

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: P457299

Luminaire Tested: **GALN-SA8C-827-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P457299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42142 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

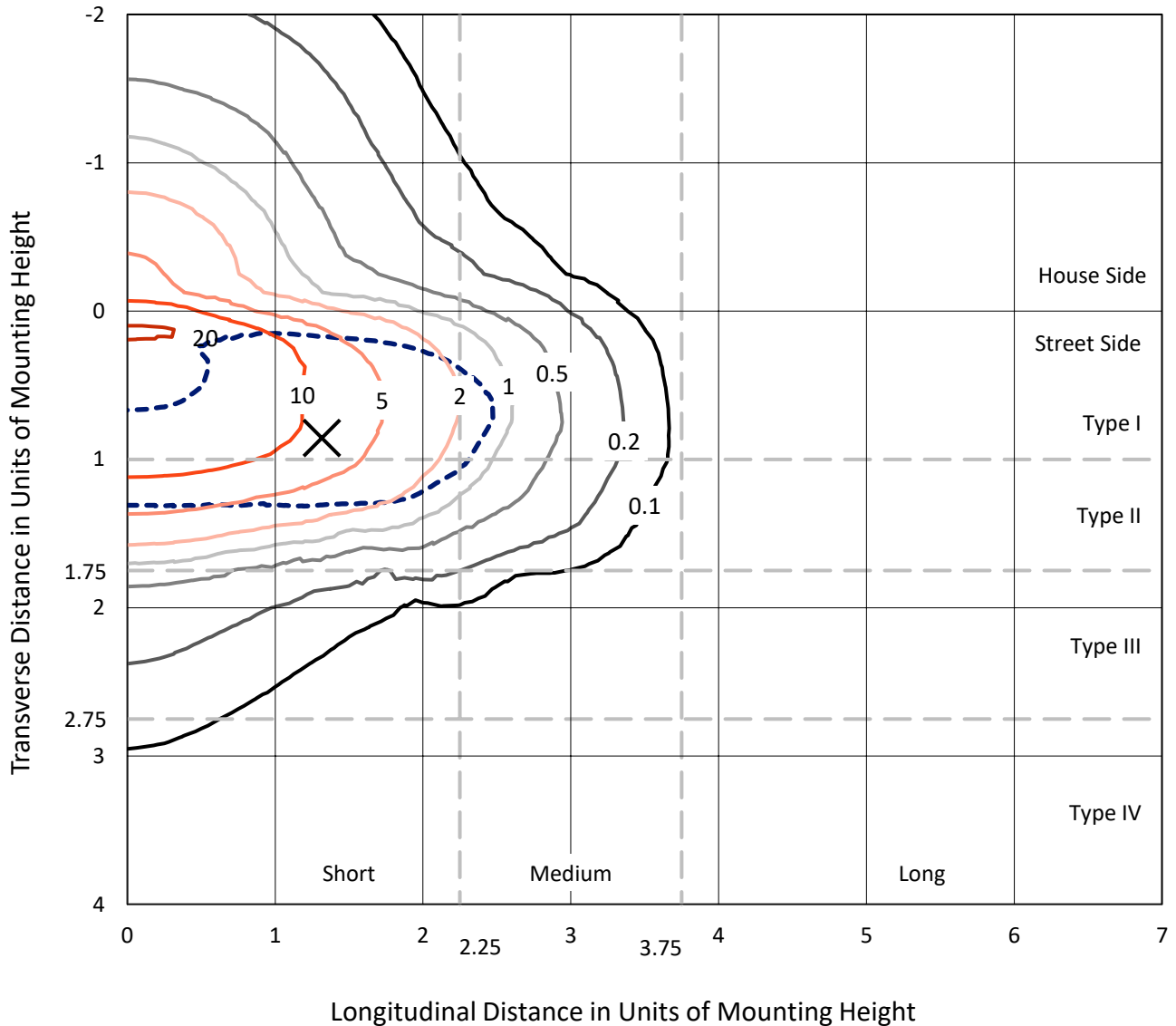
Input Watts (W): 429  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

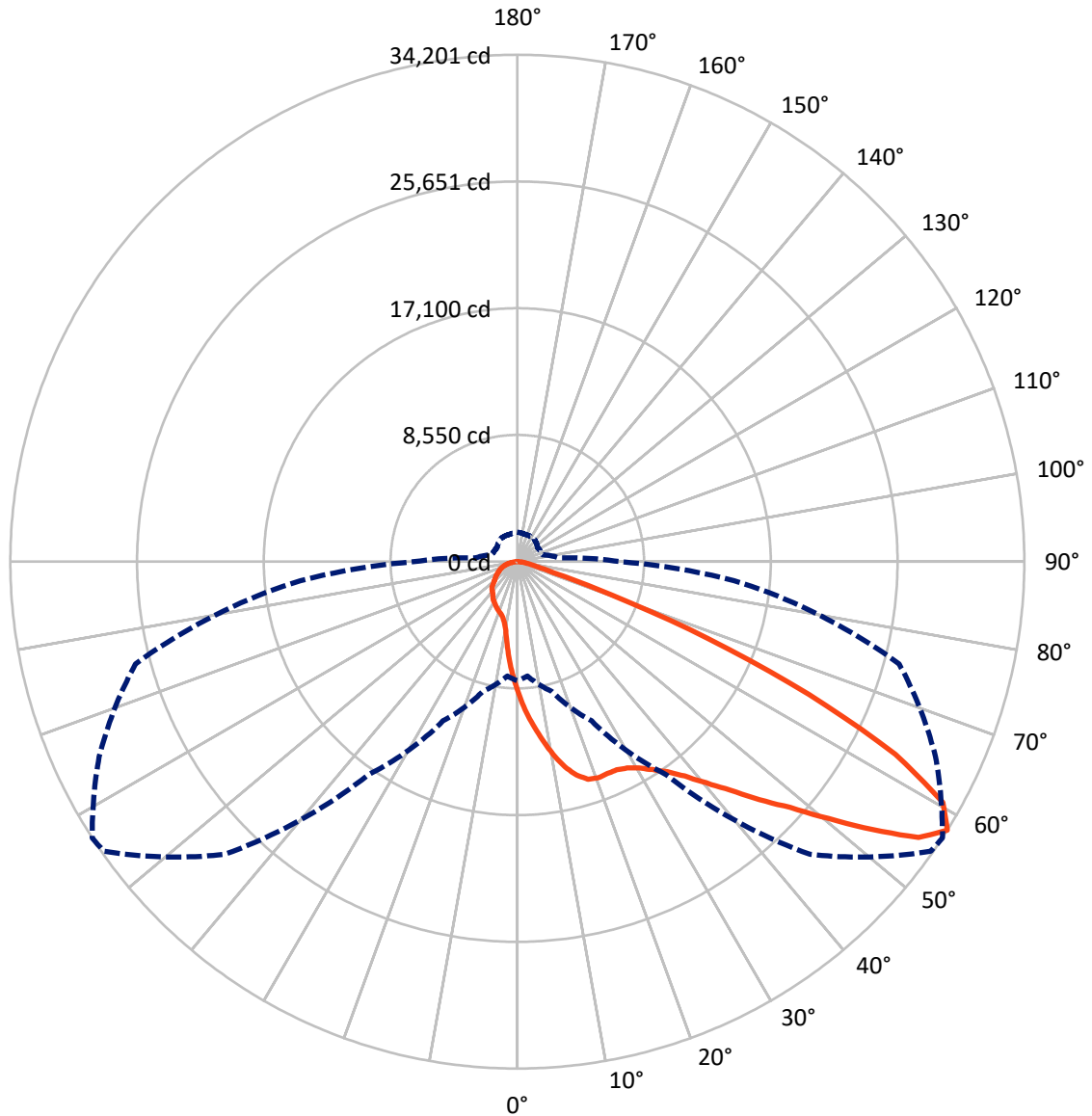
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6408.6	0.0	6408.6
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	35733.4	0.0	35733.4
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	42142.0	0.0	42142.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	850.9	2.0
10°-20°	2507.7	6.0
20°-30°	4164.1	9.9
30°-40°	6272.3	14.9
40°-50°	9417.2	22.3
50°-60°	10555.5	25.0
60°-70°	6177.6	14.7
70°-80°	1827.3	4.3
80°-90°	369.3	0.9
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°	42142.0	100.0
0°-180°	42142.0	100.0

**Coefficient of Utilization**



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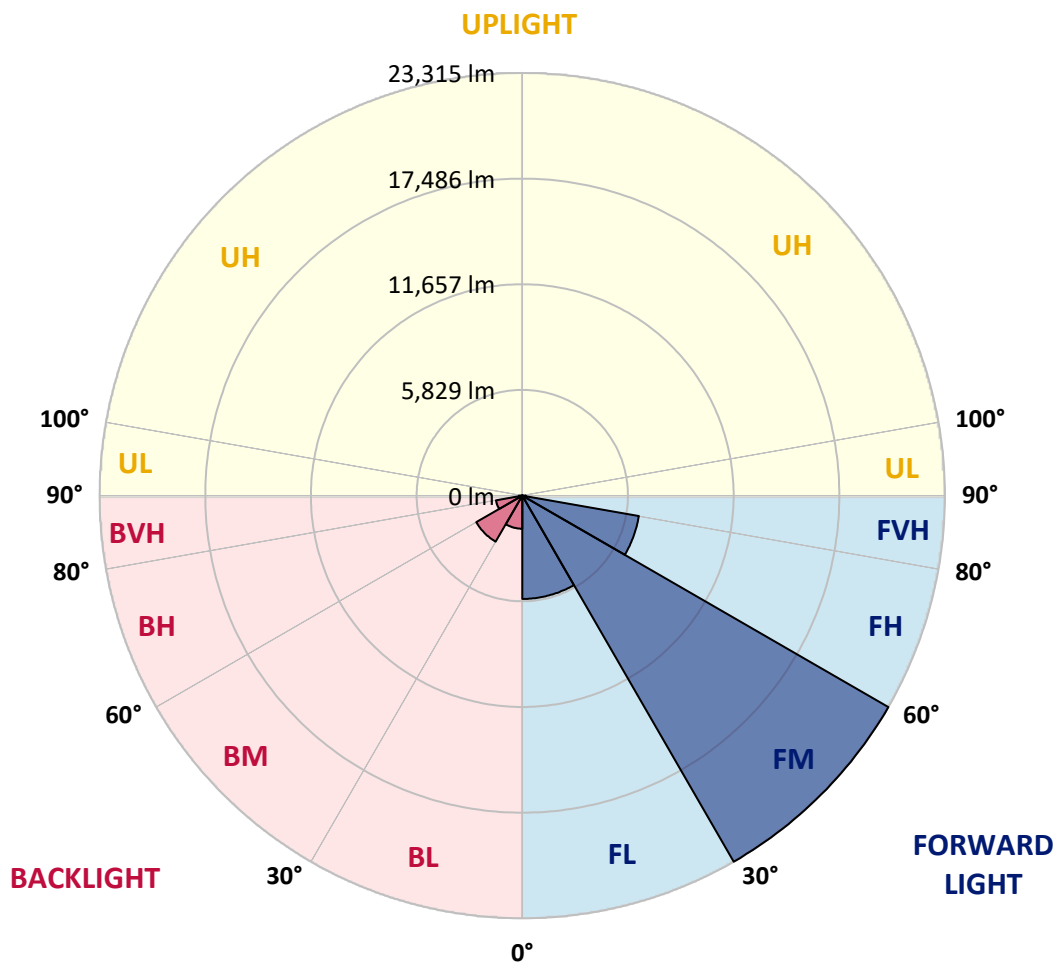
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5696.6	13.5			
FM	(30°-60°)	23314.8	55.3			
FH	(60°-80°)	6530.3	15.5			G3/7500
FVH	(80°-90°)	191.6	0.5			G2/225
BL	(0°-30°)	1826.0	4.3	B3/2500		
BM	(30°-60°)	2930.3	7.0	B3/5000		
BH	(60°-80°)	1474.6	3.5	B3/2500		G3/2500
BVH	(80°-90°)	177.7	0.4			G2/225
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°	57°	65°	75°	85°
0°	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6
