

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: P459532

Luminaire Tested: **GALN-SA9D-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459532  
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-SA9D-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 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: 65970 lumens  
Efficiency: N/A  
Efficacy: 119.5 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

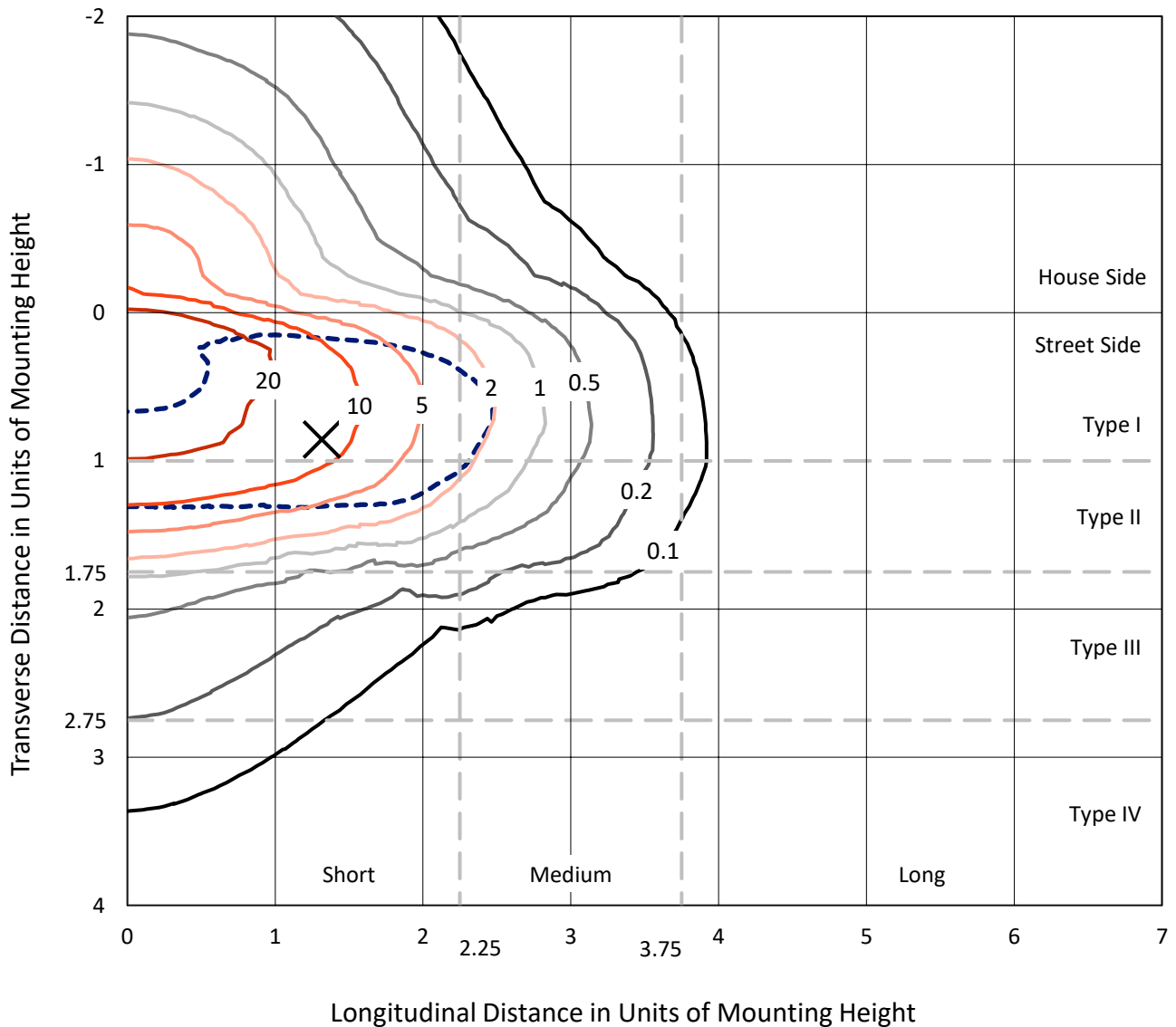
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459532  
 CATALOG NUMBER: GALN-SA9D-735-U-AFL

