

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: P453677

Luminaire Tested: **GALN-SA4D-727-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453677  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4D-727-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25547 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

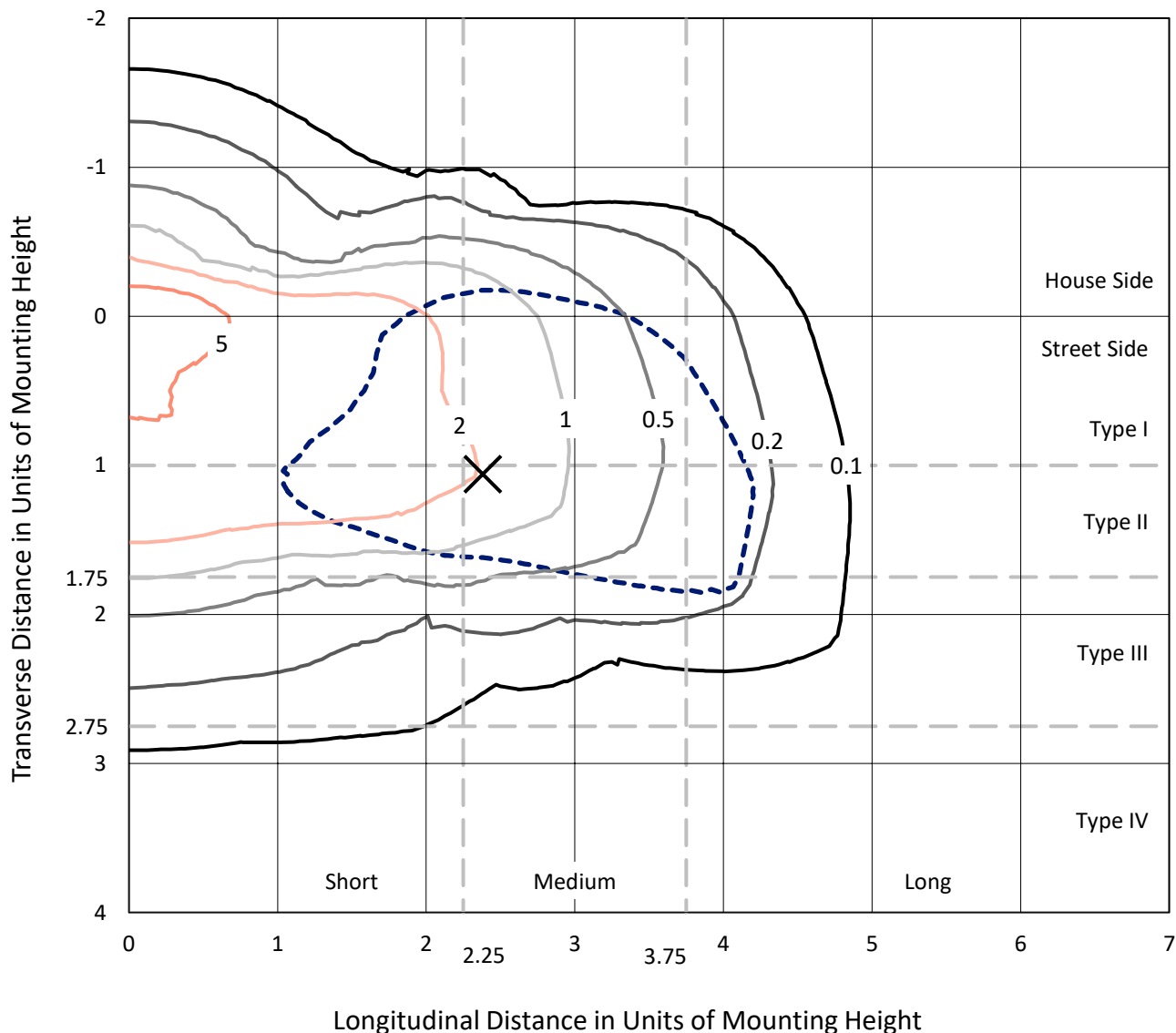
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

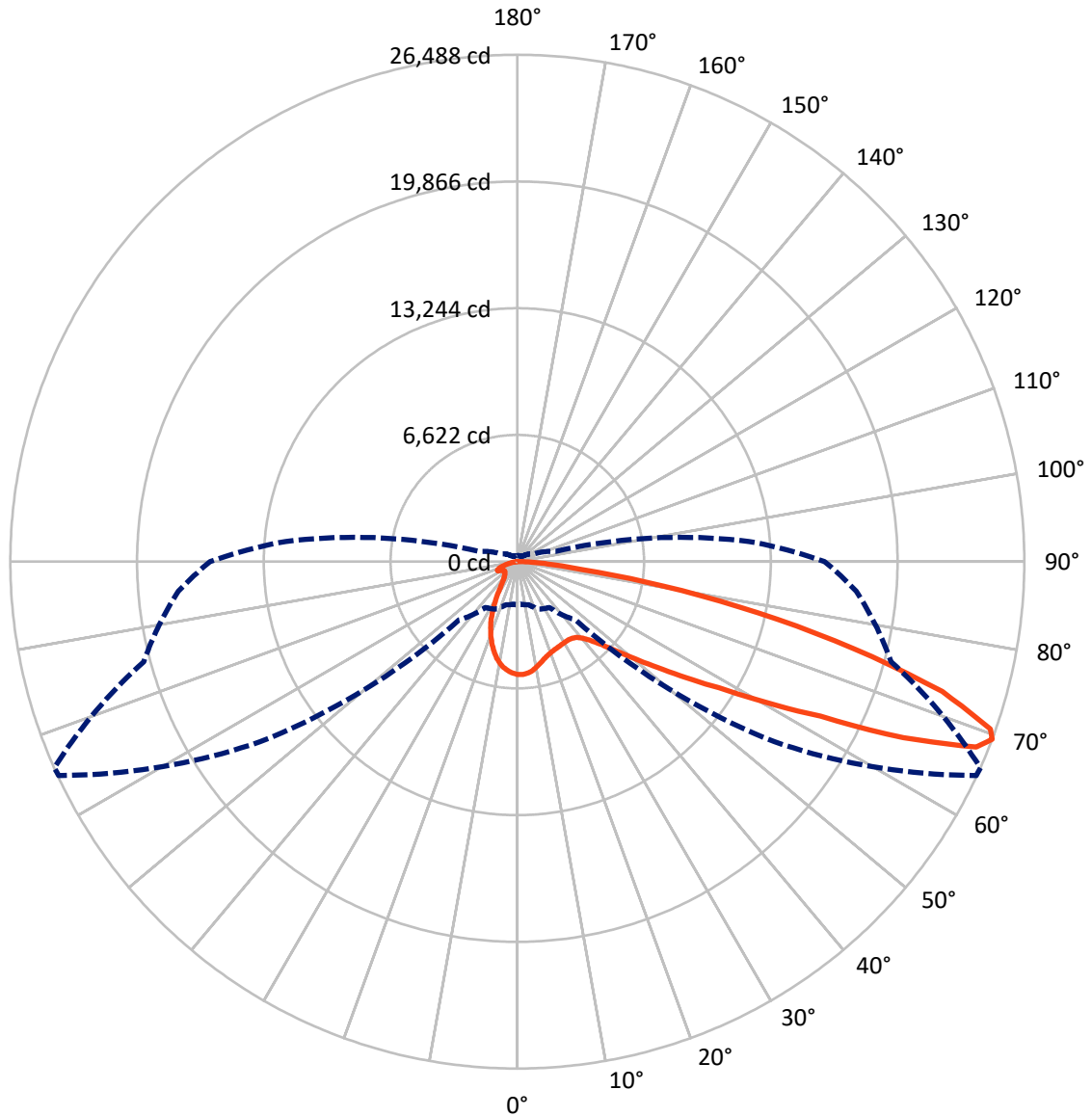
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4804.4	0.0	4804.4
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	20742.6	0.0	20742.6
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	25547.0	0.0	25547.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	512.3	2.0
10°-20°	1215.2	4.8
20°-30°	1654.3	6.5
30°-40°	2223.0	8.7
40°-50°	3319.3	13.0
50°-60°	5279.9	20.7
60°-70°	6494.0	25.4
70°-80°	4225.2	16.5
80°-90°	623.9	2.4
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°	25547.0	100.0
0°-180°	25547.0	100.0

**Coefficient of Utilization**



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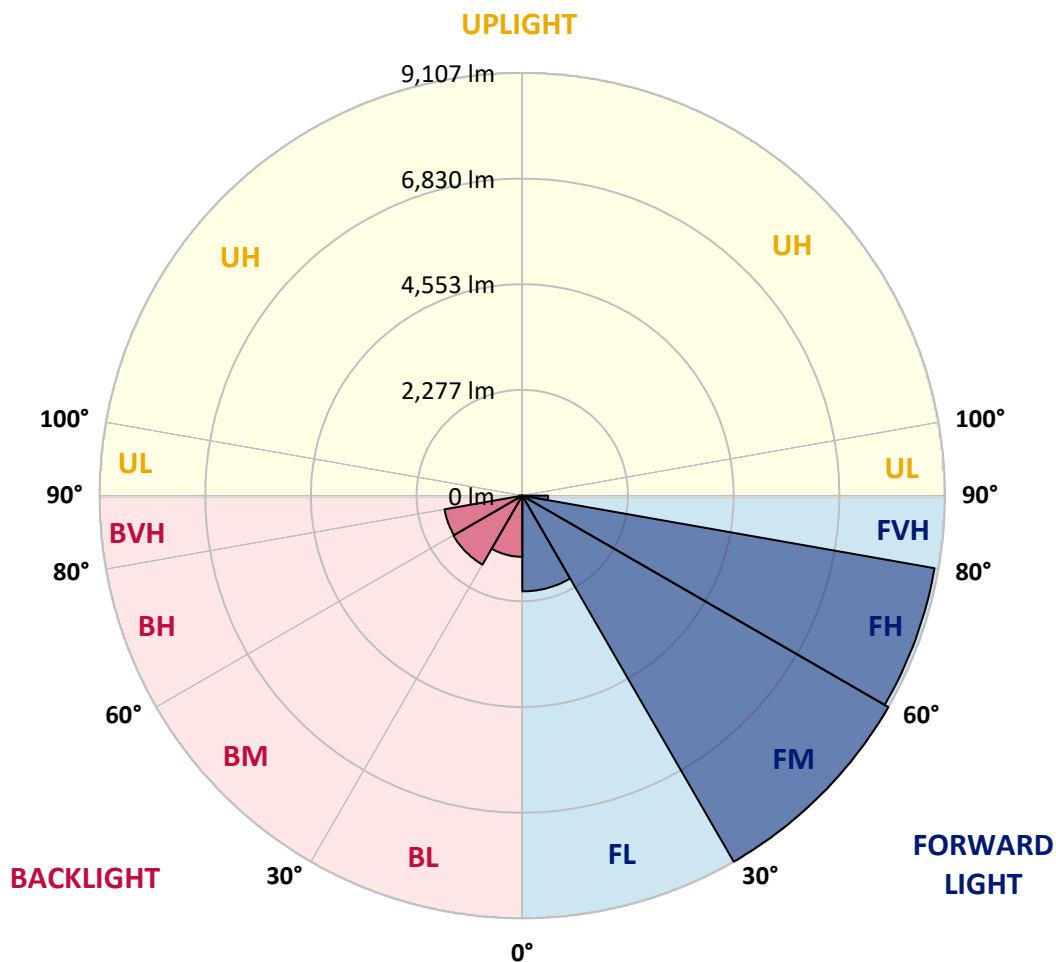
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2062.9	8.1			
FM	(30°-60°)	9106.7	35.6			
FH	(60°-80°)	9018.2	35.3			G4/12000
FVH	(80°-90°)	554.7	2.2			G4/750
BL	(0°-30°)	1318.8	5.2	B3/2500		
BM	(30°-60°)	1715.4	6.7	B2/2500		
BH	(60°-80°)	1701.0	6.7	B3/2500		G3/2500
BVH	(80°-90°)	69.2	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-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5
