

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: P459503

Luminaire Tested: **GALN-SA9C-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459503  
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-SA9C-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59953 lumens  
Efficiency: N/A  
Efficacy: 124.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

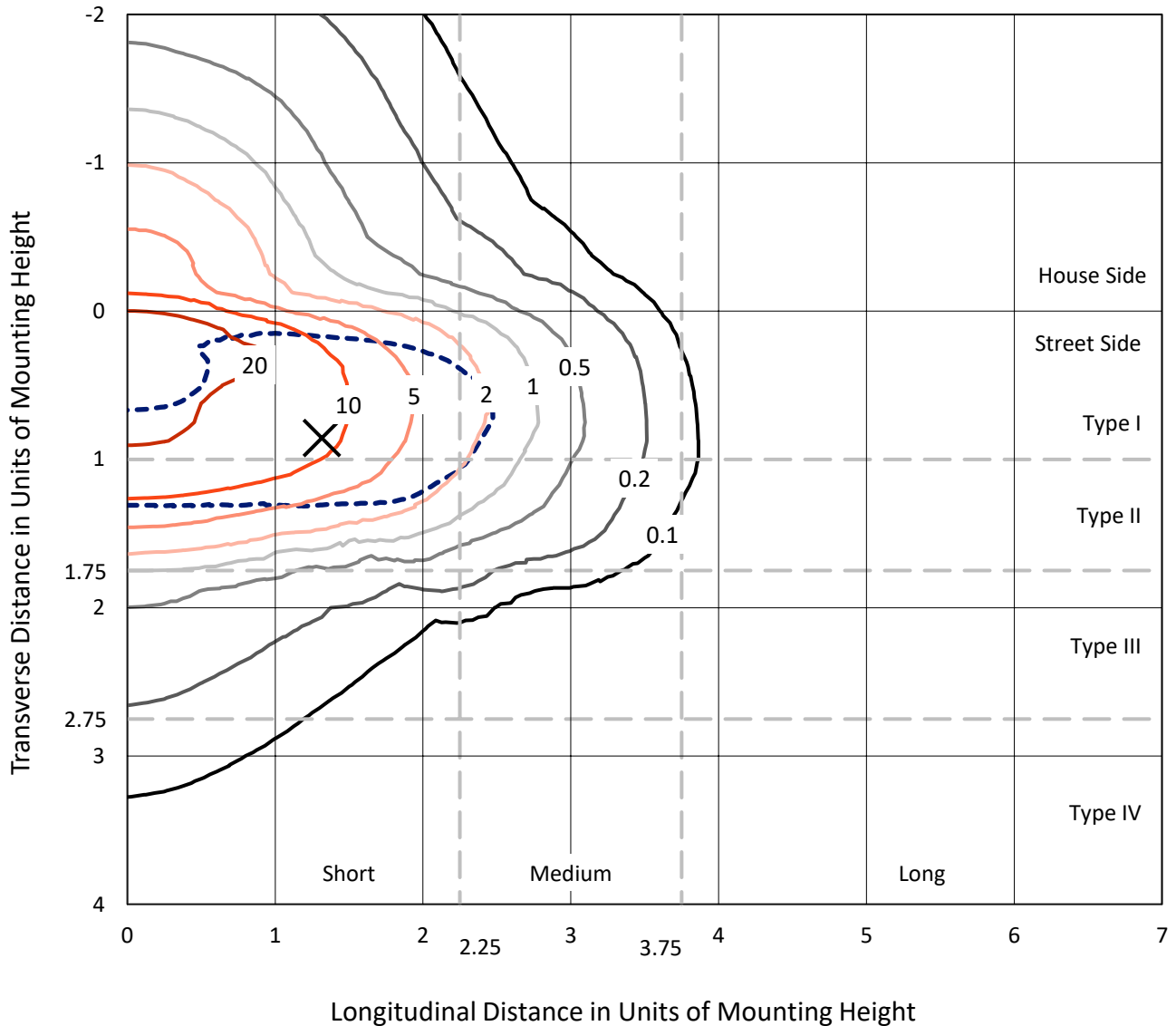
Input Watts (W): 481  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459503  
 CATALOG NUMBER: GALN-SA9C-735-U-AFL