### Iso-Footcandle Lines of Horizontal Illumination

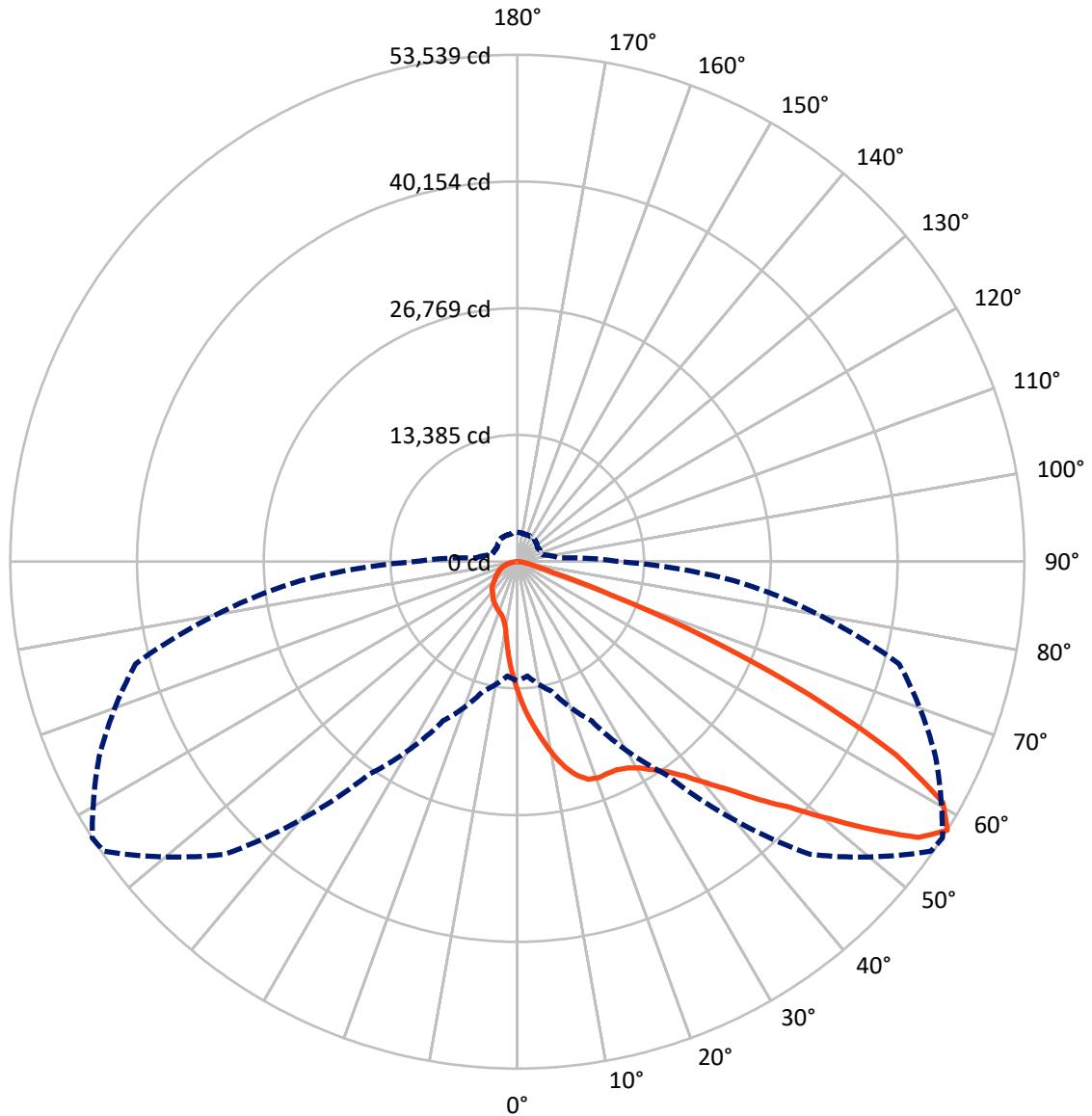
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 33.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P459532  
CATALOG NUMBER: GALN-SA9D-735-U-AFL

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P459532

CATALOG NUMBER: GALN-SA9D-735-U-AFL

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10032.2	0.0	10032.2
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	55937.8	0.0	55937.8
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	65970.0	0.0	65970.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1332.0	2.0
10°-20°	3925.6	6.0
20°-30°	6518.5	9.9
30°-40°	9818.8	14.9
40°-50°	14741.9	22.3
50°-60°	16523.9	25.0
60°-70°	9670.6	14.7
70°-80°	2860.5	4.3
80°-90°	578.2	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°	65970.0	100.0
0°-180°	65970.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P459532

