

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: P458111

Luminaire Tested: **GALN-SA9C-730-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458111  
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-730-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 58613 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

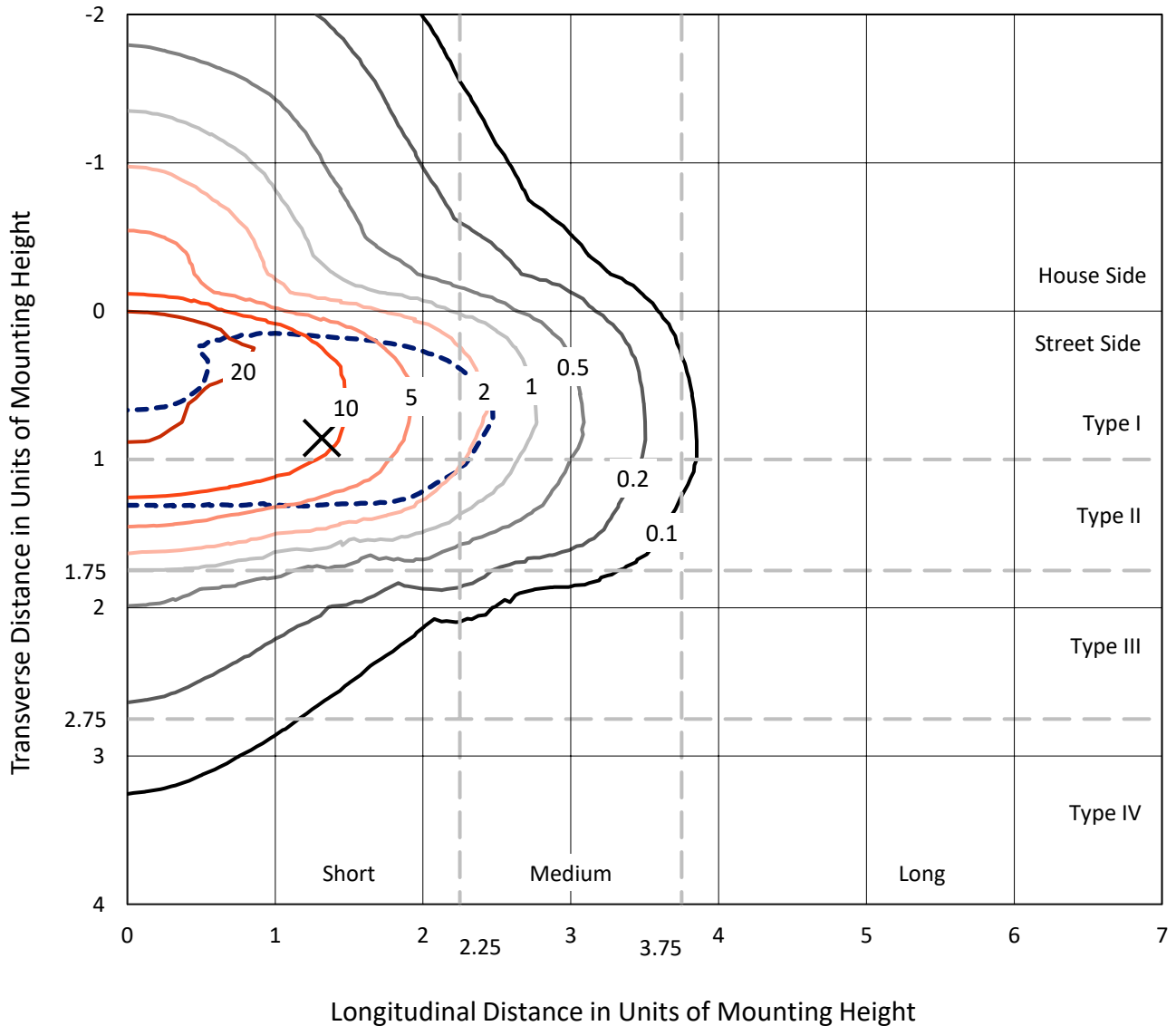
Input Watts (W): 481  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P458111  
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### Iso-Footcandle Lines of Horizontal Illumination

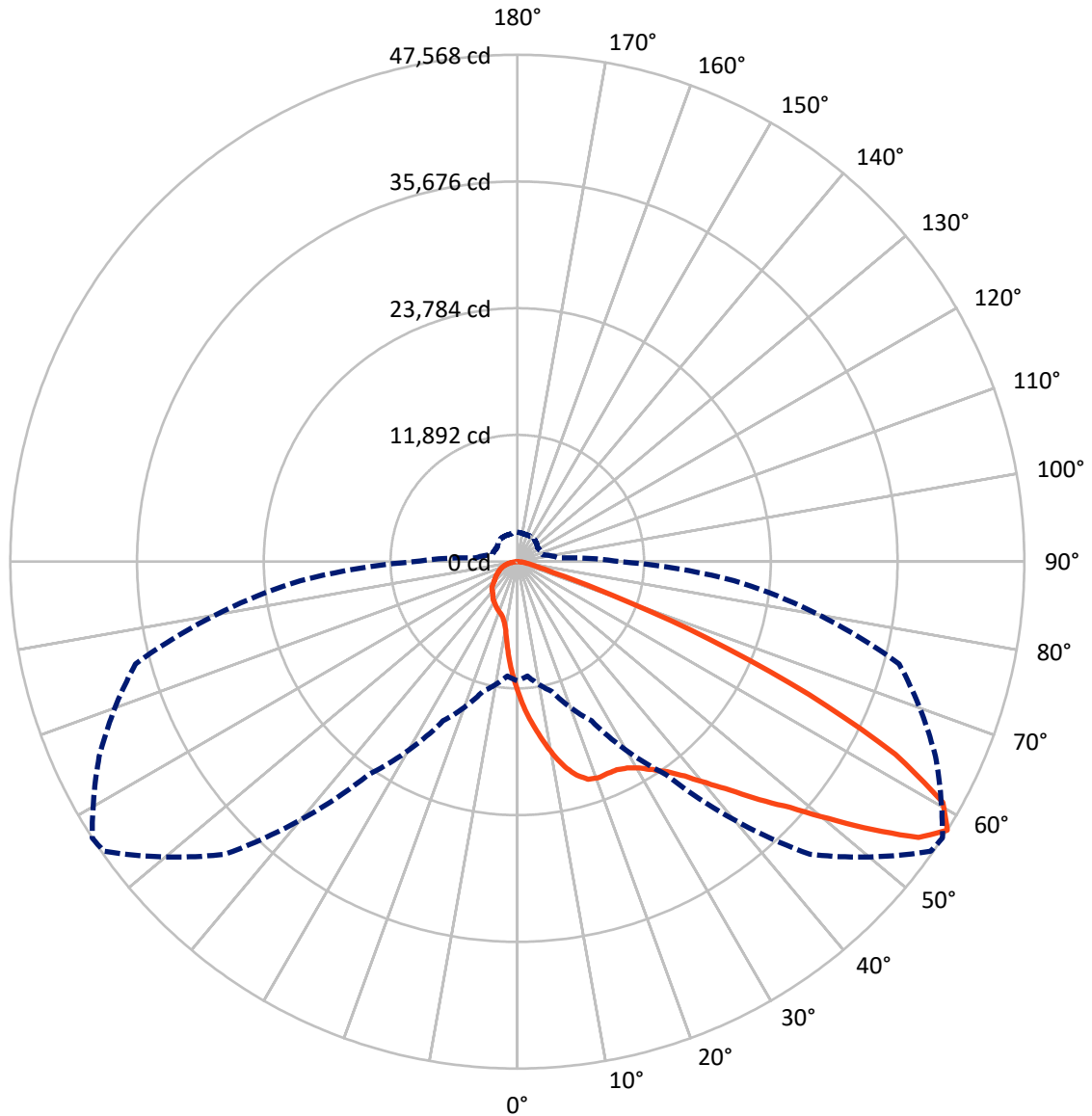
× Max cd  
 - - - 1/2 Max cd



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	8913.4	0.0	8913.4
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	49699.6	0.0	49699.6
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	58613.0	0.0	58613.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1183.5	2.0
10°-20°	3487.8	6.0
20°-30°	5791.6	9.9
30°-40°	8723.8	14.9
40°-50°	13097.9	22.3
50°-60°	14681.1	25.0
60°-70°	8592.1	14.7
70°-80°	2541.5	4.3
80°-90°	513.7	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°	58613.0	100.0
0°-180°	58613.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P458111

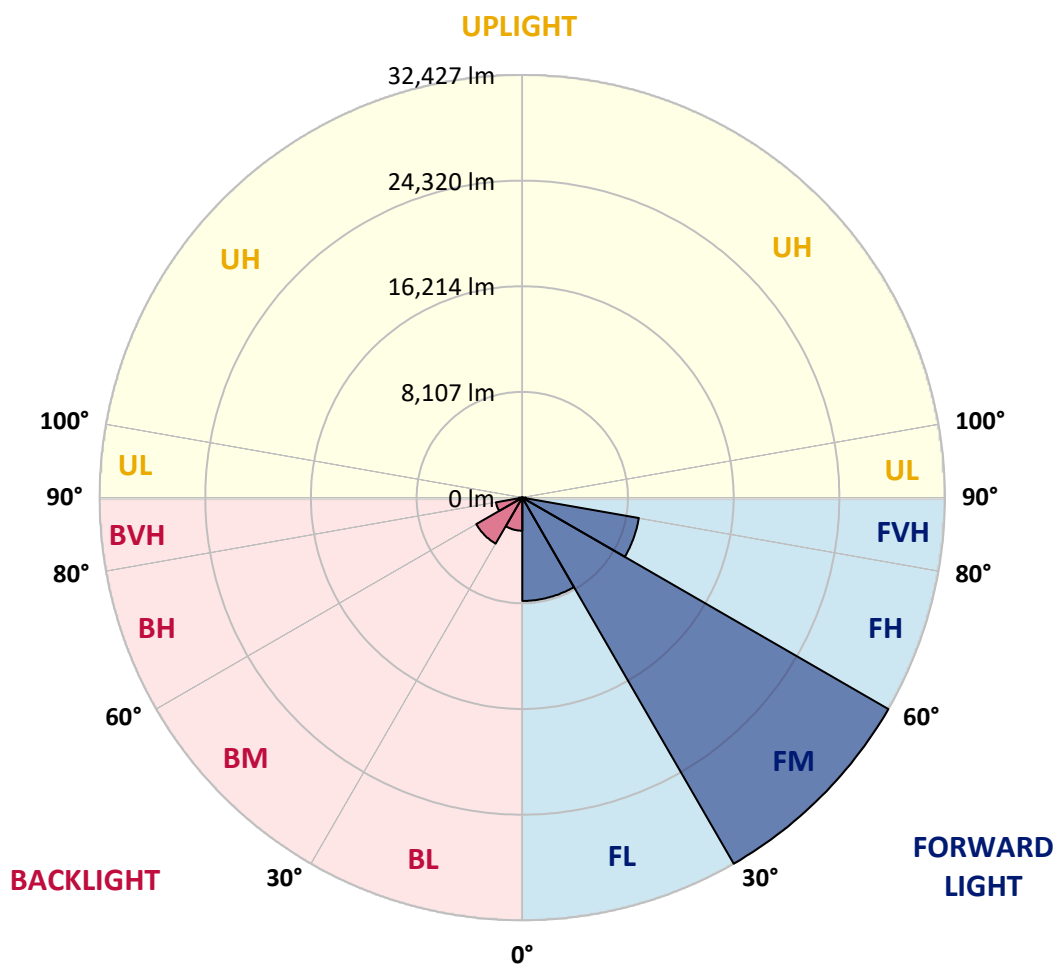
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7923.1	13.5			
FM	(30°-60°)	32427.3	55.3			
FH	(60°-80°)	9082.7	15.5			G4/12000
FVH	(80°-90°)	266.5	0.5			G3/500
BL	(0°-30°)	2539.7	4.3	B4/5000		
BM	(30°-60°)	4075.6	7.0	B3/5000		
BH	(60°-80°)	2050.9	3.5	B3/2500		G3/2500
