

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: P652146

Luminaire Tested: **GALN-SA9A-840-U-T4W-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652146  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)  
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-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25222.5 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

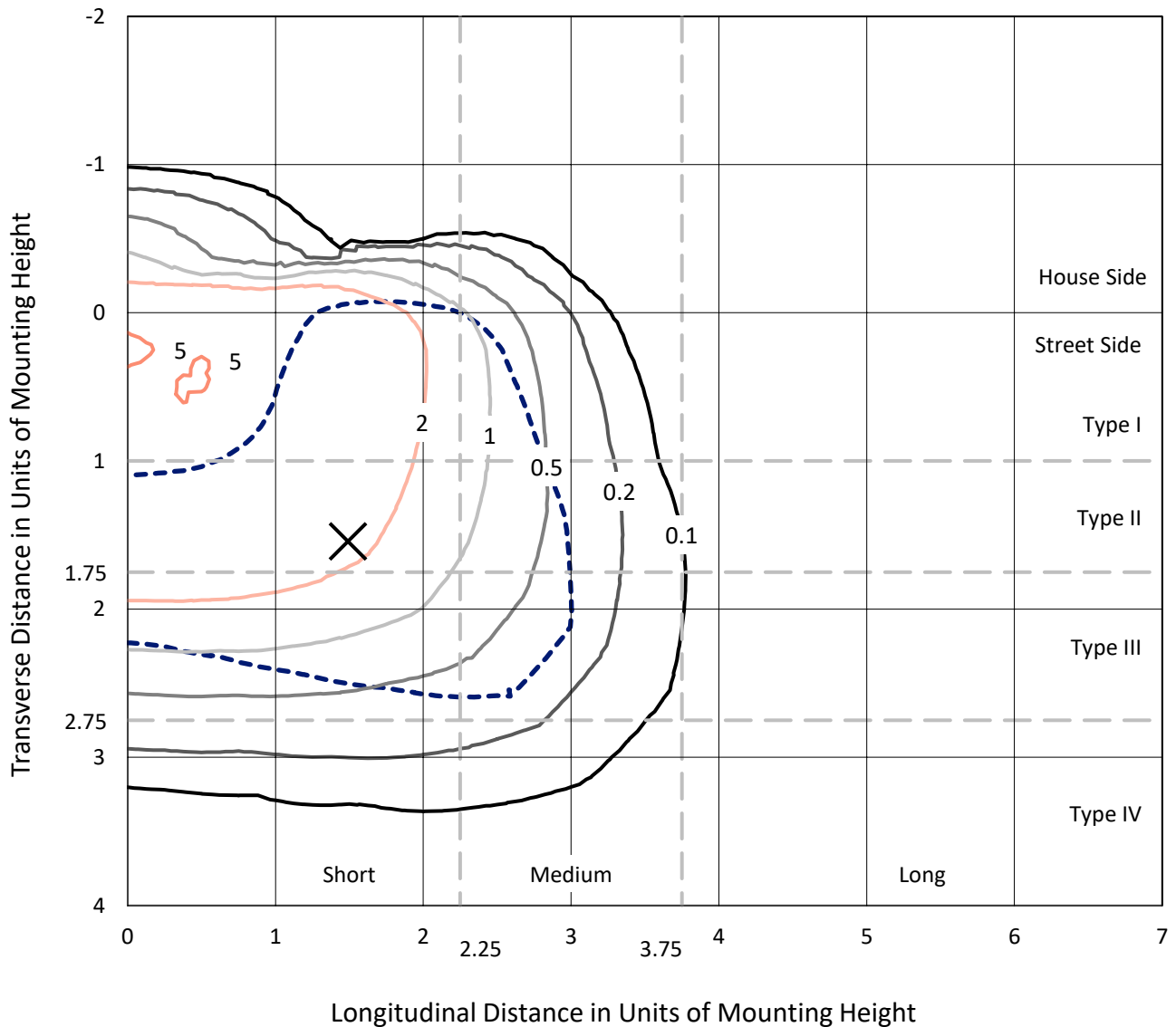
Input Watts (W): 274  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

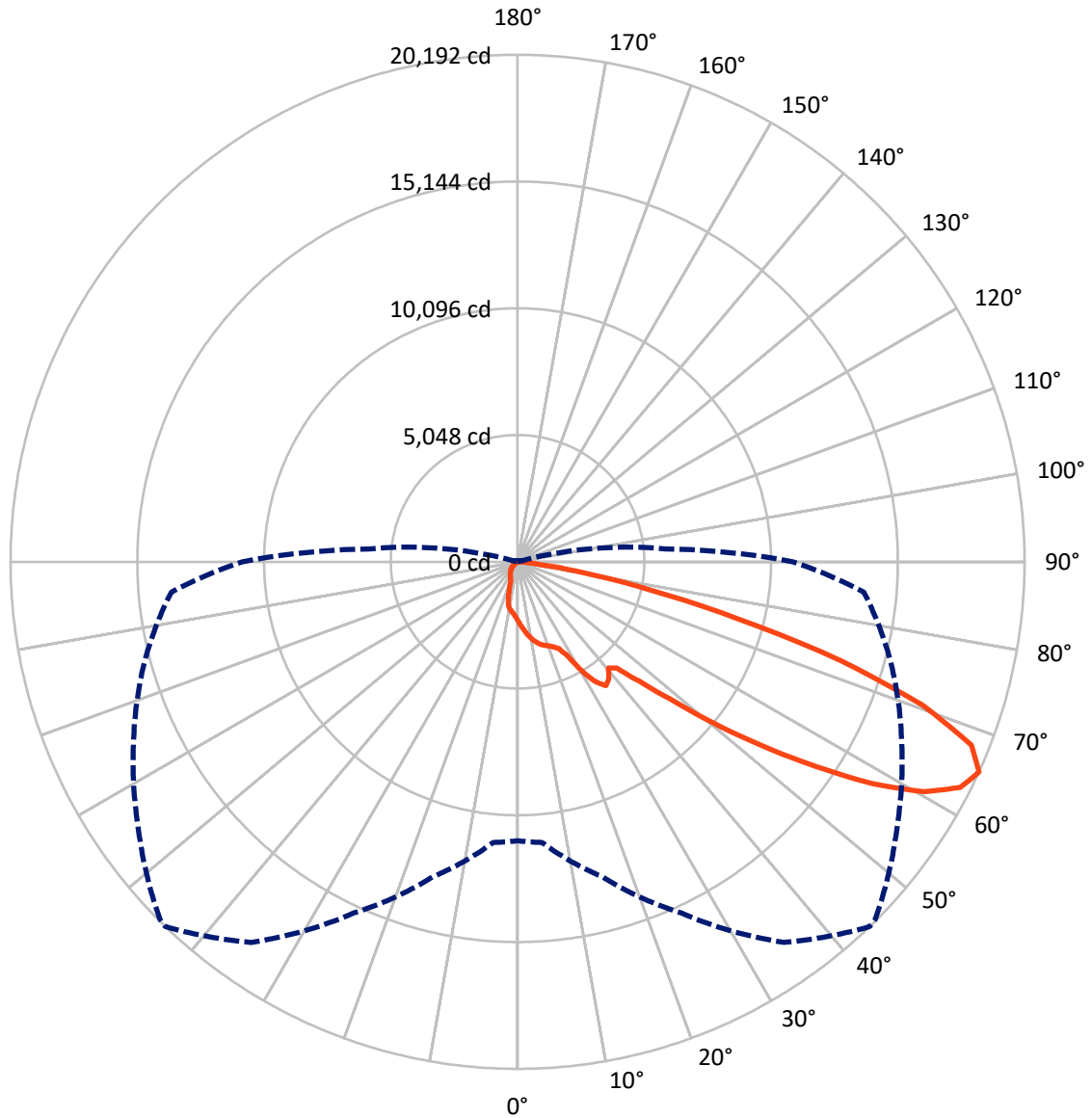
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P652146  
CATALOG NUMBER: GALN-SA9A-840-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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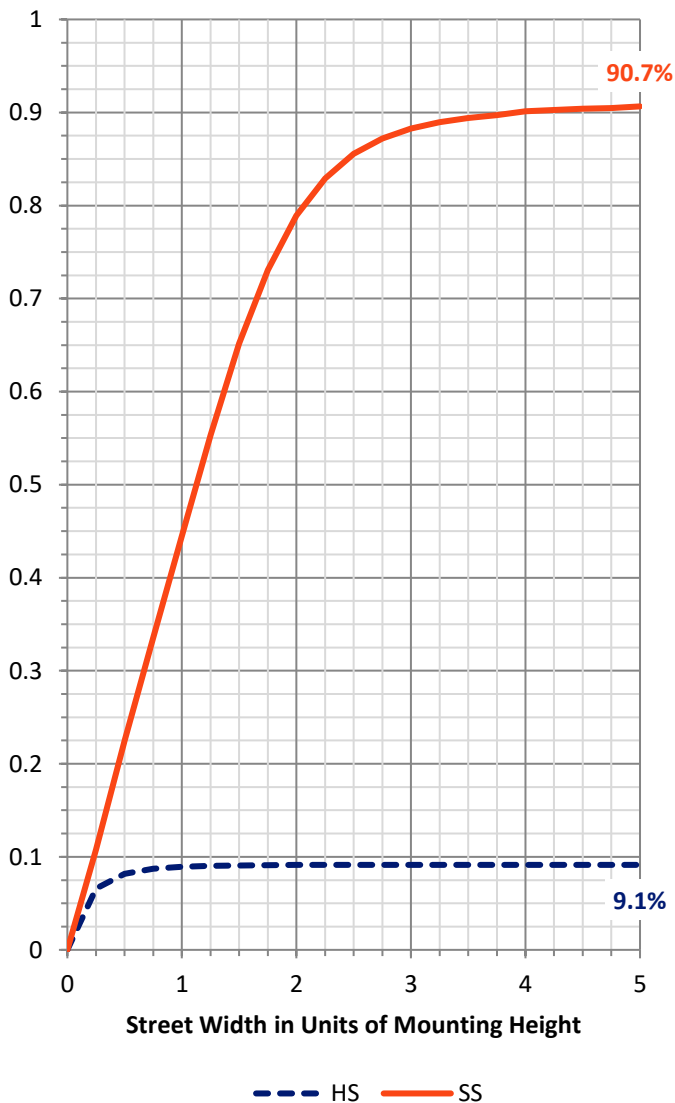
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2323.9	0.0	2323.9
	% Fixture	9.2	0.0	9.2
<b>Street Side</b>	Lumens	22898.6	0.0	22898.6
	% Fixture	90.8	0.0	90.8
<b>Total</b>	Lumens	25222.5	0.0	25222.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.5	0.9
10°-20°	702.7	2.8
20°-30°	1191.5	4.7
30°-40°	1981.1	7.9
40°-50°	3459.0	13.7
50°-60°	6757.7	26.8
60°-70°	7840.6	31.1
70°-80°	2855.1	11.3
80°-90°	201.2	0.8