2.5°	5693.0	5715.6	5741.1	5769.4	5823.1	5852.8	5874.0	5898.1	5900.9	5913.7	5903.8
5°	5272.8	5299.7	5337.9	5391.6	5472.3	5598.2	5728.3	5834.4	5847.2	5906.6	5923.6
7.5°	4921.9	4937.5	4968.6	5054.9	5169.5	5309.6	5499.1	5714.2	5745.3	5886.8	5936.3
10°	4636.1	4651.7	4688.5	4777.6	4890.8	5066.2	5274.2	5557.1	5582.6	5825.9	5939.1
12.5°	4422.5	4436.7	4476.3	4564.0	4694.1	4858.3	5087.4	5387.4	5424.2	5745.3	5912.2
15°	4259.8	4286.7	4319.2	4391.4	4528.6	4687.1	4909.2	5231.7	5261.5	5660.4	5893.9
17.5°	4190.5	4203.2	4225.9	4292.4	4392.8	4548.4	4772.0	5110.1	5145.4	5601.0	5889.6
20°	4193.3	4206.1	4210.3	4247.1	4319.2	4453.6	4674.3	5013.9	5056.3	5548.7	5896.7
22.5°	4289.5	4290.9	4275.4	4262.6	4290.9	4402.7	4605.0	4941.7	4991.2	5526.0	5902.3
25°	4438.1	4463.5	4440.9	4381.5	4329.1	4382.9	4578.1	4902.1	4948.8	5493.5	5895.3
27.5°	4678.6	4682.8	4664.4	4583.8	4448.0	4408.4	4566.8	4872.4	4912.0	5469.4	5859.9
30°	5001.1	4988.4	4971.4	4882.3	4668.7	4506.0	4590.9	4845.5	4886.6	5434.1	5817.5
32.5°	5328.0	5367.6	5352.0	5247.3	4970.0	4695.6	4668.7	4842.7	4876.6	5407.2	5770.8
35°	5674.6	5693.0	5766.5	5712.8	5428.4	5002.6	4814.4	4886.6	4913.4	5408.6	5738.2
37.5°	5946.2	5995.7	6168.3	6215.0	5947.6	5408.6	5050.7	5011.0	5022.4	5477.9	5751.0
40°	6274.4	6359.3	6581.4	6772.4	6597.0	5936.3	5452.5	5241.7	5255.8	5644.9	5834.4
42.5°	6690.4	6749.8	7048.3	7307.2	7278.9	6633.8	5939.1	5619.4	5626.5	5977.3	6067.9
45°	7177.0	7261.9	7597.2	7986.3	8052.8	7423.2	6642.3	6191.0	6186.7	6493.7	6503.6
