

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: P459548

Luminaire Tested: **GALN-SA9D-735-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
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-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 66580 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

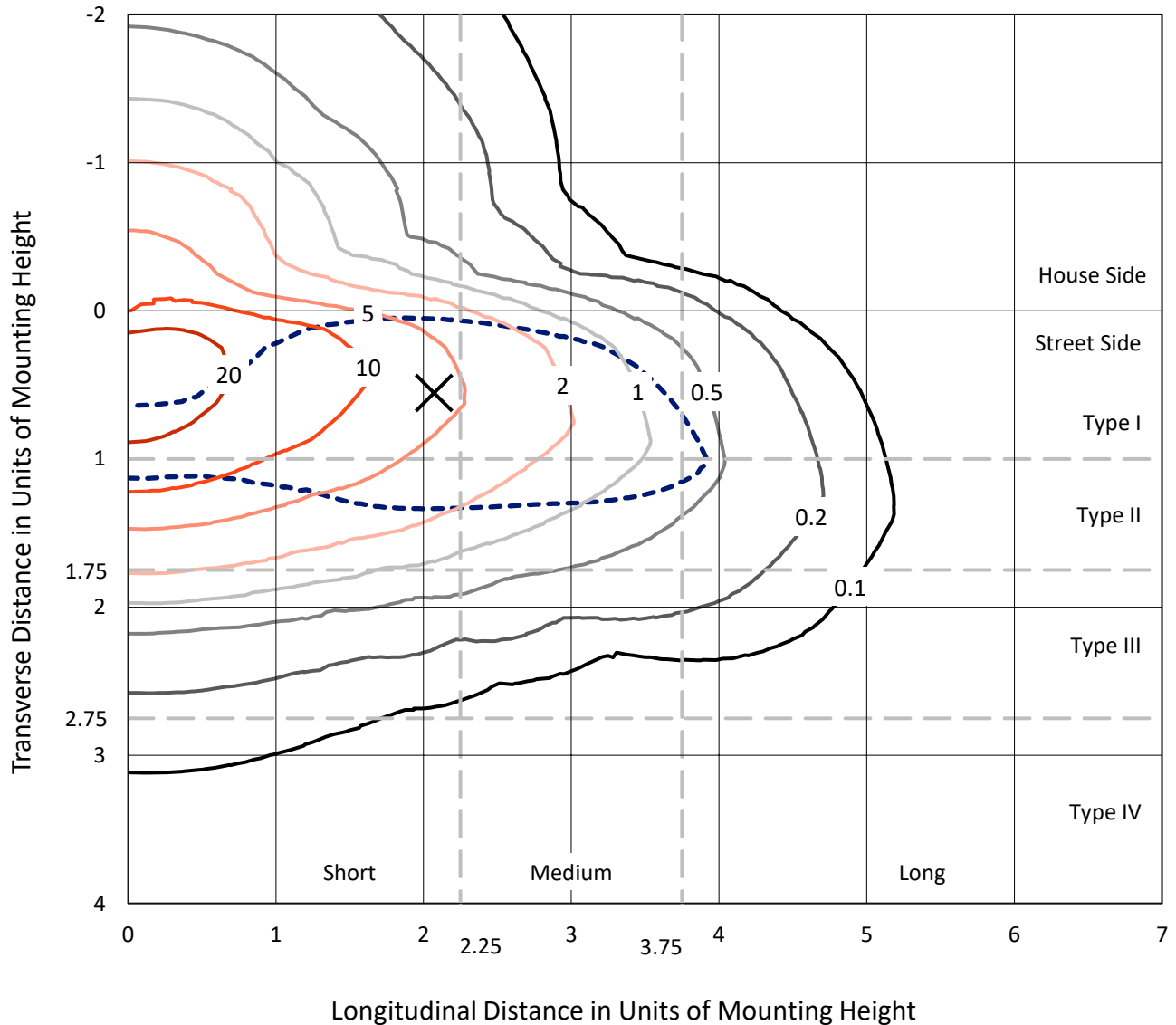
Input Watts (W): 552
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

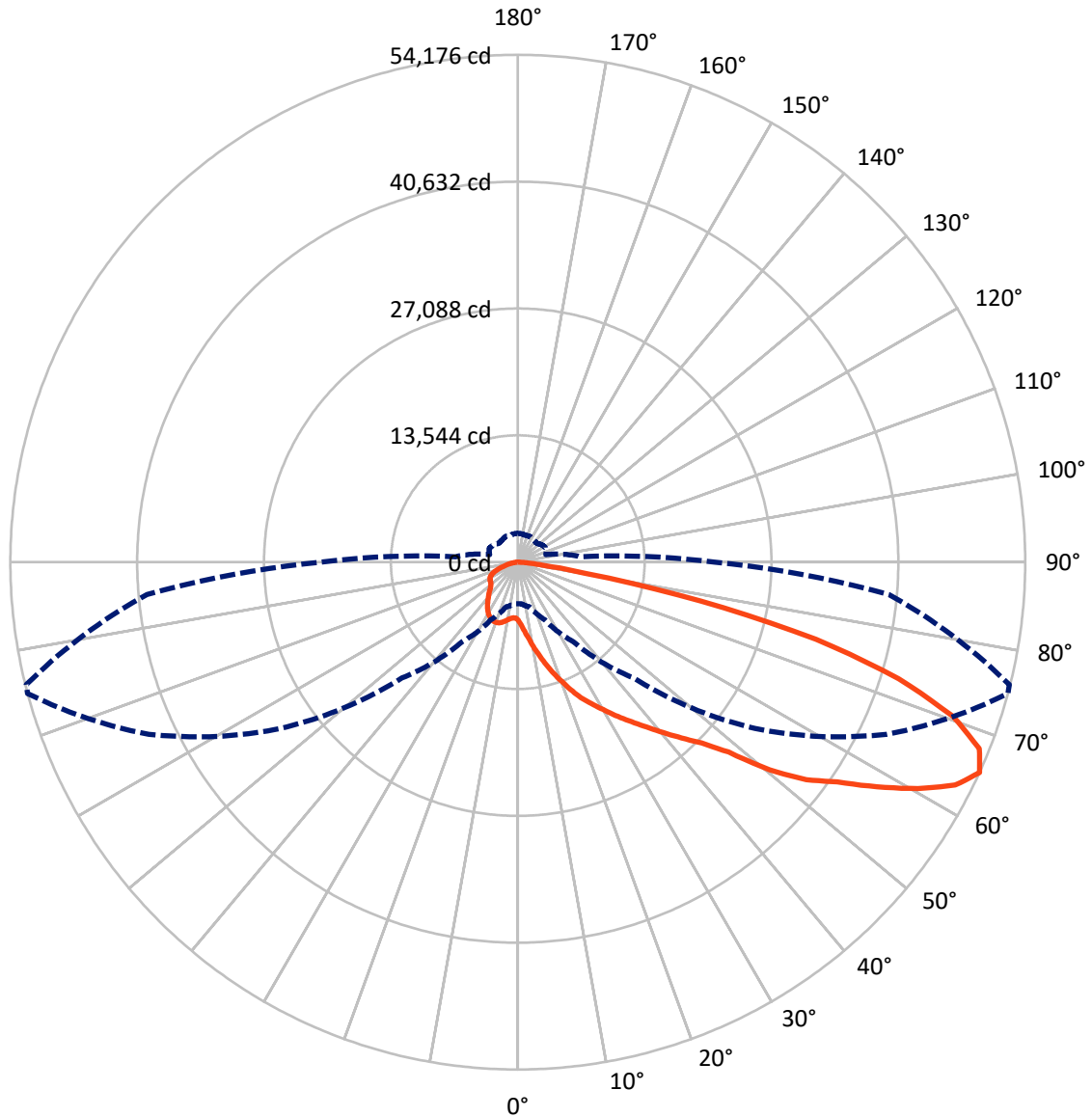
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 25.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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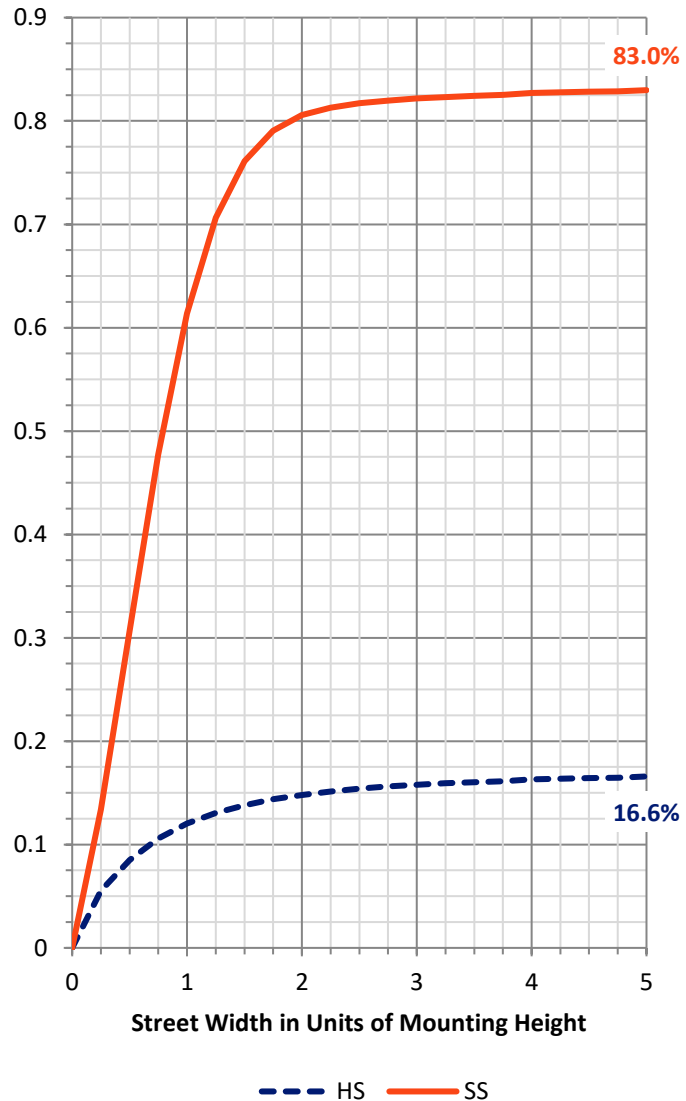
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11193.0	0.0	11193.0
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	55387.0	0.0	55387.0
	% Fixture	83.2	0.0	83.2
Total	Lumens	66580.0	0.0	66580.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	751.6	1.1
10°-20°	2943.9	4.4
20°-30°	5686.6	8.5
30°-40°	9236.8	13.9
40°-50°	12706.0	19.1
50°-60°	15001.5	22.5
60°-70°	13143.8	19.7
70°-80°	6274.9	9.4
80°-90°	835.0	1.3
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°	66580.0	100.0
0°-180°	66580.0	100.0



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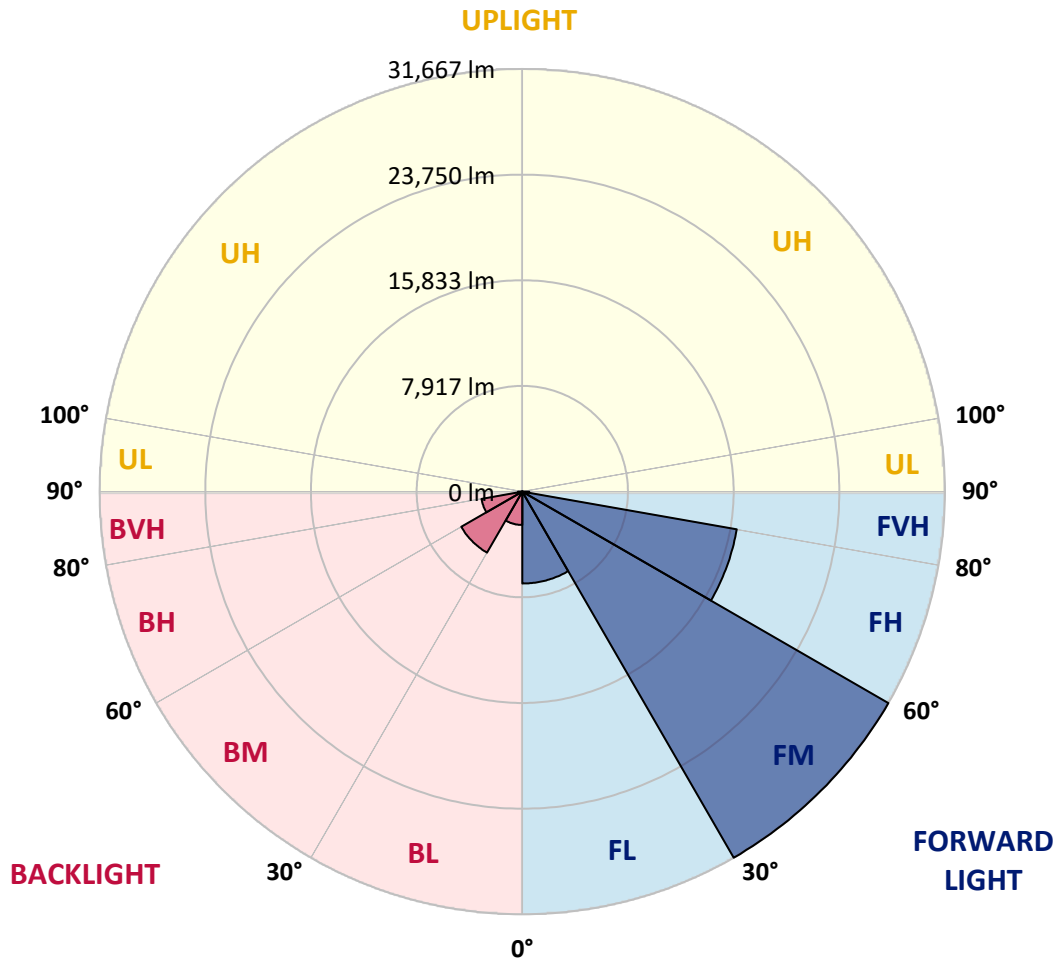
