

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: P652104

Luminaire Tested: **GALN-SA9A-840-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P652104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9A-840-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28566.2 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

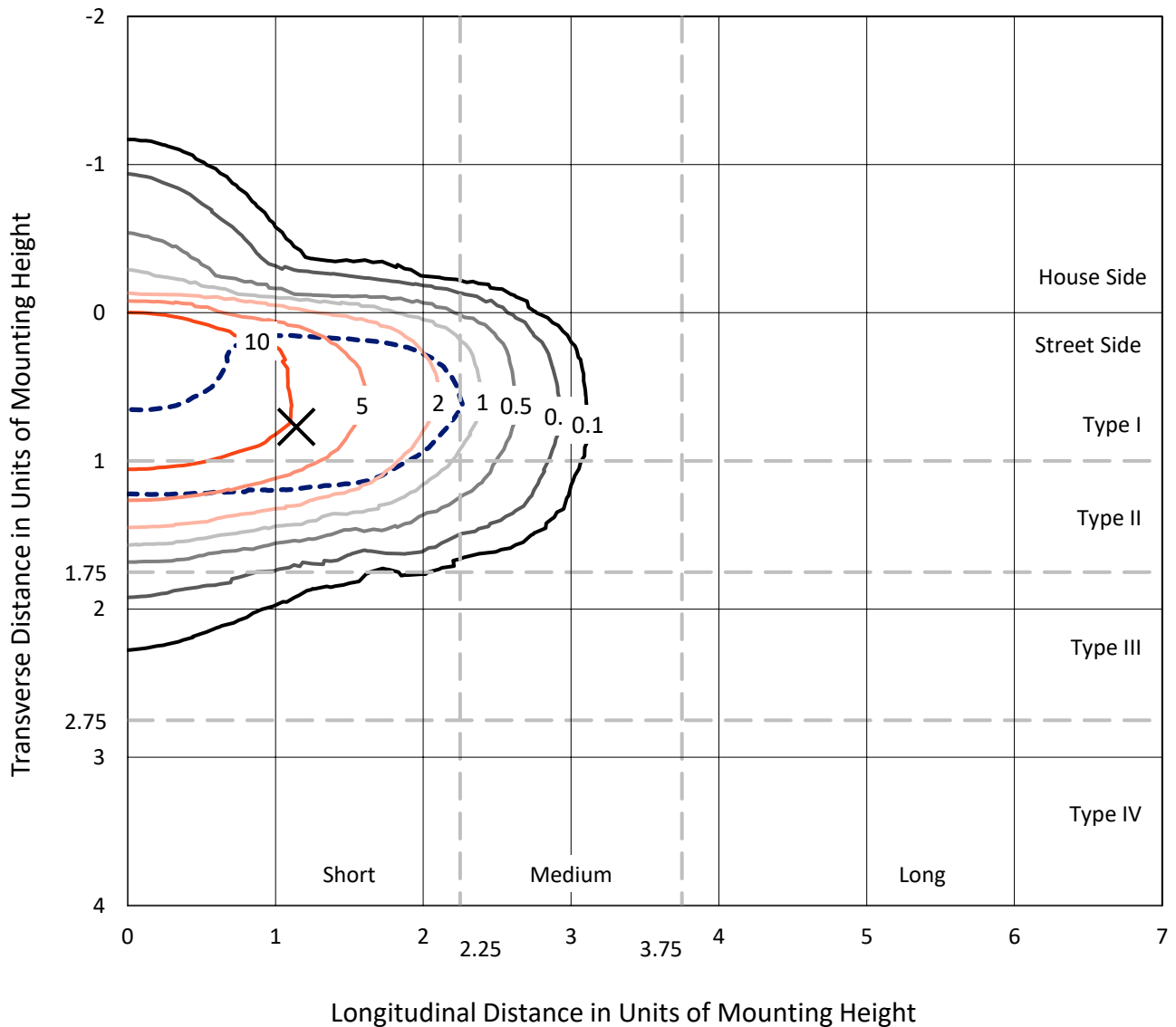
Input Watts (W): 274
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

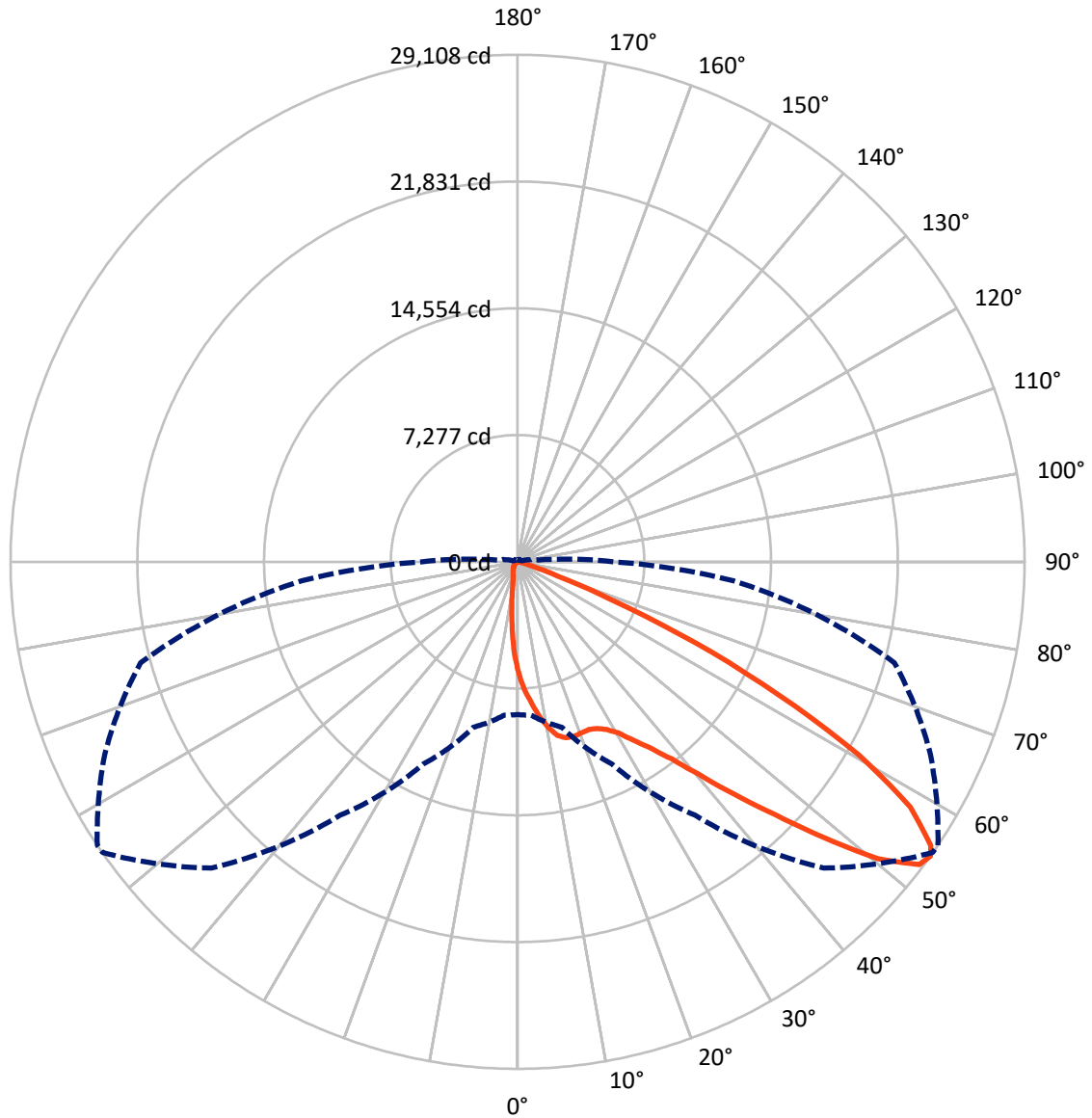
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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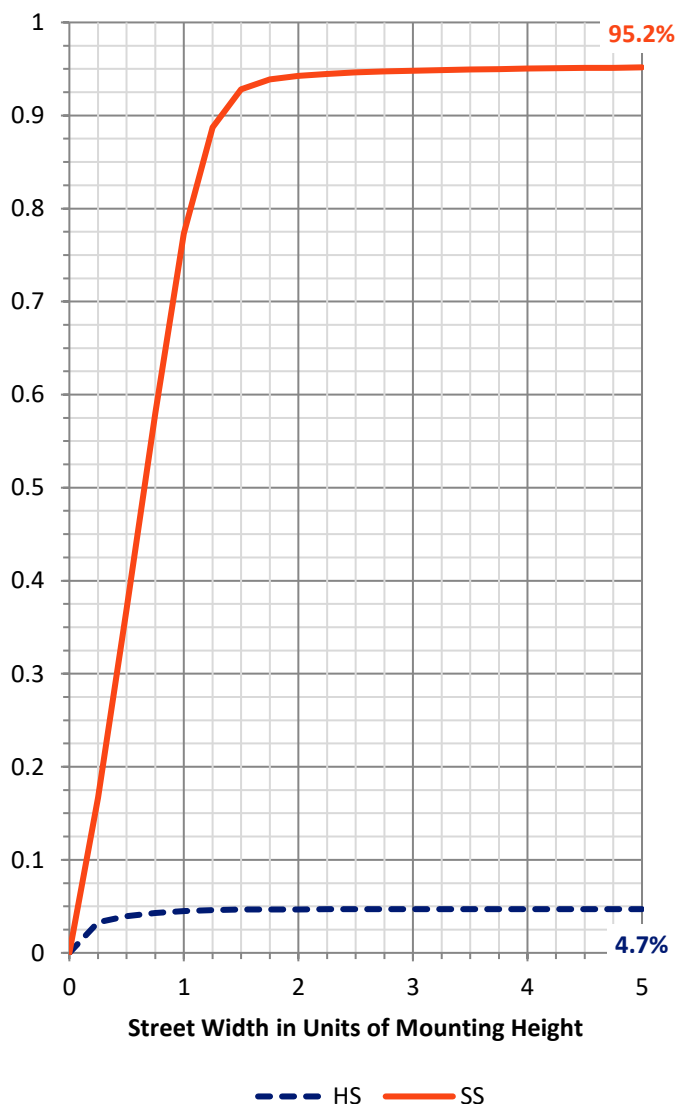
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1350.8	0.0	1350.8
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	27215.4	0.0	27215.4
	% Fixture	95.3	0.0	95.3
Total	Lumens	28566.2	0.0	28566.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.8	2.0
10°-20°	1516.1	5.3
20°-30°	2625.7	9.2
30°-40°	4532.4	15.9
40°-50°	7714.4	27.0
50°-60°	7634.3	26.7
60°-70°	3484.5	12.2
70°-80°	447.5	1.6
80°-90°	50.4	0.2
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°	28566.2	100.0
0°-180°	28566.2	100.0

Coefficient of Utilization



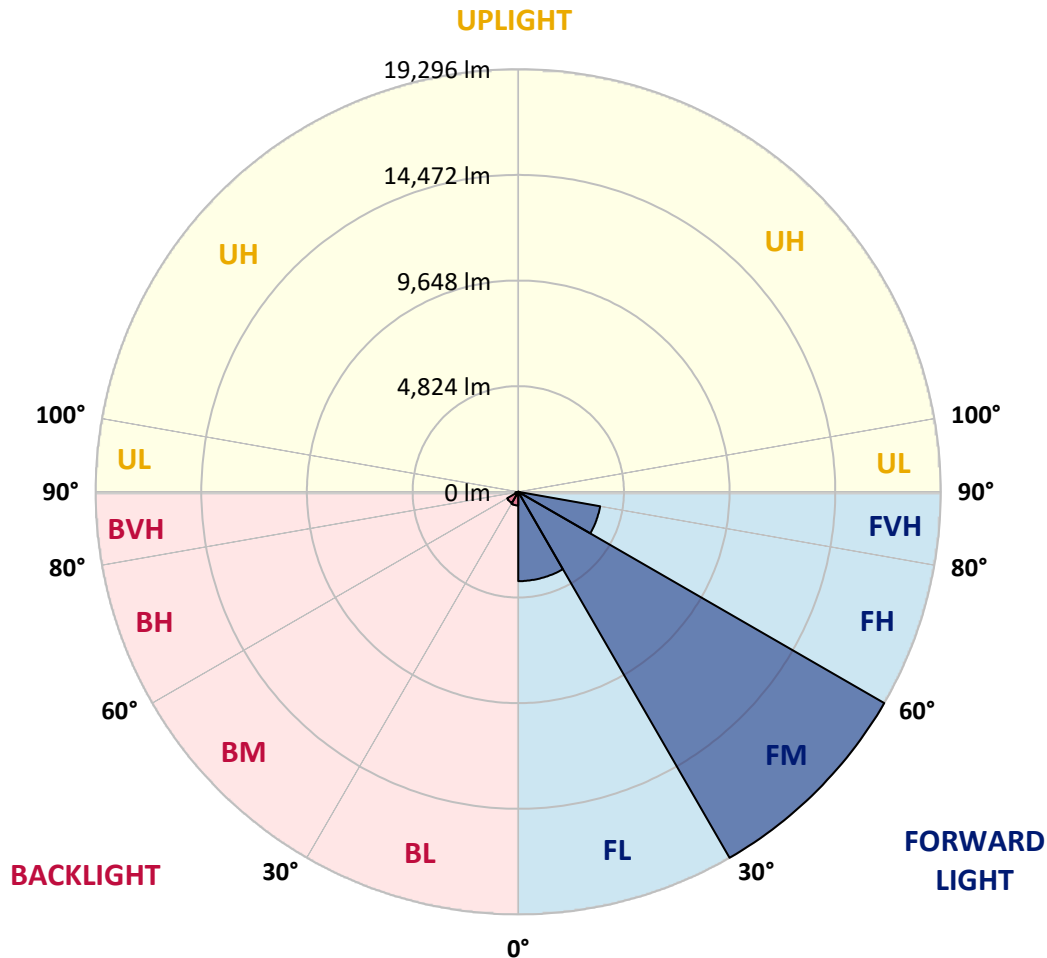
