

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: P453225

Luminaire Tested: **GALN-SA4B-727-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-727-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15072 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

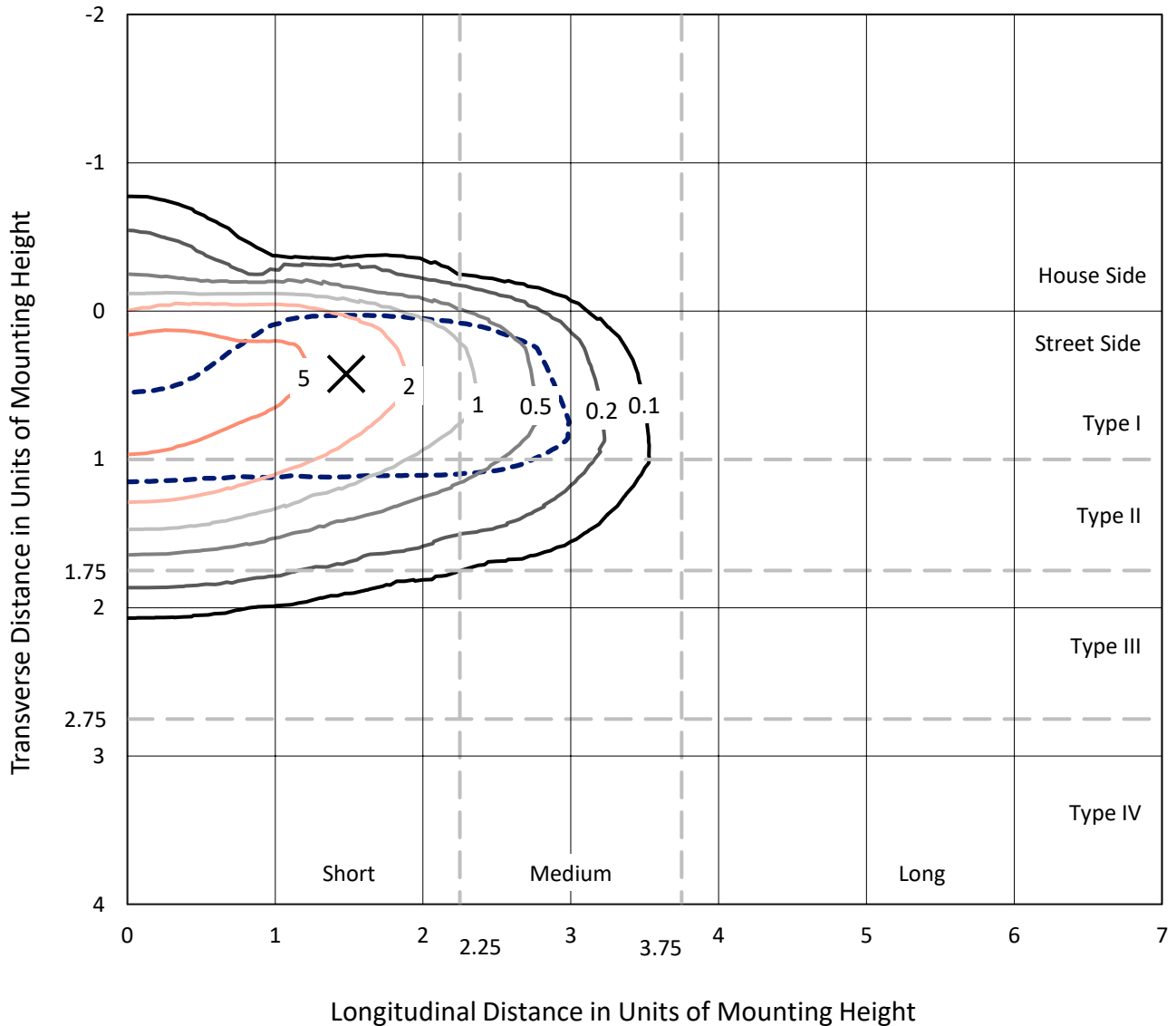
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

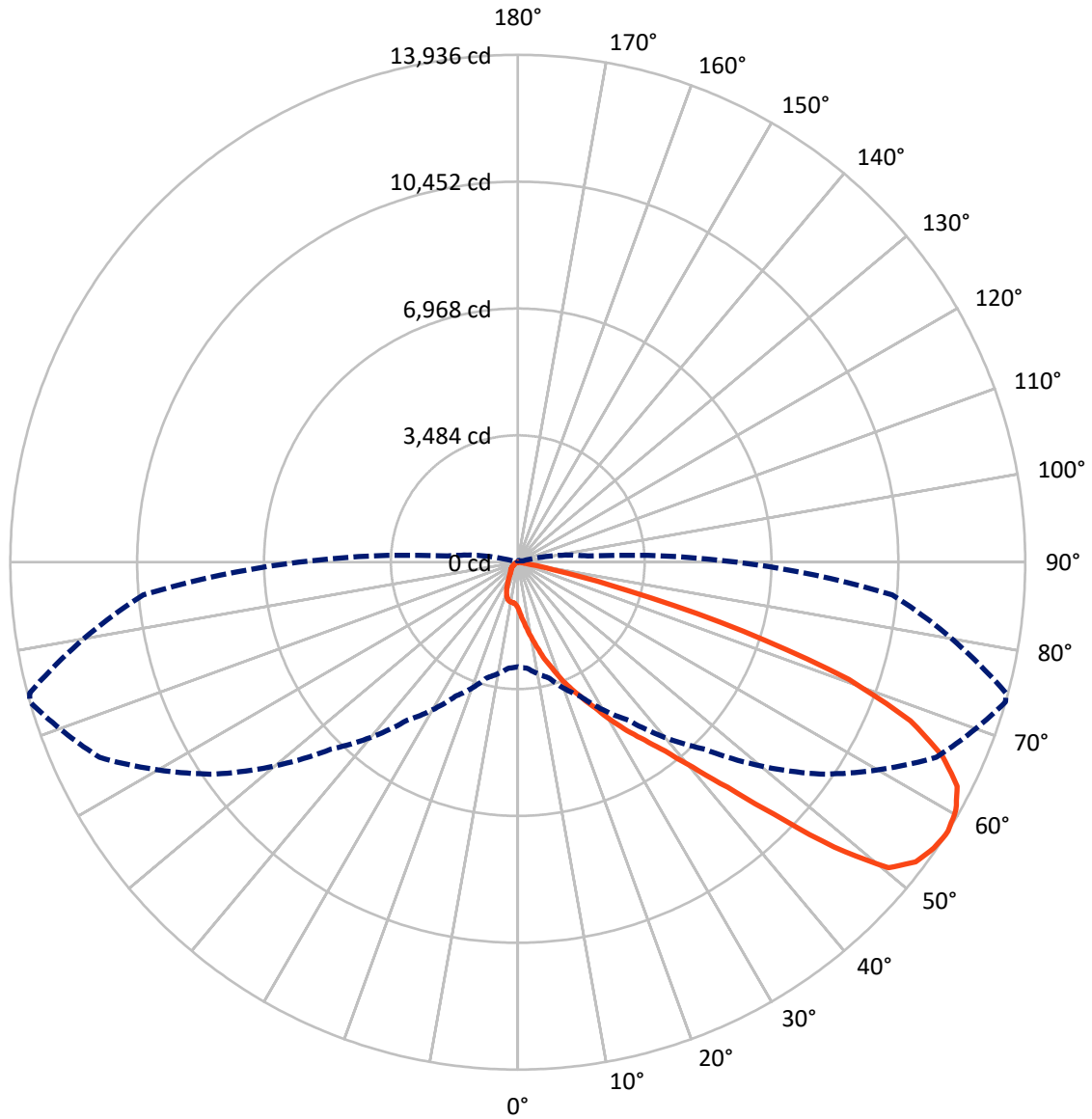
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical



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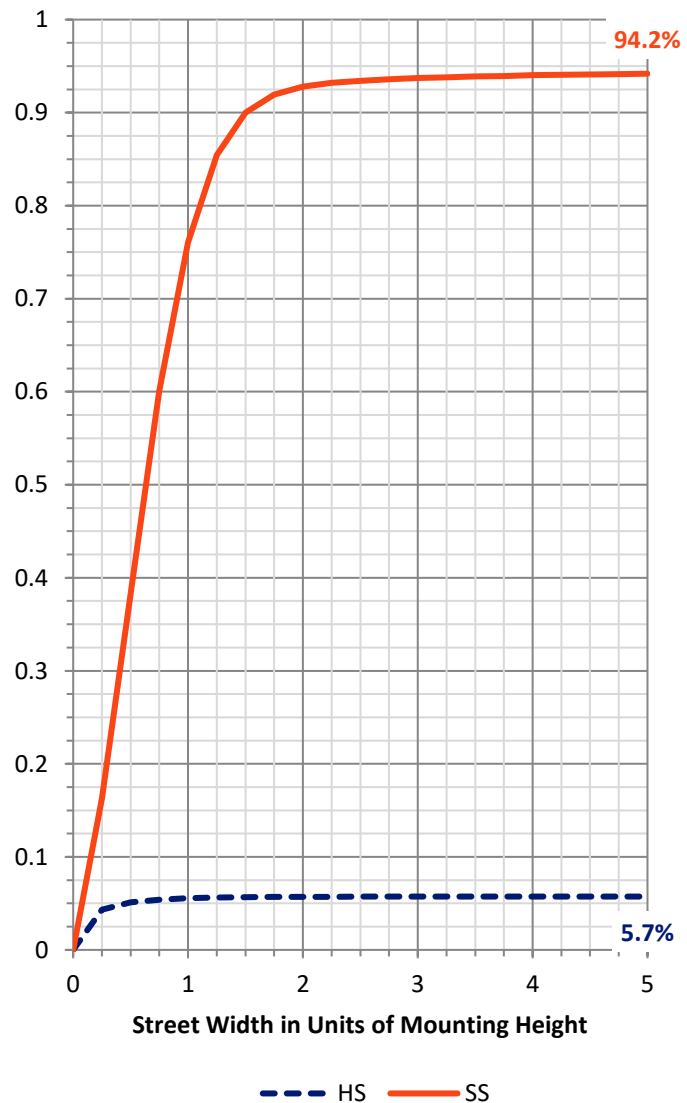
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	869.3	0.0	869.3
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	14202.7	0.0	14202.7
	% Fixture	94.2	0.0	94.2
Total	Lumens	15072.0	0.0	15072.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	1.0
10°-20°	600.5	4.0
20°-30°	1285.0	8.5
30°-40°	2361.8	15.7
40°-50°	3620.7	24.0
50°-60°	3830.2	25.4
60°-70°	2501.2	16.6
70°-80°	683.4	4.5
80°-90°	36.8	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°	15072.0	100.0
0°-180°	15072.0	100.0



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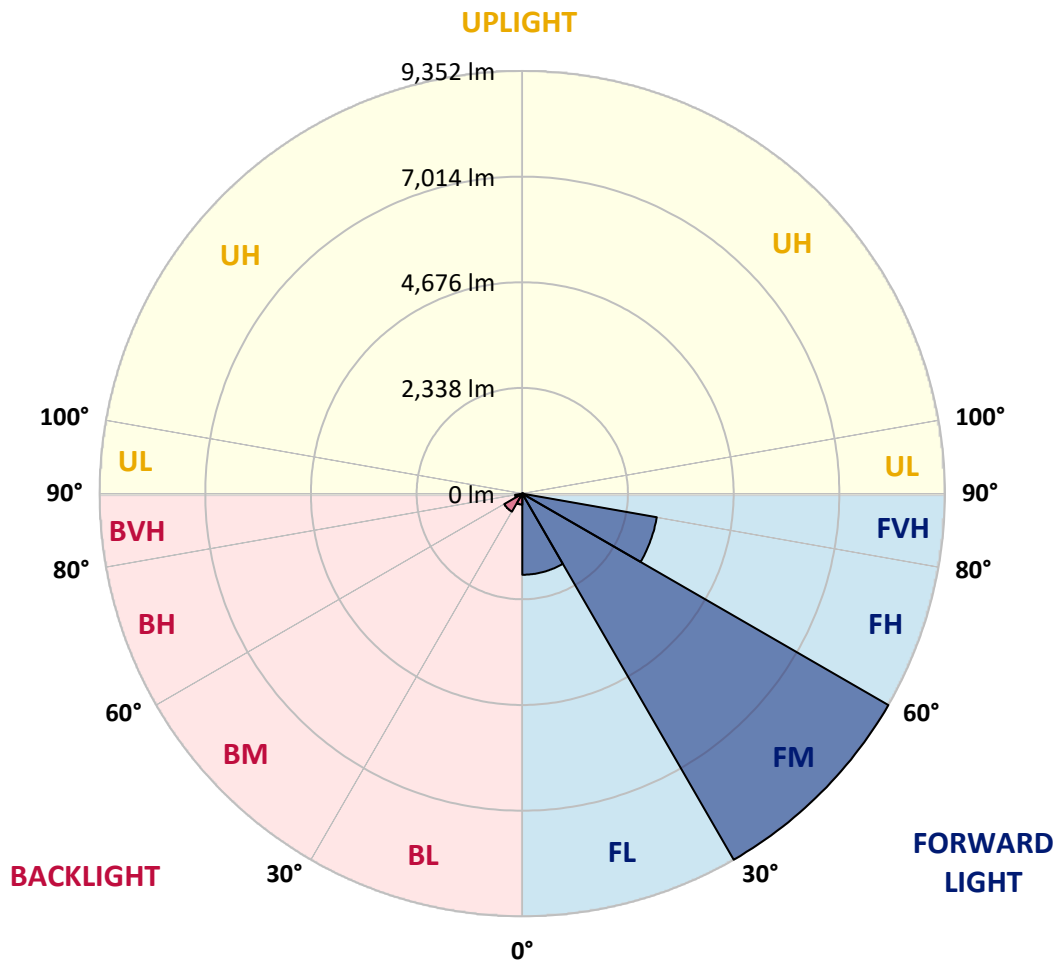
