

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: P459416

Luminaire Tested: **GALN-SA8D-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459416  
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-SA8D-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 58762 lumens  
Efficiency: N/A  
Efficacy: 119.2 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

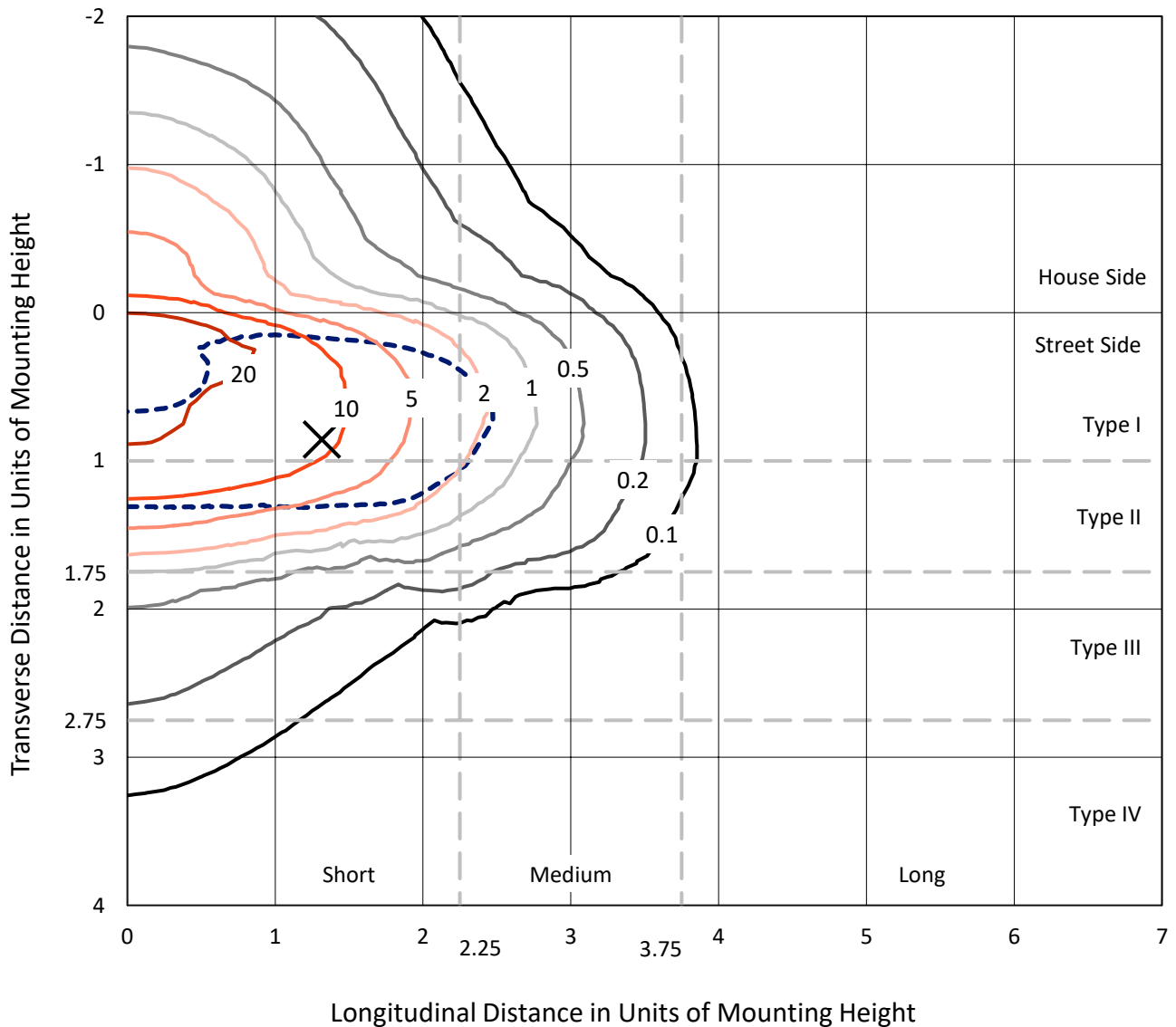
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

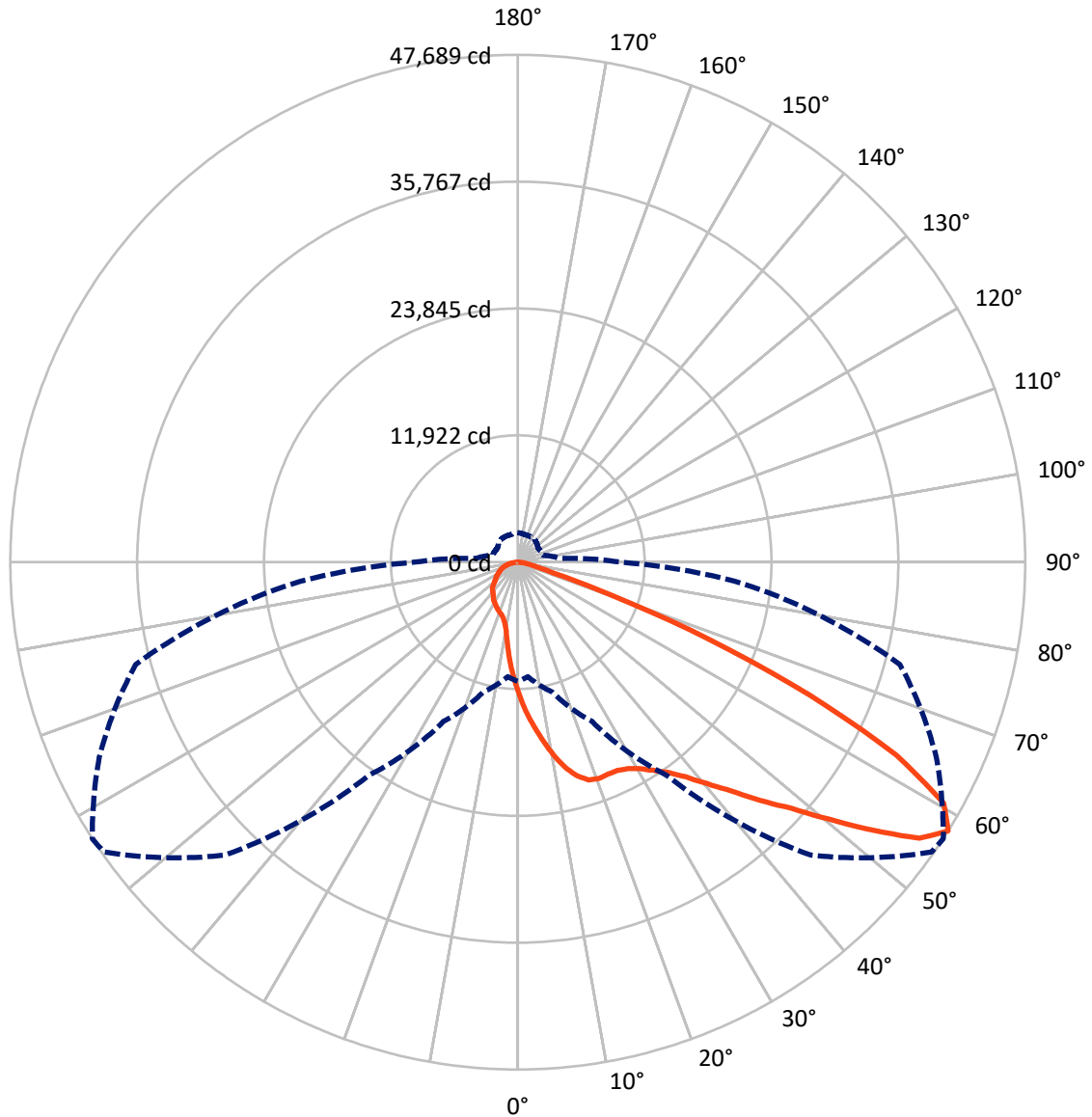
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 30 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	8936.0	0.0	8936.0
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	49826.0	0.0	49826.0
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	58762.0	0.0	58762.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1186.5	2.0
10°-20°	3496.7	6.0
20°-30°	5806.3	9.9
30°-40°	8746.0	14.9
40°-50°	13131.2	22.3
50°-60°	14718.5	25.0
60°-70°	8614.0	14.7
70°-80°	2547.9	4.3
80°-90°	515.0	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°	58762.0	100.0
0°-180°	58762.0	100.0

**Coefficient of Utilization**



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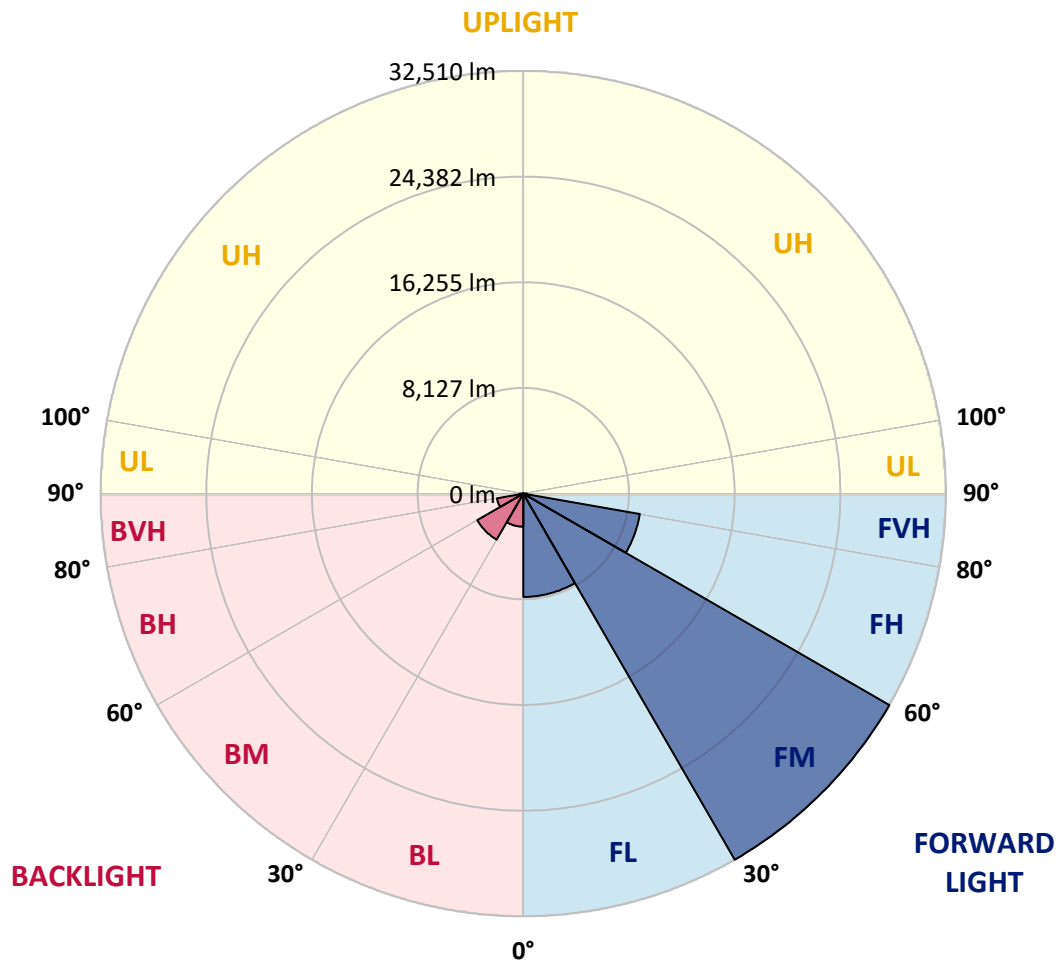
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7943.3	13.5			
FM (30°-60°)	32509.7	55.3			
FH (60°-80°)	9105.8	15.5			G4/12000
FVH (80°-90°)	267.2	0.5			G3/500
BL (0°-30°)	2546.2	4.3	B4/5000		
BM (30°-60°)	4085.9	7.0	B3/5000		
BH (60°-80°)	2056.1	3.5	B3/2500		G3/2500
BVH (80°-90°)	247.8	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2