BVH	(80°-90°)	247.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9
2.5°	15301.0	15134.1	15002.6	14887.1	14736.3	14328.8	13921.3	13914.9	13590.9	13090.4	12577.0
5°	17793.9	17569.3	17598.2	17238.8	16879.5	16289.2	15426.1	15381.2	14691.4	13754.5	12801.6
7.5°	19417.4	19420.6	19330.7	19125.4	18737.2	18066.6	17088.1	16866.7	15907.4	14486.0	13058.3
10°	19333.9	19420.6	19571.4	19747.8	19866.5	19536.1	18644.1	18374.6	17126.6	15371.5	13343.8
12.5°	18223.8	18358.6	18573.6	19016.3	19731.8	20277.2	19972.4	19754.2	18538.3	16253.9	13658.2
15°	17530.8	17611.0	17729.7	18028.1	18798.1	20104.0	20893.2	20777.7	19869.8	17251.7	14011.2
17.5°	17319.1	17399.3	17437.8	17620.6	18169.3	19507.2	21255.8	21461.1	21050.5	18169.3	14367.3
20°	17530.8	17569.3	17569.3	17678.4	18108.3	19157.5	21239.7	21653.6	22019.4	19269.8	14701.0
22.5°	18085.9	18101.9	18079.5	18118.0	18438.8	19253.7	21089.0	21602.3	22802.2	20203.4	14960.9
25°	18987.4	19013.1	18865.5	18775.7	19009.9	19677.2	21172.4	21644.0	23415.1	21095.4	15134.1
27.5°	20010.9	20043.0	19863.3	19654.8	19763.9	20200.2	21499.6	21923.1	23873.9	21974.5	15243.2
30°	21265.4	21278.2	20976.7	20726.4	20655.8	20979.9	22057.9	22452.5	24445.0	23010.8	15406.8
32.5°	22548.8	22645.0	22256.8	21903.9	21785.2	21884.6	22882.5	23264.3	25125.1	24124.1	15669.9
35°	24294.2	24310.2	23845.0	23415.1	23023.6	23152.0	23938.0	24214.0	26065.2	25410.7	16042.1
37.5°	26472.7	26620.3	25978.6	25176.5	24695.2	24509.1	25215.0	25516.6	27383.9	26989.2	16603.6
40°	28891.8	28946.4	28397.7	27897.2	27018.1	26479.1	26966.8	27294.0	29010.5	28872.6	17254.9
