

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: P651346

Luminaire Tested: **GALN-SA4D-840-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651346  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-840-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25509.2 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

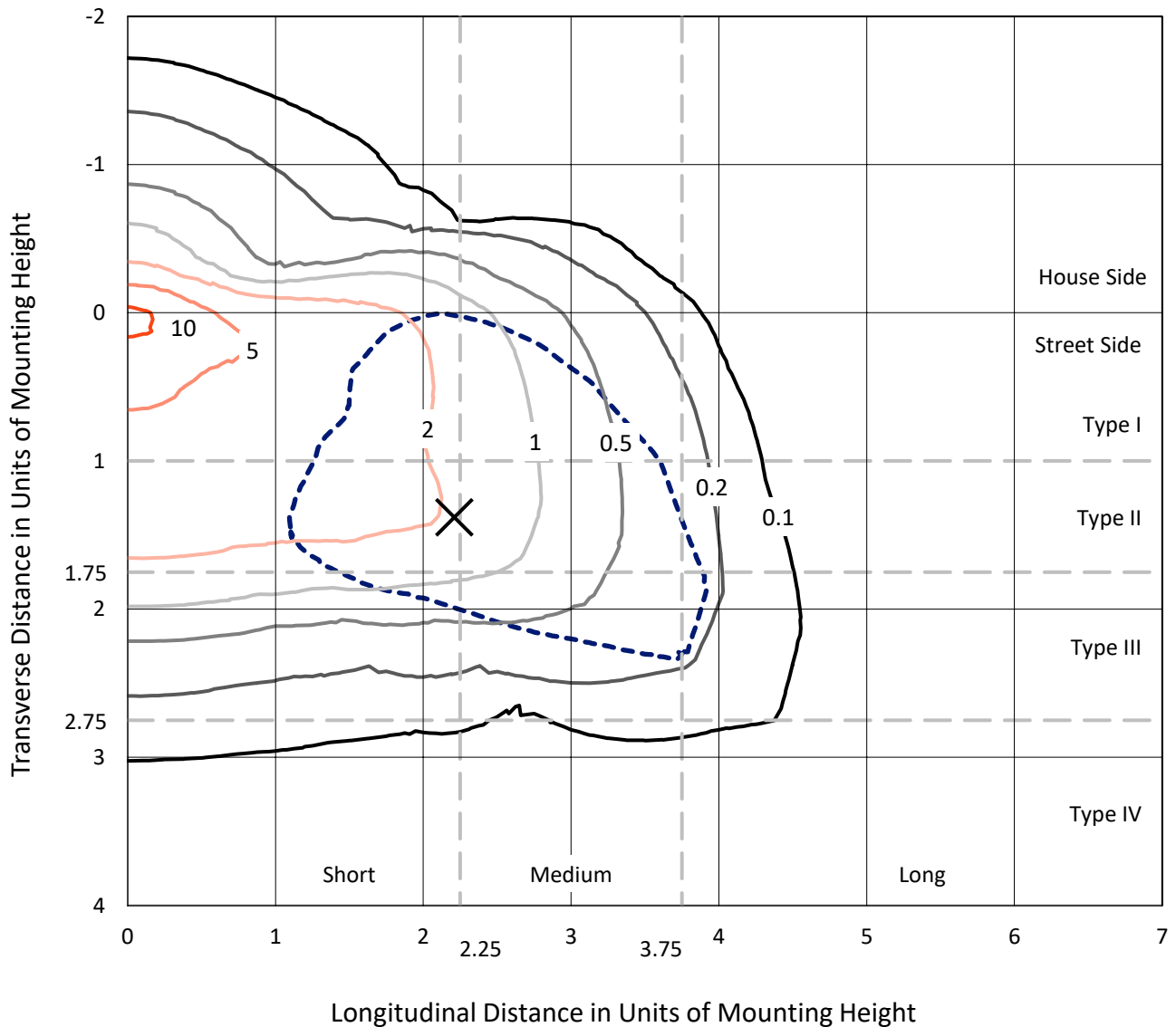
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

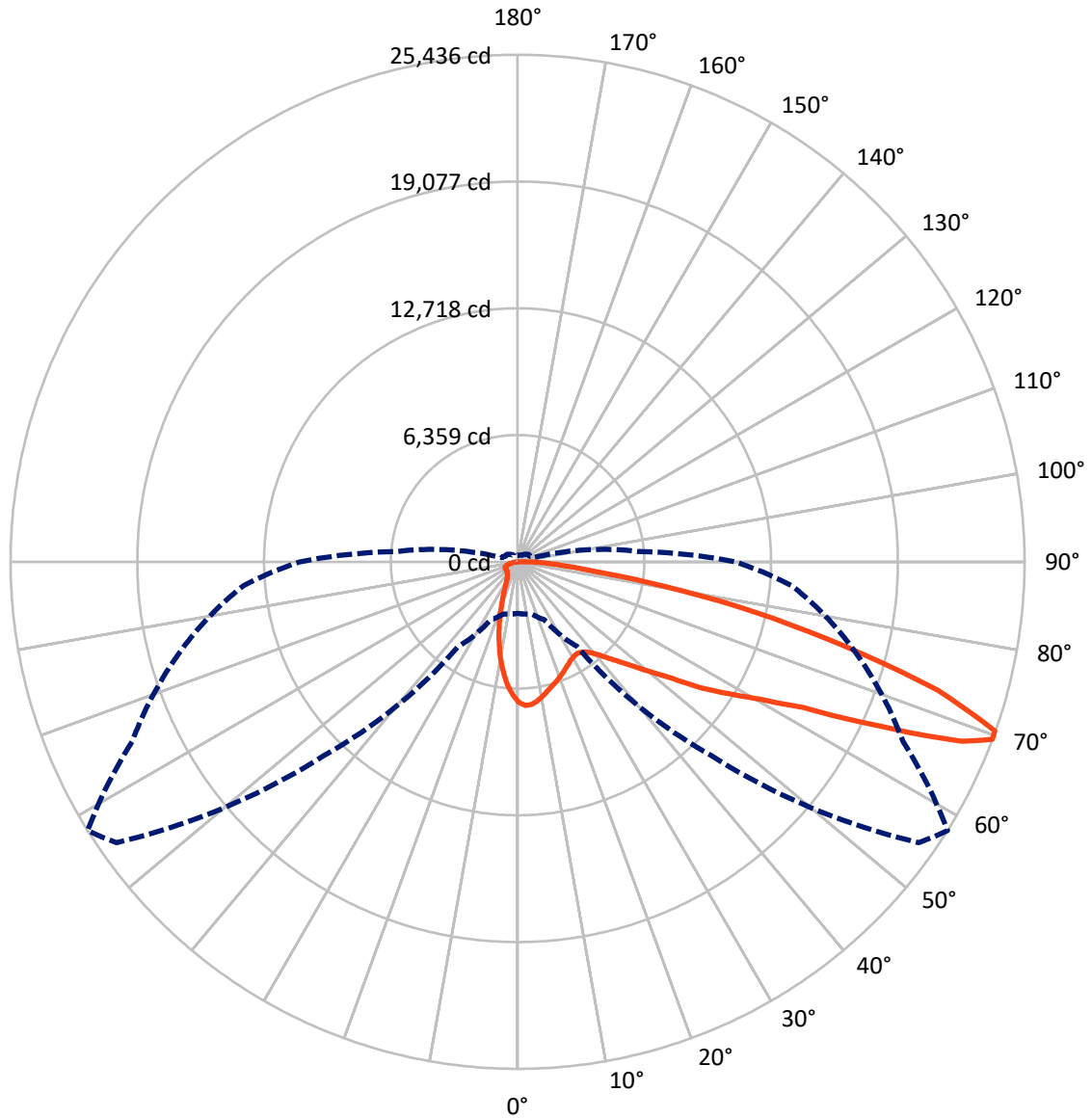
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3738.4	0.0	3738.4
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	21770.8	0.0	21770.8
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	25509.2	0.0	25509.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	598.7	2.3
10°-20°	1314.5	5.2
20°-30°	1698.4	6.7
30°-40°	2205.9	8.6
40°-50°	3207.0	12.6
50°-60°	5117.4	20.1
60°-70°	6836.2	26.8
70°-80°	3940.8	15.4
80°-90°	590.3	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°	25509.2	100.0
0°-180°	25509.2	100.0

**Coefficient of Utilization**



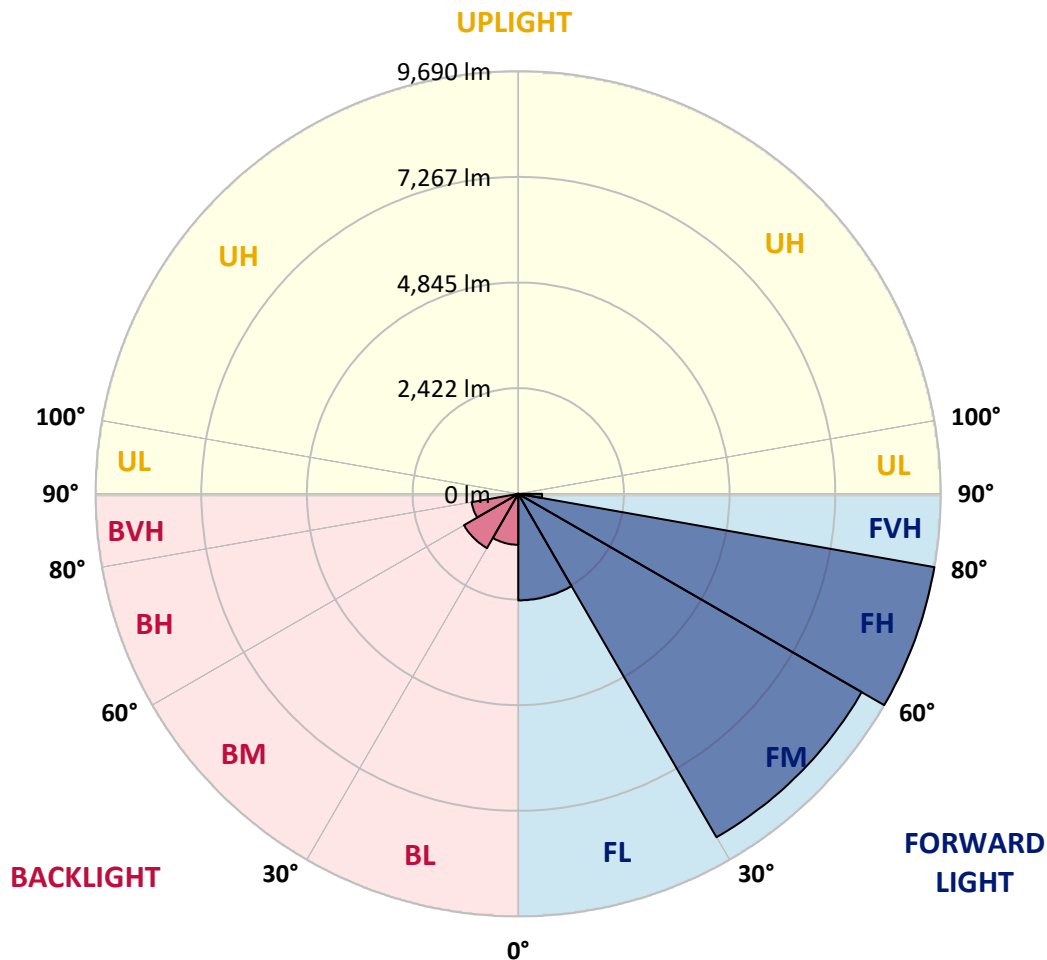
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 CATALOG NUMBER: GALN-SA4D-840-U-SL3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2443.1	9.6			
FM (30°-60°)	9092.7	35.6			
FH (60°-80°)	9690.0	38.0			G4/12000
FVH (80°-90°)	545.0	2.1			G4/750
BL (0°-30°)	1168.5	4.6	B3/2500		
BM (30°-60°)	1437.6	5.6	B2/2500		
BH (60°-80°)	1087.1	4.3	B3/2500		G3/2500
BVH (80°-90°)	45.2	0.2			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3