### Iso-Footcandle Lines of Horizontal Illumination

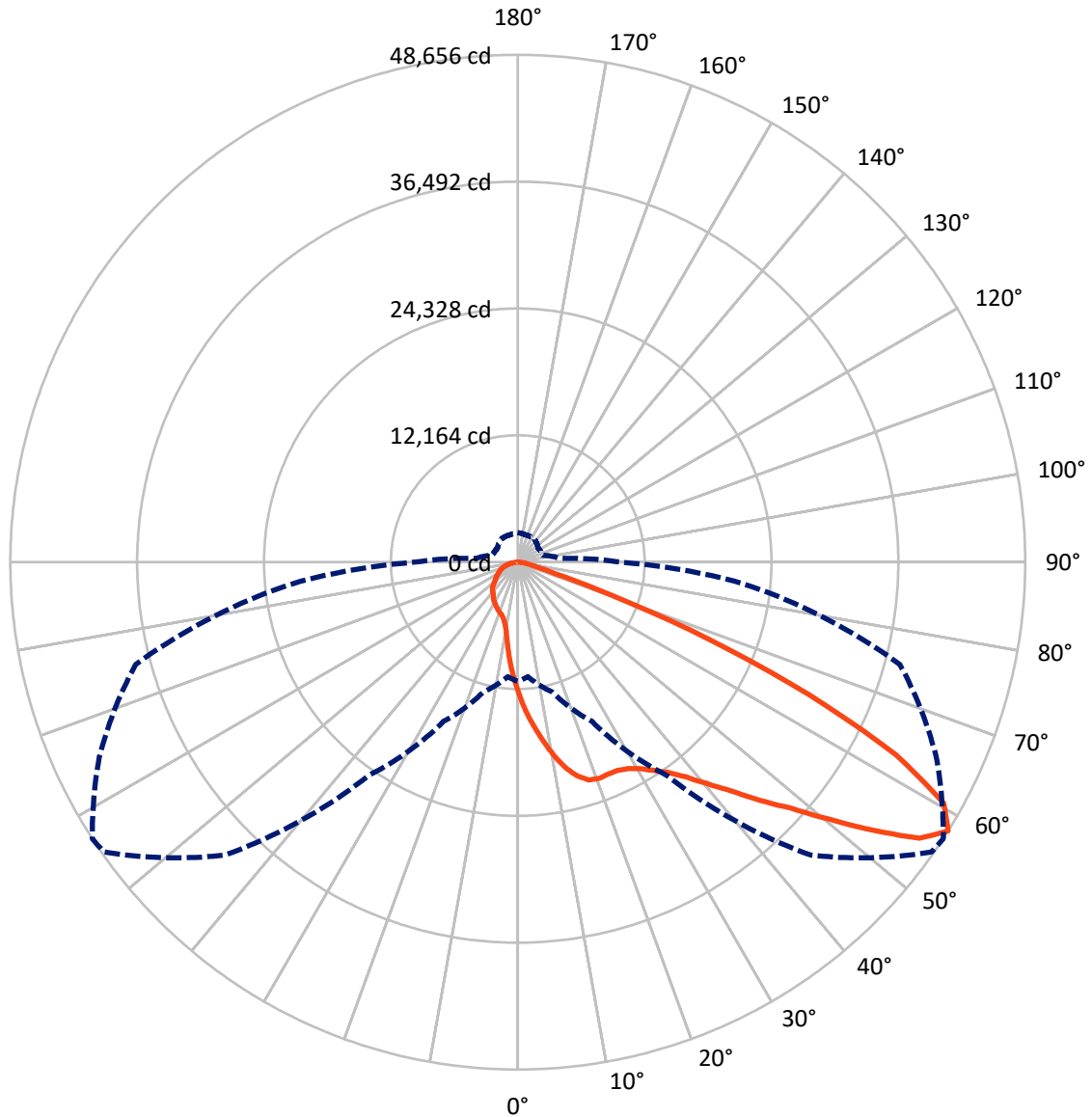
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 30.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P459503  
CATALOG NUMBER: GALN-SA9C-735-U-AFL

