

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: P459517

Luminaire Tested: **GALN-SA9C-735-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
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-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59710 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

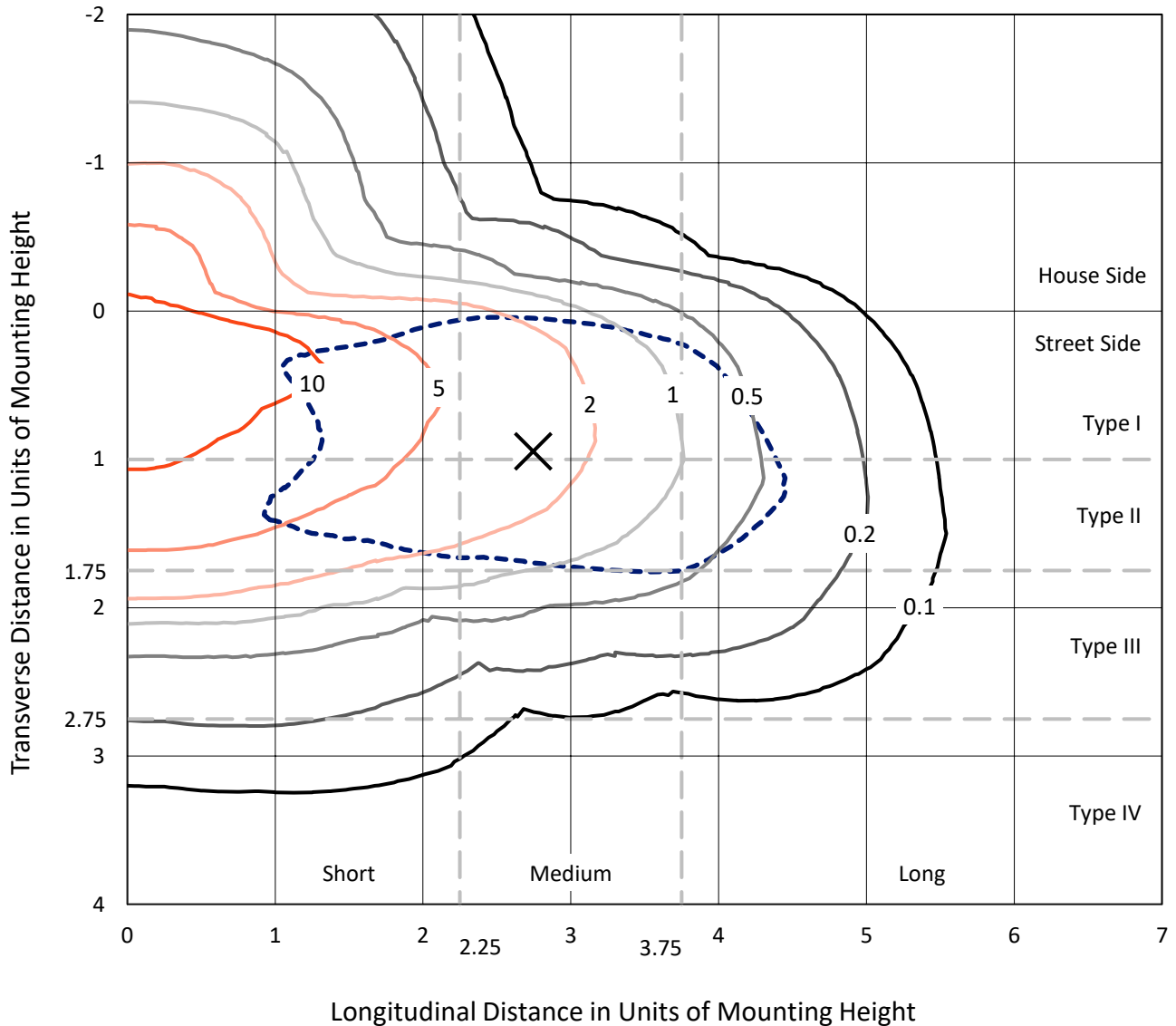
Input Watts (W): 481
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

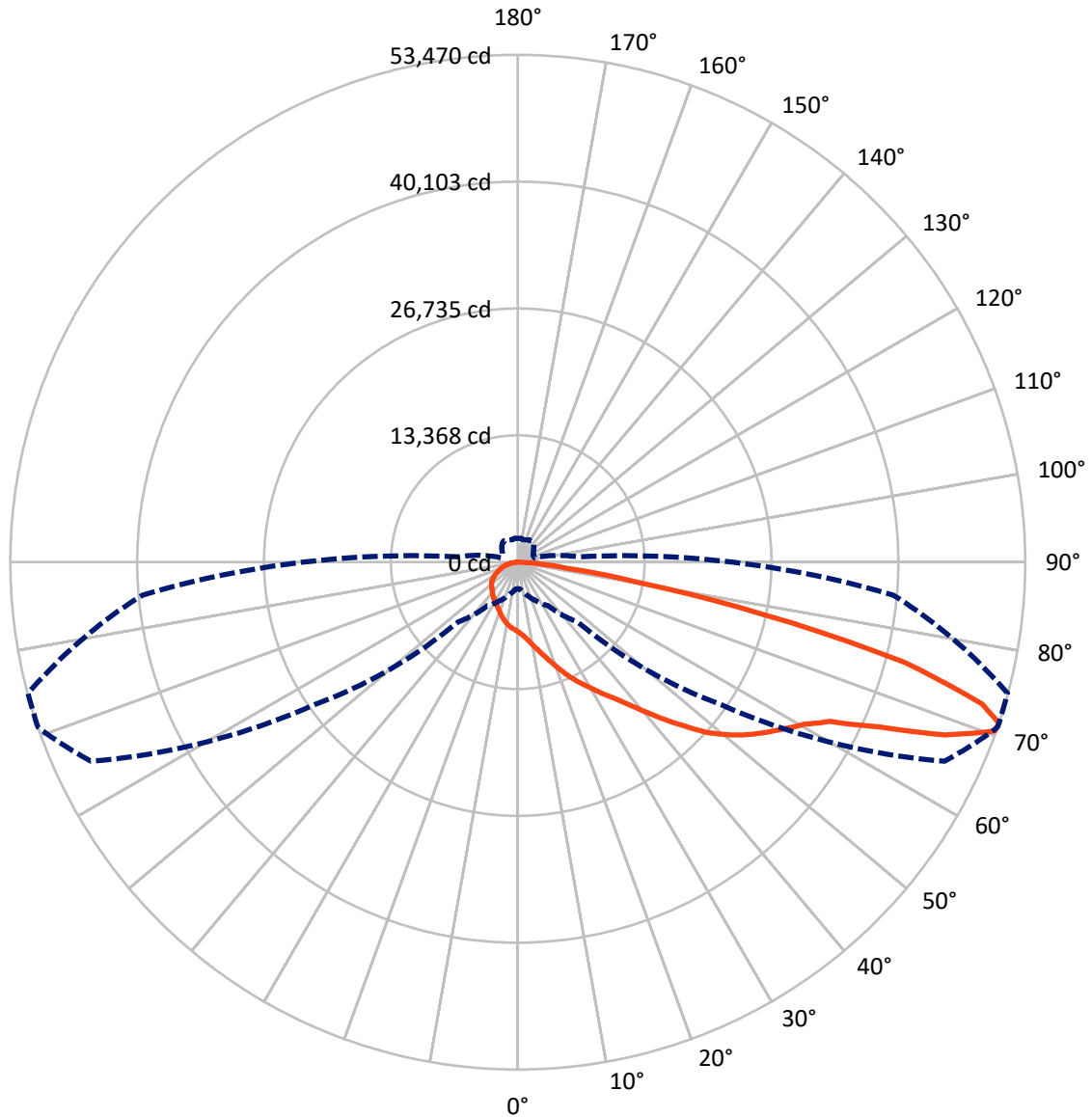
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10738.7	0.0	10738.7
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	48971.3	0.0	48971.3
	% Fixture	82.0	0.0	82.0
Total	Lumens	59710.0	0.0	59710.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	735.8	1.2
10°-20°	2390.6	4.0
20°-30°	4177.7	7.0
30°-40°	6213.8	10.4
40°-50°	9155.3	15.3
50°-60°	12817.5	21.5
60°-70°	14335.9	24.0
70°-80°	8756.9	14.7
80°-90°	1126.5	1.9
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°	59710.0	100.0
0°-180°	59710.0	100.0



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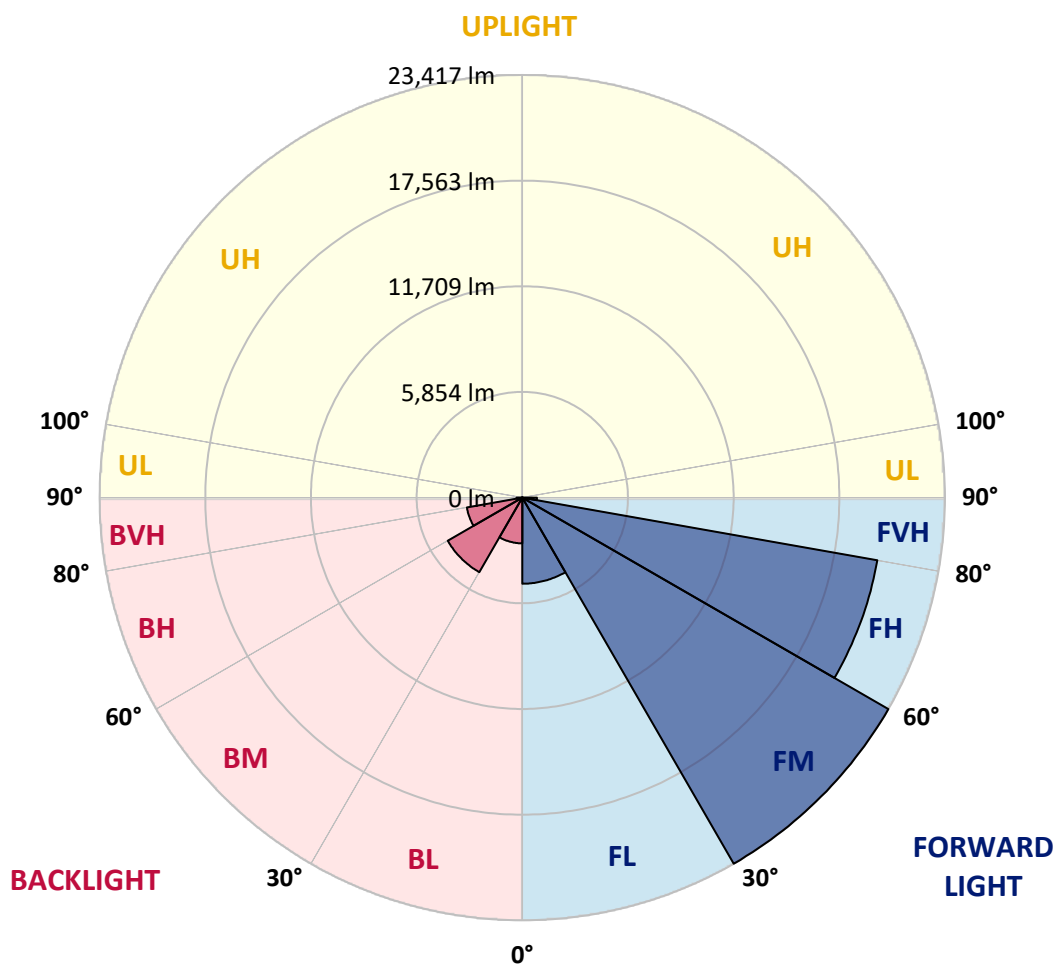
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4770.9	8.0			
FM	(30°-60°)	23417.1	39.2			
FH	(60°-80°)	19972.8	33.4			G5
FVH	(80°-90°)	810.5	1.4			G5
BL	(0°-30°)	2533.2	4.2	B4/5000		
BM	(30°-60°)	4769.5	8.0	B3/5000		
BH	(60°-80°)	3120.1	5.2	B4/5000		G4/5000
BVH	(80°-90°)	315.9	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2
2.5°	8135.5	8096.2	8099.4	8043.7	7971.5	7892.7	7781.1	7682.7	7603.9	7557.9	7423.4