2.5°	7311.0	7330.9	7325.3	7318.1	7306.8	7275.5	7224.3	7215.7	7183.0	7113.3	7026.5
5°	7198.6	7215.7	7217.1	7227.0	7241.3	7235.6	7198.6	7194.3	7146.0	7052.1	6907.0
7.5°	6813.1	6835.8	6885.7	6941.1	6990.9	7037.9	7049.3	7056.3	7026.5	6918.4	6724.9
10°	6379.2	6401.9	6424.7	6507.2	6629.6	6746.2	6843.0	6855.7	6862.9	6763.3	6527.2
12.5°	5898.4	5945.3	5993.6	6116.0	6279.6	6463.1	6633.8	6660.9	6709.2	6633.8	6356.4
15°	5490.0	5538.4	5608.1	5717.6	5915.4	6180.0	6420.4	6464.5	6559.9	6521.5	6197.1
17.5°	5206.9	5224.0	5272.4	5397.5	5611.0	5889.8	6211.3	6299.5	6451.7	6441.8	6060.5
20°	4983.6	5004.9	5034.8	5111.6	5333.5	5628.1	6016.4	6130.2	6336.5	6370.7	5925.3
22.5°	4889.7	4905.3	4901.0	4942.3	5093.1	5389.0	5818.6	5953.8	6234.1	6322.3	5800.1
25°	4895.4	4909.6	4888.2	4878.3	4967.9	5178.5	5612.4	5784.5	6151.6	6289.6	5686.3
27.5°	4990.7	5000.7	4960.8	4920.9	4928.1	5047.6	5441.7	5632.3	6081.9	6303.8	5591.1
30°	5118.7	5137.2	5111.6	5063.2	5010.6	5016.3	5332.1	5519.9	6049.1	6353.6	5545.5
32.5°	5283.8	5300.8	5289.5	5251.0	5182.7	5107.3	5305.1	5478.6	6052.0	6454.6	5535.5
35°	5457.3	5491.5	5510.0	5507.1	5451.6	5320.8	5411.8	5555.5	6120.3	6623.9	5593.9
37.5°	5653.6	5682.0	5761.8	5813.0	5761.8	5609.6	5652.2	5751.8	6271.1	6868.6	5721.9
40°	5844.3	5886.9	6003.6	6162.9	6143.0	6009.3	6019.3	6084.7	6537.1	7232.8	5972.3
42.5°	6043.4	6094.6	6298.1	6534.2	6581.2	6477.4	6504.4	6562.7	6915.5	7737.8	6401.9
45°	6299.5	6360.7	6611.1	6905.5	7090.5	7026.5	7103.3	7131.8	7422.0	8395.1	6968.2