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P459503

CATALOG NUMBER: GALN-SA9C-735-U-AFL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9117.2	0.0	9117.2
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	50835.8	0.0	50835.8
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	59953.0	0.0	59953.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1210.5	2.0
10°-20°	3567.6	6.0
20°-30°	5924.0	9.9
30°-40°	8923.2	14.9
40°-50°	13397.4	22.3
50°-60°	15016.8	25.0
60°-70°	8788.5	14.7
70°-80°	2599.6	4.3
80°-90°	525.4	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°	59953.0	100.0
0°-180°	59953.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P459503

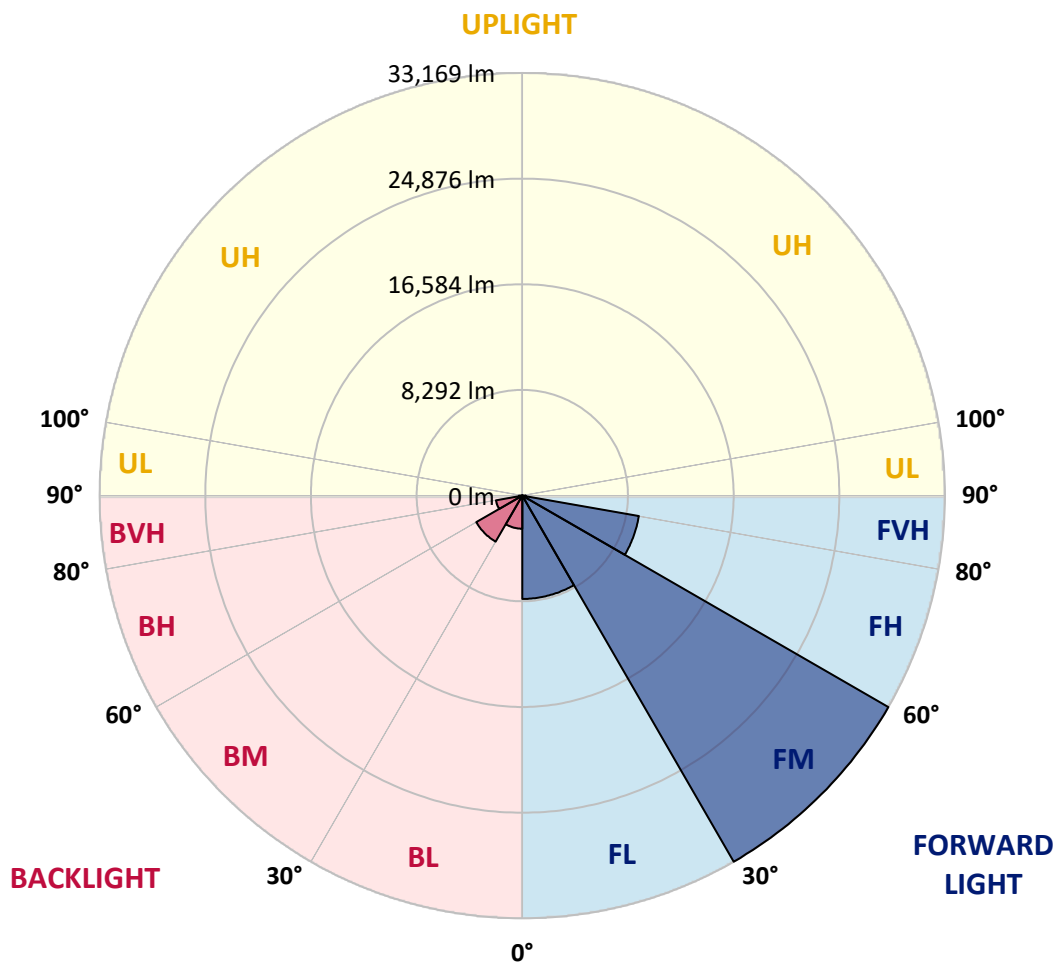
CATALOG NUMBER: GALN-SA9C-735-U-AFL

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8104.3	13.5			
FM	(30°-60°)	33168.6	55.3			
FH	(60°-80°)	9290.3	15.5			G4/12000
FVH	(80°-90°)	272.6	0.5			G3/500
BL	(0°-30°)	2597.8	4.3	B4/5000		
BM	(30°-60°)	4168.7	7.0	B3/5000		
BH	(60°-80°)	2097.8	3.5	B3/2500		G3/2500
BVH	(80°-90°)	252.8	0.4			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Short