2.5°	15339.9	15172.6	15040.7	14924.9	14773.7	14365.2	13956.7	13950.3	13625.4	13123.6	12609.0
5°	17839.1	17614.0	17642.9	17282.7	16922.4	16330.6	15465.3	15420.3	14728.7	13789.5	12834.1
7.5°	19466.7	19469.9	19379.9	19174.0	18784.8	18112.5	17131.5	16909.5	15947.8	14522.8	13091.5
10°	19383.1	19469.9	19621.1	19798.0	19917.0	19585.7	18691.5	18421.3	17170.1	15410.6	13377.7
12.5°	18270.2	18405.3	18620.8	19064.7	19782.0	20328.8	20023.2	19804.5	18585.4	16295.2	13693.0
15°	17575.4	17655.8	17774.8	18073.9	18845.9	20155.1	20946.4	20830.6	19920.3	17295.5	14046.8
17.5°	17363.1	17443.5	17482.1	17665.4	18215.5	19556.8	21309.8	21515.7	21104.0	18215.5	14403.8
20°	17575.4	17614.0	17614.0	17723.3	18154.4	19206.2	21293.7	21708.7	22075.4	19318.8	14738.4
22.5°	18131.8	18147.9	18125.4	18164.0	18485.7	19302.7	21142.6	21657.2	22860.2	20254.8	14998.9
25°	19035.7	19061.4	18913.5	18823.4	19058.2	19727.3	21226.2	21699.0	23474.6	21149.0	15172.6
27.5°	20061.8	20094.0	19913.8	19704.8	19814.1	20251.6	21554.3	21978.9	23934.6	22030.3	15282.0
30°	21319.5	21332.3	21030.0	20779.1	20708.3	21033.2	22114.0	22509.6	24507.1	23069.3	15446.0
32.5°	22606.1	22702.6	22313.4	21959.6	21840.6	21940.3	22940.6	23323.4	25189.0	24185.4	15709.8
35°	24355.9	24372.0	23905.6	23474.6	23082.2	23210.8	23998.9	24275.5	26131.5	25475.3	16082.9
37.5°	26540.0	26687.9	26044.6	25240.5	24758.0	24571.4	25279.1	25581.4	27453.5	27057.8	16645.8
40°	28965.3	29020.0	28469.9	27968.1	27086.8	26546.4	27035.3	27363.4	29084.3	28946.0	17298.8