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1795.1	11.9			
FM (30°-60°)	9352.4	62.1			
FH (60°-80°)	3021.4	20.0			G2/5000
FVH (80°-90°)	33.8	0.2			G1/100
BL (0°-30°)	242.8	1.6	B1/500		
BM (30°-60°)	460.2	3.1	B1/1000		
BH (60°-80°)	163.2	1.1	B1/500		G1/500
BVH (80°-90°)	3.0	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°	65°	74°	75°	85°
0°	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1847.1	1830.4	1797.1	1785.7	1736.8	1660.8	1594.2	1504.7	1434.0	1426.7	1341.3
5°	2473.5	2436.1	2420.5	2345.5	2227.9	2117.6	1928.3	1784.6	1619.2	1606.7	1435.0
7.5°	3077.1	3025.1	3009.4	2938.7	2801.3	2627.5	2382.0	2120.8	1858.5	1834.6	1560.9
10°	3514.1	3521.4	3493.3	3446.5	3335.2	3158.3	2855.4	2498.5	2124.9	2094.7	1702.4
12.5°	3827.4	3826.3	3831.5	3830.5	3771.2	3636.9	3318.5	2907.5	2418.4	2359.1	1864.8
15°	4031.3	4034.4	4050.1	4104.2	4110.4	4027.2	3761.8	3298.7	2758.7	2684.8	2040.6
17.5°	4237.4	4259.2	4284.2	4335.2	4381.0	4347.7	4160.4	3706.7	3066.7	3011.5	2229.0
20°	4577.6	4607.8	4593.3	4624.5	4648.4	4651.5	4506.9	4083.4	3440.3	3347.6	2444.4
22.5°	5121.9	5120.8	5083.4	5027.2	4980.4	4978.3	4847.2	4470.5	3779.5	3690.0	2660.8