2.5°	11001.2	10881.2	10786.7	10703.6	10595.2	10302.2	10009.3	10004.7	9771.7	9411.8	9042.7
5°	12793.6	12632.1	12652.9	12394.5	12136.1	11711.7	11091.2	11058.9	10562.9	9889.3	9204.2
7.5°	13960.8	13963.1	13898.6	13750.9	13471.8	12989.7	12286.1	12126.9	11437.2	10415.3	9388.7
10°	13900.9	13963.1	14071.6	14198.4	14283.8	14046.2	13404.9	13211.1	12313.8	11051.9	9594.0
12.5°	13102.7	13199.6	13354.1	13672.5	14186.9	14579.1	14359.9	14203.1	13328.8	11686.3	9820.1
15°	12604.4	12662.1	12747.5	12962.0	13515.6	14454.5	15022.0	14938.9	14286.1	12403.7	10073.9
17.5°	12452.2	12509.9	12537.5	12669.0	13063.5	14025.4	15282.6	15430.3	15135.0	13063.5	10329.9
20°	12604.4	12632.1	12632.1	12710.5	13019.7	13774.0	15271.1	15568.7	15831.7	13854.7	10569.8
22.5°	13003.5	13015.0	12998.9	13026.6	13257.3	13843.2	15162.7	15531.8	16394.5	14526.0	10756.7
25°	13651.7	13670.2	13564.1	13499.5	13667.9	14147.7	15222.7	15561.8	16835.1	15167.3	10881.2
27.5°	14387.6	14410.7	14281.5	14131.5	14210.0	14523.7	15458.0	15762.5	17165.0	15799.4	10959.7
30°	15289.6	15298.8	15081.9	14902.0	14851.3	15084.3	15859.3	16143.1	17575.6	16544.5	11077.3
32.5°	16212.3	16281.5	16002.4	15748.6	15663.3	15734.8	16452.2	16726.7	18064.7	17344.9	11266.5
35°	17467.2	17478.7	17144.2	16835.1	16553.7	16646.0	17211.1	17409.5	18740.6	18270.0	11534.1
37.5°	19033.5	19139.6	18678.3	18101.6	17755.5	17621.8	18129.3	18346.1	19688.7	19404.9	11937.8
40°	20772.9	20812.1	20417.6	20057.7	19425.7	19038.1	19388.8	19624.1	20858.2	20759.0	12406.0
