

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: P650839

Luminaire Tested: **GALN-SA4C-840-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P650839
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-SA4C-840-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1050mA 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: 19163 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

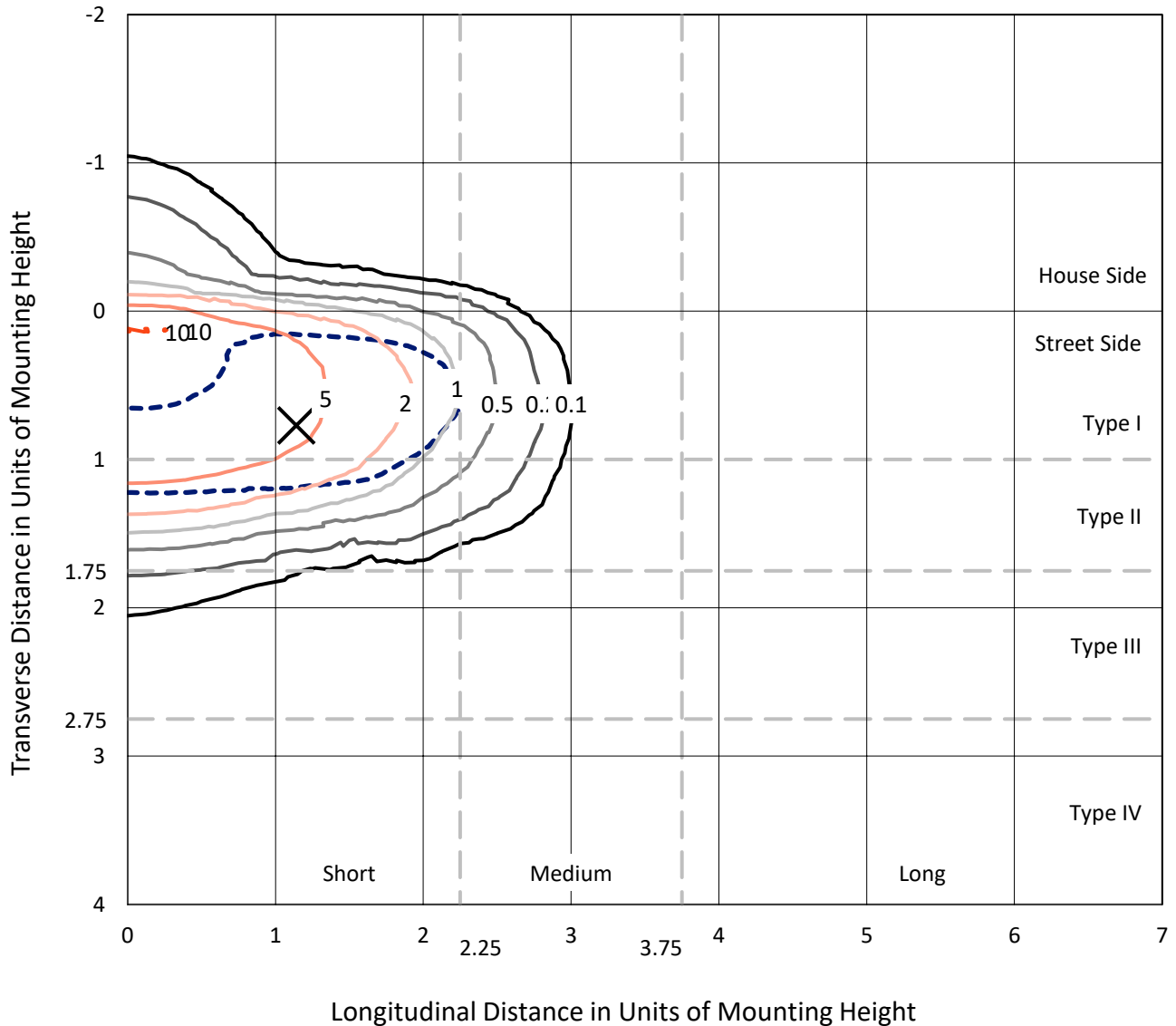
Input Watts (W): 213
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

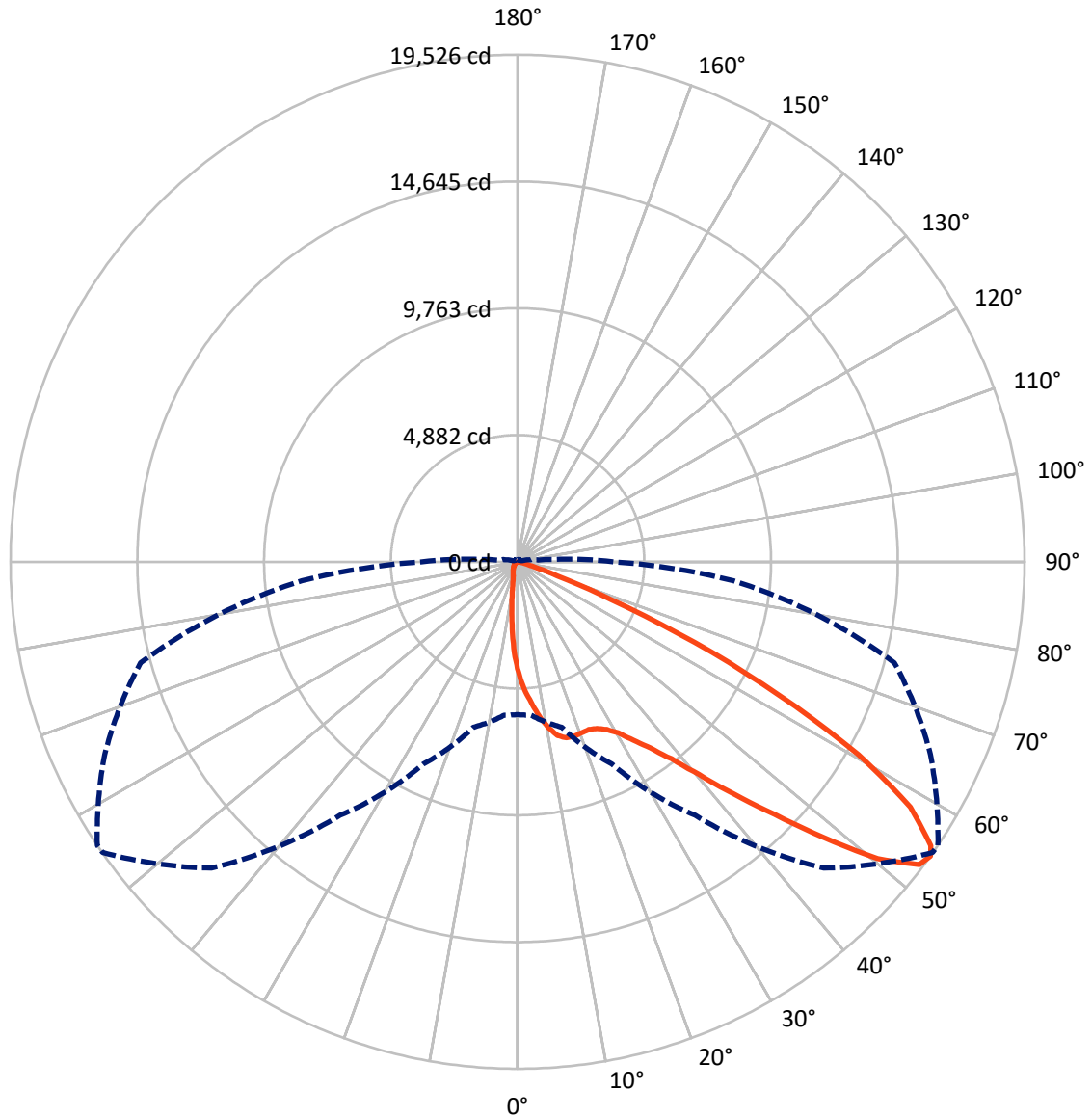
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 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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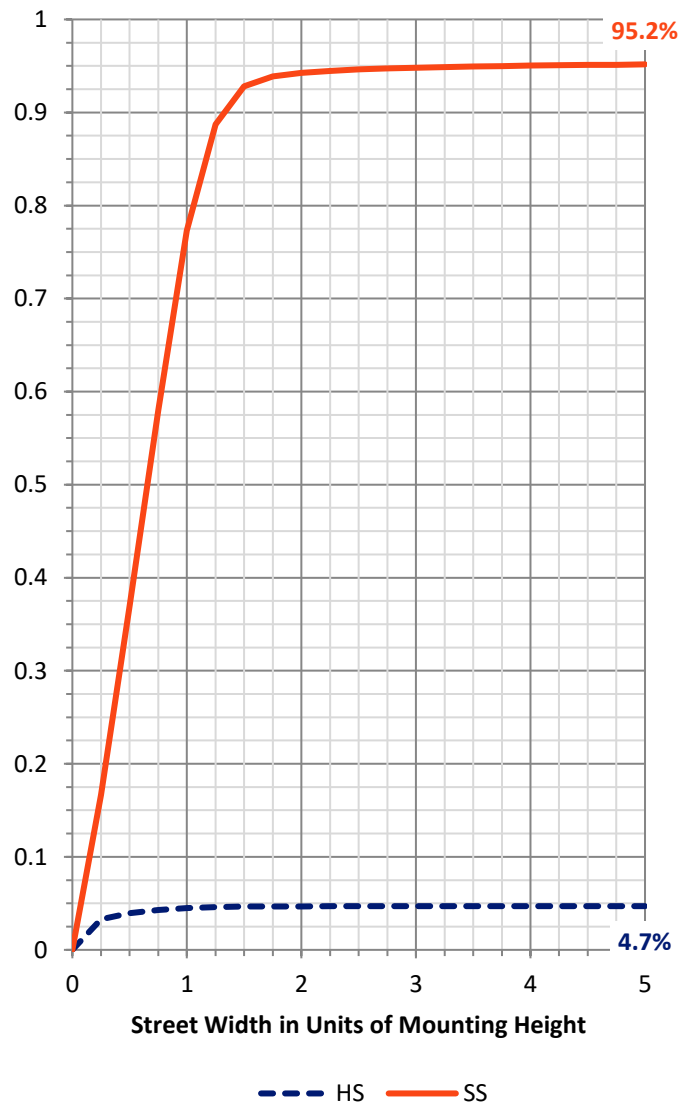
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	906.2	0.0	906.2
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	18256.8	0.0	18256.8
	% Fixture	95.3	0.0	95.3
Total	Lumens	19163.0	0.0	19163.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	376.2	2.0
10°-20°	1017.0	5.3
20°-30°	1761.4	9.2
30°-40°	3040.5	15.9
40°-50°	5175.0	27.0
50°-60°	5121.3	26.7
60°-70°	2337.5	12.2
70°-80°	300.2	1.6
