

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: P454298

Luminaire Tested: **GALN-SA5B-827-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454298
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-SA5B-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 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: 16771 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

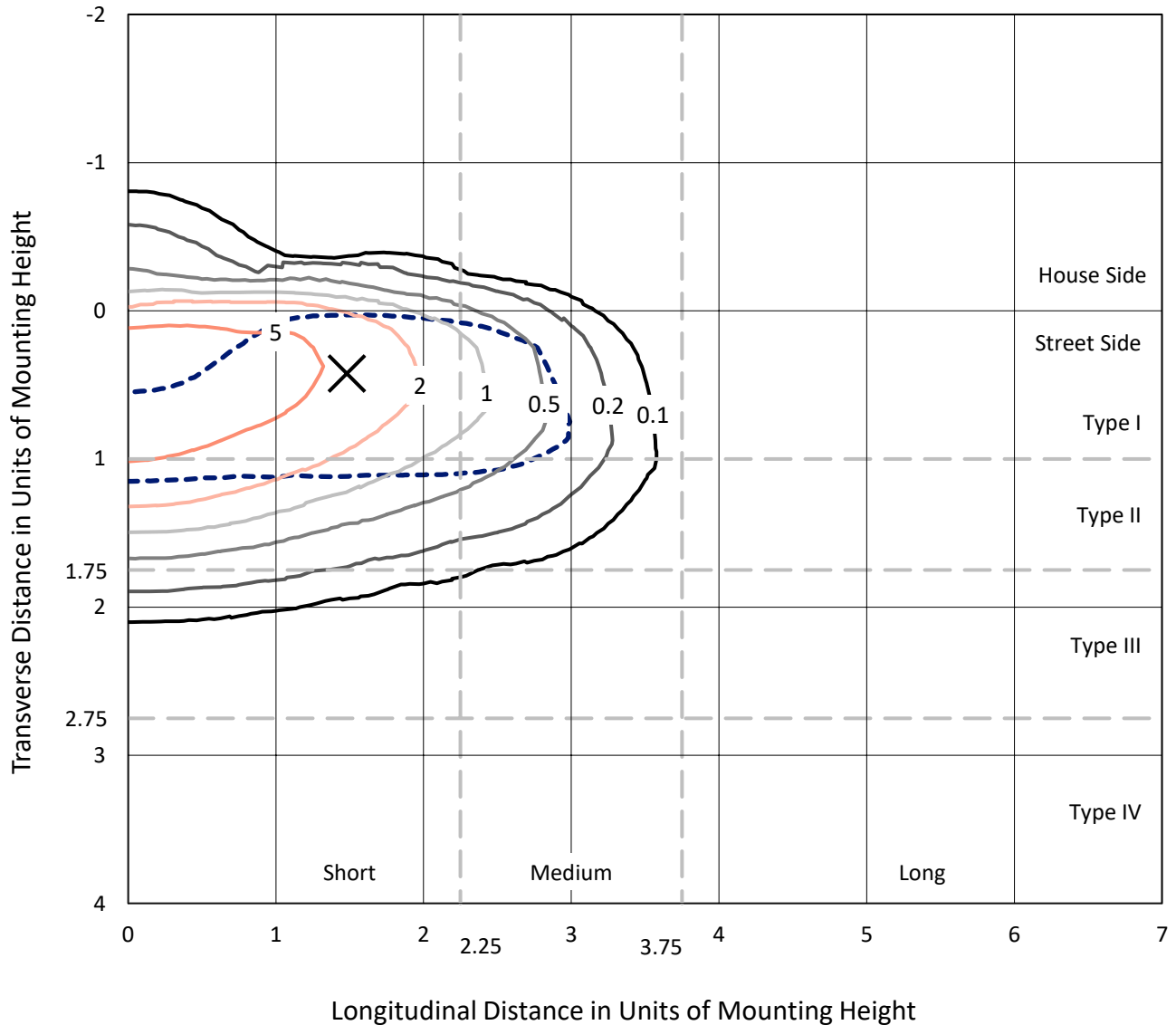
Input Watts (W): 204
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

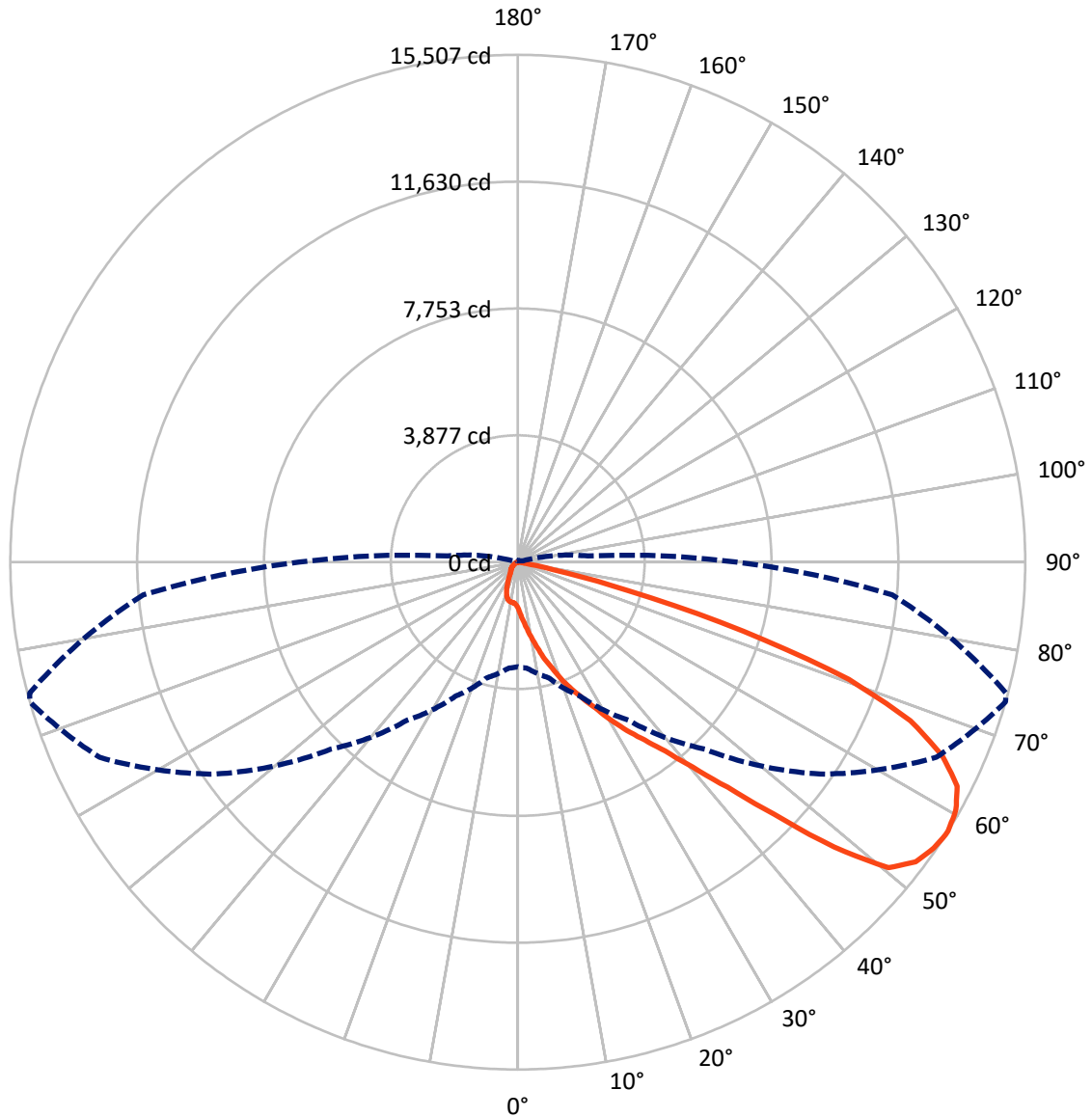
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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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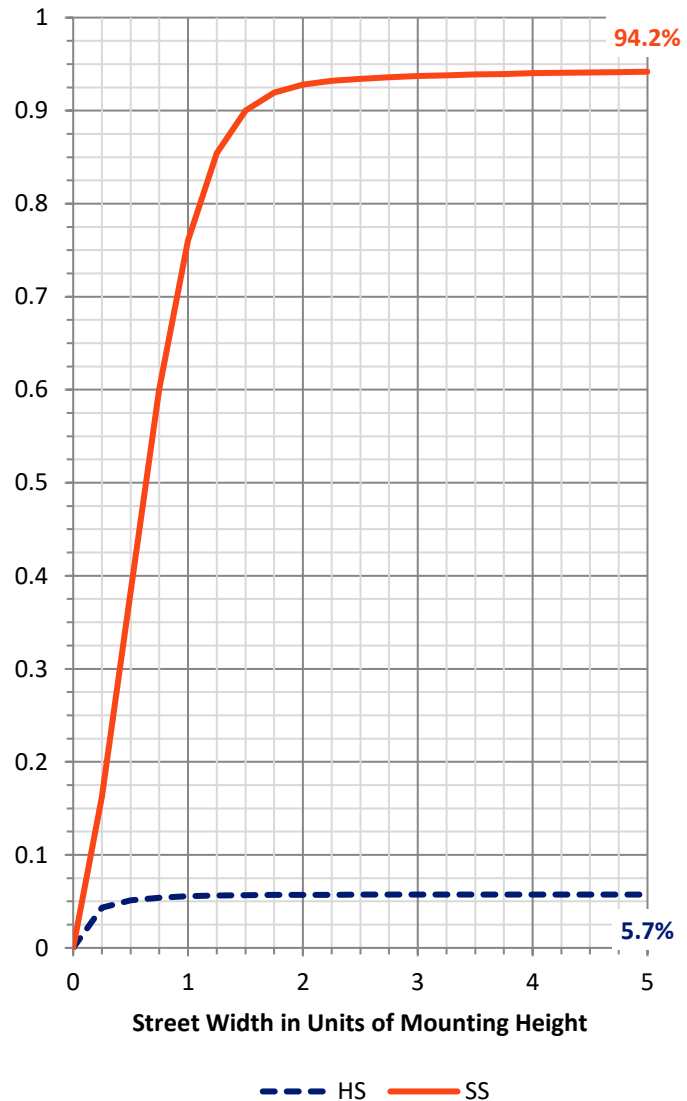
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	967.3	0.0	967.3
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	15803.7	0.0	15803.7
	% Fixture	94.2	0.0	94.2
Total	Lumens	16771.0	0.0	16771.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.5	1.0
10°-20°	668.2	4.0
20°-30°	1429.8	8.5
30°-40°	2628.0	15.7
40°-50°	4028.8	24.0
50°-60°	4262.0	25.4
60°-70°	2783.2	16.6
70°-80°	760.5	4.5
80°-90°	40.9	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°	16771.0	100.0
