	9499.7	26683.6	27668.3	24167.0	19337.3
72.5°	704.7	702.4	909.5	1926.6	3151.9	3258.4	4880.6	21590.1	22578.3	20937.5	15890.3
75°	568.1	519.5	496.4	705.8	3030.4	3364.8	3110.3	14855.9	15570.9	14037.8	9768.1
77.5°	539.2	481.3	440.9	442.0	1280.9	3568.5	2634.7	8222.3	8430.5	6340.8	2676.3
80°	446.6	393.4	364.5	410.8	620.2	3398.4	2848.8	3721.2	3414.6	1557.4	891.0
82.5°	310.1	282.3	274.2	344.8	496.4	2421.8	3312.7	1999.4	1676.6	779.9	549.6
85°	197.9	168.9	187.4	251.1	386.5	1117.7	3412.3	1558.6	1239.2	495.2	310.1
87.5°	91.4	74.1	92.6	138.9	252.2	385.3	3246.8	1750.7	1276.3	261.5	195.5
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°	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1	5061.1
2.5°	5063.4	5041.4	5024.1	4991.7	4955.8	4921.1	4889.9	4850.5	4838.9	4828.5	4844.7
5°	5079.6	5057.6	4994.0	4894.5	4784.6	4681.6	4578.6	4490.7	4436.3	4406.2	4423.5
7.5°	5103.9	5072.7	4940.8	4757.9	4560.1	4379.6	4193.3	4044.0	3934.1	3882.0	3897.1
10°	5125.9	5065.7	4850.5	4576.3	4287.0	4018.6	3724.7	3481.7	3301.2	3206.3	3229.4
12.5°	5135.2	5039.1	4724.4	4349.5	3952.6	3559.2	3126.5	2763.1	2503.9	2409.1	2389.4
15°	5144.4	5009.0	4585.5	4091.5	3548.8	2992.2	2385.9	1950.9	1735.6	1688.2	1677.8
17.5°	5146.7	4957.0	4428.2	3811.4	3075.5	2317.6	1631.5	1355.0	1356.1	1432.5	1441.7
20°	5122.4	4879.4	4237.3	3463.2	2508.6	1602.6	1120.1	1072.6	1247.3	1438.3	1461.4
22.5°	5066.9	4776.5	4020.9	3057.0	1859.4	1055.3	866.7	918.7	1144.4	1378.1	1404.7
25°	4996.3	4651.5	3765.2	2586.1	1231.1	754.4	726.7	790.3	943.0	1099.2	1114.3
27.5°	4900.3	4503.4	3478.2	2046.9	799.5	621.4	639.9	682.7	745.2	814.6	821.5
30°	4776.5	4326.4	3171.6	1492.6	604.0	558.9	585.5	608.6	635.2	674.6	678.1
32.5°	4634.1	4156.3	2856.9	1031.0	535.7	526.5	547.3	558.9	579.7	604.0	606.3
35°	4515.0	3994.3	2530.6	729.0	506.8	502.2	516.1	520.7	540.4	567.0	569.3
37.5°	4446.7	3862.4	2193.8	587.8	487.1	480.2	488.3	488.3	516.1	555.4	561.2
40°	4451.3	3789.5	1857.1	531.1	470.9	461.7	462.8	462.8	498.7	541.5	545.0
42.5°	4577.4	3808.0	1558.6	509.1	458.2	447.8	442.0	445.5	475.6	503.3	505.6
45°	4873.7	3938.7	1278.6	495.2	445.5	442.0	429.3	428.1	439.7	452.4	452.4
47.5°	5359.6	4196.8	1088.8	486.0	435.1	433.9	418.9	403.8	402.7	407.3	407.3
50°	6149.9	4641.1	961.5	475.6	428.1	418.9	401.5	378.4	370.3	373.7	373.7
52.5°	7334.8	5433.7	912.9	461.7	413.1	398.0	378.4	355.2	348.3	349.4	349.4
55°	8888.8	6650.9	906.0	445.5	396.9	372.6	356.4	339.0	330.9	333.2	333.2
57.5°	10787.5	8334.5	1029.8	420.0	374.9	347.1	337.9	326.3	320.5	324.0	322.8
60°	13095.9	10537.6	1527.4	393.4	352.9	324.0	324.0	314.7	310.1	313.6	312.4
62.5°	15754.9	13068.2	2147.6	373.7	329.8	305.5	310.1	305.5	300.8	303.2	302.0
65°	18113.1	14717.0	2011.0	358.7	306.6	288.1	296.2	293.9	290.4	292.7	291.6
67.5°	18181.3	14106.1	1129.3	342.5	284.6	270.8	282.3	281.2	278.9	281.2	280.0
70°	16225.9	11911.1	636.4	312.4	261.5	249.9	266.1	265.0	262.7	267.3	266.1
72.5°	12999.9	8643.5	465.1	275.4	238.4	227.9	246.5	245.3	245.3	252.2	248.8
75°	7480.6	4447.8	371.4	236.0	214.1	206.0	222.2	223.3	225.6	234.9	227.9
77.5°	2132.5	1386.2	303.2	200.2	184.0	180.5	196.7	199.0	200.2	210.6	201.3
80°	792.6	638.7	249.9	167.8	150.4	151.6	166.6	170.1	171.2	181.7	170.1
82.5°	505.6	421.2	202.5	129.6	118.0	116.9	135.4	140.0	140.0	141.2	134.2
85°	295.1	252.2	152.7	93.7	83.3	79.8	100.7	108.8	105.3	103.0	98.4
87.5°	197.9	173.6	93.7	52.1	45.1	42.8	59.0	64.8	62.5	59.0	55.5
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)