

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: P652353

Luminaire Tested: **GALN-SA4B-840-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652353  
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-840-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 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: 15156.5 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

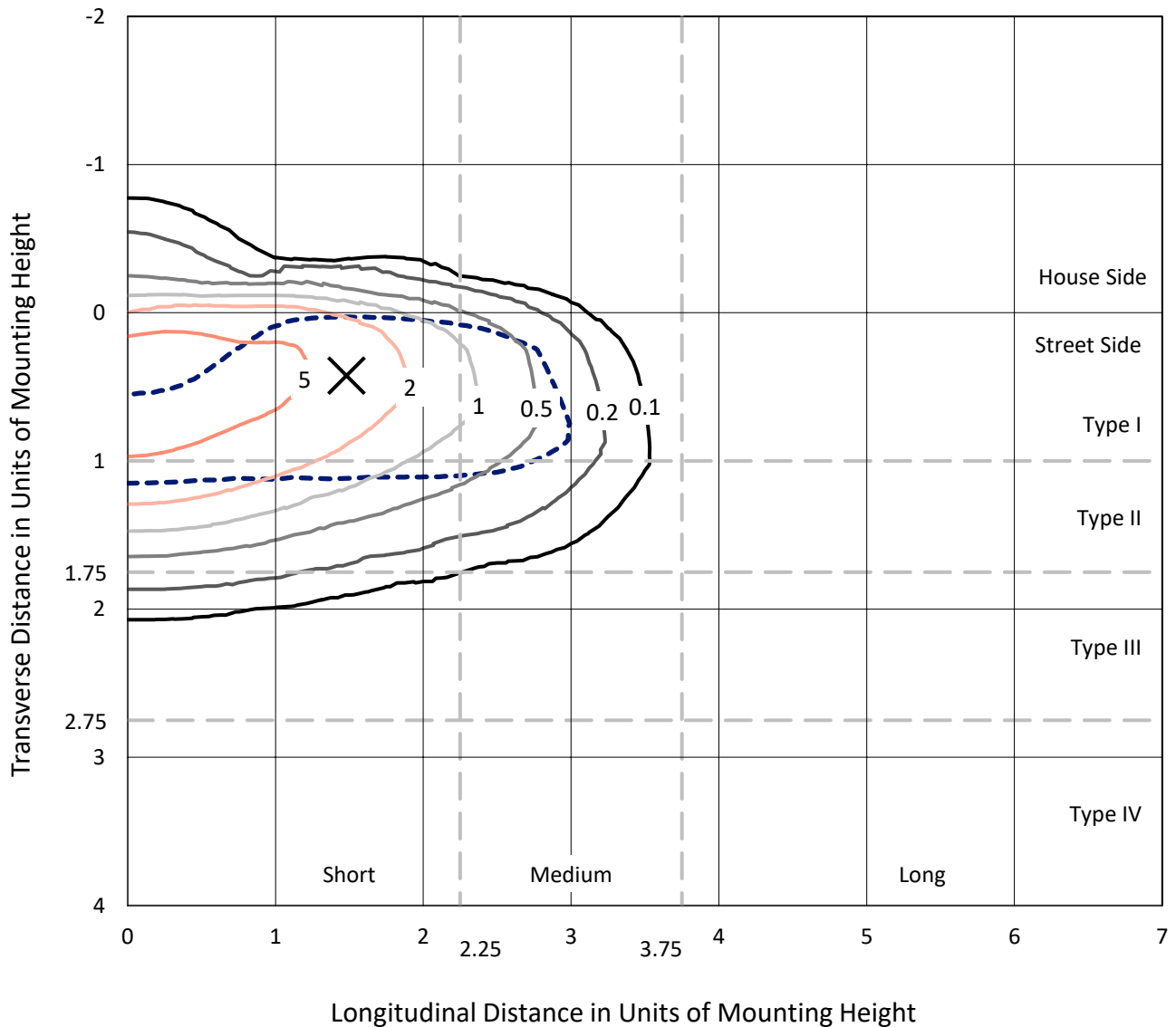
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

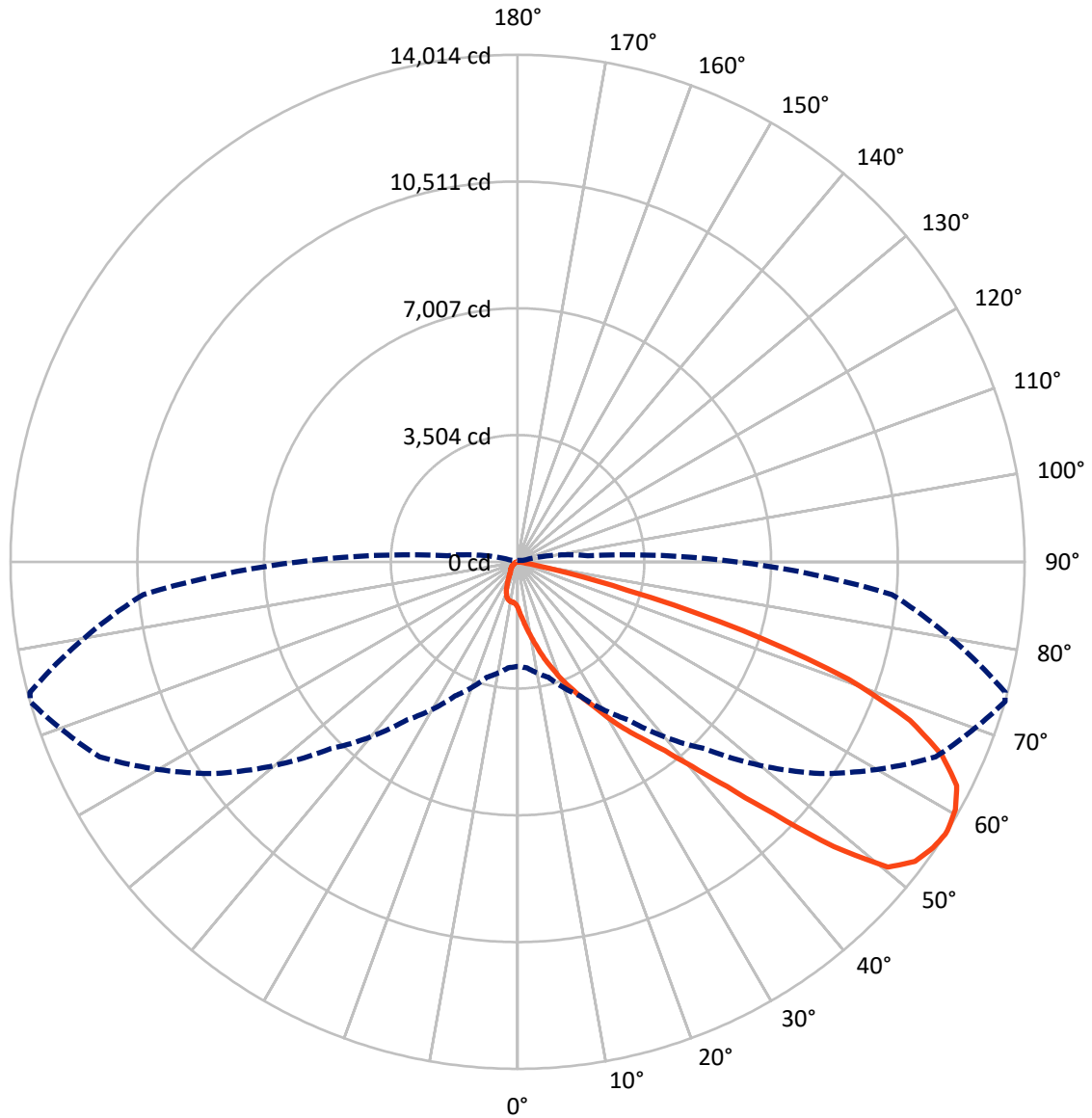
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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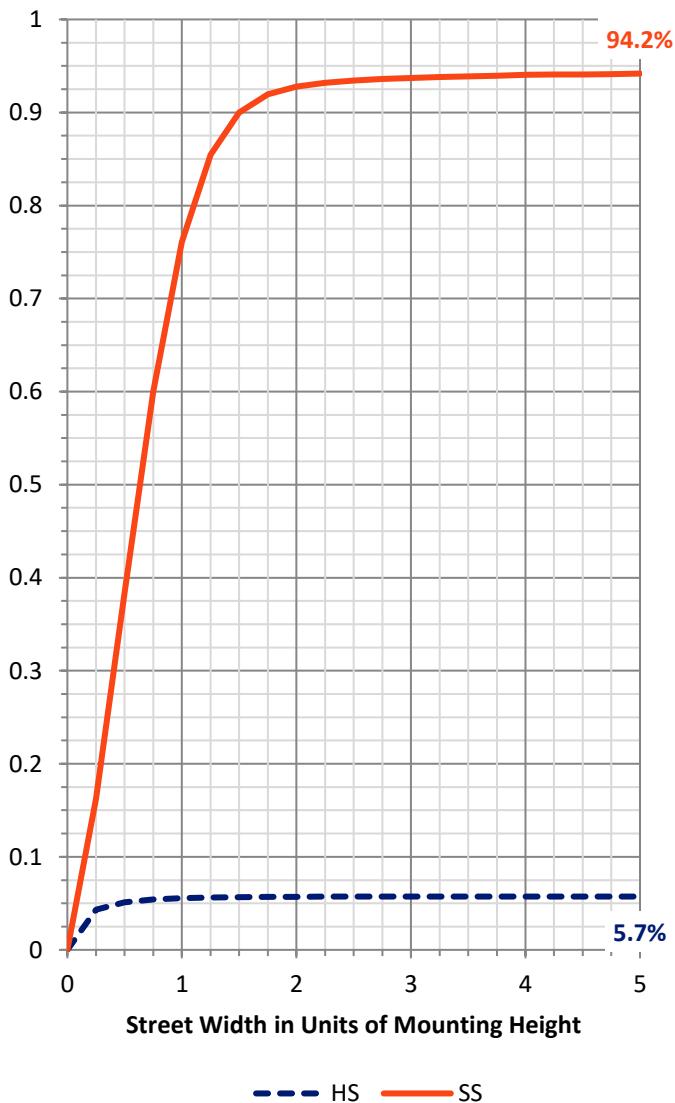
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	874.2	0.0	874.2
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	14282.3	0.0	14282.3
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	15156.5	0.0	15156.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.2	1.0
10°-20°	603.9	4.0
20°-30°	1292.2	8.5
30°-40°	2375.0	15.7
40°-50°	3641.0	24.0
50°-60°	3851.7	25.4
60°-70°	2515.2	16.6
70°-80°	687.2	4.5
80°-90°	37.0	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°	15156.5	100.0