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°	25222.5	100.0
0°-180°	25222.5	100.0

**Coefficient of Utilization**

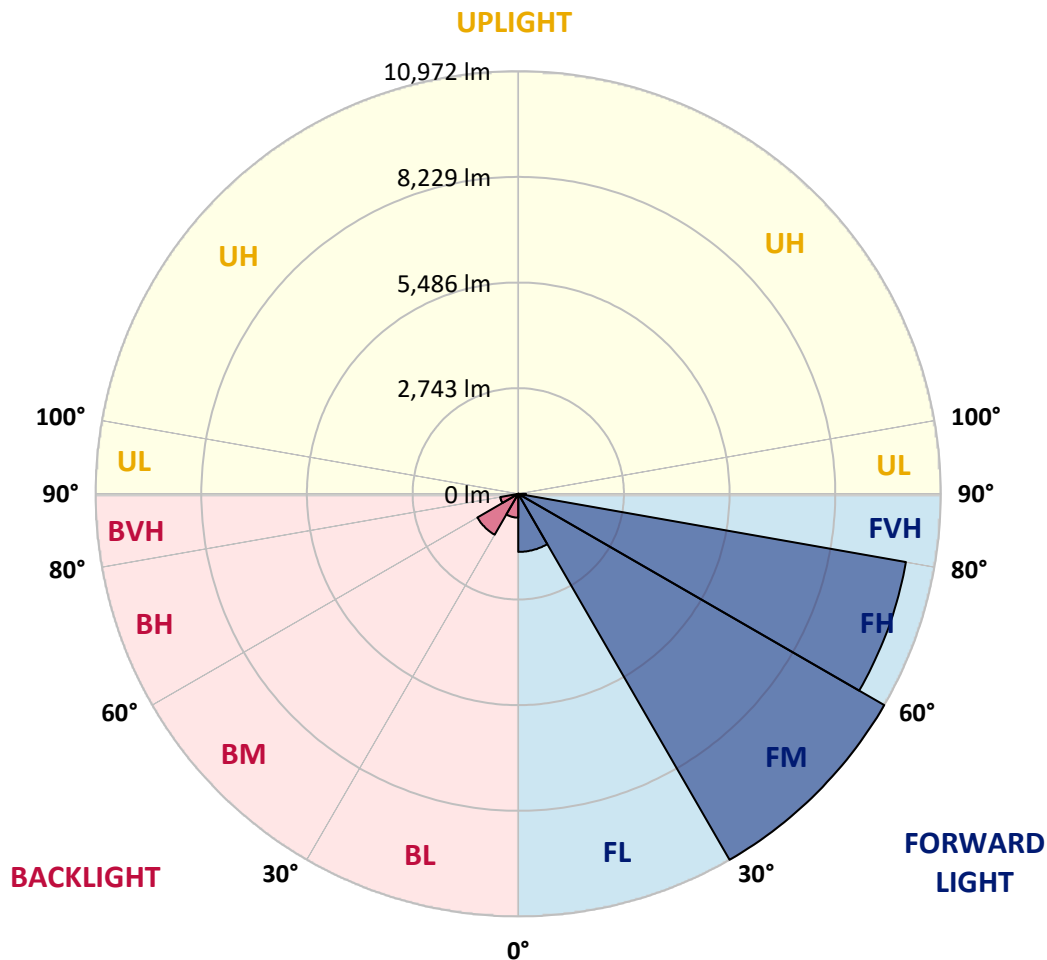


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1508.5	6.0			
FM (30°-60°)	10971.8	43.5			
FH (60°-80°)	10219.8	40.5			G4/12000
FVH (80°-90°)	198.4	0.8			G2/225
BL (0°-30°)	619.2	2.5	B2/1000		
BM (30°-60°)	1226.1	4.9	B2/2500		
BH (60°-80°)	475.9	1.9	B1/500		G1/500
BVH (80°-90°)	2.7	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°	44°	45°	55°	65°	75°	85°
0°	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5
2.5°	2642.3	2630.7	2625.0	2594.1	2571.0	2542.1	2542.1	2505.5	2463.1	2416.9	2374.5
5°	2937.2	2917.9	2892.9	2865.9	2812.0	2734.8	2734.8	2657.7	2569.1	2490.1	2403.3
7.5°	3220.5	3203.2	3160.8	3108.8	3020.1	2939.1	2933.3	2821.6	2715.6	2596.1	2472.7
10°	3469.1	3455.7	3419.0	3318.8	3226.3	3120.3	3118.3	2993.1	2869.7	2723.2	2571.0
12.5°	3642.6	3644.6	3596.4	3500.0	3380.5	3280.2	3272.6	3149.2	3020.1	2862.0	2675.1
15°	3765.9	3765.9	3715.9	3607.9	3500.0	3411.3	3403.6	3295.7	3162.7	2991.2	2788.8
17.5°	3800.6	3812.2	3758.3	3661.9	3575.2	3498.1	3496.1	3405.5	3299.6	3133.8	2904.5
20°	3787.2	3798.7	3756.3	3681.1	3621.4	3577.1	3571.3	3534.6	3436.4	3280.2	3027.8