42.5°	30412.6	30531.3	30573.0	30521.7	29860.8	28956.0	29142.1	29296.1	30935.6	30640.4	17922.2
45°	30926.0	31102.4	31699.2	32963.3	33033.9	32142.0	31708.8	31856.4	33033.9	32424.3	18560.7
47.5°	30075.7	30377.3	31477.8	34070.2	36011.3	36078.7	34772.9	34448.8	34946.1	33903.4	19022.7
50°	27878.0	27942.1	29626.6	33380.4	37407.0	39842.2	38491.4	37888.2	36762.1	34997.5	19340.4
52.5°	24477.0	24550.8	25962.5	30175.2	36547.1	42473.1	42842.0	41764.0	38606.9	35847.7	19548.9
55°	18169.3	18596.0	20148.9	24220.4	32472.4	42226.0	46300.7	45687.9	40836.8	36521.5	19876.2
57.5°	11171.7	10780.3	12621.9	16478.5	24422.5	38831.5	47369.1	47568.1	43291.2	37086.1	20424.8
60°	5139.9	5216.9	5977.3	8499.1	14887.1	30377.3	44616.3	45874.0	44648.4	37066.9	20562.8
62.5°	3542.1	3471.5	3279.0	3731.4	6789.0	19212.0	37686.1	39816.5	41927.6	35915.1	20014.1
65°	3166.7	3096.1	2723.9	2598.8	3118.6	8374.0	27396.7	30085.4	35302.3	33008.2	18647.3
67.5°	2958.2	2861.9	2476.9	2233.1	2226.6	3333.5	16154.4	19391.7	26183.9	27906.8	16157.6
70°	2740.0	2663.0	2281.2	2011.7	1896.2	2095.1	7100.2	9294.8	17001.4	20110.4	12586.6
72.5°	2521.8	2432.0	2088.7	1799.9	1649.1	1568.9	2720.7	3538.9	9606.0	12057.2	7716.3
75°	2204.2	2159.3	1867.3	1629.9	1466.2	1267.3	1726.1	1970.0	4594.5	5537.7	3872.6
77.5°	1928.3	1880.1	1658.8	1424.5	1305.8	1029.9	1225.6	1337.9	1937.9	2245.9	1748.6
80°	1411.7	1459.8	1398.9	1257.7	1164.7	808.5	824.6	917.6	1151.8	1273.7	1068.4
82.5°	895.1	985.0	1078.0	968.9	882.3	638.5	571.1	606.4	786.1	834.2	474.8
85°	375.4	381.8	625.6	590.3	503.7	378.6	343.3	362.6	420.3	439.6	221.4