0°-180°	16771.0	100.0



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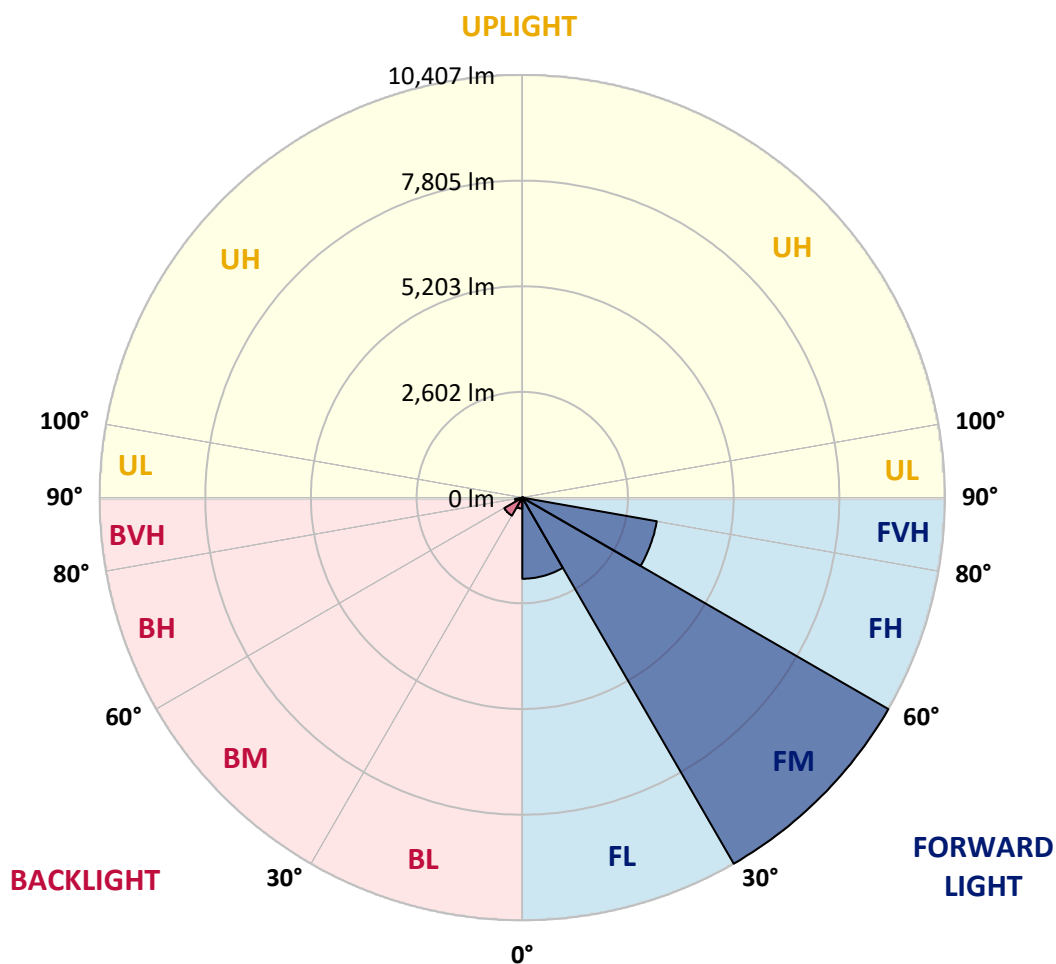
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1997.4	11.9			
FM (30°-60°)	10406.7	62.1			
FH (60°-80°)	3362.0	20.0			G2/5000
FVH (80°-90°)	37.6	0.2			G1/100
BL (0°-30°)	270.2	1.6	B1/500		
BM (30°-60°)	512.1	3.1	B1/1000		
BH (60°-80°)	181.6	1.1	B1/500		G1/500
BVH (80°-90°)	3.4	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°	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5
2.5°	2055.3	2036.8	1999.7	1987.0	1932.6	1848.0	1773.9	1674.3	1595.6	1587.5	1492.6
5°	2752.4	2710.7	2693.3	2609.9	2479.1	2356.4	2145.6	1985.8	1801.7	1787.8	1596.8
7.5°	3424.0	3366.1	3348.7	3269.9	3117.1	2923.7	2650.5	2359.8	2068.0	2041.4	1736.9
10°	3910.3	3918.4	3887.1	3835.0	3711.1	3514.3	3177.3	2780.2	2364.5	2330.9	1894.3
12.5°	4258.8	4257.6	4263.4	4262.3	4196.3	4046.9	3692.6	3235.2	2691.0	2625.0	2075.0
15°	4485.8	4489.2	4506.6	4566.8	4573.8	4481.1	4185.9	3670.6	3069.6	2987.4	2270.7
17.5°	4715.0	4739.3	4767.1	4823.9	4874.8	4837.8	4629.3	4124.5	3412.4	3351.0	2480.3
20°	5093.7	5127.2	5111.0	5145.8	5172.4	5175.9	5014.9	4543.7	3828.1	3725.0	2719.9