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6883.3	10.3			
FM	(30°-60°)	31666.8	47.6			
FH	(60°-80°)	16315.1	24.5			G5
FVH	(80°-90°)	521.8	0.8			G4/750
BL	(0°-30°)	2498.8	3.8	B3/2500		
BM	(30°-60°)	5277.4	7.9	B4/8500		
BH	(60°-80°)	3103.6	4.7	B4/5000		G4/5000
BVH	(80°-90°)	313.2	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1
2.5°	8219.3	8165.1	8107.3	7948.4	7778.7	7587.3	7312.8	7049.2	6698.9	6688.1	6428.1
5°	10498.0	10461.9	10205.5	10057.4	9663.8	9140.2	8696.0	8006.2	7367.0	7291.2	6785.6
7.5°	12592.5	12451.7	12354.2	12087.0	11696.9	11025.2	10165.8	9234.0	8165.1	8064.0	7226.2
10°	14170.7	14156.2	14105.7	13874.5	13582.0	12913.9	11960.6	10624.4	9176.3	8977.6	7760.6
12.5°	15351.6	15362.4	15355.2	15351.6	15142.1	14575.1	13542.3	12133.9	10198.3	10057.4	8378.2
15°	16128.0	16236.3	16279.7	16460.2	16478.3	16099.1	15210.7	13592.9	11350.3	11140.8	9042.6
17.5°	16640.8	16694.9	16897.2	17204.1	17453.3	17384.7	16593.8	14943.5	12527.5	12177.2	9732.4
20°	17131.9	17225.8	17381.1	17800.0	18240.6	18442.8	17886.7	16326.6	13694.0	13470.1	10494.4
22.5°	18153.9	18287.5	18341.7	18554.8	18930.3	19287.8	19035.1	17651.9	14972.4	14669.0	11303.3
25°	19883.7	20024.5	19872.9	19822.3	19945.1	20122.1	20067.9	18901.4	16178.5	15745.2	12068.9
27.5°	22137.1	22155.2	21859.1	21577.4	21274.1	21183.8	21017.7	20010.1	17225.8	16864.7	12838.1