REPORT NUMBER: P459503

CATALOG NUMBER: GALN-SA9C-735-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4
2.5°	15650.8	15480.1	15345.6	15227.4	15073.2	14656.4	14239.6	14233.0	13901.6	13389.6	12864.5
5°	18200.7	17971.0	18000.5	17633.0	17265.4	16661.6	15778.8	15732.8	15027.2	14069.0	13094.3
7.5°	19861.3	19864.6	19772.7	19562.6	19165.5	18479.7	17478.7	17252.3	16271.0	14817.2	13356.8
10°	19776.0	19864.6	20018.8	20199.3	20320.7	19982.7	19070.4	18794.7	17518.1	15723.0	13648.9
12.5°	18640.5	18778.3	18998.2	19451.1	20182.9	20740.8	20429.0	20205.9	18962.1	16625.5	13970.5
15°	17931.6	18013.6	18135.1	18440.3	19227.9	20563.6	21370.9	21252.8	20324.0	17646.1	14331.5
17.5°	17715.0	17797.0	17836.4	18023.5	18584.7	19953.2	21741.7	21951.8	21531.7	18584.7	14695.8
20°	17931.6	17971.0	17971.0	18082.6	18522.3	19595.5	21725.3	22148.7	22522.8	19710.3	15037.1
22.5°	18499.3	18515.8	18492.8	18532.2	18860.3	19693.9	21571.1	22096.2	23323.6	20665.3	15302.9
25°	19421.5	19447.8	19296.8	19204.9	19444.5	20127.1	21656.4	22138.8	23950.4	21577.6	15480.1
27.5°	20468.4	20501.2	20317.4	20104.1	20215.7	20662.0	21991.2	22424.3	24419.7	22476.9	15591.7
30°	21751.6	21764.7	21456.2	21200.2	21128.0	21459.5	22562.2	22965.8	25003.8	23536.9	15759.1
32.5°	23064.3	23162.7	22765.6	22404.7	22283.2	22385.0	23405.6	23796.1	25699.6	24675.6	16028.2
35°	24849.6	24866.0	24390.1	23950.4	23550.0	23681.3	24485.3	24767.5	26661.1	25991.6	16408.9
37.5°	27077.9	27228.9	26572.5	25752.1	25259.8	25069.5	25791.4	26099.9	28009.9	27606.3	16983.2
40°	29552.4	29608.1	29047.0	28535.0	27635.8	27084.5	27583.3	27918.0	29673.8	29532.7	17649.4
42.5°	31107.9	31229.3	31272.0	31219.5	30543.4	29618.0	29808.3	29965.9	31642.8	31340.9	18332.0
45°	31633.0	31813.5	32423.9	33716.9	33789.1	32876.8	32433.7	32584.7	33789.1	33165.6	18985.0
47.5°	30763.3	31071.8	32197.5	34849.1	36834.6	36903.5	35567.8	35236.4	35745.1	34678.5	19457.6
50°	28515.3	28580.9	30303.9	34143.6	38262.2	40753.0	39371.4	38754.4	37602.5	35797.6	19782.5
52.5°	25036.6	25112.1	26556.1	30865.1	37382.7	43444.1	43821.5	42718.8	39489.6	36667.2	19995.8