22.5°	5699.3	5698.1	5656.4	5593.9	5541.8	5539.5	5393.6	4974.4	4205.5	4106.0	2960.8
25°	6464.6	6468.1	6387.1	6208.7	6079.0	5920.4	5752.5	5351.9	4609.7	4486.9	3214.4
27.5°	7342.3	7320.3	7197.6	6952.1	6695.1	6424.1	6182.1	5790.7	5038.1	4936.2	3505.0
30°	8130.9	8122.8	7979.2	7679.3	7341.2	7069.1	6718.2	6340.7	5592.7	5467.7	3830.4
32.5°	8865.0	8876.6	8677.4	8367.1	8040.6	7726.8	7356.2	6866.4	6136.9	5959.8	4184.7
35°	9438.2	9449.7	9243.6	8985.4	8649.6	8389.1	8035.9	7426.9	6674.2	6524.8	4592.3
37.5°	9743.8	9758.9	9639.6	9445.1	9235.5	9104.7	8775.8	8148.2	7327.3	7237.0	5074.0
40°	9801.7	9819.1	9767.0	9714.9	9703.3	9797.1	9701.0	8998.1	8232.8	8091.5	5791.9
42.5°	9628.1	9651.2	9674.4	9790.2	10026.4	10370.3	10704.9	10151.4	9398.8	9208.9	6669.6
45°	9171.8	9169.5	9261.0	9560.9	10090.1	10824.2	11754.0	11595.3	10987.4	10761.7	7909.7
47.5°	8391.4	8379.8	8577.8	9005.1	9829.5	10907.5	12609.7	13348.4	13015.0	12806.5	9242.5
50°	7202.2	7259.0	7570.4	8166.8	9182.3	10655.1	12873.7	14498.2	14678.9	14457.7	10319.3
52.5°	5809.3	5806.9	6295.6	7105.0	8223.5	10099.3	12689.6	14706.7	15219.6	15050.6	10849.7
55°	4299.3	4329.4	4837.8	5654.1	6978.7	9085.0	12088.6	14492.4	15425.7	15306.5	11199.3
