

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: P457319

Luminaire Tested: **GALN-SA8C-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
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-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42707 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

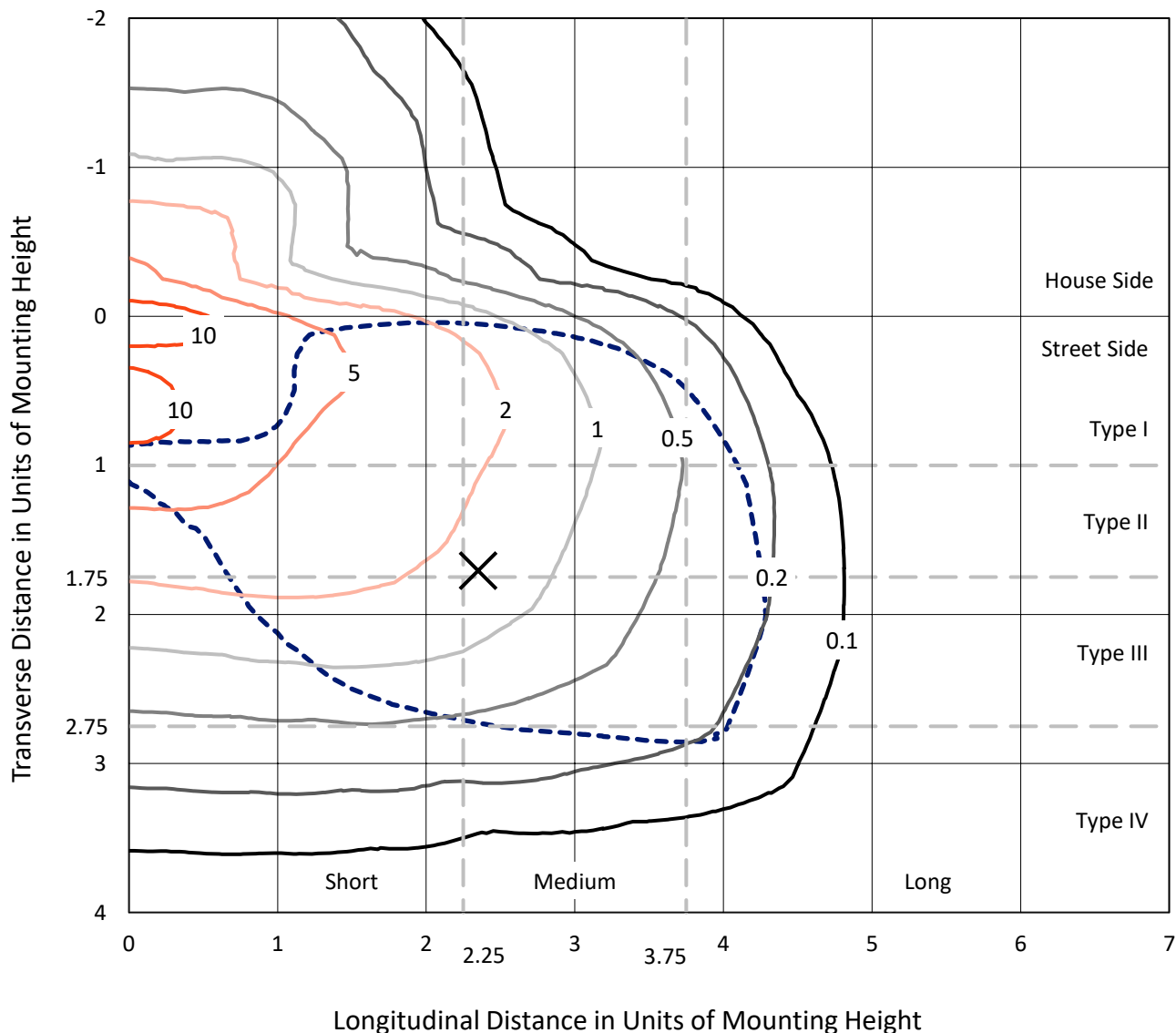
Input Watts (W): 429
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

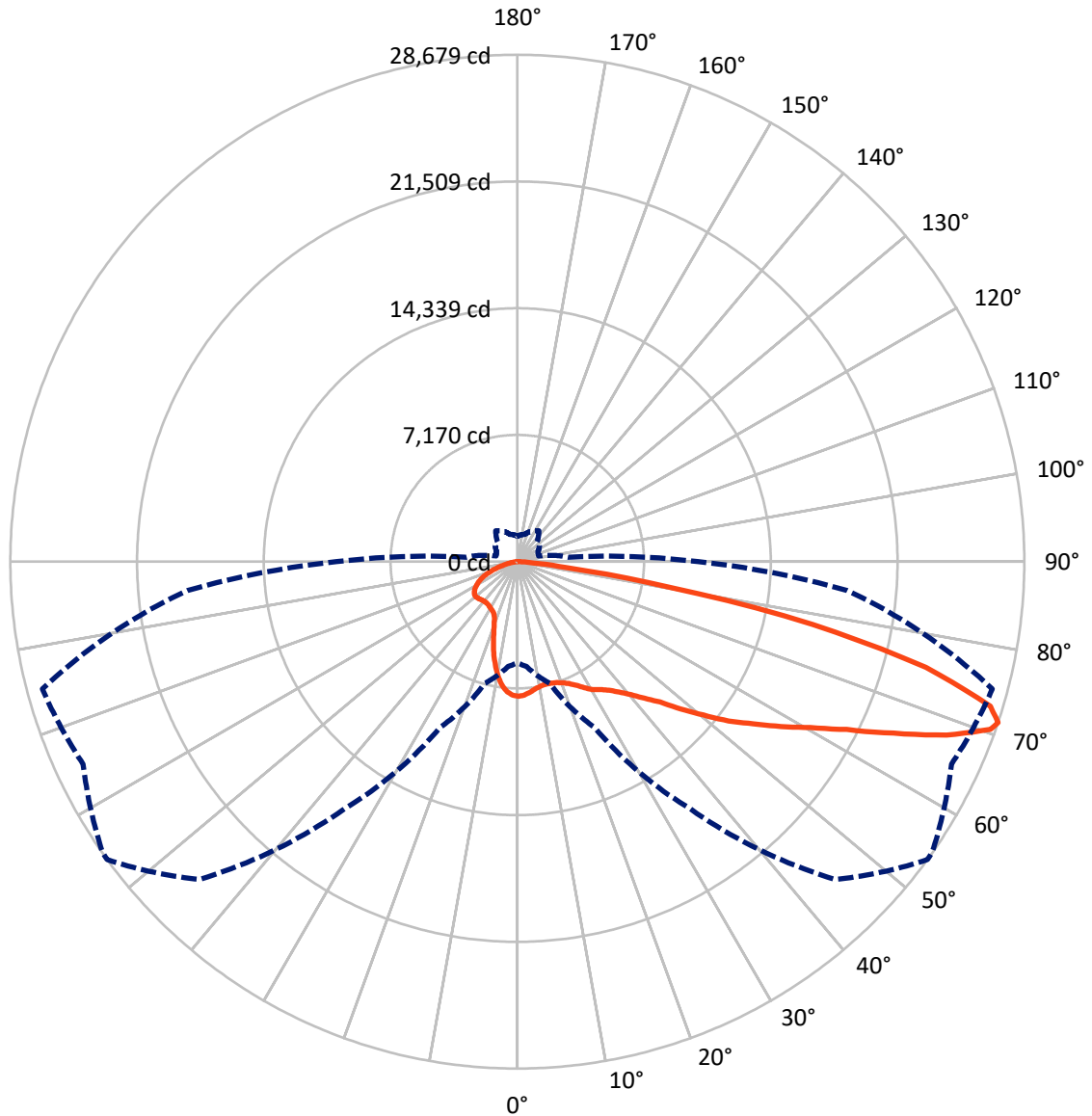
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7710.5	0.0	7710.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	34996.5	0.0	34996.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	42707.0	0.0	42707.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	679.0	1.6
10°-20°	1793.0	4.2
20°-30°	2985.3	7.0
30°-40°	4414.3	10.3
40°-50°	6217.7	14.6
50°-60°	8325.8	19.5
60°-70°	10494.1	24.6
70°-80°	7167.4	16.8
80°-90°	630.3	1.5
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°	42707.0	100.0
0°-180°	42707.0	100.0

Coefficient of Utilization



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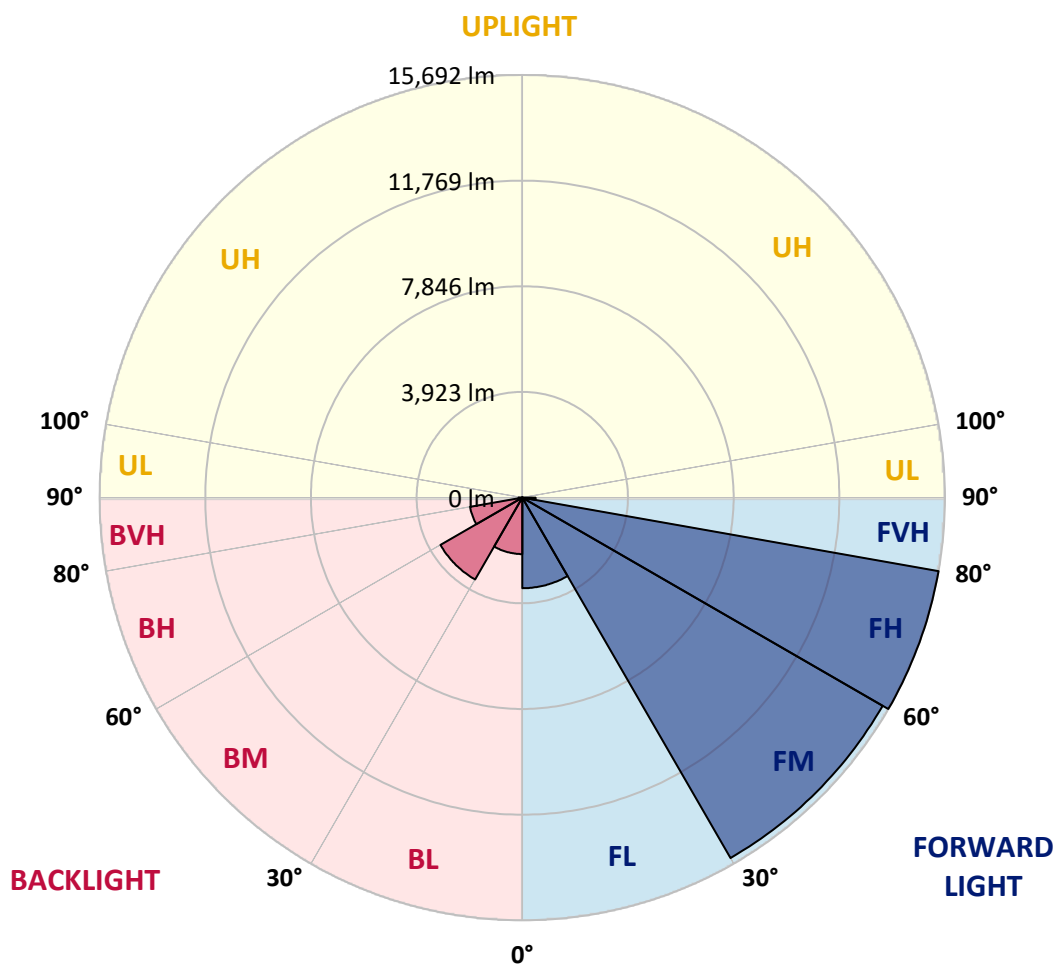
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3361.7	7.9			
FM	(30°-60°)	15449.9	36.2			
FH	(60°-80°)	15692.2	36.7			G5
FVH	(80°-90°)	492.7	1.2			G3/500
BL	(0°-30°)	2095.6	4.9	B3/2500		
BM	(30°-60°)	3508.0	8.2	B3/5000		
BH	(60°-80°)	1969.2	4.6	B3/2500		G3/2500
BVH	(80°-90°)	137.6	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6
2.5°	7361.2	7395.8	7405.0	7428.1	7476.5	7515.8	7555.0	7550.4	7605.7	7628.8	7649.6