42.5°	21866.3	21951.6	21981.6	21944.7	21469.5	20819.0	20952.8	21063.5	22242.3	22030.1	12885.9
45°	22235.4	22362.3	22791.3	23700.2	23751.0	23109.7	22798.2	22904.4	23751.0	23312.7	13344.9
47.5°	21624.1	21840.9	22632.2	24496.1	25891.7	25940.1	25001.2	24768.3	25125.8	24376.1	13677.1
50°	20043.9	20090.0	21301.1	24000.1	26895.1	28646.0	27674.8	27241.2	26431.5	25162.7	13905.5
52.5°	17598.7	17651.7	18666.7	21695.6	26276.9	30537.6	30802.9	30027.8	27757.9	25774.0	14055.4
55°	13063.5	13370.3	14486.8	17414.1	23347.3	30360.0	33289.6	32849.0	29361.1	26258.5	14290.7
57.5°	8032.3	7750.9	9075.0	11847.8	17559.5	27919.4	34057.8	34200.8	31125.8	26664.5	14685.2
60°	3695.5	3750.9	4297.6	6110.8	10703.6	21840.9	32078.6	32982.8	32101.6	26650.6	14784.4
62.5°	2546.7	2496.0	2357.6	2682.8	4881.2	13813.2	27095.8	28627.6	30145.4	25822.5	14389.9
65°	2276.8	2226.1	1958.5	1868.5	2242.2	6020.8	19697.9	21631.0	25381.9	23732.5	13407.2
67.5°	2126.9	2057.7	1780.9	1605.5	1600.9	2396.8	11614.8	13942.4	18825.9	20064.7	11617.1
70°	1970.0	1914.7	1640.1	1446.4	1363.3	1506.3	5105.0	6682.8	12223.8	14459.1	9049.6
72.5°	1813.2	1748.6	1501.7	1294.1	1185.7	1128.0	1956.2	2544.4	6906.6	8669.0	5547.9
75°	1584.8	1552.5	1342.6	1171.9	1054.2	911.2	1241.1	1416.4	3303.4	3981.6	2784.3
77.5°	1386.4	1351.8	1192.6	1024.2	938.9	740.5	881.2	961.9	1393.3	1614.8	1257.2
80°	1015.0	1049.6	1005.8	904.3	837.4	581.3	592.9	659.7	828.1	915.8	768.2
82.5°	643.6	708.2	775.1	696.7	634.4	459.1	410.6	436.0	565.2	599.8	341.4
85°	269.9	274.5	449.8	424.5	362.2	272.2	246.8	260.7	302.2	316.0	159.2