80°-90°	33.8	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°	19163.0	100.0
0°-180°	19163.0	100.0

Coefficient of Utilization



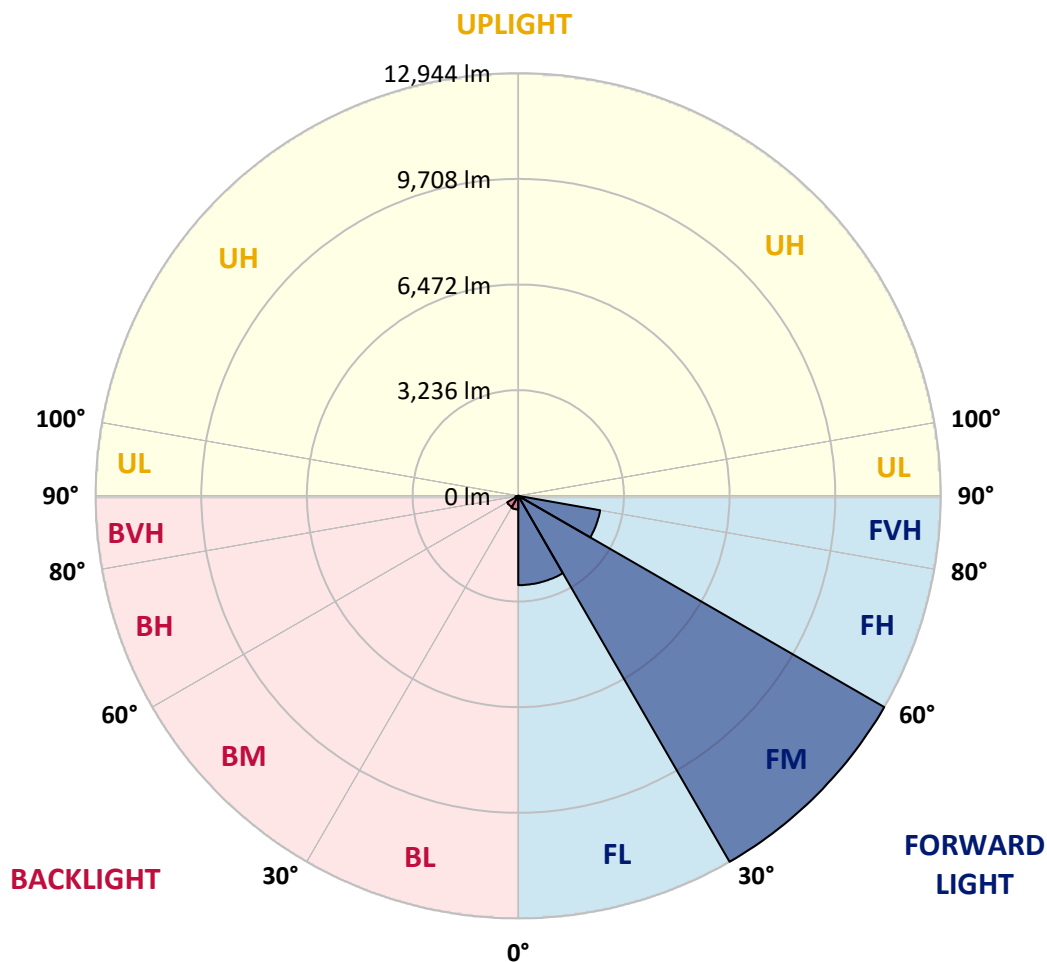
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2735.6	14.3			
FM (30°-60°)	12944.1	67.5			
FH (60°-80°)	2546.9	13.3			G2/5000
FVH (80°-90°)	30.2	0.2			G1/100
BL (0°-30°)	419.1	2.2	B1/500		
BM (30°-60°)	392.7	2.0	B1/1000		
BH (60°-80°)	90.7	0.5	B0/110		G0/110
BVH (80°-90°)	3.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5
2.5°	5410.7	5373.2	5321.5	5281.5	5187.0	5051.3	4907.8	4907.8	4769.5	4576.8	4380.3
5°	6240.7	6216.2	6165.8	6062.3	5956.3	5766.2	5477.9	5427.6	5180.6	4831.5	4464.4
7.5°	6578.2	6589.8	6592.4	6565.3	6514.9	6327.3	6041.7	6006.8	5612.4	5144.4	4574.2
10°	6255.0	6311.9	6367.5	6479.9	6638.9	6684.2	6522.6	6486.4	6098.5	5461.1	4693.2
12.5°	5774.1	5805.1	5836.1	6013.2	6332.6	6698.5	6867.8	6866.5	6538.1	5776.6	4844.4
15°	5550.3	5577.5	5580.1	5658.9	5935.6	6468.3	7015.2	7034.6	6967.3	6165.8	5007.3
17.5°	5596.9	5618.9	5600.8	5620.2	5765.0	6214.9	6998.4	7063.1	7315.2	6539.4	5154.7
20°	5900.7	5943.4	5873.5	5819.3	5863.2	6147.7	6941.5	7032.0	7560.8	6904.0	5289.2
22.5°	6446.3	6469.6	6381.7	6233.0	6155.4	6288.6	6926.0	7015.2	7770.3	7202.7	5366.8