25°	5809.7	5812.8	5740.0	5579.8	5463.2	5320.6	5169.8	4809.7	4142.7	4032.4	2888.7
27.5°	6598.5	6578.7	6468.4	6247.8	6016.8	5773.3	5555.8	5204.1	4527.7	4436.1	3149.9
30°	7307.2	7299.9	7170.8	6901.3	6597.5	6352.9	6037.6	5698.4	5026.1	4913.8	3442.3
32.5°	7966.9	7977.3	7798.3	7519.5	7226.0	6944.0	6611.0	6170.8	5515.2	5356.0	3760.8
35°	8482.0	8492.4	8307.2	8075.1	7773.4	7539.2	7221.8	6674.5	5998.1	5863.8	4127.1
37.5°	8756.7	8770.3	8663.1	8488.3	8299.9	8182.3	7886.8	7322.8	6585.0	6503.8	4560.0
40°	8808.8	8824.4	8777.5	8730.7	8720.3	8804.6	8718.2	8086.6	7398.7	7271.8	5205.1
42.5°	8652.7	8673.5	8694.3	8798.4	9010.6	9319.7	9620.4	9123.0	8446.6	8276.0	5993.9
45°	8242.7	8240.6	8322.8	8592.3	9067.9	9727.6	10563.2	10420.7	9874.4	9671.4	7108.4
47.5°	7541.3	7530.9	7708.8	8092.8	8833.7	9802.5	11332.2	11996.2	11696.5	11509.2	8306.2
50°	6472.6	6523.6	6803.5	7339.4	8252.0	9575.7	11569.5	13029.5	13191.8	12993.1	9273.9
52.5°	5220.7	5218.7	5657.8	6385.2	7390.4	9076.2	11404.0	13216.8	13677.8	13525.9	9750.5
55°	3863.8	3890.8	4347.7	5081.3	6271.8	8164.6	10864.0	13024.3	13863.0	13755.8	10064.8
57°	2874.2	2922.0	3288.3	4064.6	5297.7	7262.4	10144.9	12679.8	13935.9	13877.6	10326.0
