

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: P651345

Luminaire Tested: **GALN-SA4D-840-U-SL3-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-840-U-SL3-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21289.9 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

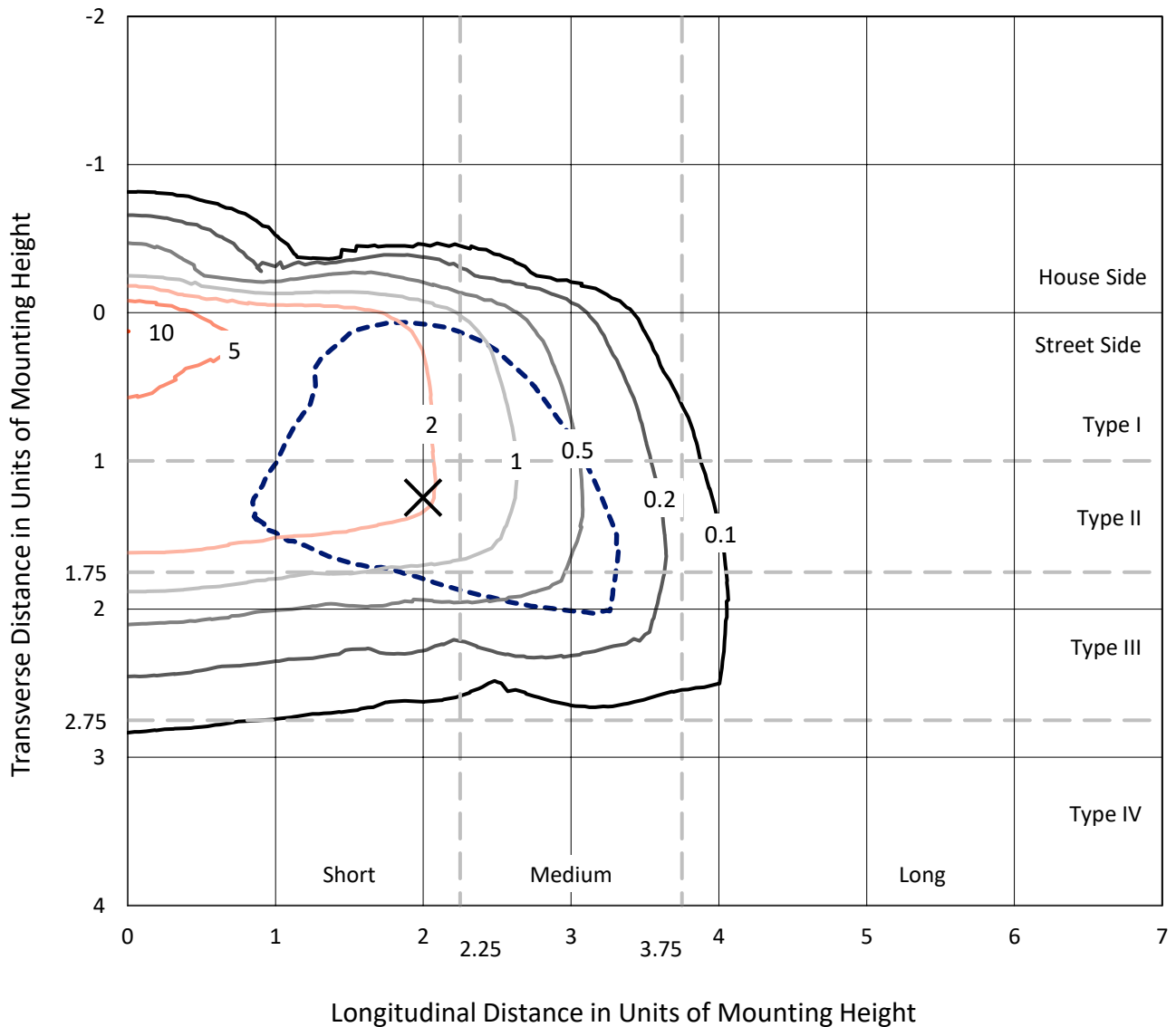
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

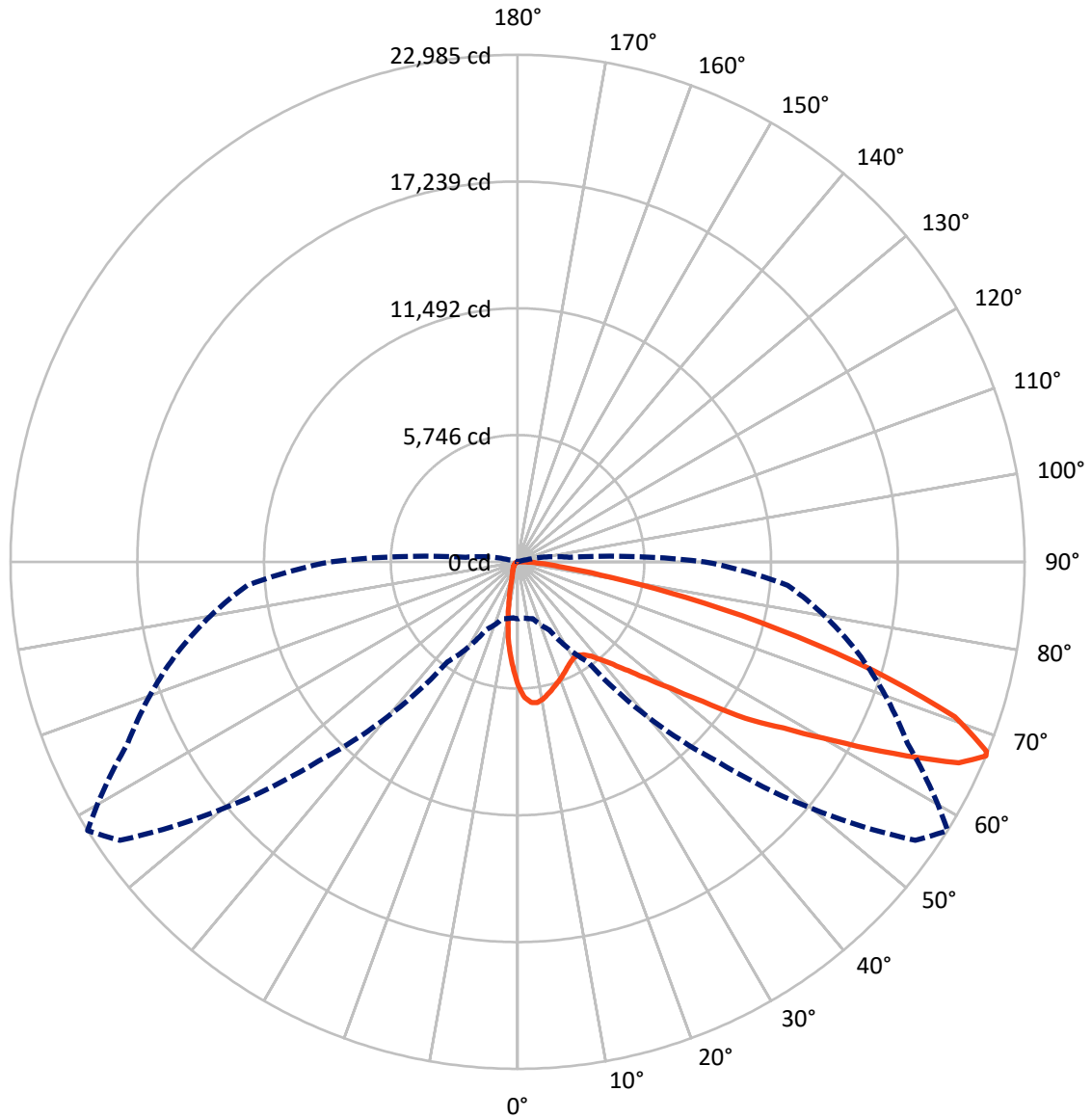
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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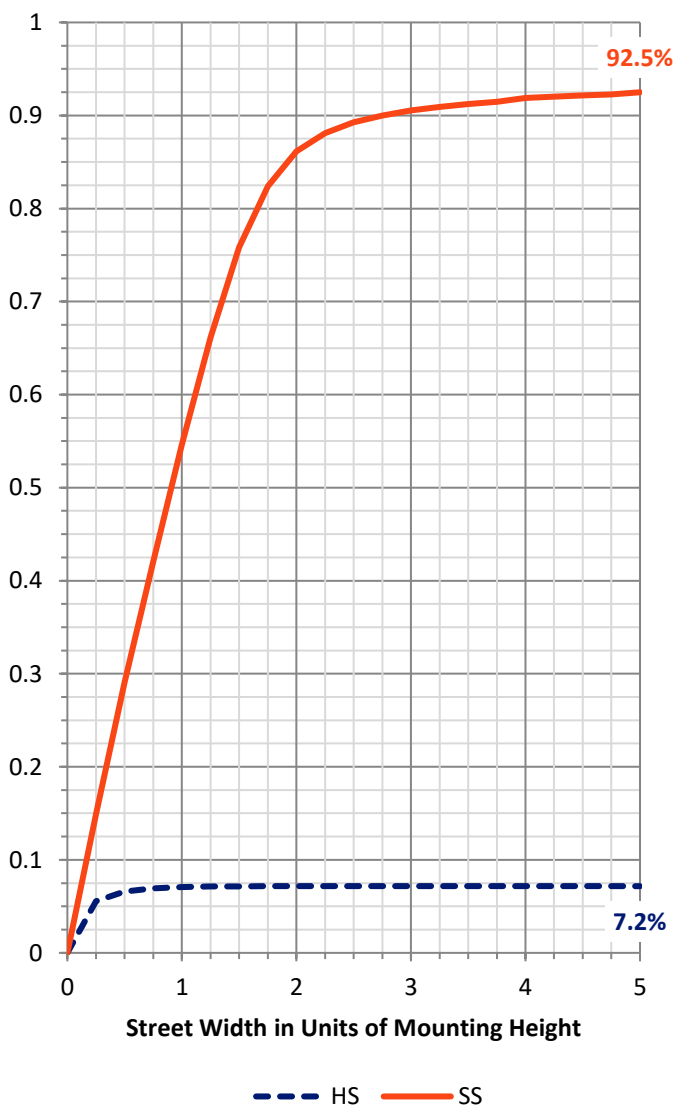
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1536.4	0.0	1536.4
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	19753.5	0.0	19753.5
	% Fixture	92.8	0.0	92.8
Total	Lumens	21289.9	0.0	21289.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.0	2.2
10°-20°	989.1	4.6
20°-30°	1340.3	6.3
30°-40°	1859.0	8.7
40°-50°	2964.8	13.9
50°-60°	5124.9	24.1
60°-70°	5854.3	27.5
70°-80°	2440.7	11.5
80°-90°	258.8	1.2
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°	21289.9	100.0
0°-180°	21289.9	100.0

Coefficient of Utilization



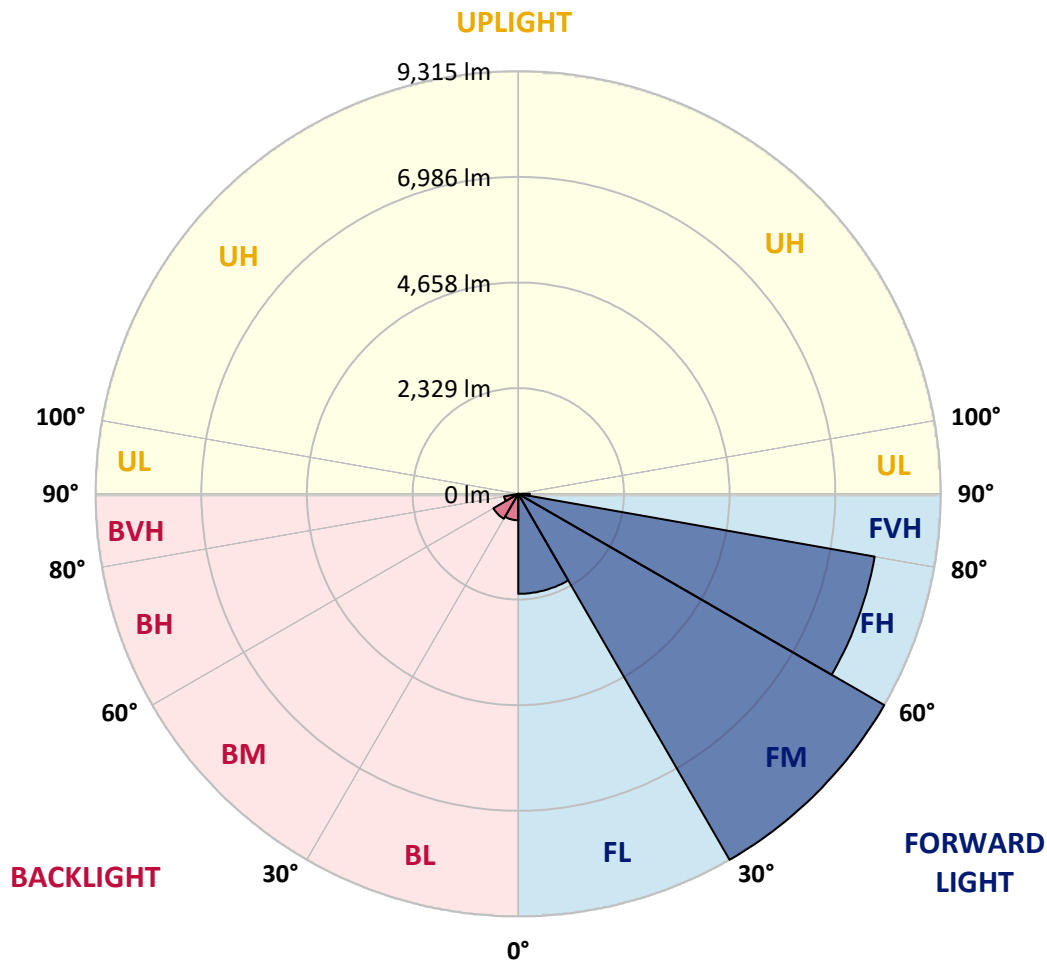
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2204.0	10.4			