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4077.9	14.3			
FM (30°-60°)	19295.8	67.5			
FH (60°-80°)	3796.7	13.3			G2/5000
FVH (80°-90°)	45.0	0.2			G1/100
BL (0°-30°)	624.7	2.2	B2/1000		
BM (30°-60°)	585.4	2.0	B1/1000		
BH (60°-80°)	135.3	0.5	B1/500		G1/500
BVH (80°-90°)	5.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6
2.5°	8065.8	8009.9	7932.7	7873.0	7732.3	7530.0	7316.0	7316.0	7109.8	6822.6	6529.7
5°	9303.1	9266.5	9191.3	9037.1	8879.1	8595.8	8165.9	8090.8	7722.7	7202.3	6655.0
7.5°	9806.1	9823.5	9827.3	9786.8	9711.7	9432.2	9006.3	8954.2	8366.4	7668.7	6818.8
10°	9324.3	9409.1	9491.9	9659.6	9896.7	9964.2	9723.2	9669.2	9091.0	8140.9	6996.1
12.5°	8607.3	8653.6	8699.8	8963.9	9439.9	9985.4	10237.8	10235.9	9746.3	8611.2	7221.6
15°	8273.9	8314.4	8318.2	8435.8	8848.2	9642.3	10457.5	10486.4	10386.2	9191.3	7464.5
17.5°	8343.3	8376.0	8349.0	8378.0	8593.8	9264.5	10432.4	10528.8	10904.7	9748.3	7684.1
20°	8796.2	8859.8	8755.7	8674.7	8740.3	9164.3	10347.7	10482.6	11270.8	10291.8	7884.5
22.5°	9609.5	9644.2	9513.1	9291.5	9175.9	9374.4	10324.5	10457.5	11583.1	10737.0	8000.2
25°	10513.4	10501.8	10357.3	10108.7	9865.9	9798.4	10476.8	10596.3	11841.4	11137.9	8034.9