30°	24556.7	24470.0	23978.9	23469.7	22956.9	22451.3	21974.6	21079.0	18392.2	17977.0	13592.9
32.5°	26802.9	26756.0	26210.7	25419.8	24553.1	24076.4	23112.2	22158.8	19641.8	19240.9	14369.3
35°	28485.8	28554.4	27954.9	27091.8	26145.7	25723.1	24506.1	23292.8	20934.6	20497.6	15214.3
37.5°	29681.1	29645.0	29114.1	28366.6	27536.0	27167.7	26134.8	24531.4	22324.9	21906.0	16138.8
40°	30107.2	30085.6	29691.9	29146.6	28619.4	28489.4	27839.4	25867.6	23917.5	23426.4	17251.1
42.5°	29836.4	29883.3	29623.3	29475.3	29377.8	29471.7	29533.0	27619.1	25654.5	25203.1	18457.3
45°	29005.8	28980.5	28944.4	29186.4	29735.3	30352.8	31208.7	29273.0	27543.2	27182.1	20075.1
47.5°	27521.6	27702.1	27792.4	28460.5	29659.4	31122.0	33137.1	31490.4	30284.2	29970.0	22541.6
50°	25445.1	25589.5	26124.0	27312.1	29099.7	31410.9	35022.2	35116.1	34856.1	34267.4	25221.2
52.5°	22202.2	22426.0	23527.5	25705.1	27951.3	31291.7	36163.4	38225.4	38568.5	38127.9	27861.0
55°	18572.8	18887.0	20049.8	22906.4	26369.6	30641.7	36950.6	40027.4	41396.1	40988.0	30403.4
57.5°	15019.3	15351.6	16546.9	19313.1	23610.5	29204.4	37467.0	42035.3	45245.7	44714.9	33566.8
60°	11256.4	11603.0	12628.6	15477.9	19681.5	26394.8	37116.7	43775.9	49091.7	48864.2	36733.9
62.5°	7262.3	7645.1	8537.1	10895.2	15127.7	22556.1	35242.5	44736.5	52421.3	52146.9	39045.2