42.5°	30489.9	30608.9	30650.8	30599.3	29936.7	29029.6	29216.2	29370.6	31014.2	30718.3	17967.8
45°	31004.6	31181.5	31779.8	33047.1	33117.9	32223.7	31789.4	31937.4	33117.9	32506.7	18607.9
47.5°	30152.2	30454.6	31557.8	34156.8	36102.9	36170.4	34861.3	34536.4	35035.0	33989.6	19071.1
50°	27948.8	28013.2	29701.9	33465.3	37502.1	39943.5	38589.3	37984.6	36855.5	35086.4	19389.5
52.5°	24539.3	24613.2	26028.5	30251.9	36640.0	42581.1	42951.0	41870.2	38705.1	35938.8	19598.6
55°	18215.5	18643.3	20200.1	24281.9	32555.0	42333.4	46418.4	45804.1	40940.6	36614.3	19926.7
57.5°	11200.1	10807.7	12654.0	16520.3	24484.6	38930.2	47489.5	47689.0	43401.3	37180.4	20476.7
60°	5153.0	5230.2	5992.5	8520.7	14924.9	30454.6	44729.7	45990.6	44761.9	37161.1	20615.0
62.5°	3551.1	3480.3	3287.3	3740.9	6806.3	19260.9	37781.9	39917.7	42034.2	36006.4	20065.0
65°	3174.8	3104.0	2730.9	2605.4	3126.5	8395.3	27466.4	30161.8	35392.0	33092.1	18694.7
67.5°	2965.7	2869.2	2483.2	2238.7	2232.3	3342.0	16195.5	19441.0	26250.5	27977.8	16198.7
70°	2747.0	2669.8	2287.0	2016.8	1901.0	2100.4	7118.3	9318.4	17044.6	20161.5	12618.6
72.5°	2528.2	2438.2	2094.0	1804.5	1653.3	1572.9	2727.7	3547.9	9630.4	12087.9	7735.9
75°	2209.8	2164.8	1872.0	1634.0	1470.0	1270.5	1730.5	1975.0	4606.1	5551.8	3882.4
77.5°	1933.2	1884.9	1663.0	1428.2	1309.1	1032.5	1228.7	1341.3	1942.8	2251.6	1753.0
80°	1415.3	1463.5	1402.4	1260.9	1167.6	810.6	826.7	919.9	1154.8	1277.0	1071.1
82.5°	897.4	987.5	1080.8	971.4	884.6	640.1	572.6	607.9	788.1	836.3	476.1
85°	376.3	382.8	627.2	591.9	505.0	379.6	344.2	363.5	421.4	440.7	221.9