27.5°	11417.3	11452.0	11209.2	10900.8	10609.8	10434.4	10818.0	10906.6	12132.4	11594.6	8077.3
30°	12467.7	12411.8	12172.8	11820.2	11486.7	11241.9	11367.2	11392.3	12533.3	12199.8	8189.1
32.5°	13834.2	13680.0	13412.1	12795.3	12556.4	12142.0	12172.8	12203.7	13020.9	12799.2	8324.0
35°	15688.2	15680.5	15156.2	14325.6	13743.5	13229.0	13094.1	13119.1	13759.0	13689.6	8622.8
37.5°	17920.0	17950.9	17353.4	16517.0	15445.4	14628.2	14350.7	14354.5	14880.7	14919.3	9077.6
40°	19737.5	19818.4	19461.9	18897.2	17839.1	16561.3	16094.9	16052.5	16457.2	16409.0	9727.1
42.5°	20520.0	20595.2	20728.1	20924.7	20342.6	19288.4	18188.0	18245.7	18369.1	18031.8	10455.6
45°	20136.4	20255.9	20778.3	21992.4	22539.8	22185.2	20872.7	20670.3	20148.0	19795.3	11188.0
47.5°	18538.7	18829.7	19702.8	21724.5	23640.3	24839.0	23902.4	23634.5	21928.8	21082.8	11654.4
50°	15911.8	15929.1	17145.3	19729.8	23069.8	26513.9	26995.7	26795.3	23588.2	21805.4	11889.6
52.5°	11534.9	11914.5	13028.5	16021.6	20598.9	26259.5	28967.3	28884.5	25299.6	22175.5	12228.7
54°	8769.2	8842.4	9833.1	12803.0	17760.1	24862.1	29088.8	29108.0	26149.6	22399.1	12429.1
55°	7188.9	7013.4	8054.2	10906.6	15823.2	23626.8	28691.7	28784.2	26531.2	22514.7	12577.6