0°-180°	15156.5	100.0

**Coefficient of Utilization**

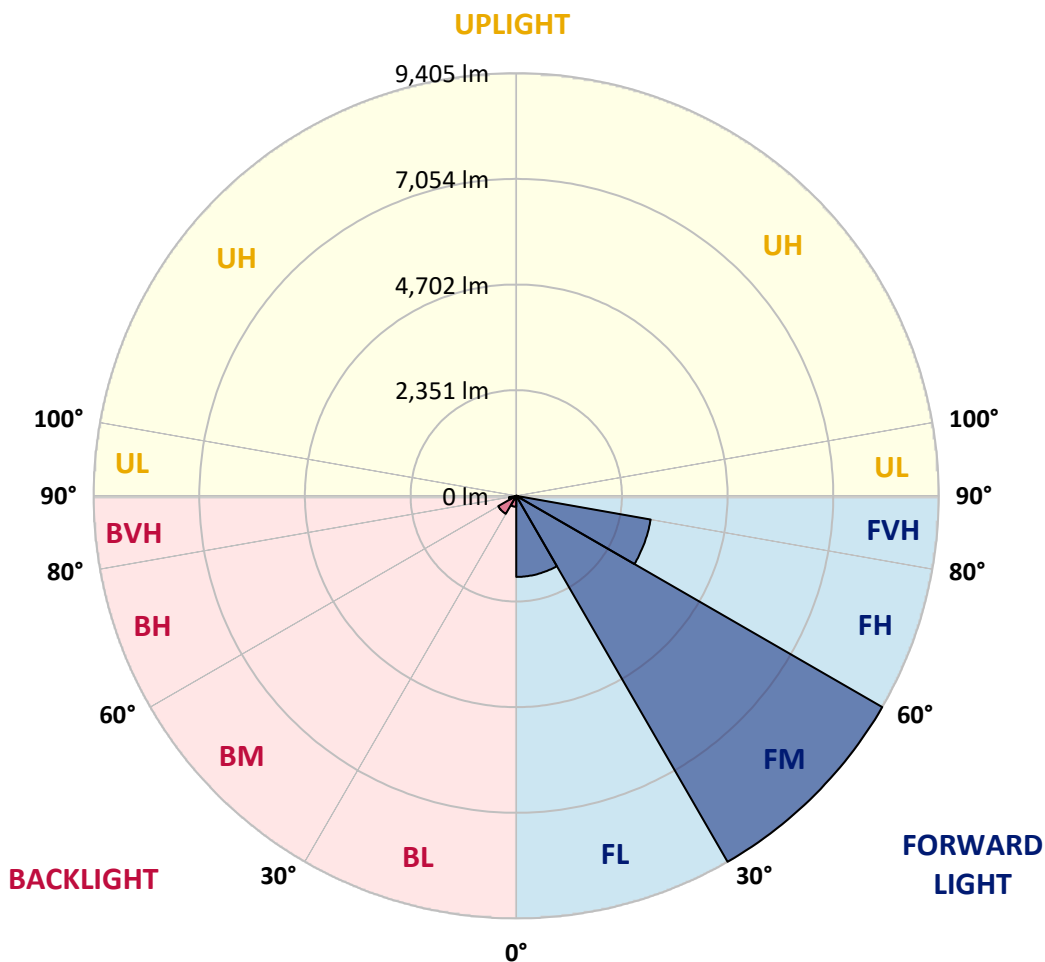


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1805.1	11.9			
FM (30°-60°)	9404.9	62.1			
FH (60°-80°)	3038.4	20.0			G2/5000
FVH (80°-90°)	33.9	0.2			G1/100
BL (0°-30°)	244.2	1.6	B1/500		
BM (30°-60°)	462.8	3.1	B1/1000		
BH (60°-80°)	164.1	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°	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3
2.5°	1857.4	1840.7	1807.2	1795.7	1746.5	1670.1	1603.1	1513.1	1442.0	1434.7	1348.9
5°	2487.4	2449.7	2434.0	2358.7	2240.4	2129.5	1939.1	1794.7	1628.3	1615.7	1443.1
7.5°	3094.4	3042.0	3026.3	2955.2	2817.0	2642.3	2395.3	2132.7	1869.0	1844.9	1569.6
10°	3533.9	3541.2	3512.9	3465.8	3353.8	3176.0	2871.4	2512.5	2136.8	2106.5	1712.0
12.5°	3848.8	3847.7	3853.0	3851.9	3792.3	3657.3	3337.1	2923.7	2431.9	2372.3	1875.3
15°	4054.0	4057.1	4072.8	4127.2	4133.4	4049.8	3782.9	3317.2	2774.1	2699.9	2052.0
17.5°	4261.1	4283.1	4308.2	4359.5	4405.5	4372.0	4183.7	3727.4	3083.9	3028.4	2241.5
20°	4603.3	4633.7	4619.0	4650.4	4674.4	4677.6	4532.1	4106.3	3459.5	3366.4	2458.1
22.5°	5150.6	5149.5	5111.9	5055.3	5008.3	5006.2	4874.4	4495.6	3800.6	3710.7	2675.7