25°	7052.7	7045.0	6948.0	6781.2	6618.2	6573.0	7028.2	7108.3	7943.5	7471.6	5390.1
27.5°	7659.1	7682.4	7519.5	7312.6	7117.3	6999.6	7257.0	7316.4	8138.7	7778.0	5418.5
30°	8363.7	8326.2	8165.9	7929.3	7705.6	7541.4	7625.4	7642.3	8407.6	8183.9	5493.5
32.5°	9280.4	9176.9	8997.2	8583.5	8423.1	8145.2	8165.9	8186.5	8734.7	8586.0	5584.0
35°	10524.1	10518.9	10167.3	9610.0	9219.5	8874.4	8783.9	8800.6	9229.9	9183.4	5784.4
37.5°	12021.3	12041.9	11641.1	11080.0	10361.2	9813.0	9626.8	9629.4	9982.3	10008.2	6089.5
40°	13240.5	13294.8	13055.6	12676.7	11966.9	11109.8	10796.9	10768.4	11040.0	11007.6	6525.2
42.5°	13765.3	13815.8	13905.0	14036.9	13646.4	12939.2	12201.0	12239.7	12322.5	12096.3	7013.9
45°	13508.1	13588.2	13938.6	14753.2	15120.3	14882.4	14002.0	13866.2	13515.8	13279.2	7505.2
47.5°	12436.3	12631.5	13217.2	14573.4	15858.6	16662.7	16034.3	15854.7	14710.4	14142.8	7818.1
50°	10674.1	10685.7	11501.5	13235.2	15475.8	17786.2	18109.4	17975.0	15823.7	14627.7	7975.8
52.5°	7738.0	7992.6	8739.9	10747.7	13818.4	17615.6	19432.1	19376.5	16971.7	14875.9	8203.4
54°	5882.6	5931.7	6596.3	8588.6	11913.9	16678.2	19513.6	19526.4	17541.9	15025.9	8337.8
55°	4822.5	4704.8	5403.0	7316.4	10614.6	15849.5	19247.2	19309.3	17797.8	15103.5	8437.3