57.5°	3407.5	3409.4	4205.3	5753.0	9910.2	18346.0	26265.3	26592.9	26573.6	22713.2	13034.3
60°	1725.0	1736.5	1911.8	2655.8	4895.4	12195.9	21716.8	22497.3	24528.8	22742.2	13184.7
62.5°	1206.5	1193.0	1164.1	1277.8	2060.3	6198.2	16168.1	16846.5	20839.9	21641.6	12706.7
65°	1033.0	1004.2	923.2	905.8	1040.7	2468.8	10070.1	11176.4	15911.8	18739.2	11346.0
67.5°	882.7	871.1	797.9	753.5	736.2	1075.5	5196.0	5778.0	10875.7	13469.9	8593.8
70°	749.8	743.9	699.6	643.7	595.5	643.7	1927.3	2387.9	6061.3	7252.4	4055.0
72.5°	609.1	614.8	622.5	551.2	501.1	456.7	822.9	957.9	2536.3	2592.2	1418.5
75°	533.9	528.1	528.1	479.9	418.2	339.2	452.9	487.6	776.7	720.8	329.6
77.5°	375.8	362.3	424.0	395.1	348.8	240.9	258.3	273.7	321.9	275.6	154.2
80°	260.2	260.2	271.7	354.6	314.1	175.3	158.0	169.6	190.8	163.8	88.6
82.5°	146.5	150.4	177.3	188.9	183.1	117.6	104.1	106.0	127.2	111.8	55.9
85°	17.3	28.9	102.2	100.2	75.2	52.1	57.9	59.7	79.1	69.4	32.8
87.5°	1.9	3.9	21.2	27.0	19.3	21.2	21.2	21.2	27.0	30.9	23.1
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°	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6	6346.6
2.5°	6371.7	6225.2	5876.3	5471.6	5213.4	4793.2	4438.5	4182.2	4118.6	3995.3	4031.9
5°	6363.9	6059.4	5348.3	4596.6	3794.8	3197.4	2752.2	2401.4	2247.2	2145.1	2073.7