25°	5842.3	5845.5	5772.2	5611.1	5493.8	5350.4	5198.7	4836.7	4165.9	4055.0	2904.9
27.5°	6635.5	6615.6	6504.7	6282.9	6050.6	5805.7	5586.9	5233.3	4553.1	4461.0	3167.6
30°	7348.2	7340.8	7211.1	6940.0	6634.5	6388.6	6071.4	5730.3	5054.3	4941.3	3461.6
32.5°	8011.6	8022.0	7842.1	7561.6	7266.5	6982.9	6648.0	6205.4	5546.1	5386.0	3781.8
35°	8529.6	8540.0	8353.7	8120.4	7816.9	7581.5	7262.3	6711.9	6031.7	5896.8	4150.2
37.5°	8805.9	8819.4	8711.7	8535.8	8346.4	8228.2	7931.0	7363.8	6621.9	6540.3	4585.6
40°	8858.2	8873.8	8826.8	8779.7	8769.2	8854.0	8767.1	8131.9	7440.2	7312.6	5234.3
42.5°	8701.2	8722.1	8743.0	8847.7	9061.2	9371.9	9674.4	9174.2	8494.0	8322.4	6027.5
45°	8288.9	8286.8	8369.5	8640.5	9118.7	9782.2	10622.4	10479.1	9929.7	9725.7	7148.2
47.5°	7583.5	7573.1	7752.1	8138.2	8883.2	9857.5	11395.8	12063.4	11762.1	11573.7	8352.7
50°	6508.9	6560.1	6841.6	7380.5	8298.3	9629.4	11634.4	13102.5	13265.8	13065.9	9325.9
52.5°	5250.0	5247.9	5689.5	6421.0	7431.8	9127.1	11468.0	13290.9	13754.5	13601.7	9805.2
55°	3885.4	3912.7	4372.0	5109.7	6306.9	8210.4	10924.8	13097.3	13940.8	13832.9	10121.2
57°	2890.3	2938.5	3306.7	4087.4	5327.5	7303.2	10201.8	12750.9	14014.0	13955.4	10383.9