57°	3198.2	3251.4	3659.0	4522.8	5894.9	8081.1	11288.5	14109.2	15506.8	15441.9	11490.0
57.5°	2985.1	2987.4	3384.6	4169.6	5577.7	7695.5	11059.2	13949.4	15504.5	15468.6	11537.5
60°	1837.6	1895.5	2169.9	2818.4	4082.8	6006.1	9522.7	13031.2	15384.0	15436.1	11740.1
62.5°	1100.0	1124.3	1302.7	1698.7	2631.9	4383.9	7792.8	11855.9	15070.2	15228.9	11726.2
65°	707.5	713.3	794.3	1028.2	1645.4	2963.1	6004.9	10303.1	14258.6	14550.3	11267.7
67.5°	546.5	555.8	588.2	675.1	954.1	1845.7	4247.2	8646.1	12945.5	13321.8	10156.1
70°	485.2	489.8	501.4	529.2	631.1	1042.1	2642.4	6754.1	10735.0	10841.5	7947.9
72.5°	396.0	408.7	444.6	453.9	500.2	650.7	1470.6	4533.2	7212.6	7239.3	4446.4
75°	306.8	309.2	362.4	389.1	421.5	448.1	656.5	2285.7	3464.5	3279.2	1713.7
77.5°	229.3	239.7	264.0	297.6	343.9	320.7	294.1	861.5	1075.7	1056.0	497.9
80°	147.1	152.8	184.1	223.5	267.5	209.6	165.6	252.4	236.2	243.2	119.3
82.5°	74.1	75.3	118.1	181.8	170.2	105.4	104.2	103.1	88.0	86.8	55.6
85°	8.1	17.4	76.4	104.2	76.4	34.7	48.6	47.5	46.3	47.5	32.4
87.5°	1.2	1.2	12.7	15.1	10.4	11.6	13.9	15.1	18.5	17.4	13.9
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°	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5	1404.5
2.5°	1446.2	1399.9	1314.2	1232.0	1170.7	1131.3	1080.3	1061.8	1035.2	1031.7	1019.0