87.5°	144.7	141.5	221.9	205.9	157.6	109.4	109.4	122.2	167.3	154.4	70.8
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°	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2	12345.2
2.5°	12387.0	12158.7	11705.1	11142.2	10730.5	10267.3	9858.8	9566.1	9456.7	9405.3	9308.8
5°	12377.4	11927.1	10987.8	10003.6	9212.3	8401.7	7716.6	7272.7	7234.1	6938.2	6909.2
7.5°	12380.6	11692.3	10196.6	8749.1	7542.9	6713.0	6146.9	5998.9	5822.0	5777.0	5799.5
10°	12390.3	11393.1	9347.4	7507.5	6339.9	5796.3	5584.0	5526.1	5532.5	5551.8	5555.0
12.5°	12403.1	11103.6	8466.0	6565.0	5664.4	5439.2	5416.7	5468.2	5522.9	5564.7	5574.3
15°	12419.2	10772.3	7607.2	5805.9	5326.7	5307.4	5381.3	5468.2	5545.4	5606.5	5616.1
17.5°	12399.9	10386.3	6886.7	5339.5	5140.1	5233.4	5355.6	5465.0	5535.7	5593.6	5600.1
20°	12354.9	9955.3	6191.9	5011.4	5024.3	5175.5	5307.4	5410.3	5487.5	5516.4	5538.9
22.5°	12181.2	9440.7	5587.2	4757.3	4886.0	5095.1	5252.7	5313.8	5226.9	5165.8	5181.9
25°	11885.3	8771.6	5024.3	4551.5	4760.5	4982.5	5143.3	4995.3	4924.6	4898.8	4911.7
27.5°	11515.3	8038.2	4599.7	4335.9	4599.7	4857.0	4812.0	4786.3	4754.1	4712.3	4721.9
30°	11116.5	7320.9	4239.4	4168.7	4426.0	4574.0	4593.3	4635.1	4599.7	4535.4	4561.1
32.5°	10746.6	6645.4	3966.0	4027.2	4303.8	4281.3	4426.0	4474.3	4310.2	4094.7	4104.4
35°	10431.4	6018.2	3760.2	3888.8	4094.7	4104.4	4249.1	4081.8	3904.9	3802.0	3808.4
37.5°	10193.3	5529.3	3625.1	3769.8	3827.7	3950.0	3872.8	3785.9	3763.4	3692.6	3695.8
40°	10051.8	5101.5	3538.2	3676.5	3666.9	3750.5	3502.9	3589.7	3621.9	3599.3	3602.6