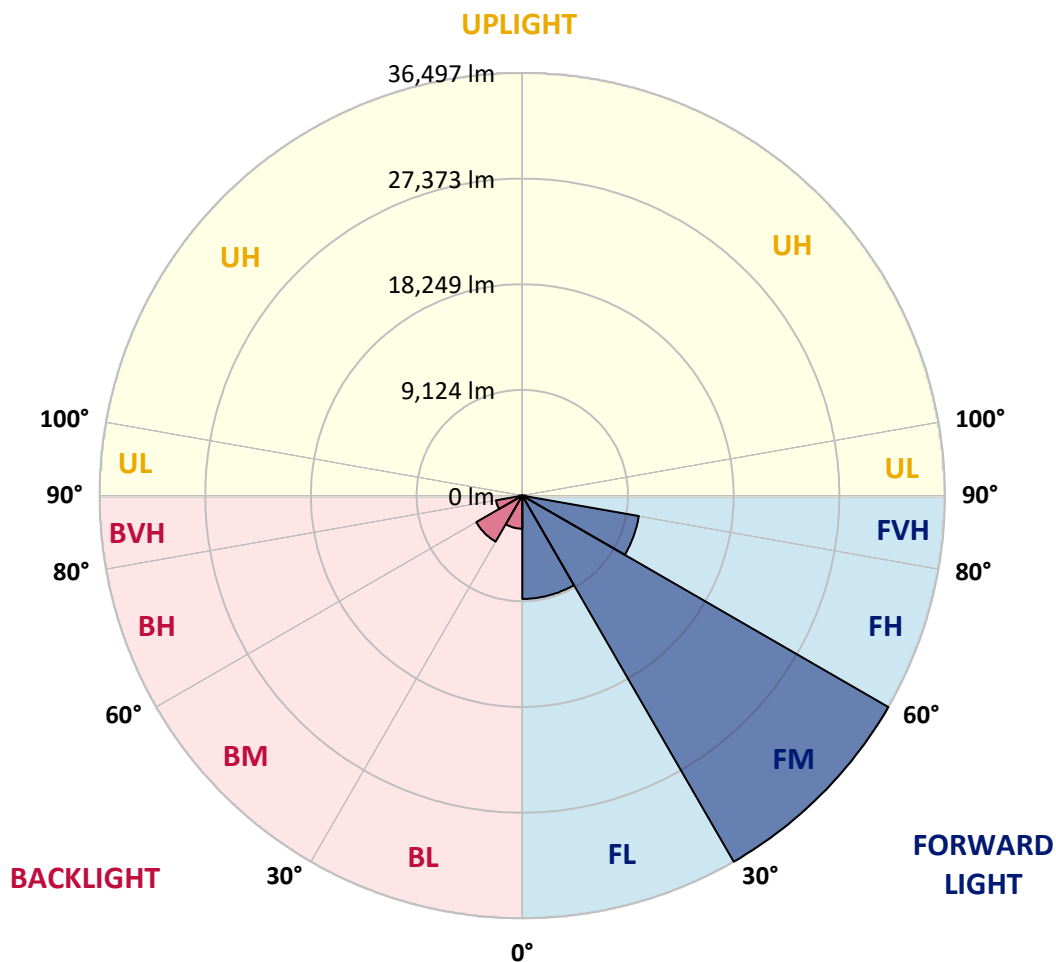
CATALOG NUMBER: GALN-SA9D-735-U-AFL

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8917.6	13.5			
FM	(30°-60°)	36497.5	55.3			
FH	(60°-80°)	10222.7	15.5			G4/12000
FVH	(80°-90°)	300.0	0.5			G3/500
BL	(0°-30°)	2858.5	4.3	B4/5000		
BM	(30°-60°)	4587.1	7.0	B3/5000		
BH	(60°-80°)	2308.4	3.5	B3/2500		G3/2500
BVH	(80°-90°)	278.2	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: P459532