22.5°	3758.3	3769.8	3739.0	3694.7	3665.8	3679.2	3669.6	3700.4	3648.4	3459.5	3174.3
25°	3764.1	3775.6	3752.5	3727.4	3752.5	3835.3	3860.4	3993.4	3947.1	3686.9	3332.3
27.5°	3945.2	3968.3	3935.5	3947.1	4035.8	4228.5	4276.7	4506.1	4301.7	3976.0	3579.0
30°	4348.0	4332.6	4270.9	4326.8	4635.2	5043.7	5030.3	4993.6	4673.7	4309.5	3872.0
32.5°	4714.2	4700.7	4696.8	4937.8	5496.7	5695.2	5685.6	5330.9	5007.1	4691.1	4161.0
35°	4862.6	4810.5	4799.0	5383.0	6317.7	6055.6	5995.8	5469.7	5411.8	5107.4	4456.0
37.5°	5309.7	5273.1	5093.9	5456.2	5990.0	5903.3	5857.1	5708.7	5843.6	5475.5	4789.3
40°	6231.0	6128.8	5966.9	5612.3	5525.5	5562.2	5608.5	6015.1	6354.3	5978.5	5234.6
42.5°	7375.8	7352.7	7052.0	6390.9	5741.4	5791.5	5851.3	6655.0	7088.6	6735.9	5961.2
45°	8749.9	8782.7	8349.1	7568.5	6716.6	6759.0	6845.8	7599.4	8083.1	7913.5	7104.0
47.5°	9998.8	9973.8	9827.3	9015.9	8229.6	8135.2	8275.9	8811.7	9459.2	9486.2	8522.5
50°	11255.4	11388.4	11170.7	10852.7	10268.7	10070.1	10018.2	10280.2	11267.0	11137.9	10226.3
52.5°	13061.3	13130.7	12722.1	12641.2	12774.2	12130.4	12078.4	12142.0	13024.7	12581.4	11502.2
55°	14196.5	14156.0	14003.8	14635.9	15162.1	14358.4	14292.9	14036.5	14483.7	13601.0	12729.9
57.5°	14555.0	14612.8	14967.4	16110.4	17355.4	16673.1	16553.6	15825.1	15536.0	14551.2	13859.3