47.5°	6629.6	6700.7	7009.4	7376.5	7638.2	7696.6	7830.3	7813.2	8049.4	9173.3	7702.2
50°	7185.8	7225.7	7517.3	7891.4	8251.4	8514.6	8659.7	8686.7	8827.6	9930.1	8523.1
52.5°	7847.4	7882.9	8093.4	8420.7	8871.7	9429.4	9787.9	9699.7	9733.8	10852.0	9483.5
55°	8591.4	8651.2	8784.9	9002.6	9587.2	10408.1	11128.0	11149.3	10770.9	11734.1	10403.8
57.5°	9167.6	9268.6	9497.7	9807.7	10549.0	11496.5	12463.9	12478.1	11994.4	12675.9	11419.7
60°	8877.3	8996.8	9520.4	10275.8	11810.8	13395.7	14060.1	13979.0	13185.2	13748.5	12658.8
62.5°	7625.4	7646.8	8407.9	9588.7	12199.3	15936.6	16435.9	16093.0	14774.3	15108.6	13917.8
65°	4935.2	5074.6	5677.8	7332.3	10923.2	17346.5	20598.6	19806.2	17002.2	16652.1	14972.0
67.5°	3115.7	3080.1	3330.4	4186.8	7513.1	16104.5	24151.0	24025.8	19915.7	17626.7	14720.2
69°	2583.6	2623.4	2708.7	3209.5	5170.0	13749.9	24570.7	25435.6	21328.4	17549.9	13805.4
70°	2343.1	2361.6	2451.3	2845.3	3989.1	11516.4	23882.1	25397.2	21883.2	17228.3	13142.5
72.5°	1859.5	1858.0	2011.7	2367.3	2981.8	6574.1	19609.8	22049.8	21263.0	15731.7	10859.2
75°	1412.7	1435.4	1604.8	2003.1	2747.1	3592.2	13684.5	16980.8	16982.2	12425.4	6776.1
77.5°	1018.6	1032.8	1230.6	1681.6	2587.8	2912.2	9114.9	12179.4	11449.5	5693.5	2129.7
80°	667.2	675.7	826.5	1331.6	2333.2	2747.1	5404.7	7454.7	5400.4	1510.9	704.3
82.5°	365.6	408.3	505.0	862.1	1872.2	2538.1	3284.9	3772.9	2025.9	672.9	367.0
85°	183.5	194.9	284.5	503.6	1223.5	2099.8	2287.6	2163.9	1045.6	334.3	190.7