5°	1508.8	1420.8	1271.4	1153.3	1058.3	986.5	924.0	871.9	830.2	821.0	825.6
7.5°	1597.9	1467.1	1258.7	1097.7	965.7	843.0	743.4	682.0	638.0	621.8	624.1
10°	1698.7	1528.4	1256.3	1038.6	837.2	686.6	577.8	523.4	497.9	488.6	478.2
12.5°	1817.9	1599.1	1250.5	947.2	695.9	547.7	470.1	437.7	413.4	406.4	406.4
15°	1952.2	1674.3	1222.8	833.7	565.1	452.7	400.6	375.2	367.1	360.1	360.1
17.5°	2092.4	1748.4	1164.9	693.6	469.0	387.9	355.5	340.4	328.8	320.7	320.7
20°	2252.1	1821.4	1072.2	569.7	396.0	346.2	320.7	303.4	294.1	287.2	284.8
22.5°	2403.8	1880.5	954.1	467.8	345.1	311.5	288.3	269.8	260.5	257.1	257.1
25°	2561.3	1916.3	811.7	386.7	315.0	282.5	257.1	242.0	233.9	231.6	230.4
27.5°	2714.1	1937.2	686.6	338.1	287.2	255.9	231.6	220.0	211.9	209.6	210.7
30°	2899.4	1940.7	565.1	303.4	262.8	230.4	208.4	198.0	193.4	191.1	189.9
32.5°	3087.0	1936.0	474.7	282.5	239.7	208.4	189.9	181.8	178.3	174.8	174.8
35°	3297.7	1911.7	404.1	261.7	217.7	189.9	173.7	166.7	162.1	158.6	157.5
37.5°	3559.4	1899.0	363.6	238.5	198.0	172.5	157.5	150.5	147.1	142.4	141.3
40°	3971.6	1955.7	350.8	217.7	178.3	156.3	142.4	134.3	129.7	125.1	123.9
42.5°	4485.8	2055.3	330.0	196.8	161.0	141.3	127.4	118.1	110.0	104.2	101.9