87.5°	144.4	141.2	221.4	205.3	157.2	109.1	109.1	121.9	166.8	154.0	70.6
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°	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9	12313.9
2.5°	12355.6	12127.8	11675.4	11114.0	10703.3	10241.3	9833.8	9541.8	9432.8	9381.4	9285.2
5°	12346.0	11896.8	10960.0	9978.2	9188.9	8380.4	7697.0	7254.2	7215.7	6920.6	6891.7
7.5°	12349.2	11662.6	10170.7	8726.9	7523.7	6696.0	6131.3	5983.7	5807.2	5762.3	5784.8
10°	12358.8	11364.2	9323.7	7488.5	6323.8	5781.6	5569.8	5512.1	5518.5	5537.7	5540.9
12.5°	12371.7	11075.5	8444.6	6548.4	5650.0	5425.4	5403.0	5454.3	5508.9	5550.6	5560.2
15°	12387.7	10745.0	7587.9	5791.2	5313.1	5293.9	5367.7	5454.3	5531.3	5592.3	5601.9
17.5°	12368.5	10360.0	6869.2	5326.0	5127.1	5220.1	5342.0	5451.1	5521.7	5579.4	5585.9
20°	12323.5	9930.1	6176.2	4998.7	5011.6	5162.3	5293.9	5396.6	5473.6	5502.4	5524.9
22.5°	12150.3	9416.7	5573.0	4745.3	4873.6	5082.1	5239.4	5300.3	5213.7	5152.7	5168.8
25°	11855.1	8749.4	5011.6	4539.9	4748.5	4969.8	5130.3	4982.7	4912.1	4886.4	4899.3
27.5°	11486.1	8017.8	4588.0	4325.0	4588.0	4844.7	4799.8	4774.1	4742.0	4700.3	4710.0
30°	11088.3	7302.4	4228.7	4158.1	4414.8	4562.4	4581.6	4623.3	4588.0	4523.9	4549.5
32.5°	10719.3	6628.6	3956.0	4016.9	4292.9	4270.4	4414.8	4462.9	4299.3	4084.3	4093.9
35°	10404.9	6003.0	3750.6	3879.0	4084.3	4093.9	4238.3	4071.5	3895.0	3792.4	3798.8
37.5°	10167.5	5515.3	3615.9	3760.3	3818.0	3939.9	3862.9	3776.3	3753.9	3683.3	3686.5
40°	10026.3	5088.6	3529.3	3667.2	3657.6	3741.0	3494.0	3580.6	3612.7	3590.2	3593.4