57.5°	2285.8	2287.1	2821.1	3859.3	6648.0	12306.9	17619.5	17839.2	17826.3	15236.6	8743.8
60°	1157.1	1164.9	1282.5	1781.6	3283.9	8181.4	14568.2	15091.8	16454.6	15256.1	8844.6
62.5°	809.4	800.3	780.9	857.1	1382.1	4157.9	10846.0	11301.1	13979.9	14517.8	8524.0
65°	693.0	673.6	619.3	607.6	698.2	1656.2	6755.3	7497.4	10674.1	12570.8	7611.2
67.5°	592.1	584.4	535.3	505.5	493.9	721.4	3485.6	3876.1	7295.8	9036.0	5765.0
70°	502.9	499.0	469.3	431.9	399.5	431.9	1292.9	1601.9	4066.2	4865.1	2720.2
72.5°	408.6	412.4	417.6	369.8	336.1	306.4	552.0	642.5	1701.4	1738.9	951.6
75°	358.1	354.2	354.2	321.9	280.6	227.6	303.9	327.1	521.0	483.6	221.1
77.5°	252.1	243.0	284.4	265.1	234.1	161.6	173.2	183.6	215.9	184.9	103.4
80°	174.5	174.5	182.3	237.9	210.8	117.7	106.1	113.8	128.0	109.9	59.5
82.5°	98.2	100.8	118.9	126.7	122.8	78.9	69.8	71.1	85.4	75.0	37.5
85°	11.6	19.4	68.5	67.2	50.5	34.9	38.8	40.1	53.0	46.5	22.0
87.5°	1.3	2.6	14.2	18.1	13.0	14.2	14.2	14.2	18.1	20.7	15.5
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°	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5	4257.5
2.5°	4274.3	4176.0	3942.0	3670.5	3497.3	3215.4	2977.5	2805.6	2762.9	2680.2	2704.7