5°	7033.6	7042.8	7077.4	7123.6	7208.9	7317.4	7423.5	7425.8	7561.9	7670.3	7723.4
7.5°	6793.7	6823.7	6846.8	6895.2	6985.2	7102.8	7271.2	7285.1	7527.3	7741.8	7854.9
10°	6636.8	6671.4	6696.8	6756.8	6846.8	6978.3	7160.5	7185.9	7501.9	7854.9	8053.3
12.5°	6493.8	6528.4	6551.5	6629.9	6747.6	6909.0	7114.4	7144.3	7511.1	7986.4	8270.1
15°	6581.5	6609.2	6599.9	6623.0	6701.4	6886.0	7132.8	7162.8	7545.7	8113.2	8484.6
17.5°	6971.3	6994.4	6918.3	6830.6	6793.7	6929.8	7190.5	7222.8	7614.9	8244.7	8703.8
20°	7545.7	7608.0	7441.9	7245.8	7068.2	7086.7	7310.4	7345.0	7711.8	8376.2	8927.6
22.5°	8293.2	8339.3	8136.3	7813.3	7485.8	7317.4	7490.4	7511.1	7857.2	8546.9	9172.1
25°	9172.1	9199.8	8918.3	8503.1	8030.2	7711.8	7737.2	7774.1	8097.1	8740.7	9388.9
27.5°	10025.6	10113.3	9788.0	9280.5	8657.6	8127.1	8076.3	8099.4	8357.8	8849.1	9538.9
30°	11038.3	11031.4	10687.7	10099.4	9301.3	8579.2	8397.0	8392.4	8498.5	8902.2	9647.3
32.5°	11845.7	11940.3	11603.5	10962.2	10037.2	9047.5	8618.4	8609.2	8606.9	8994.5	9808.8
35°	12763.9	12777.7	12468.6	11822.7	10833.0	9635.8	8927.6	8881.4	8828.4	9192.8	10027.9
37.5°	13585.1	13649.7	13366.0	12641.6	11615.0	10247.1	9352.0	9322.0	9160.5	9536.6	10378.6
40°	14226.4	14274.9	14104.1	13414.4	12385.5	10906.8	9891.8	9836.5	9640.4	10099.4	10846.9
42.5°	14436.3	14535.5	14602.4	14263.3	13271.4	11688.9	10556.2	10487.0	10337.0	10953.0	11386.7
45°	14452.5	14609.3	14962.3	14978.4	14161.8	12625.4	11331.3	11282.9	11271.3	12046.4	12145.6
47.5°	14330.2	14489.4	15082.3	15402.9	14955.4	13571.3	12450.1	12374.0	12380.9	13398.2	12996.9