7.5°	6367.8	5891.8	4750.8	3554.0	2596.1	2010.2	1597.7	1383.8	1241.1	1181.4	1189.2
10°	6379.3	5702.9	4057.0	2632.7	1751.9	1299.0	1046.5	944.4	896.2	888.5	886.6
12.5°	6406.3	5496.7	3393.9	1954.3	1225.8	944.4	848.0	813.3	797.9	797.9	792.1
15°	6435.2	5269.2	2842.7	1453.2	944.4	811.4	767.1	749.8	740.1	740.1	738.1
17.5°	6435.2	5007.1	2328.1	1127.4	813.3	745.9	711.1	688.0	680.4	680.4	678.4
20°	6394.8	4702.6	1871.4	907.8	738.1	684.2	649.5	624.4	614.8	611.0	609.1
22.5°	6254.1	4295.9	1489.8	780.5	676.5	630.2	585.9	557.0	549.3	545.4	547.3
25°	6003.6	3837.2	1179.5	686.1	620.6	564.7	526.1	504.9	497.3	497.3	499.1
27.5°	5745.3	3357.4	934.8	614.8	553.1	503.0	472.2	458.7	456.7	462.6	464.5
30°	5506.3	2875.5	757.4	557.0	493.4	451.0	429.8	426.0	426.0	427.9	429.8
32.5°	5240.4	2453.4	634.1	506.9	445.2	408.6	397.0	397.0	400.9	400.9	404.8
35°	5072.7	2091.1	557.0	458.7	408.6	377.8	370.0	372.0	377.8	385.4	389.3
37.5°	4982.1	1802.0	506.9	420.2	373.9	352.7	345.0	348.8	362.3	375.8	377.8
40°	4989.8	1584.3	466.4	387.4	346.9	323.8	318.0	329.6	343.0	356.6	358.5
42.5°	5074.6	1422.4	427.9	348.8	323.8	291.0	289.1	300.7	306.5	319.9	321.9
45°	5174.8	1304.8	387.4	308.4	281.4	252.5	254.4	264.1	271.7	292.9	296.8