60°	14395.1	14501.0	15266.2	16966.1	18692.9	18590.8	18488.6	17264.8	16291.5	15345.2	14651.4
62.5°	13256.0	13404.4	14628.3	16813.8	19145.9	19783.8	19656.6	18162.9	16794.5	15730.7	14790.2
65°	11109.0	11218.9	12976.5	15431.9	18502.1	20192.3	20146.1	18444.3	16873.6	15377.9	13840.0
67.5°	7919.3	8293.2	9921.8	13005.5	16598.0	19494.7	19573.7	18107.0	16131.6	13853.5	11461.7
70°	4978.2	5232.6	6400.6	9310.8	13306.1	17102.9	17363.1	16563.2	14000.0	10798.7	7672.6
72.5°	2374.5	2563.3	3395.9	5893.7	9391.8	13456.4	13662.6	13597.1	10825.7	6803.4	3958.7
75°	1058.1	1129.4	1620.9	3008.5	6063.3	9044.9	9578.7	9667.4	6764.8	3328.4	1540.0
77.5°	539.7	541.6	759.3	1457.0	3027.8	5396.4	5502.4	5812.7	3667.7	1466.7	535.8
80°	287.2	306.5	402.8	688.0	1570.7	2657.7	2644.3	2906.4	1626.7	718.9	179.2
82.5°	129.1	142.6	227.4	360.4	767.1	1007.9	1087.0	1189.2	697.7	458.7	79.1
85°	38.5	46.3	111.8	181.2	277.5	291.0	325.7	420.2	395.1	325.7	40.5
87.5°	5.8	5.8	46.3	50.1	40.5	52.1	54.0	59.7	127.2	119.5	21.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P652146

CATALOG NUMBER: GALN-SA9A-840-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5
2.5°	2351.4	2337.8	2289.6	2249.2	2214.4	2193.2	2168.2	2152.8	2145.1	2139.3	2141.3