57.5°	2682.7	2684.8	3041.7	3747.2	5012.6	6915.9	9938.9	12536.2	13933.8	13901.5	10368.6
60°	1651.4	1703.5	1950.1	2532.8	3669.2	5397.6	8558.0	11711.0	13825.5	13872.4	10550.7
62.5°	988.6	1010.4	1170.7	1526.6	2365.3	3939.8	7003.3	10654.8	13543.5	13686.1	10538.3
65°	635.8	641.0	713.9	924.1	1478.7	2662.9	5396.6	9259.4	12814.1	13076.3	10126.2
67.5°	491.2	499.5	528.6	606.7	857.5	1658.7	3817.0	7770.2	11634.0	11972.2	9127.2
70°	436.0	440.2	450.6	475.6	567.1	936.5	2374.7	6069.9	9647.5	9743.2	7142.7
72.5°	355.9	367.3	399.6	407.9	449.5	584.8	1321.6	4074.0	6482.0	6505.9	3995.9
75°	275.8	277.8	325.7	349.6	378.8	402.7	590.0	2054.2	3113.5	2947.0	1540.1
77.5°	206.0	215.4	237.3	267.4	309.1	288.2	264.3	774.2	966.7	949.0	447.5
80°	132.2	137.4	165.5	200.8	240.4	188.4	148.8	226.9	212.3	218.5	107.2
82.5°	66.6	67.6	106.1	163.4	153.0	94.7	93.7	92.6	79.1	78.0	49.9
85°	7.3	15.6	68.7	93.7	68.7	31.2	43.7	42.7	41.6	42.7	29.1
87.5°	1.0	1.0	11.4	13.5	9.4	10.4	12.5	13.5	16.6	15.6	12.5
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°	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1299.7	1258.1	1181.1	1107.2	1052.1	1016.7	970.9	954.2	930.3	927.2	915.7