65°	4423.8	4467.2	4958.3	6763.9	10353.5	17464.2	30955.9	43461.8	54176.4	54093.4	39749.4
67.5°	2860.1	2928.7	3152.6	4051.9	6207.8	12130.3	24751.7	39254.6	53150.8	53121.9	38294.0
70°	2415.9	2437.6	2538.7	2733.7	3607.7	7356.2	17381.1	32548.5	49254.3	49254.3	34794.7
72.5°	2159.5	2188.4	2224.5	2285.9	2574.8	4167.4	10371.6	25336.7	42526.4	42808.1	29616.1
75°	1960.9	1953.7	1975.4	1986.2	2195.7	2722.9	5362.8	18738.9	32898.8	32335.4	21447.4
77.5°	1679.2	1690.1	1679.2	1726.2	1939.3	2072.9	2722.9	12574.5	19937.9	19208.4	10765.2
80°	1379.5	1397.6	1415.6	1444.5	1657.6	1574.5	1635.9	5731.1	7374.2	7218.9	3326.0
82.5°	1036.4	1061.7	1090.6	1159.2	1303.7	1040.0	1032.8	2448.4	2661.5	2437.6	1224.2
85°	418.9	494.7	747.5	816.1	819.8	570.6	635.6	1022.0	1087.0	1061.7	480.3
87.5°	97.5	115.6	242.0	364.7	335.8	213.1	234.7	332.2	379.2	350.3	162.5
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°	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1	6186.1
2.5°	6308.9	6182.5	5965.8	5799.7	5680.5	5575.8	5510.8	5471.1	5456.6	5453.0	5456.6
5°	6522.0	6298.1	5955.0	5738.3	5619.2	5550.5	5510.8	5507.2	5510.8	5514.4	5503.6
7.5°	6814.5	6493.1	6045.3	5843.1	5752.8	5702.2	5684.2	5676.9	5680.5	5676.9	5676.9
10°	7204.5	6763.9	6222.2	6012.8	5936.9	5879.2	5850.3	5832.2	5817.8	5803.3	5796.1