5°	9015.1	8975.7	8926.5	8805.0	8752.5	8558.9	8312.8	8089.6	7918.9	7823.8	7554.7
7.5°	9727.2	9717.4	9704.2	9635.3	9500.8	9231.7	9021.6	8634.4	8381.7	8201.2	7741.7
10°	10167.0	10183.4	10193.2	10206.3	10150.6	10009.4	9720.6	9231.7	8910.0	8680.3	7984.6
12.5°	10390.1	10406.5	10462.3	10583.8	10659.2	10642.8	10406.5	9927.4	9484.4	9182.4	8243.8
15°	10528.0	10554.2	10652.7	10813.5	11066.2	11227.0	11112.1	10669.1	10183.4	9825.7	8552.3
17.5°	10678.9	10708.5	10816.8	11046.5	11377.9	11725.8	11850.5	11469.8	10941.5	10514.8	8896.9
20°	10764.3	10803.6	10957.9	11259.8	11647.1	12152.4	12566.0	12365.8	11788.2	11315.6	9294.0
22.5°	10902.1	10934.9	11066.2	11387.8	11850.5	12483.9	13281.4	13238.7	12730.0	12119.6	9730.5
25°	11276.2	11328.7	11394.4	11588.0	12034.3	12821.9	13875.4	14170.7	13642.4	12959.8	10130.9
27.5°	11981.8	12024.5	12021.2	12047.4	12300.1	13114.0	14390.6	15092.9	14548.2	13809.7	10518.1
30°	12785.8	12802.2	12815.4	12756.3	12812.1	13412.7	14863.2	16005.3	15460.5	14682.7	10856.1
32.5°	13763.8	13796.6	13685.0	13534.1	13488.1	13855.7	15253.7	16917.6	16540.2	15568.8	11190.9
35°	14919.0	15004.3	14777.9	14512.1	14325.0	14492.4	15778.8	17849.6	17646.2	16701.0	11633.9
37.5°	16238.3	16343.3	16133.3	15611.4	15345.6	15391.6	16464.7	19001.5	19044.2	17990.7	12293.6
40°	17318.0	17455.8	17462.4	16724.0	16320.3	16372.8	17334.4	20242.0	20731.0	19585.7	13071.3
42.5°	18030.1	18164.7	18305.8	17872.6	17449.2	17747.9	18348.5	21587.6	22627.9	21521.9	14157.6
45°	18811.2	18932.6	19011.4	18814.5	18578.2	19352.7	19572.6	23018.4	24649.5	23684.6	15345.6