87.5°	54.1	68.3	118.1	194.9	496.5	1094.1	1273.3	1142.4	402.6	120.9	39.9
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°	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3	7049.3
2.5°	6990.9	6965.3	6851.5	6749.1	6655.2	6555.6	6471.7	6397.7	6404.8	6406.2	6330.8
5°	6831.6	6773.2	6557.0	6355.0	6184.3	5968.1	5783.1	5663.5	5603.8	5524.2	5552.6
7.5°	6615.3	6502.9	6202.8	5867.1	5552.6	5272.4	4967.9	4758.8	4625.1	4495.6	4512.6
10°	6392.0	6211.3	5774.6	5330.7	4923.8	4475.6	4087.3	3754.4	3506.8	3414.4	3353.2
12.5°	6162.9	5925.3	5370.5	4780.2	4218.2	3681.8	3131.3	2774.2	2501.0	2355.9	2374.4
15°	5953.8	5665.0	4949.5	4229.6	3499.7	2861.0	2311.8	1971.8	1781.2	1741.3	1764.1
17.5°	5760.3	5381.9	4555.4	3694.6	2842.5	2145.4	1737.1	1545.0	1468.2	1446.9	1445.4
20°	5561.2	5141.5	4112.9	3122.7	2215.1	1663.1	1425.5	1335.8	1321.6	1330.2	1331.6
22.5°	5359.1	4844.2	3657.7	2555.1	1764.1	1360.1	1246.3	1222.1	1233.4	1253.3	1256.2
25°	5172.7	4582.4	3219.4	2057.2	1408.4	1195.1	1139.6	1139.6	1165.1	1195.1	1196.5
27.5°	5019.1	4329.1	2782.7	1633.2	1179.4	1075.6	1057.1	1067.0	1102.6	1125.3	1126.8
30°	4892.5	4093.0	2370.1	1308.8	1037.1	980.2	976.0	993.1	1018.6	1040.0	1041.4
32.5°	4797.2	3885.3	1984.6	1099.7	939.0	907.7	906.3	919.0	933.3	939.0	944.6
35°	4760.2	3713.1	1631.8	967.4	873.5	853.6	853.6	852.2	857.8	860.7	863.5
37.5°	4790.1	3580.8	1358.6	882.0	825.1	810.9	802.4	793.8	791.0	791.0	792.4
40°	4916.7	3511.1	1155.2	826.5	791.0	769.7	754.0	744.0	734.1	737.0	739.7