12.5°	7634.2	7063.7	6413.6	6211.4	6103.1	6012.8	5947.8	5900.8	5868.3	5835.8	5828.6
15°	8114.5	7381.5	6626.7	6345.0	6189.7	6056.1	5944.2	5868.3	5810.5	5763.6	5760.0
17.5°	8573.2	7681.2	6771.2	6406.4	6178.9	5991.1	5843.1	5738.3	5666.1	5604.7	5597.5
20°	9064.3	7966.5	6836.2	6366.7	6070.6	5843.1	5648.0	5521.6	5438.6	5370.0	5359.1
22.5°	9559.1	8208.4	6828.9	6240.3	5882.8	5615.5	5409.7	5276.1	5178.6	5110.0	5084.7
25°	10032.1	8403.4	6738.6	6038.1	5622.8	5344.7	5135.2	5012.5	4925.8	4842.7	4842.7
27.5°	10458.3	8519.0	6568.9	5792.5	5355.5	5063.0	4896.9	4784.9	4705.5	4651.3	4618.8
30°	10877.2	8573.2	6337.8	5481.9	5073.8	4824.7	4691.1	4626.0	4553.8	4492.4	4485.2
32.5°	11252.7	8562.3	6048.9	5178.6	4806.6	4629.7	4575.5	4524.9	4449.1	4362.4	4340.8
35°	11617.5	8490.1	5705.8	4846.3	4582.7	4514.1	4528.5	4456.3	4319.1	4210.8	4192.7
37.5°	12014.7	8360.1	5330.2	4575.5	4394.9	4459.9	4496.0	4337.1	4113.2	3943.5	3903.8
40°	12473.4	8212.1	4940.2	4304.6	4246.9	4409.4	4409.4	4116.9	3809.9	3705.2	3676.3
42.5°	13011.4	8089.3	4615.2	4077.1	4124.1	4286.6	4268.5	3824.3	3698.0	3643.8	3629.3
45°	13863.7	8045.9	4279.4	3878.5	4023.0	4142.1	3994.1	3723.2	3651.0	3607.7	3593.2
47.5°	15210.7	8096.5	3983.2	3730.5	3907.4	3997.7	3687.1	3654.6	3604.1	3542.7	3535.4
50°	16460.2	8049.5	3773.8	3647.4	3806.3	3824.3	3560.7	3571.6	3542.7	3474.1	3459.6