47.5°	19717.0	19851.5	19927.0	19739.9	19651.3	20760.6	20891.8	24354.1	26808.9	25785.0	16658.3
50°	20924.7	21026.4	20987.0	20868.9	20849.2	21840.3	22158.6	25604.5	28590.9	28046.1	18020.3
52.5°	22427.7	22549.1	22591.8	22424.4	22349.0	22611.5	23179.2	26743.3	30212.1	29988.9	19474.1
55°	23336.8	23530.4	24180.2	24442.7	24623.2	23609.2	24278.6	28000.2	31665.9	32036.8	21036.2
57.5°	22171.7	22421.2	23875.0	25187.7	26884.4	26103.3	25837.5	29312.9	33119.8	34022.3	22906.9
60°	19329.7	19385.5	21259.4	23678.1	27091.1	29309.6	29089.7	31400.1	34695.0	36024.1	25371.5
62.5°	13409.4	13527.5	15742.7	19602.1	24537.9	30464.8	34622.8	35003.5	36952.9	39020.4	28984.7
65°	6914.7	6760.5	8778.8	12319.8	18499.4	27721.2	39105.7	41629.4	41849.3	43706.8	34071.5
67.5°	4256.5	4325.4	5270.5	7193.7	10938.2	20146.9	38636.4	49725.6	48567.1	49459.8	38794.0
70°	3196.5	3281.8	3931.6	4922.7	6668.6	11519.1	31071.9	51688.1	53306.0	53076.3	40231.4
71°	2779.7	2868.3	3544.3	4479.6	5602.0	8890.4	26178.8	49633.7	53470.1	53430.7	39689.9
72.5°	2369.4	2425.2	2953.6	3793.7	4722.5	6232.1	19667.7	44514.1	51189.3	52498.7	37756.9
75°	1860.8	1903.4	2139.7	2894.5	3718.3	3826.6	10554.2	33372.5	42042.9	44537.1	31432.9
77.5°	1516.2	1545.7	1667.1	2149.6	2868.3	2710.8	5536.4	21722.1	26339.6	28850.2	18515.8
80°	1204.4	1237.2	1309.4	1457.1	2149.6	1933.0	2641.8	11007.1	12723.5	12697.2	7390.6
82.5°	935.3	945.2	1030.5	1069.9	1470.2	1371.8	1430.9	4660.1	5162.2	5332.9	2668.1
85°	590.7	620.3	912.3	820.4	879.5	804.0	705.6	1850.9	2280.8	2248.0	1066.6
87.5°	180.5	190.3	308.5	347.9	390.5	351.2	259.3	544.8	666.2	722.0	265.8