47.5°	7799.5	7851.9	8184.3	8608.8	8877.6	8414.9	7495.4	7011.5	6966.2	7246.4	7165.7
50°	8372.5	8454.6	8706.4	9170.4	9839.6	9576.5	8617.2	8075.4	7969.3	8231.0	8095.2
52.5°	8613.0	8699.3	8911.5	9487.3	10664.4	11078.9	10041.9	9344.4	9167.6	9368.5	9319.0
55°	8195.7	8307.4	8505.5	9205.8	11026.6	12812.0	11963.1	10811.5	10682.8	10596.5	10610.6
57.5°	7073.8	7179.9	7447.2	8219.7	10593.7	14069.7	14706.3	12697.4	12421.5	12024.0	12091.9
60°	5384.5	5451.0	5589.7	6445.6	9310.5	14396.5	17821.6	15081.2	14905.8	13445.8	13493.9
62.5°	3824.1	3899.1	3995.3	4422.5	6816.3	13475.5	20260.7	18410.2	17783.4	14918.6	14871.9
65°	3105.4	3054.4	3170.5	3369.9	3999.5	10443.7	20809.6	23030.7	22167.7	16858.2	16210.2
67.5°	2553.6	2499.9	2614.5	2969.6	3041.7	6062.2	18831.8	26030.0	25857.4	18967.6	17569.8
69°	2260.8	2232.5	2332.9	2737.5	2920.0	4305.1	16405.5	26447.4	26488.4	20211.1	17779.2
70°	2037.2	2048.6	2146.2	2620.1	2864.9	3549.6	14021.6	25871.6	26219.6	20832.2	17552.8
72.5°	1499.6	1523.7	1659.5	2170.2	2812.5	3012.0	8344.2	22597.8	23213.2	20869.0	16057.4
75°	1048.3	1037.0	1157.3	1634.0	2656.9	2985.1	4900.7	17476.4	18173.9	18038.1	13492.5
77.5°	686.2	704.5	800.7	1154.4	2235.3	2962.5	3194.5	12398.9	12851.6	12063.6	7980.6
80°	483.8	482.4	536.2	788.0	1658.1	2846.5	2615.9	7815.1	7700.5	4740.8	2366.9
82.5°	277.3	297.1	359.3	554.6	1109.2	2505.5	2406.5	3737.8	3412.4	1351.1	799.3
85°	154.2	161.3	213.6	335.3	648.0	1887.3	2100.9	1700.5	1604.3	564.5	343.8