47.5°	5205.6	1223.8	341.1	262.1	231.3	221.6	223.5	229.3	244.7	264.1	266.0
50°	5240.4	1173.7	296.8	221.6	196.6	194.7	196.6	200.4	210.1	217.8	215.9
52.5°	5388.7	1171.8	260.2	192.8	167.7	171.6	173.5	171.6	163.8	152.2	148.4
54°	5527.5	1177.6	242.9	179.2	154.2	160.0	158.0	148.4	129.1	117.6	111.8
55°	5639.2	1183.4	233.2	169.6	146.5	148.4	150.4	131.0	106.0	94.4	90.6
57.5°	5859.0	1169.8	210.1	148.4	129.1	121.4	119.5	86.7	57.9	50.1	46.3
60°	5749.2	1056.1	190.8	127.2	109.8	98.3	81.0	48.2	28.9	21.2	21.2
62.5°	5317.4	896.2	169.6	104.1	90.6	75.2	42.4	27.0	13.5	7.7	5.8
65°	4756.6	753.5	152.2	82.8	71.3	48.2	23.1	17.3	5.8	0.0	0.0
67.5°	3536.6	558.9	129.1	65.5	54.0	30.9	15.4	9.7	1.9	0.0	0.0
70°	1638.2	341.1	109.8	50.1	38.5	23.1	11.6	5.8	0.0	0.0	0.0
72.5°	470.3	214.0	90.6	36.6	27.0	19.3	9.7	3.9	1.9	0.0	0.0
75°	163.8	171.6	67.4	27.0	21.2	13.5	7.7	3.9	1.9	0.0	0.0
77.5°	98.3	138.8	42.4	23.1	17.3	11.6	7.7	3.9	1.9	1.9	0.0
80°	55.9	92.5	27.0	19.3	15.4	9.7	5.8	3.9	1.9	1.9	0.0
82.5°	30.9	44.3	21.2	17.3	13.5	9.7	5.8	3.9	1.9	1.9	1.9
85°	25.1	23.1	17.3	15.4	11.6	7.7	5.8	1.9	0.0	0.0	0.0
87.5°	19.3	15.4	15.4	15.4	11.6	7.7	5.8	1.9	0.0	0.0	0.0
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)