42.5°	5185.6	3523.9	1017.2	789.6	761.1	731.2	708.5	697.1	690.0	698.5	697.1
45°	5613.8	3652.0	929.0	764.0	731.2	692.8	671.5	660.1	660.1	672.9	677.2
47.5°	6212.7	3896.7	882.0	744.0	708.5	663.0	641.6	633.1	636.0	657.2	658.7
50°	6944.0	4322.0	873.5	734.1	697.1	641.6	617.5	608.9	616.0	638.7	641.6
52.5°	7750.7	4869.7	914.8	735.5	687.2	628.8	597.5	584.7	591.8	610.3	616.0
55°	8706.6	5555.5	1021.5	741.2	672.9	621.7	583.3	554.8	563.4	576.2	577.6
57.5°	9682.6	6420.4	1209.3	742.6	661.5	608.9	559.1	522.1	522.1	530.7	535.0
60°	10874.8	7362.2	1456.8	744.0	663.0	590.4	526.4	485.1	479.5	483.7	485.1
62.5°	12058.4	8150.4	1498.1	739.7	677.2	571.9	490.8	448.2	438.2	436.7	433.9
65°	12580.5	8003.9	1227.8	719.9	692.8	560.5	462.4	412.6	395.5	389.8	389.8
67.5°	11729.8	6770.4	923.3	692.8	682.9	549.2	435.3	382.7	362.8	351.4	351.4
69°	10930.2	6022.1	829.4	674.3	657.2	530.7	418.2	367.0	342.9	330.1	325.8
70°	10312.8	5507.1	789.6	658.7	633.1	509.3	405.4	355.7	328.7	314.4	311.6
72.5°	8230.0	4320.6	691.4	599.0	539.2	428.2	359.9	320.1	294.5	278.9	274.6
75°	4743.2	2341.7	573.3	520.7	433.9	332.9	304.4	278.9	258.9	244.7	240.4
77.5°	1459.6	904.8	415.5	411.2	318.7	257.5	243.3	233.3	219.1	203.4	200.6
80°	614.6	461.0	281.7	277.4	212.0	179.2	175.0	173.6	167.9	155.1	150.8
82.5°	337.2	260.4	196.3	170.7	128.0	103.9	108.2	109.6	105.3	92.5	83.9
85°	165.0	142.3	95.3	76.8	58.4	37.0	35.6	42.6	39.9	28.4	31.3
87.5°	32.7	39.9	25.6	11.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0
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)