FM (30°-60°)	9315.2	43.8			
FH (60°-80°)	7977.4	37.5			G4/12000
FVH (80°-90°)	256.9	1.2			G3/500
BL (0°-30°)	583.4	2.7	B2/1000		
BM (30°-60°)	633.5	3.0	B1/1000		
BH (60°-80°)	317.6	1.5	B1/500		G1/500
BVH (80°-90°)	1.9	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-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8
2.5°	6550.0	6560.0	6523.0	6493.1	6416.2	6333.7	6224.2	6165.9	6066.3	5894.1	5703.5
5°	6703.7	6716.5	6710.8	6703.7	6673.8	6594.1	6454.7	6403.5	6257.0	5976.7	5632.3
7.5°	6362.2	6409.2	6414.8	6470.3	6523.0	6530.1	6477.5	6439.0	6303.9	5975.2	5505.8
10°	5909.8	5941.1	5986.7	6050.7	6177.2	6282.5	6333.7	6328.1	6249.8	5931.2	5357.8
12.5°	5453.1	5470.2	5539.9	5649.4	5804.5	5983.8	6120.4	6147.4	6148.8	5878.5	5234.0
15°	5060.5	5053.3	5107.4	5234.0	5451.7	5676.5	5921.1	5963.9	6032.2	5827.3	5118.8
17.5°	4724.7	4761.7	4770.2	4909.7	5110.3	5401.9	5713.5	5788.9	5925.4	5783.2	5023.5
20°	4517.0	4536.9	4555.4	4633.7	4814.3	5121.6	5518.6	5622.4	5825.9	5743.4	4916.7
22.5°	4455.8	4468.7	4453.0	4477.1	4605.2	4878.4	5306.6	5444.5	5730.6	5706.4	4830.0
25°	4502.8	4515.6	4478.6	4450.2	4494.2	4680.6	5101.8	5269.6	5653.7	5699.2	4764.5