5°	1355.9	1276.8	1142.6	1036.4	951.1	886.6	830.4	783.6	746.1	737.8	742.0
7.5°	1436.0	1318.5	1131.1	986.5	867.9	757.6	668.1	612.9	573.4	558.8	560.9
10°	1526.6	1373.6	1129.1	933.4	752.4	617.1	519.3	470.4	447.5	439.1	429.8
12.5°	1633.8	1437.1	1123.9	851.2	625.4	492.2	422.5	393.4	371.5	365.3	365.3
15°	1754.5	1504.7	1098.9	749.2	507.8	406.9	360.1	337.2	329.9	323.6	323.6
17.5°	1880.4	1571.3	1046.9	623.3	421.4	348.6	319.5	305.9	295.5	288.2	288.2
20°	2024.0	1636.9	963.6	512.0	355.9	311.1	288.2	272.6	264.3	258.1	256.0
22.5°	2160.3	1690.0	857.5	420.4	310.1	279.9	259.1	242.5	234.1	231.0	231.0
25°	2301.8	1722.2	729.5	347.6	283.0	253.9	231.0	217.5	210.2	208.1	207.1
27.5°	2439.2	1740.9	617.1	303.9	258.1	230.0	208.1	197.7	190.4	188.4	189.4
30°	2605.7	1744.1	507.8	272.6	236.2	207.1	187.3	177.9	173.8	171.7	170.7
32.5°	2774.3	1739.9	426.7	253.9	215.4	187.3	170.7	163.4	160.3	157.1	157.1
35°	2963.7	1718.0	363.2	235.2	195.6	170.7	156.1	149.8	145.7	142.6	141.5
37.5°	3198.8	1706.6	326.8	214.4	177.9	155.1	141.5	135.3	132.2	128.0	127.0
40°	3569.3	1757.6	315.3	195.6	160.3	140.5	128.0	120.7	116.5	112.4	111.3
42.5°	4031.3	1847.1	296.6	176.9	144.6	127.0	114.5	106.1	98.9	93.7	91.6