CATALOG NUMBER: GALN-SA9D-735-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5
2.5°	17221.5	17033.7	16885.7	16755.7	16586.0	16127.3	15668.7	15661.5	15296.8	14733.4	14155.7
5°	20027.4	19774.6	19807.1	19402.6	18998.2	18333.7	17362.3	17311.8	16535.4	15480.9	14408.4
7.5°	21854.6	21858.2	21757.1	21526.0	21089.0	20334.3	19232.9	18983.7	17904.0	16304.3	14697.3
10°	21760.7	21858.2	22027.9	22226.5	22360.2	21988.2	20984.3	20681.0	19276.2	17301.0	15018.7
12.5°	20511.3	20662.9	20904.9	21403.2	22208.5	22822.4	22479.3	22233.8	20865.1	18294.0	15372.6
15°	19731.2	19821.5	19955.1	20291.0	21157.6	22627.4	23515.7	23385.7	22363.8	19417.1	15769.8
17.5°	19492.9	19583.2	19626.5	19832.4	20449.9	21955.7	23923.8	24154.9	23692.7	20449.9	16170.7
20°	19731.2	19774.6	19774.6	19897.4	20381.3	21562.1	23905.7	24371.6	24783.2	21688.5	16546.2
22.5°	20356.0	20374.0	20348.8	20392.1	20753.2	21670.4	23736.0	24313.8	25664.3	22739.3	16838.7
25°	21370.7	21399.6	21233.5	21132.4	21396.0	22147.1	23829.9	24360.7	26354.1	23743.2	17033.7
27.5°	22522.7	22558.8	22356.5	22121.8	22244.6	22735.7	24198.2	24674.9	26870.5	24732.7	17156.5
30°	23934.6	23949.1	23609.6	23327.9	23248.5	23613.2	24826.6	25270.7	27513.2	25899.1	17340.7
32.5°	25379.1	25487.4	25050.5	24653.2	24519.6	24631.6	25754.6	26184.4	28278.8	27152.1	17636.8
35°	27343.5	27361.6	26838.0	26354.1	25913.5	26058.0	26942.7	27253.2	29336.9	28600.2	18055.7
37.5°	29795.5	29961.6	29239.4	28336.6	27794.9	27585.5	28379.9	28719.4	30821.1	30376.9	18687.6
40°	32518.3	32579.7	31962.2	31398.8	30409.4	29802.7	30351.6	30719.9	32651.9	32496.6	19420.7
42.5°	34230.0	34363.6	34410.5	34352.7	33608.8	32590.5	32800.0	32973.3	34818.6	34486.4	20171.8
45°	34807.7	35006.4	35678.0	37100.8	37180.3	36176.4	35688.9	35855.0	37180.3	36494.1	20890.4
47.5°	33850.8	34190.2	35428.9	38346.7	40531.4	40607.2	39137.5	38772.8	39332.5	38158.9	21410.4
50°	31377.2	31449.4	33345.2	37570.3	42102.2	44843.1	43322.8	42643.9	41376.4	39390.3	21767.9
52.5°	27549.4	27632.4	29221.3	33962.7	41134.5	47804.2	48219.5	47006.2	43452.8	40347.2	22002.7
55°	20449.9	20930.1	22677.9	27260.5	36548.3	47526.2	52112.3	51422.6	45962.5	41105.6	22371.0
57.5°	12574.0	12133.4	14206.2	18546.8	27488.0	43705.6	53314.8	53538.7	48725.1	41741.1	22988.5
60°	5785.0	5871.7	6727.5	9565.9	16755.7	34190.2	50216.5	51632.0	50252.6	41719.5	23143.8
62.5°	3986.7	3907.2	3690.6	4199.8	7641.2	21623.5	42416.4	44814.2	47190.3	40423.1	22526.3
65°	3564.2	3484.7	3065.9	2925.0	3510.0	9425.1	30835.5	33861.6	39733.3	37151.4	20987.9
67.5°	3329.5	3221.1	2787.8	2513.4	2506.1	3752.0	18182.1	21825.7	29470.5	31409.7	18185.7
70°	3083.9	2997.2	2567.5	2264.2	2134.2	2358.1	7991.4	10461.5	19135.4	22634.6	14166.5
72.5°	2838.4	2737.2	2350.8	2025.8	1856.1	1765.8	3062.2	3983.1	10811.7	13570.7	8684.8
75°	2480.9	2430.3	2101.7	1834.5	1650.3	1426.4	1942.8	2217.2	5171.1	6232.8	4358.6
77.5°	2170.3	2116.1	1867.0	1603.3	1469.7	1159.2	1379.5	1505.8	2181.1	2527.8	1968.1
80°	1588.9	1643.1	1574.5	1415.6	1310.8	910.0	928.1	1032.8	1296.4	1433.6	1202.5
82.5°	1007.5	1108.6	1213.3	1090.6	993.1	718.6	642.8	682.5	884.7	938.9	534.4
85°	422.5	429.7	704.2	664.4	566.9	426.1	386.4	408.1	473.1	494.7	249.2