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°	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2	7328.2
2.5°	7370.9	7334.8	7206.8	7101.8	7003.3	6895.0	6803.1	6776.9	6753.9	6744.1	6740.8
5°	7439.8	7331.5	7078.8	6872.1	6708.0	6557.0	6461.8	6419.2	6376.5	6376.5	6389.6
7.5°	7538.3	7341.4	6950.8	6642.3	6435.6	6294.5	6225.5	6219.0	6228.8	6238.7	6242.0
10°	7646.6	7334.8	6763.8	6379.8	6196.0	6130.4	6133.7	6189.4	6242.0	6281.3	6287.9
12.5°	7751.6	7295.4	6543.9	6133.7	6015.5	6028.6	6120.5	6245.2	6347.0	6402.8	6406.0
15°	7869.7	7233.1	6278.1	5900.6	5861.3	5963.0	6133.7	6324.0	6478.2	6570.1	6580.0
17.5°	7968.2	7128.0	5999.1	5674.2	5723.4	5910.5	6146.8	6392.9	6580.0	6694.8	6714.5
20°	8079.8	6993.5	5710.3	5457.6	5598.7	5851.4	6120.5	6386.4	6580.0	6691.6	6717.8
22.5°	8168.4	6803.1	5434.6	5280.4	5487.1	5779.2	6031.9	6245.2	6402.8	6461.8	6501.2
25°	8204.5	6563.6	5175.4	5136.0	5398.5	5661.1	5831.7	5953.2	6002.4	5995.8	6012.2
27.5°	8184.8	6287.9	4952.2	5021.1	5287.0	5477.3	5562.6	5552.8	5464.2	5382.1	5421.5
30°	8102.7	5959.7	4765.2	4903.0	5142.6	5247.6	5234.4	5106.5	4939.1	4784.8	4794.7
32.5°	7955.0	5605.3	4591.2	4768.4	4939.1	4985.0	4896.4	4729.1	4489.5	4289.3	4259.8
35°	7830.3	5267.3	4437.0	4614.2	4735.6	4712.6	4627.3	4410.7	4194.1	4016.9	3987.4
37.5°	7810.6	4978.5	4289.3	4440.3	4509.2	4476.4	4371.3	4187.6	4108.8	3974.2	3957.8
40°	7915.7	4775.0	4138.3	4256.5	4289.3	4263.0	4148.2	4043.2	4115.4	4082.5	4082.5
42.5°	8201.2	4666.7	4003.8	4072.7	4098.9	4118.6	4036.6	3948.0	4036.6	3885.6	3836.4