45°	5151.6	2186.1	297.6	174.8	145.9	125.1	112.3	100.7	90.3	85.7	84.5
47.5°	5849.8	2312.4	268.6	157.5	129.7	111.2	97.3	84.5	75.3	71.8	70.6
50°	6278.2	2337.8	250.1	137.8	113.5	96.1	82.2	70.6	64.8	61.4	61.4
52.5°	6473.9	2297.3	224.6	120.4	98.4	84.5	70.6	61.4	57.9	55.6	54.4
55°	6610.5	2234.8	191.1	104.2	84.5	71.8	62.5	55.6	50.9	48.6	47.5
57°	6690.4	2150.2	165.6	91.5	72.9	62.5	55.6	49.8	45.2	40.5	40.5
57.5°	6693.9	2117.8	158.6	90.3	69.5	60.2	54.4	48.6	42.8	38.2	37.1
60°	6590.8	1895.5	127.4	76.4	55.6	50.9	45.2	38.2	30.1	25.5	24.3
62.5°	6259.7	1613.0	105.4	64.8	45.2	39.4	32.4	28.9	20.8	15.1	15.1
65°	5758.3	1308.4	90.3	52.1	37.1	28.9	22.0	20.8	12.7	6.9	5.8
67.5°	5033.5	1019.0	76.4	42.8	31.3	20.8	15.1	13.9	6.9	2.3	0.0
70°	3835.0	694.7	63.7	34.7	23.2	15.1	10.4	8.1	4.6	1.2	0.0
72.5°	2210.5	382.1	53.3	26.6	17.4	11.6	8.1	4.6	4.6	0.0	0.0
75°	789.7	164.4	40.5	19.7	13.9	9.3	5.8	2.3	3.5	1.2	0.0
77.5°	251.3	88.0	26.6	15.1	11.6	6.9	4.6	2.3	2.3	1.2	0.0
80°	74.1	46.3	16.2	12.7	8.1	5.8	3.5	1.2	2.3	1.2	0.0
82.5°	40.5	23.2	12.7	9.3	8.1	4.6	3.5	1.2	1.2	1.2	0.0
85°	20.8	13.9	10.4	9.3	8.1	4.6	3.5	1.2	0.0	1.2	1.2
87.5°	11.6	10.4	10.4	9.3	8.1	5.8	3.5	1.2	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)