50°	14034.9	14224.1	14943.8	15675.1	15575.9	14554.0	13631.2	13605.9	13748.9	14941.5	13880.4
52.5°	13479.0	13707.4	14800.8	15845.8	16037.3	15400.6	14973.8	14902.3	15264.5	16616.3	14847.0
55°	11940.3	12284.0	14277.2	15940.4	16475.6	16210.3	16182.6	16311.8	16791.6	18443.4	15910.4
57.5°	11137.5	11395.9	13139.9	15956.6	17029.2	17151.5	17594.4	17626.7	18466.4	20383.4	17112.3
60°	10699.2	10927.6	12517.0	15850.4	17802.0	18316.5	19038.5	19153.9	20102.0	22485.0	18358.0
62.5°	10316.3	10512.4	12143.3	15483.6	18674.0	20044.3	20909.4	20964.8	21959.0	24805.7	19587.6
65°	9414.3	9638.1	11391.3	15116.9	19426.1	22203.5	23391.6	23327.0	23936.0	26808.0	20358.0
67.5°	8198.6	8482.3	9986.4	13850.4	19797.5	24563.5	26187.5	26106.7	25887.6	28120.6	20579.5
70°	6646.1	6798.3	8189.4	11661.2	18314.2	25802.2	28395.1	28309.8	27096.4	28293.6	19532.2
71°	5718.7	5956.3	7130.5	10357.8	17080.0	25423.9	28678.9	28655.8	27098.7	27816.1	18743.2
72.5°	4463.8	4609.1	5647.2	8025.6	14517.1	23273.9	27977.6	28065.3	26510.4	26489.7	17116.9
75°	2823.6	2888.2	3543.3	4724.5	7965.6	16482.5	23882.9	24120.5	23539.2	21682.2	12729.3
77.5°	1640.2	1723.2	2122.3	2784.4	3441.8	8946.0	17089.2	17347.6	16355.6	11938.0	5211.2
80°	955.0	1047.3	1398.0	1617.1	1580.2	3319.6	8701.5	9142.1	7082.1	3015.1	1462.5
82.5°	530.6	592.9	982.7	985.0	842.0	1084.2	2738.2	2865.1	2020.8	1215.7	597.5
85°	385.2	436.0	634.4	574.4	403.7	466.0	952.7	998.9	816.6	512.1	193.8
87.5°	136.1	193.8	348.3	276.8	110.7	96.9	274.5	223.8	207.6	143.0	43.8