52.5°	17482.2	7901.5	3640.2	3604.1	3719.6	3521.0	3441.5	3481.3	3470.4	3383.8	3369.3
55°	18605.3	7811.2	3575.2	3604.1	3661.8	3257.4	3329.6	3387.4	3372.9	3311.5	3307.9
57.5°	19966.8	7829.3	3528.2	3614.9	3604.1	3123.8	3217.7	3286.3	3282.7	3264.6	3264.6
60°	21360.7	7836.5	3456.0	3611.3	3535.4	3019.0	3102.1	3199.6	3206.8	3217.7	3217.7
62.5°	21823.0	7522.3	3315.2	3546.3	3383.8	2917.9	2993.8	3127.4	3120.1	3149.0	3152.6
65°	20959.9	6652.0	3105.7	3398.2	3188.8	2845.7	2910.7	3033.5	2993.8	3069.6	3084.0
67.5°	19078.4	5503.6	2780.7	3131.0	2972.1	2769.9	2856.5	2903.5	2831.2	2979.3	2982.9
70°	16489.1	4297.4	2369.0	2751.8	2726.5	2690.4	2813.2	2741.0	2639.8	2820.4	2784.3
72.5°	13787.9	3282.7	1892.3	2249.8	2397.9	2571.2	2737.4	2531.5	2390.7	2444.8	2379.8
75°	10357.2	2426.8	1520.3	1762.3	1997.0	2401.5	2668.7	2278.7	2062.0	2011.5	1997.0
77.5°	5279.7	1585.4	1137.6	1318.1	1498.7	2170.4	2574.8	1982.6	1708.1	1628.7	1592.6
80°	1885.1	985.9	801.7	910.0	1011.2	1867.0	2249.8	1639.5	1325.3	1310.9	1325.3
82.5°	873.9	635.6	538.1	595.9	599.5	1245.9	1715.4	1224.2	1007.5	1531.2	1292.8
85°	375.6	317.8	303.3	296.1	274.5	556.1	964.2	657.3	1025.6	458.6	422.5
87.5°	111.9	126.4	111.9	83.1	61.4	61.4	97.5	36.1	25.3	18.1	18.1
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)