87.5°	103.8	101.5	159.2	147.6	113.0	78.4	78.4	87.7	120.0	110.7	50.7
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°	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6	8853.6
2.5°	8883.5	8719.8	8394.5	7990.8	7695.5	7363.4	7070.4	6860.5	6782.0	6745.1	6675.9
5°	8876.6	8553.7	7880.1	7174.2	6606.7	6025.4	5534.0	5215.7	5188.0	4975.8	4955.0
7.5°	8878.9	8385.3	7312.6	6274.5	5409.5	4814.3	4408.3	4302.2	4175.3	4143.0	4159.2
10°	8885.8	8170.7	6703.6	5384.1	4546.7	4156.9	4004.6	3963.1	3967.7	3981.6	3983.9
12.5°	8895.1	7963.1	6071.5	4708.2	4062.3	3900.8	3884.7	3921.6	3960.8	3990.8	3997.7
15°	8906.6	7725.5	5455.6	4163.8	3820.1	3806.2	3859.3	3921.6	3976.9	4020.8	4027.7
17.5°	8892.8	7448.7	4938.9	3829.3	3686.3	3753.2	3840.8	3919.3	3970.0	4011.5	4016.2
20°	8860.5	7139.6	4440.6	3594.0	3603.2	3711.7	3806.2	3880.1	3935.4	3956.2	3972.3
22.5°	8735.9	6770.5	4006.9	3411.8	3504.1	3654.0	3767.0	3810.9	3748.6	3704.7	3716.3
25°	8523.7	6290.7	3603.2	3264.1	3414.1	3573.3	3688.6	3582.5	3531.7	3513.3	3522.5
27.5°	8258.4	5764.7	3298.7	3109.6	3298.7	3483.3	3451.0	3432.5	3409.5	3379.5	3386.4
30°	7972.3	5250.3	3040.4	2989.6	3174.2	3280.3	3294.1	3324.1	3298.7	3252.6	3271.1
32.5°	7707.1	4765.9	2844.3	2888.1	3086.5	3070.4	3174.2	3208.8	3091.1	2936.6	2943.5
35°	7481.0	4316.0	2696.7	2788.9	2936.6	2943.5	3047.3	2927.3	2800.5	2726.7	2731.3
37.5°	7310.3	3965.4	2599.8	2703.6	2745.1	2832.8	2777.4	2715.1	2699.0	2648.2	2650.5
40°	7208.8	3658.6	2537.5	2636.7	2629.8	2689.7	2512.1	2574.4	2597.5	2581.3	2583.6