87.5°	49.5	53.8	89.1	169.8	294.3	891.3	1189.8	785.2	724.4	203.7	138.6
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°	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5	5899.5
2.5°	5908.0	5925.0	5879.7	5835.8	5796.2	5741.1	5691.5	5650.5	5622.2	5618.0	5603.8
5°	5927.8	5929.2	5842.9	5726.9	5613.7	5489.2	5360.5	5268.5	5182.2	5134.1	5110.1
7.5°	5942.0	5929.2	5773.6	5585.4	5367.6	5141.2	4914.8	4733.8	4593.7	4538.5	4559.7
10°	5936.3	5896.7	5668.9	5367.6	5050.7	4712.5	4387.1	4132.5	3899.1	3778.8	3781.6
12.5°	5905.2	5840.1	5513.3	5122.8	4657.4	4204.6	3706.6	3362.9	3092.6	2932.8	2883.3
15°	5878.3	5765.1	5330.8	4790.3	4211.7	3565.2	2958.2	2533.8	2307.5	2181.5	2180.1
17.5°	5850.0	5693.0	5131.3	4438.1	3699.6	2867.7	2231.1	1907.1	1801.0	1813.7	1792.5
20°	5820.3	5608.1	4923.3	4046.2	3075.7	2139.1	1670.8	1539.2	1569.0	1627.0	1635.5
22.5°	5786.3	5517.5	4699.8	3614.7	2419.2	1610.0	1355.3	1335.5	1411.9	1502.5	1515.2
25°	5734.0	5404.3	4418.3	3163.4	1866.1	1297.3	1187.0	1201.1	1276.1	1352.5	1361.0
27.5°	5660.4	5264.3	4133.9	2600.3	1402.0	1113.4	1085.1	1103.5	1140.3	1187.0	1198.3
30°	5561.4	5105.8	3807.1	2113.6	1123.3	1021.5	1010.1	1020.0	1041.3	1061.1	1066.7
32.5°	5462.4	4953.0	3477.5	1618.5	1001.6	960.6	949.3	949.3	949.3	952.1	953.5
35°	5370.4	4808.7	3123.8	1260.5	938.0	912.5	897.0	880.0	877.1	867.2	867.2
37.5°	5319.5	4677.2	2747.4	1055.4	891.3	872.9	851.7	823.4	807.8	809.2	806.4
40°	5329.4	4590.9	2405.1	939.4	853.1	833.3	800.7	768.2	758.3	758.3	755.5