57.5°	2697.8	2699.9	3058.7	3768.3	5040.7	6954.6	9994.6	12606.5	14011.9	13979.4	10426.8
60°	1660.7	1713.0	1961.0	2547.1	3689.8	5427.9	8606.0	11776.7	13903.1	13950.2	10609.9
62.5°	994.1	1016.1	1177.2	1535.2	2378.6	3961.9	7042.5	10714.5	13619.5	13762.9	10597.4
65°	639.4	644.6	717.9	929.2	1487.0	2677.8	5426.9	9311.3	12885.9	13149.6	10182.9
67.5°	493.9	502.3	531.6	610.1	862.3	1668.0	3838.3	7813.8	11699.2	12039.3	9178.3
70°	438.5	442.6	453.1	478.2	570.3	941.8	2388.0	6103.9	9701.6	9797.9	7182.8
72.5°	357.8	369.4	401.8	410.2	452.0	588.1	1328.9	4096.8	6518.3	6542.4	4018.4
75°	277.3	279.4	327.6	351.6	380.9	404.9	593.3	2065.7	3131.0	2963.5	1548.7
77.5°	207.2	216.6	238.6	269.0	310.8	289.9	265.8	778.5	972.1	954.4	449.9
80°	132.9	138.1	166.3	201.9	241.7	189.4	149.6	228.2	213.4	219.8	107.8
82.5°	66.9	68.0	106.7	164.3	153.8	95.2	94.2	93.1	79.6	78.5	50.2
85°	7.3	15.7	69.0	94.2	69.0	31.4	44.0	42.9	41.9	42.9	29.3
87.5°	1.0	1.0	11.5	13.6	9.4	10.4	12.5	13.6	16.7	15.7	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°	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3	1269.3
2.5°	1307.0	1265.1	1187.7	1113.4	1058.0	1022.4	976.3	959.6	935.5	932.4	920.9