5°	2360.9	2328.2	2245.3	2179.8	2129.7	2075.7	2039.1	2017.9	2008.2	1992.8	1992.8
7.5°	2414.9	2362.9	2247.2	2147.0	2060.3	1987.0	1917.6	1892.6	1875.3	1871.4	1867.5
10°	2492.0	2426.5	2268.4	2129.7	2006.3	1906.1	1807.8	1721.1	1653.7	1613.1	1607.4
12.5°	2588.3	2493.9	2301.2	2118.1	1960.0	1782.8	1522.5	1347.2	1229.6	1193.0	1198.8
15°	2677.0	2574.9	2333.9	2108.5	1875.3	1478.2	1183.4	983.0	923.2	917.4	919.3
17.5°	2783.0	2661.6	2372.5	2095.0	1642.1	1129.4	878.8	824.9	836.5	855.7	853.8
20°	2892.9	2754.1	2418.8	2014.0	1310.5	849.9	776.7	782.5	799.8	817.2	821.1
22.5°	3010.4	2860.2	2472.7	1819.3	1000.3	740.1	736.2	743.9	761.3	780.5	784.4
25°	3172.3	2993.1	2513.2	1564.9	757.4	684.2	691.9	705.4	720.8	742.0	745.9
27.5°	3380.5	3172.3	2534.4	1233.5	655.3	634.1	636.0	655.3	674.6	693.8	693.8
30°	3650.3	3386.3	2492.0	932.8	605.2	585.9	578.2	589.8	614.8	634.1	636.0
32.5°	3891.2	3588.6	2380.2	713.1	568.5	541.6	522.3	524.2	533.9	545.4	547.3
35°	4132.2	3785.3	2189.4	599.4	530.0	499.1	470.3	454.8	447.2	441.4	447.2
37.5°	4440.5	4030.0	1935.0	545.4	497.3	458.7	418.2	385.4	358.5	341.1	345.0
40°	4837.5	4369.2	1634.3	510.7	466.4	420.2	366.2	323.8	277.5	262.1	254.4
42.5°	5492.8	4883.8	1318.3	481.8	435.6	379.7	312.3	254.4	212.0	196.6	200.4