45°	8654.1	4670.0	3882.4	3892.2	3971.0	4039.9	3984.1	3852.8	3806.9	3504.9	3445.9
47.5°	9320.3	4781.6	3783.9	3721.5	3862.7	3977.5	3898.8	3708.4	3504.9	3304.8	3268.7
50°	10098.1	4981.7	3695.3	3544.3	3718.3	3898.8	3839.7	3616.5	3406.5	3285.1	3262.1
52.5°	10961.2	5234.4	3587.0	3347.4	3541.0	3862.7	3852.8	3603.4	3314.6	3232.6	3212.9
55°	12027.7	5483.9	3452.4	3117.7	3383.5	3833.1	3816.7	3495.1	3294.9	3235.8	3229.3
57.5°	13268.3	5844.9	3258.8	2884.7	3203.0	3711.7	3675.6	3429.5	3229.3	3186.6	3183.3
60°	15266.9	6406.0	2983.1	2671.4	3019.2	3498.4	3544.3	3317.9	3124.3	3114.4	3111.1
62.5°	17895.6	7193.7	2697.6	2451.5	2805.9	3222.7	3354.0	3166.9	3012.7	3061.9	3068.5
65°	21525.2	7856.6	2402.3	2264.4	2569.6	2956.9	3173.5	3025.8	2888.0	2983.1	2983.1
67.5°	23891.4	7869.7	2133.2	2070.8	2330.1	2733.7	2983.1	2858.4	2727.2	2888.0	2894.5
70°	23399.1	6895.0	1910.0	1867.3	2097.1	2494.2	2773.1	2674.7	2523.7	2668.1	2615.6
71°	22604.9	6353.5	1821.4	1788.6	2005.2	2379.3	2674.7	2592.6	2441.6	2536.8	2507.3
72.5°	21338.2	5516.7	1677.0	1683.6	1867.3	2234.9	2536.8	2451.5	2300.5	2353.0	2343.2
75°	18036.7	4817.7	1434.1	1463.7	1604.8	1988.8	2261.1	2195.5	2041.3	2041.3	2031.4
77.5°	11276.2	3367.1	1191.3	1207.7	1361.9	1703.2	1942.8	1887.0	1739.3	1690.1	1677.0
80°	4207.2	1739.3	932.0	951.7	1046.9	1342.2	1608.1	1555.6	1404.6	1348.8	1296.3
82.5°	1591.7	873.0	685.9	669.5	771.2	1023.9	1260.2	1197.9	1079.7	945.2	905.8
85°	600.6	433.2	420.1	406.9	452.9	607.1	781.1	767.9	643.2	548.1	538.2
87.5°	157.5	141.1	164.1	121.4	128.0	114.9	118.1	49.2	23.0	9.8	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)