27.5°	4616.6	4640.8	4589.6	4538.4	4512.7	4573.9	4941.0	5135.9	5601.1	5733.3	4734.7
30°	4794.5	4808.7	4770.2	4707.7	4649.3	4588.2	4857.0	5043.4	5586.8	5813.1	4731.8
32.5°	4987.9	5017.7	4996.5	4955.2	4879.8	4734.7	4881.2	5046.3	5621.0	5928.3	4767.4
35°	5226.9	5261.0	5281.0	5272.5	5175.7	4995.0	5034.8	5174.3	5712.1	6140.3	4864.2
37.5°	5461.6	5491.6	5603.9	5642.4	5557.0	5386.3	5333.6	5426.1	5912.7	6417.7	5039.1
40°	5730.6	5770.4	5928.3	6074.8	6033.6	5854.3	5757.6	5834.4	6220.0	6836.0	5370.6
42.5°	5988.1	6059.2	6299.6	6558.5	6597.0	6396.4	6332.3	6358.0	6675.2	7437.7	5833.0
45°	6353.7	6420.5	6730.7	7082.1	7262.8	7106.3	7040.9	7036.6	7299.8	8284.3	6582.8
47.5°	6881.5	6941.3	7306.9	7654.0	7975.5	7996.9	7873.1	7915.7	8085.0	9274.5	7501.8
50°	7528.8	7669.7	7910.1	8271.5	8701.1	9048.2	9086.7	9029.7	9174.8	10421.1	8605.8
52.5°	8469.2	8523.3	8743.8	9041.1	9544.8	10133.7	10590.4	10512.2	10466.7	11513.7	9721.1
55°	9170.6	9243.1	9586.0	9994.3	10732.7	11509.4	12499.6	12526.7	11951.9	12563.7	10812.3
57.5°	8958.6	9069.6	9588.8	10409.7	12033.0	13452.8	14189.8	14208.3	13326.2	13583.7	12044.4
60°	7870.2	7922.9	8666.9	9762.4	12144.0	15558.4	16587.0	16437.6	14724.7	14724.7	13132.7