5°	4269.1	4064.8	3587.8	3083.5	2545.7	2144.9	1846.2	1610.9	1507.5	1439.0	1391.2
7.5°	4271.7	3952.4	3187.0	2384.1	1741.5	1348.5	1071.8	928.3	832.6	792.6	797.7
10°	4279.4	3825.6	2721.6	1766.1	1175.2	871.4	702.1	633.5	601.2	596.0	594.8
12.5°	4297.6	3687.3	2276.8	1311.0	822.2	633.5	568.9	545.6	535.3	535.3	531.3
15°	4316.9	3534.7	1907.0	974.8	633.5	544.3	514.6	502.9	496.4	496.4	495.2
17.5°	4316.9	3359.0	1561.8	756.3	545.6	500.3	477.1	461.5	456.4	456.4	455.1
20°	4289.8	3154.7	1255.4	609.0	495.2	458.9	435.7	418.9	412.4	409.8	408.6
22.5°	4195.4	2881.9	999.4	523.6	453.8	422.8	393.0	373.7	368.4	365.9	367.2
25°	4027.4	2574.1	791.2	460.3	416.3	378.8	353.0	338.8	333.5	333.5	334.9
27.5°	3854.1	2252.2	627.0	412.4	371.0	337.4	316.7	307.7	306.4	310.3	311.6
30°	3693.8	1929.0	508.1	373.7	331.0	302.5	288.3	285.7	285.7	287.0	288.3
32.5°	3515.4	1645.8	425.4	340.0	298.6	274.1	266.3	266.3	269.0	269.0	271.5
35°	3402.9	1402.8	373.7	307.7	274.1	253.4	248.3	249.5	253.4	258.6	261.1
37.5°	3342.1	1208.9	340.0	281.8	250.8	236.6	231.4	234.1	243.0	252.1	253.4
40°	3347.3	1062.8	312.9	259.9	232.7	217.2	213.4	221.1	230.1	239.2	240.4
42.5°	3404.2	954.1	287.0	234.1	217.2	195.2	193.9	201.7	205.5	214.6	215.9