42.5°	7107.3	3441.8	2472.9	2544.4	2542.1	2424.5	2385.2	2438.3	2498.3	2505.2	2500.6
45°	7026.6	3273.4	2406.0	2403.7	2449.8	2265.3	2253.8	2286.1	2371.4	2412.9	2410.6
47.5°	6936.6	3132.7	2304.5	2239.9	2253.8	2166.1	2147.6	2161.5	2265.3	2332.2	2350.6
50°	6823.6	2991.9	2177.6	2090.0	2032.3	2073.8	2078.4	2080.7	2184.6	2260.7	2276.8
52.5°	6733.6	2885.8	2032.3	1967.7	1898.5	1990.8	2025.4	2030.0	2092.3	2154.6	2166.1
55°	6786.6	2825.8	1889.3	1843.1	1780.9	1905.4	1972.3	1981.6	1995.4	2041.5	2048.5
57.5°	6945.8	2839.7	1773.9	1714.0	1667.8	1803.9	1917.0	1923.9	1914.7	1970.0	1979.2
60°	6994.3	2832.8	1688.6	1570.9	1543.3	1695.5	1836.2	1850.1	1847.8	1928.5	1944.6
62.5°	6791.3	2745.1	1603.2	1451.0	1432.5	1584.8	1723.2	1778.6	1790.1	1905.4	1926.2
65°	6313.7	2565.2	1490.2	1324.1	1324.1	1467.1	1614.8	1690.9	1723.2	1877.7	1900.8
67.5°	5684.0	2353.0	1374.9	1215.7	1211.1	1354.1	1499.4	1577.9	1628.6	1838.5	1852.4
70°	4717.4	2066.9	1231.8	1098.0	1098.0	1227.2	1358.7	1453.3	1527.1	1764.7	1764.7
72.5°	3231.8	1718.6	1058.8	964.2	966.6	1086.5	1220.3	1326.4	1414.1	1617.1	1621.7
75°	2043.8	1342.6	869.7	821.2	830.5	943.5	1081.9	1192.6	1367.9	1598.6	1605.5
77.5°	1086.5	943.5	692.0	680.5	692.0	795.9	950.4	1102.7	1372.6	1386.4	1363.3
80°	703.6	669.0	546.7	523.6	528.3	641.3	846.6	1047.3	1102.7	1116.5	1065.7
82.5°	382.9	424.5	387.5	364.5	364.5	500.6	722.0	832.8	791.2	657.4	627.5
85°	163.8	198.4	200.7	175.3	168.4	309.1	484.4	454.4	422.1	403.7	399.1
87.5°	46.1	64.6	64.6	48.4	36.9	85.4	96.9	27.7	0.0	2.3	4.6
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)