42.5°	9885.1	4787.0	3439.4	3538.9	3535.7	3372.1	3317.5	3391.3	3474.7	3484.3	3477.9
45°	9772.9	4552.7	3346.4	3343.2	3407.3	3150.7	3134.6	3179.5	3298.3	3356.0	3352.8
47.5°	9647.7	4357.0	3205.2	3115.4	3134.6	3012.7	2987.0	3006.3	3150.7	3243.7	3269.4
50°	9490.5	4161.3	3028.7	2906.8	2826.6	2884.4	2890.8	2894.0	3038.4	3144.3	3166.7
52.5°	9365.4	4013.7	2826.6	2736.8	2640.5	2768.9	2817.0	2823.4	2910.0	2996.7	3012.7
55°	9439.2	3930.3	2627.7	2563.5	2476.9	2650.2	2743.2	2756.0	2775.3	2839.5	2849.1
57.5°	9660.6	3949.6	2467.3	2383.9	2319.7	2509.0	2666.2	2675.8	2663.0	2740.0	2752.8
60°	9727.9	3939.9	2348.6	2184.9	2146.4	2358.2	2553.9	2573.2	2569.9	2682.2	2704.7
62.5°	9445.6	3818.0	2229.9	2018.1	1992.4	2204.2	2396.7	2473.7	2489.7	2650.2	2679.0
65°	8781.4	3567.8	2072.6	1841.6	1841.6	2040.6	2245.9	2351.8	2396.7	2611.7	2643.7
67.5°	7905.5	3272.6	1912.2	1690.8	1684.4	1883.3	2085.5	2194.6	2265.1	2557.1	2576.4
70°	6561.2	2874.7	1713.3	1527.2	1527.2	1706.9	1889.8	2021.3	2124.0	2454.4	2454.4
72.5°	4495.0	2390.3	1472.7	1341.1	1344.3	1511.2	1697.3	1844.8	1966.8	2249.1	2255.5
75°	2842.7	1867.3	1209.6	1142.2	1155.0	1312.2	1504.7	1658.8	1902.6	2223.4	2233.1
77.5°	1511.2	1312.2	962.5	946.5	962.5	1106.9	1321.9	1533.6	1909.0	1928.3	1896.2
80°	978.6	930.4	760.4	728.3	734.7	891.9	1177.5	1456.6	1533.6	1552.9	1482.3
82.5°	532.6	590.3	539.0	506.9	506.9	696.2	1004.2	1158.2	1100.5	914.4	872.7
85°	227.8	275.9	279.1	243.8	234.2	429.9	673.8	632.1	587.1	561.5	555.1
87.5°	64.2	89.8	89.8	67.4	51.3	118.7	134.8	38.5	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)