87.5°	162.5	158.9	249.2	231.1	176.9	122.8	122.8	137.2	187.8	173.3	79.4
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: P459532  
 CATALOG NUMBER: GALN-SA9D-735-U-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5	13859.5
2.5°	13906.5	13650.1	13140.9	12509.0	12046.8	11526.7	11068.1	10739.5	10616.7	10559.0	10450.6
5°	13895.7	13390.1	12335.6	11230.6	10342.3	9432.3	8663.1	8164.8	8121.4	7789.2	7756.7
7.5°	13899.3	13126.5	11447.3	9822.3	8468.1	7536.4	6900.9	6734.8	6536.2	6485.6	6510.9
10°	13910.1	12790.6	10494.0	8428.4	7117.6	6507.3	6268.9	6203.9	6211.2	6232.8	6236.4
12.5°	13924.5	12465.6	9504.5	7370.3	6359.2	6106.4	6081.2	6138.9	6200.3	6247.3	6258.1
15°	13942.6	12093.7	8540.3	6518.1	5980.0	5958.4	6041.4	6138.9	6225.6	6294.2	6305.0
17.5°	13920.9	11660.4	7731.4	5994.5	5770.6	5875.3	6012.5	6135.3	6214.8	6279.8	6287.0
20°	13870.4	11176.5	6951.4	5626.2	5640.6	5810.3	5958.4	6073.9	6160.6	6193.1	6218.4
22.5°	13675.4	10598.7	6272.5	5340.9	5485.3	5720.0	5897.0	5965.6	5868.1	5799.5	5817.5
25°	13343.1	9847.6	5640.6	5109.8	5344.5	5593.7	5774.2	5608.1	5528.7	5499.8	5514.2
27.5°	12927.9	9024.2	5163.9	4867.8	5163.9	5452.8	5402.3	5373.4	5337.3	5290.3	5301.1
30°	12480.1	8218.9	4759.5	4680.0	4968.9	5135.0	5156.7	5203.6	5163.9	5091.7	5120.6
32.5°	12064.8	7460.6	4452.5	4521.1	4831.7	4806.4	4968.9	5023.1	4838.9	4597.0	4607.8
35°	11710.9	6756.4	4221.4	4365.9	4597.0	4607.8	4770.3	4582.5	4383.9	4268.4	4275.6
37.5°	11443.7	6207.5	4069.8	4232.3	4297.3	4434.5	4347.8	4250.3	4225.0	4145.6	4149.2
40°	11284.8	5727.3	3972.3	4127.5	4116.7	4210.6	3932.5	4030.0	4066.1	4040.9	4044.5
42.5°	11125.9	5387.8	3871.1	3983.1	3979.5	3795.3	3733.9	3817.0	3910.9	3921.7	3914.5
45°	10999.5	5124.2	3766.4	3762.8	3835.0	3546.1	3528.1	3578.6	3712.2	3777.2	3773.6
47.5°	10858.7	4903.9	3607.5	3506.4	3528.1	3390.9	3362.0	3383.6	3546.1	3650.9	3679.7
50°	10681.7	4683.6	3408.9	3271.7	3181.4	3246.4	3253.6	3257.2	3419.7	3538.9	3564.2
52.5°	10540.9	4517.5	3181.4	3080.3	2972.0	3116.4	3170.6	3177.8	3275.3	3372.8	3390.9
55°	10624.0	4423.6	2957.5	2885.3	2787.8	2982.8	3087.5	3102.0	3123.6	3195.9	3206.7
57.5°	10873.1	4445.3	2777.0	2683.1	2610.9	2823.9	3000.9	3011.7	2997.2	3083.9	3098.4
60°	10949.0	4434.5	2643.4	2459.2	2415.9	2654.2	2874.5	2896.1	2892.5	3018.9	3044.2
62.5°	10631.2	4297.3	2509.7	2271.4	2242.5	2480.9	2697.5	2784.2	2802.2	2982.8	3015.3
65°	9883.7	4015.6	2332.8	2072.8	2072.8	2296.7	2527.8	2647.0	2697.5	2939.5	2975.6
67.5°	8897.8	3683.4	2152.2	1903.1	1895.8	2119.7	2347.2	2470.0	2549.5	2878.1	2899.7
70°	7384.8	3235.6	1928.3	1718.9	1718.9	1921.1	2127.0	2275.0	2390.6	2762.5	2762.5
72.5°	5059.2	2690.3	1657.5	1509.5	1513.1	1700.8	1910.3	2076.4	2213.6	2531.4	2538.6
75°	3199.5	2101.7	1361.4	1285.6	1300.0	1477.0	1693.6	1867.0	2141.4	2502.5	2513.4
77.5°	1700.8	1477.0	1083.3	1065.3	1083.3	1245.8	1487.8	1726.1	2148.6	2170.3	2134.2
80°	1101.4	1047.2	855.8	819.7	827.0	1003.9	1325.3	1639.5	1726.1	1747.8	1668.3
82.5°	599.4	664.4	606.7	570.6	570.6	783.6	1130.3	1303.6	1238.6	1029.2	982.2
85°	256.4	310.6	314.2	274.4	263.6	483.9	758.3	711.4	660.8	631.9	624.7
87.5°	72.2	101.1	101.1	75.8	57.8	133.6	151.7	43.3	0.0	3.6	7.2
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)