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°	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6	7619.6
2.5°	7661.1	7665.7	7642.6	7601.1	7559.6	7506.5	7446.5	7400.4	7379.6	7377.3	7375.0
5°	7744.1	7755.7	7668.0	7538.8	7395.8	7220.5	7070.5	6899.8	6856.0	6786.8	6807.5
7.5°	7877.9	7871.0	7698.0	7423.5	7089.0	6717.6	6403.8	6221.6	6032.4	5979.4	5981.7
10°	8069.4	8025.6	7698.0	7188.2	6629.9	6078.6	5640.3	5363.5	5213.5	5088.9	5042.8
12.5°	8272.4	8161.7	7624.2	6858.3	6039.4	5363.5	4892.9	4519.1	4422.3	4320.8	4323.1
15°	8466.2	8281.6	7478.8	6394.6	5402.7	4599.9	4143.1	3919.4	3889.4	3900.9	3898.6
17.5°	8641.5	8367.0	7257.4	5877.9	4659.9	3944.7	3702.5	3718.7	3799.4	3857.1	3864.0
20°	8819.1	8417.7	6927.5	5185.8	3958.6	3548.0	3557.2	3684.1	3806.3	3884.8	3896.3
22.5°	8987.5	8440.8	6540.0	4516.8	3451.1	3379.6	3515.7	3651.8	3771.7	3847.8	3859.4
25°	9098.3	8387.7	5990.9	3817.9	3201.9	3319.6	3462.6	3577.9	3679.4	3757.9	3776.3
27.5°	9128.2	8217.0	5310.4	3252.7	3086.6	3261.9	3393.4	3478.7	3557.2	3631.0	3644.8
30°	9112.1	7965.6	4563.0	2920.5	3019.7	3195.0	3296.5	3358.8	3453.4	3511.0	3522.6
32.5°	9086.7	7672.6	3783.3	2742.9	2964.3	3132.7	3192.7	3248.1	3245.8	3222.7	3238.8
35°	9096.0	7322.0	3151.2	2636.7	2915.9	3086.6	3137.3	3068.1	2869.7	2860.5	2851.3
37.5°	9144.4	6975.9	2692.1	2562.9	2890.5	3079.7	3107.3	2789.0	2613.7	2532.9	2512.2
40°	9269.0	6572.2	2389.9	2507.6	2888.2	3132.7	2971.2	2648.3	2311.5	2154.6	2143.1
42.5°	9435.1	6175.5	2205.4	2473.0	2915.9	3213.5	2915.9	2449.9	2083.1	1990.8	1977.0