62.5°	5581.1	5663.7	6266.9	7878.8	10967.4	16289.7	19458.0	19149.2	16651.0	15815.9	13781.5
65°	3566.7	3487.0	3886.8	4973.7	8170.4	15209.8	21957.6	21976.1	18463.5	16252.7	13427.2
67°	2583.6	2552.3	2667.5	3400.2	5539.9	12785.6	22010.2	22984.8	19504.9	15976.6	12294.7
67.5°	2363.0	2387.3	2471.2	3067.3	5033.5	11634.6	21771.2	22925.0	19739.6	15810.2	11885.0
70°	1791.2	1749.9	1840.9	2169.6	3017.5	7339.6	18728.1	21025.8	19448.0	14158.5	9496.4
72.5°	1317.4	1313.1	1439.7	1774.1	2323.3	3909.6	14058.9	16858.7	15888.4	10781.0	5979.5
75°	889.2	929.0	1131.1	1482.4	2105.5	2535.2	9584.5	12230.7	11030.1	6121.8	2444.2
77.5°	506.5	509.3	728.4	1190.8	1890.7	2040.1	5679.4	7792.0	5838.6	2035.9	725.5
80°	219.1	240.4	361.4	865.0	1567.8	1806.8	3256.5	4282.3	2361.6	431.1	234.7
82.5°	81.1	95.3	159.4	532.1	1143.8	1488.1	1967.6	2044.4	801.0	152.2	146.5
85°	0.0	2.9	58.4	248.9	596.1	664.4	1314.6	1212.1	354.2	72.6	95.3
87.5°	0.0	0.0	0.0	25.6	78.2	247.5	408.3	455.2	85.4	25.6	22.8
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°	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8	5643.8
2.5°	5601.1	5508.6	5276.7	5044.8	4872.7	4728.9	4512.7	4394.6	4332.1	4239.6	4245.3
5°	5460.3	5272.5	4864.2	4441.6	4100.1	3767.3	3368.9	3208.2	3073.0	2996.1	2944.9