42.5°	5441.1	4562.6	2076.9	878.6	816.3	793.7	752.6	722.9	717.3	715.9	718.7
45°	5698.6	4631.9	1782.6	838.9	785.2	751.2	710.2	683.3	677.7	677.7	676.3
47.5°	6200.9	4856.8	1571.8	813.5	762.6	718.7	676.3	649.4	639.5	636.6	636.6
50°	6981.8	5344.9	1414.8	790.8	734.3	689.0	645.1	614.0	598.4	597.0	595.6
52.5°	8066.9	6106.1	1353.9	773.9	703.1	657.9	609.8	580.0	560.2	556.0	553.2
55°	9335.9	7168.5	1437.4	761.1	670.6	622.5	573.0	541.8	523.5	515.0	513.6
57.5°	10805.9	8444.6	1754.3	744.2	640.9	584.3	536.2	505.1	485.3	475.4	472.5
60°	12125.8	9756.1	2307.5	734.3	615.4	543.3	493.7	465.5	447.1	437.2	435.7
62.5°	13576.0	11006.8	2968.1	761.1	604.1	503.7	454.1	428.7	413.1	403.2	403.2
65°	15125.1	12258.8	3405.3	851.7	621.1	472.5	411.7	390.5	376.3	369.3	367.8
67.5°	16169.2	12691.7	2805.5	945.1	663.5	438.6	370.7	353.7	345.2	338.1	338.1
69°	16056.0	12144.2	2069.8	969.1	676.3	421.6	348.0	335.3	324.0	321.1	318.3
70°	15698.1	11520.3	1734.5	953.5	666.3	406.0	333.9	318.3	308.4	305.6	304.2
72.5°	13982.0	9991.0	1291.7	829.0	567.3	352.3	295.7	281.5	273.0	268.8	268.8
75°	11616.5	8165.9	1008.7	659.3	444.2	297.1	253.2	241.9	234.8	232.0	230.6
77.5°	6510.7	4559.7	724.4	516.4	336.7	240.5	212.2	202.3	195.2	192.4	192.4
80°	1813.7	1303.0	425.8	341.0	229.2	182.5	168.4	161.3	151.4	144.3	148.5
82.5°	683.3	564.5	243.3	205.1	145.7	121.7	117.4	111.8	107.5	97.6	97.6
85°	332.5	274.5	155.6	108.9	80.6	63.7	60.8	58.0	55.2	48.1	49.5
87.5°	114.6	121.7	67.9	39.6	24.1	15.6	12.7	7.1	7.1	7.1	7.1
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)