55°	18584.7	19021.1	20609.5	24774.1	33214.8	43191.4	47359.2	46732.4	41770.4	37356.4	20330.6
57.5°	11427.1	11026.8	12910.5	16855.2	24980.8	39719.3	48452.1	48655.5	44280.9	37934.0	20891.8
60°	5257.4	5336.2	6113.9	8693.4	15227.4	31071.8	45636.3	46922.8	45669.1	37914.3	21032.9
62.5°	3623.1	3550.9	3354.0	3816.7	6944.2	19651.2	38547.7	40726.8	42886.2	36736.2	20471.7
65°	3239.1	3166.9	2786.2	2658.2	3189.9	8565.4	28023.0	30773.2	36109.3	33762.9	19073.7
67.5°	3025.8	2927.3	2533.5	2284.1	2277.5	3409.8	16523.7	19835.0	26782.5	28544.8	16527.0
70°	2802.6	2723.9	2333.3	2057.7	1939.5	2143.0	7262.6	9507.3	17390.1	20570.1	12874.4
72.5°	2579.5	2487.6	2136.4	1841.1	1686.8	1604.8	2782.9	3619.8	9825.6	12332.9	7892.7
75°	2254.6	2208.6	1910.0	1667.1	1499.8	1296.3	1765.6	2015.0	4699.5	5664.3	3961.1
77.5°	1972.3	1923.1	1696.7	1457.1	1335.7	1053.4	1253.6	1368.5	1982.2	2297.2	1788.6
80°	1444.0	1493.2	1430.9	1286.5	1191.3	827.0	843.4	938.6	1178.2	1302.9	1092.8
82.5°	915.6	1007.5	1102.7	991.1	902.5	653.1	584.2	620.3	804.0	853.3	485.7
85°	384.0	390.5	639.9	603.8	515.2	387.2	351.1	370.8	429.9	449.6	226.4
87.5°	147.7	144.4	226.4	210.0	160.8	111.6	111.6	124.7	170.7	157.5	72.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P459503  
 CATALOG NUMBER: GALN-SA9C-735-U-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4	12595.4
2.5°	12638.1	12405.1	11942.4	11368.1	10948.0	10475.4	10058.6	9760.0	9648.4	9595.9	9497.4
5°	12628.3	12168.8	11210.5	10206.3	9399.0	8572.0	7873.0	7420.1	7380.7	7078.8	7049.2
7.5°	12631.5	11929.2	10403.2	8926.4	7695.8	6849.1	6271.5	6120.5	5940.0	5894.1	5917.0
10°	12641.4	11624.0	9536.8	7659.7	6468.4	5913.8	5697.2	5638.1	5644.6	5664.3	5667.6
12.5°	12654.5	11328.7	8637.6	6698.1	5779.2	5549.5	5526.5	5579.0	5634.8	5677.5	5687.3
15°	12670.9	10990.7	7761.4	5923.6	5434.6	5414.9	5490.4	5579.0	5657.8	5720.1	5730.0
17.5°	12651.2	10596.8	7026.3	5447.7	5244.3	5339.4	5464.1	5575.7	5647.9	5707.0	5713.6
20°	12605.3	10157.1	6317.4	5113.0	5126.1	5280.4	5414.9	5519.9	5598.7	5628.2	5651.2
22.5°	12428.1	9632.0	5700.4	4853.7	4985.0	5198.3	5359.1	5421.5	5332.9	5270.5	5286.9
25°	12126.1	8949.4	5126.1	4643.7	4857.0	5083.5	5247.6	5096.6	5024.4	4998.1	5011.3