5°	1363.5	1284.0	1149.0	1042.3	956.5	891.5	835.0	787.9	750.3	741.9	746.1
7.5°	1444.1	1325.8	1137.5	992.0	872.7	761.8	671.8	616.4	576.6	562.0	564.1
10°	1535.2	1381.3	1135.4	938.6	756.6	620.6	522.2	473.0	449.9	441.6	432.2
12.5°	1642.9	1445.2	1130.1	856.0	628.9	494.9	424.9	395.5	373.6	367.3	367.3
15°	1764.3	1513.1	1105.1	753.5	510.7	409.1	362.1	339.0	331.7	325.5	325.5
17.5°	1890.9	1580.2	1052.8	626.8	423.8	350.5	321.3	307.6	297.2	289.9	289.9
20°	2035.3	1646.1	969.0	514.9	357.8	312.9	289.9	274.2	265.8	259.5	257.4
22.5°	2172.4	1699.4	862.3	422.8	311.8	281.5	260.5	243.8	235.5	232.3	232.3
25°	2314.8	1731.9	733.5	349.5	284.6	255.3	232.3	218.7	211.3	209.3	208.2
27.5°	2452.9	1750.7	620.6	305.5	259.5	231.3	209.3	198.8	191.5	189.4	190.5
30°	2620.3	1753.8	510.7	274.2	237.6	208.2	188.4	179.0	174.8	172.7	171.6
32.5°	2789.8	1749.6	429.1	255.3	216.6	188.4	171.6	164.3	161.1	158.0	158.0
35°	2980.3	1727.7	365.2	236.5	196.7	171.6	156.9	150.7	146.5	143.4	142.3
37.5°	3216.7	1716.1	328.6	215.5	179.0	155.9	142.3	136.1	132.9	128.7	127.7
40°	3589.3	1767.4	317.1	196.7	161.1	141.3	128.7	121.4	117.2	113.0	111.9
42.5°	4054.0	1857.4	298.2	177.9	145.5	127.7	115.1	106.7	99.4	94.2	92.1