7.5°	5251.1	4973.7	4369.1	3805.7	3280.7	2698.9	2262.0	1970.4	1774.1	1701.5	1631.8
10°	5022.0	4653.6	3866.8	3085.8	2357.4	1757.0	1387.1	1119.6	1024.3	936.1	944.7
12.5°	4810.1	4361.9	3405.9	2435.6	1651.7	1116.8	870.7	761.1	729.8	719.9	719.9
15°	4636.5	4083.1	2910.8	1831.0	1132.5	802.4	697.1	667.2	655.9	653.0	653.0
17.5°	4451.6	3818.5	2464.0	1353.0	823.8	671.5	636.0	616.0	611.7	608.9	608.9
20°	4286.5	3552.4	2040.1	1007.3	665.8	604.7	581.9	569.1	564.8	562.0	563.4
22.5°	4130.1	3316.2	1641.8	761.1	586.2	550.6	527.8	515.0	506.5	499.4	500.8
25°	3990.6	3088.7	1320.3	623.1	527.8	496.5	473.7	455.2	436.7	428.2	426.8
27.5°	3892.5	2889.4	1028.6	533.5	475.2	441.0	412.6	389.8	365.7	352.8	349.9
30°	3811.3	2687.4	813.8	470.9	422.5	389.8	354.2	321.5	295.9	283.1	277.4
32.5°	3758.7	2495.4	641.6	419.7	378.4	338.6	298.7	266.0	237.6	224.8	221.9
35°	3750.2	2334.6	525.0	377.0	338.6	295.9	254.7	219.1	194.9	182.1	179.2
37.5°	3811.3	2210.8	439.6	342.9	305.9	258.9	213.4	180.6	159.4	149.4	147.9
40°	3975.0	2132.6	381.3	314.4	276.0	224.8	182.1	153.7	132.3	122.4	122.4
42.5°	4286.5	2135.5	342.9	287.4	246.2	192.1	155.1	128.0	109.6	101.0	98.1
45°	4773.1	2232.2	310.2	260.4	217.7	166.4	132.3	105.3	86.8	79.6	79.6