42.5°	9910.3	4799.1	3448.2	3547.9	3544.7	3380.6	3325.9	3399.9	3483.6	3493.2	3486.8
45°	9797.7	4564.3	3354.9	3351.7	3416.0	3158.7	3142.6	3187.6	3306.6	3364.5	3361.3
47.5°	9672.2	4368.1	3213.4	3123.3	3142.6	3020.4	2994.6	3013.9	3158.7	3252.0	3277.7
50°	9514.6	4171.9	3036.4	2914.2	2833.8	2891.7	2898.1	2901.4	3046.1	3152.2	3174.8
52.5°	9389.2	4023.9	2833.8	2743.7	2647.2	2775.9	2824.2	2830.6	2917.4	3004.3	3020.4
55°	9463.2	3940.3	2634.4	2570.0	2483.2	2656.9	2750.2	2763.0	2782.3	2846.7	2856.3
57.5°	9685.1	3959.6	2473.5	2389.9	2325.6	2515.4	2673.0	2682.6	2669.8	2747.0	2759.8
60°	9752.7	3950.0	2354.5	2190.5	2151.9	2364.2	2560.4	2579.7	2576.5	2689.1	2711.6
62.5°	9469.6	3827.7	2235.5	2023.2	1997.5	2209.8	2402.8	2480.0	2496.1	2656.9	2685.8
65°	8803.8	3576.8	2077.9	1846.3	1846.3	2045.7	2251.6	2357.8	2402.8	2618.3	2650.5
67.5°	7925.6	3280.9	1917.1	1695.1	1688.7	1888.1	2090.8	2200.1	2270.9	2563.6	2582.9
70°	6577.9	2882.1	1717.7	1531.1	1531.1	1711.2	1894.6	2026.4	2129.4	2460.7	2460.7
72.5°	4506.4	2396.4	1476.4	1344.5	1347.7	1515.0	1701.6	1849.5	1971.8	2254.8	2261.3
75°	2849.9	1872.0	1212.6	1145.1	1158.0	1315.6	1508.6	1663.0	1907.4	2229.1	2238.7
77.5°	1515.0	1315.6	965.0	948.9	965.0	1109.7	1325.2	1537.5	1913.9	1933.2	1901.0
80°	981.1	932.8	762.3	730.2	736.6	894.2	1180.5	1460.3	1537.5	1556.8	1486.1
82.5°	534.0	591.9	540.4	508.2	508.2	698.0	1006.8	1161.2	1103.3	916.7	874.9
85°	228.4	276.6	279.8	244.5	234.8	431.0	675.5	633.7	588.6	562.9	556.5
87.5°	64.3	90.1	90.1	67.5	51.5	119.0	135.1	38.6	0.0	3.2	6.4
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)