45°	4655.6	1975.7	269.0	158.0	131.9	113.0	101.5	91.1	81.7	77.5	76.4
47.5°	5286.6	2089.7	242.8	142.3	117.2	100.5	87.9	76.4	68.0	64.8	63.8
50°	5673.8	2112.8	226.1	124.6	102.5	86.9	74.3	63.8	58.6	55.4	55.4
52.5°	5850.7	2076.2	203.0	108.8	89.0	76.4	63.8	55.4	52.3	50.2	49.2
55°	5974.1	2019.7	172.7	94.2	76.4	64.8	56.5	50.2	46.0	44.0	42.9
57°	6046.4	1943.2	149.6	82.7	65.9	56.5	50.2	45.0	40.8	36.7	36.7
57.5°	6049.5	1913.9	143.4	81.7	62.8	54.4	49.2	44.0	38.7	34.6	33.5
60°	5956.4	1713.0	115.1	69.0	50.2	46.0	40.8	34.6	27.2	23.0	22.0
62.5°	5657.1	1457.7	95.2	58.6	40.8	35.6	29.3	26.2	18.8	13.6	13.6
65°	5203.9	1182.4	81.7	47.1	33.5	26.2	19.8	18.8	11.5	6.3	5.2
67.5°	4548.9	920.9	69.0	38.7	28.3	18.8	13.6	12.5	6.3	2.1	0.0
70°	3465.8	627.9	57.5	31.4	20.9	13.6	9.4	7.3	4.2	1.0	0.0
72.5°	1997.6	345.3	48.1	24.1	15.7	10.4	7.3	4.2	4.2	0.0	0.0
75°	713.7	148.6	36.7	17.8	12.5	8.4	5.2	2.1	3.1	1.0	0.0
77.5°	227.1	79.6	24.1	13.6	10.4	6.3	4.2	2.1	2.1	1.0	0.0
80°	66.9	41.9	14.6	11.5	7.3	5.2	3.1	1.0	2.1	1.0	0.0
82.5°	36.7	20.9	11.5	8.4	7.3	4.2	3.1	1.0	1.0	1.0	0.0
85°	18.8	12.5	9.4	8.4	7.3	4.2	3.1	1.0	0.0	1.0	1.0
87.5°	10.4	9.4	9.4	8.4	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)