47.5°	5424.7	2424.3	281.7	233.3	192.1	142.3	112.4	85.4	69.7	62.6	62.6
50°	6276.9	2733.0	257.5	210.6	170.7	122.4	91.1	69.7	54.1	48.4	46.9
52.5°	7167.4	3114.2	229.1	190.7	146.5	103.9	74.0	54.1	41.3	37.0	35.6
55°	8150.6	3487.0	202.0	170.7	119.5	86.8	58.4	42.6	29.9	25.6	25.6
57.5°	9142.1	3852.6	169.3	142.3	93.9	64.0	45.5	31.3	19.9	15.6	15.6
60°	9981.5	3970.7	143.7	115.2	71.1	45.5	32.7	19.9	11.4	7.1	7.1
62.5°	10096.7	3572.3	120.9	88.2	51.2	31.3	17.1	11.4	4.3	2.9	2.9
65°	9470.8	2902.3	101.0	66.9	34.1	15.6	7.1	4.3	1.4	0.0	0.0
67°	8486.3	2353.1	82.5	49.8	24.2	9.9	4.3	1.4	0.0	0.0	0.0
67.5°	8234.5	2243.5	79.6	46.9	21.4	8.5	2.9	1.4	0.0	0.0	0.0
70°	6461.8	1680.1	56.9	28.4	12.8	5.7	0.0	0.0	0.0	0.0	0.0
72.5°	4016.2	950.3	41.3	17.1	8.5	2.9	0.0	0.0	0.0	0.0	0.0
75°	1518.0	332.9	28.4	11.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	472.3	126.7	17.1	8.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	159.4	48.4	11.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	98.1	19.9	7.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	61.1	8.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.4	2.9	1.4	0.0	0.0	0.0	0.0	0.0	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)