45°	9681.9	5721.0	2103.9	2456.8	2957.4	3243.4	2897.4	2304.6	1990.8	1917.0	1917.0
47.5°	9961.0	5287.3	2048.5	2445.3	3010.5	3222.7	2733.6	2258.4	1947.0	1956.2	2000.0
50°	10237.8	4911.3	2007.0	2419.9	3056.6	3211.2	2666.7	2256.1	1958.5	2076.2	2154.6
52.5°	10558.5	4646.0	1956.2	2378.4	3056.6	3137.3	2646.0	2302.2	1990.8	2025.4	2060.0
55°	10946.1	4563.0	1891.6	2288.4	3001.2	2952.8	2634.4	2369.1	2013.9	1933.1	1947.0
57.5°	11458.2	4696.8	1829.3	2175.4	2874.3	2761.3	2629.8	2387.6	1960.8	1893.9	1880.1
60°	12053.3	4962.1	1810.9	2060.0	2701.3	2597.5	2602.1	2334.5	1887.0	1817.8	1829.3
62.5°	12470.9	5121.2	1799.4	1972.4	2512.2	2417.6	2535.2	2270.0	1854.7	1794.7	1806.3
65°	12470.9	4927.5	1693.2	1838.6	2267.6	2200.7	2454.5	2189.2	1813.2	1744.0	1732.5
67.5°	11998.0	4362.3	1531.8	1637.9	1997.7	1953.9	2341.5	2092.3	1750.9	1697.8	1670.2
70°	10766.1	3308.0	1328.8	1402.6	1656.3	1695.5	2196.1	1960.8	1647.1	1582.5	1541.0
71°	10224.0	2881.3	1243.4	1282.6	1524.8	1582.5	2126.9	1905.5	1601.0	1508.7	1434.9
72.5°	9179.0	2426.8	1114.2	1130.4	1303.4	1407.2	1981.6	1799.4	1513.3	1381.8	1298.8
75°	6973.6	1771.7	897.4	888.1	964.3	1116.5	1677.1	1603.3	1326.4	1148.8	1100.4
77.5°	3012.8	964.3	671.3	678.2	655.1	846.6	1319.5	1377.2	1137.3	934.3	890.4
80°	913.5	556.0	459.1	468.3	438.3	567.5	929.7	1079.6	913.5	726.7	666.7
82.5°	468.3	332.2	313.7	309.1	279.1	320.7	562.9	738.2	652.8	454.5	401.4
85°	203.0	177.6	154.6	149.9	131.5	115.3	200.7	369.1	346.0	253.8	242.2
87.5°	50.8	46.1	30.0	27.7	16.1	2.3	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)