45°	3471.4	875.3	259.9	206.9	188.7	169.4	170.6	177.1	182.3	196.5	199.1
47.5°	3492.1	821.0	228.8	175.9	155.2	148.7	150.0	153.8	164.2	177.1	178.5
50°	3515.4	787.3	199.1	148.7	131.9	130.6	131.9	134.5	141.0	146.1	144.8
52.5°	3614.9	786.1	174.5	129.3	112.4	115.0	116.4	115.0	109.9	102.1	99.6
54°	3708.0	790.0	162.9	120.3	103.4	107.3	106.1	99.6	86.6	78.9	75.0
55°	3783.0	793.8	156.4	113.8	98.2	99.6	100.8	87.9	71.1	63.3	60.8
57.5°	3930.4	784.8	141.0	99.6	86.6	81.5	80.1	58.2	38.8	33.6	31.0
60°	3856.7	708.5	128.0	85.4	73.7	65.9	54.3	32.3	19.4	14.2	14.2
62.5°	3567.1	601.2	113.8	69.8	60.8	50.5	28.4	18.1	9.1	5.1	3.9
65°	3190.8	505.5	102.1	55.6	47.9	32.3	15.5	11.6	3.9	0.0	0.0
67.5°	2372.5	374.9	86.6	44.0	36.2	20.7	10.3	6.5	1.3	0.0	0.0
70°	1098.9	228.8	73.7	33.6	25.8	15.5	7.7	3.9	0.0	0.0	0.0
72.5°	315.5	143.5	60.8	24.6	18.1	13.0	6.5	2.6	1.3	0.0	0.0
75°	109.9	115.0	45.2	18.1	14.2	9.1	5.1	2.6	1.3	0.0	0.0
77.5°	65.9	93.1	28.4	15.5	11.6	7.7	5.1	2.6	1.3	1.3	0.0
80°	37.5	62.1	18.1	13.0	10.3	6.5	3.9	2.6	1.3	1.3	0.0
82.5°	20.7	29.8	14.2	11.6	9.1	6.5	3.9	2.6	1.3	1.3	1.3
85°	16.8	15.5	11.6	10.3	7.7	5.1	3.9	1.3	0.0	0.0	0.0
87.5°	13.0	10.3	10.3	10.3	7.7	5.1	3.9	1.3	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)