45°	4629.7	1964.7	267.4	157.1	131.1	112.4	100.9	90.5	81.2	77.0	76.0
47.5°	5257.2	2078.1	241.4	141.5	116.5	99.9	87.4	76.0	67.6	64.5	63.5
50°	5642.2	2101.0	224.8	123.8	102.0	86.4	73.9	63.5	58.3	55.2	55.2
52.5°	5818.1	2064.6	201.9	108.2	88.5	76.0	63.5	55.2	52.0	49.9	48.9
55°	5940.8	2008.4	171.7	93.7	76.0	64.5	56.2	49.9	45.8	43.7	42.7
57°	6012.6	1932.4	148.8	82.2	65.6	56.2	49.9	44.7	40.6	36.4	36.4
57.5°	6015.8	1903.3	142.6	81.2	62.4	54.1	48.9	43.7	38.5	34.3	33.3
60°	5923.2	1703.5	114.5	68.7	49.9	45.8	40.6	34.3	27.1	22.9	21.9
62.5°	5625.5	1449.6	94.7	58.3	40.6	35.4	29.1	26.0	18.7	13.5	13.5
65°	5175.0	1175.9	81.2	46.8	33.3	26.0	19.8	18.7	11.4	6.2	5.2
67.5°	4523.5	915.7	68.7	38.5	28.1	18.7	13.5	12.5	6.2	2.1	0.0
70°	3446.5	624.4	57.2	31.2	20.8	13.5	9.4	7.3	4.2	1.0	0.0
72.5°	1986.5	343.4	47.9	23.9	15.6	10.4	7.3	4.2	4.2	0.0	0.0
75°	709.7	147.8	36.4	17.7	12.5	8.3	5.2	2.1	3.1	1.0	0.0
77.5°	225.8	79.1	23.9	13.5	10.4	6.2	4.2	2.1	2.1	1.0	0.0
80°	66.6	41.6	14.6	11.4	7.3	5.2	3.1	1.0	2.1	1.0	0.0
82.5°	36.4	20.8	11.4	8.3	7.3	4.2	3.1	1.0	1.0	1.0	0.0
85°	18.7	12.5	9.4	8.3	7.3	4.2	3.1	1.0	0.0	1.0	1.0
87.5°	10.4	9.4	9.4	8.3	7.3	5.2	3.1	1.0	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)