27.5°	11748.7	8201.1	4692.9	4423.8	4692.9	4955.5	4909.5	4883.3	4850.5	4807.8	4817.6
30°	11341.8	7469.3	4325.4	4253.2	4515.7	4666.7	4686.4	4729.0	4692.9	4627.3	4653.6
32.5°	10964.4	6780.1	4046.4	4108.8	4391.0	4368.0	4515.7	4564.9	4397.6	4177.7	4187.5
35°	10642.8	6140.2	3836.4	3967.7	4177.7	4187.5	4335.2	4164.6	3984.1	3879.1	3885.6
37.5°	10399.9	5641.4	3698.6	3846.2	3905.3	4030.0	3951.3	3862.6	3839.7	3767.5	3770.8
40°	10255.5	5204.9	3609.9	3751.1	3741.2	3826.5	3573.8	3662.5	3695.3	3672.3	3675.6
42.5°	10111.1	4896.4	3518.1	3619.8	3616.5	3449.1	3393.4	3468.8	3554.2	3564.0	3557.4
45°	9996.3	4656.8	3422.9	3419.6	3485.2	3222.7	3206.3	3252.2	3373.7	3432.7	3429.5
47.5°	9868.3	4456.6	3278.5	3186.6	3206.3	3081.6	3055.3	3075.0	3222.7	3317.9	3344.1
50°	9707.5	4256.5	3098.0	2973.3	2891.2	2950.3	2956.9	2960.2	3107.8	3216.1	3239.1
52.5°	9579.5	4105.5	2891.2	2799.4	2700.9	2832.2	2881.4	2888.0	2976.6	3065.2	3081.6
55°	9655.0	4020.2	2687.8	2622.1	2533.5	2710.7	2805.9	2819.0	2838.7	2904.4	2914.2
57.5°	9881.4	4039.9	2523.7	2438.4	2372.7	2566.3	2727.2	2737.0	2723.9	2802.6	2815.8
60°	9950.3	4030.0	2402.3	2234.9	2195.5	2412.1	2612.3	2632.0	2628.7	2743.6	2766.5
62.5°	9661.5	3905.3	2280.8	2064.2	2038.0	2254.6	2451.5	2530.2	2546.7	2710.7	2740.3
65°	8982.2	3649.3	2120.0	1883.7	1883.7	2087.2	2297.2	2405.5	2451.5	2671.4	2704.2
67.5°	8086.3	3347.4	1955.9	1729.5	1722.9	1926.4	2133.2	2244.7	2316.9	2615.6	2635.3
70°	6711.2	2940.5	1752.5	1562.1	1562.1	1745.9	1933.0	2067.5	2172.5	2510.6	2510.6
72.5°	4597.8	2444.9	1506.3	1371.8	1375.1	1545.7	1736.1	1887.0	2011.7	2300.5	2307.1
75°	2907.6	1910.0	1237.2	1168.3	1181.4	1342.2	1539.2	1696.7	1946.1	2274.3	2284.1
77.5°	1545.7	1342.2	984.5	968.1	984.5	1132.2	1352.1	1568.7	1952.7	1972.3	1939.5
80°	1000.9	951.7	777.8	745.0	751.5	912.3	1204.4	1489.9	1568.7	1588.4	1516.2
82.5°	544.8	603.8	551.3	518.5	518.5	712.1	1027.2	1184.7	1125.6	935.3	892.6
85°	233.0	282.2	285.5	249.4	239.6	439.8	689.2	646.5	600.6	574.3	567.7
87.5°	65.6	91.9	91.9	68.9	52.5	121.4	137.8	39.4	0.0	3.3	6.6
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)