45°	6527.8	5533.3	1015.7	451.0	404.8	335.4	262.1	200.4	165.8	158.0	161.9
47.5°	7900.0	6373.6	782.5	416.3	366.2	287.2	206.2	158.0	136.8	134.9	133.0
50°	9191.3	7156.1	653.4	377.8	319.9	239.0	169.6	133.0	119.5	117.6	117.6
52.5°	10359.3	7716.9	531.9	333.5	269.8	196.6	142.6	117.6	106.0	100.2	100.2
55°	11398.1	8083.1	431.7	279.5	212.0	156.1	123.4	106.0	92.5	84.8	82.8
57.5°	12182.5	8127.4	323.8	223.5	158.0	121.4	106.0	92.5	77.1	67.4	63.6
60°	12517.9	7743.9	239.0	169.6	117.6	96.4	84.8	75.2	57.9	48.2	46.3
62.5°	12180.5	6998.0	177.3	129.1	90.6	71.3	59.7	55.9	40.5	28.9	27.0
65°	10972.1	5920.6	140.7	98.3	67.4	52.1	38.5	36.6	25.1	13.5	11.6
67.5°	8790.5	4637.1	111.8	73.3	48.2	34.7	25.1	23.1	13.5	3.9	3.9
70°	5716.4	2964.2	90.6	54.0	30.9	23.1	15.4	11.6	7.7	1.9	0.0
72.5°	2827.4	1385.7	73.3	42.4	21.2	11.6	5.8	3.9	5.8	0.0	0.0
75°	1096.7	493.4	54.0	28.9	11.6	5.8	3.9	0.0	1.9	0.0	0.0
77.5°	364.2	163.8	32.8	15.4	7.7	3.9	0.0	0.0	0.0	0.0	0.0
80°	134.9	63.6	17.3	9.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0
82.5°	54.0	25.1	11.6	7.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	27.0	15.4	7.7	5.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.3	11.6	7.7	5.8	3.9	1.9	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)