

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: P451290

Luminaire Tested: **GALN-SA2A-827-U-T4W-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451290  
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-SA2A-827-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 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: 4891 lumens  
Efficiency: N/A  
Efficacy: 77.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

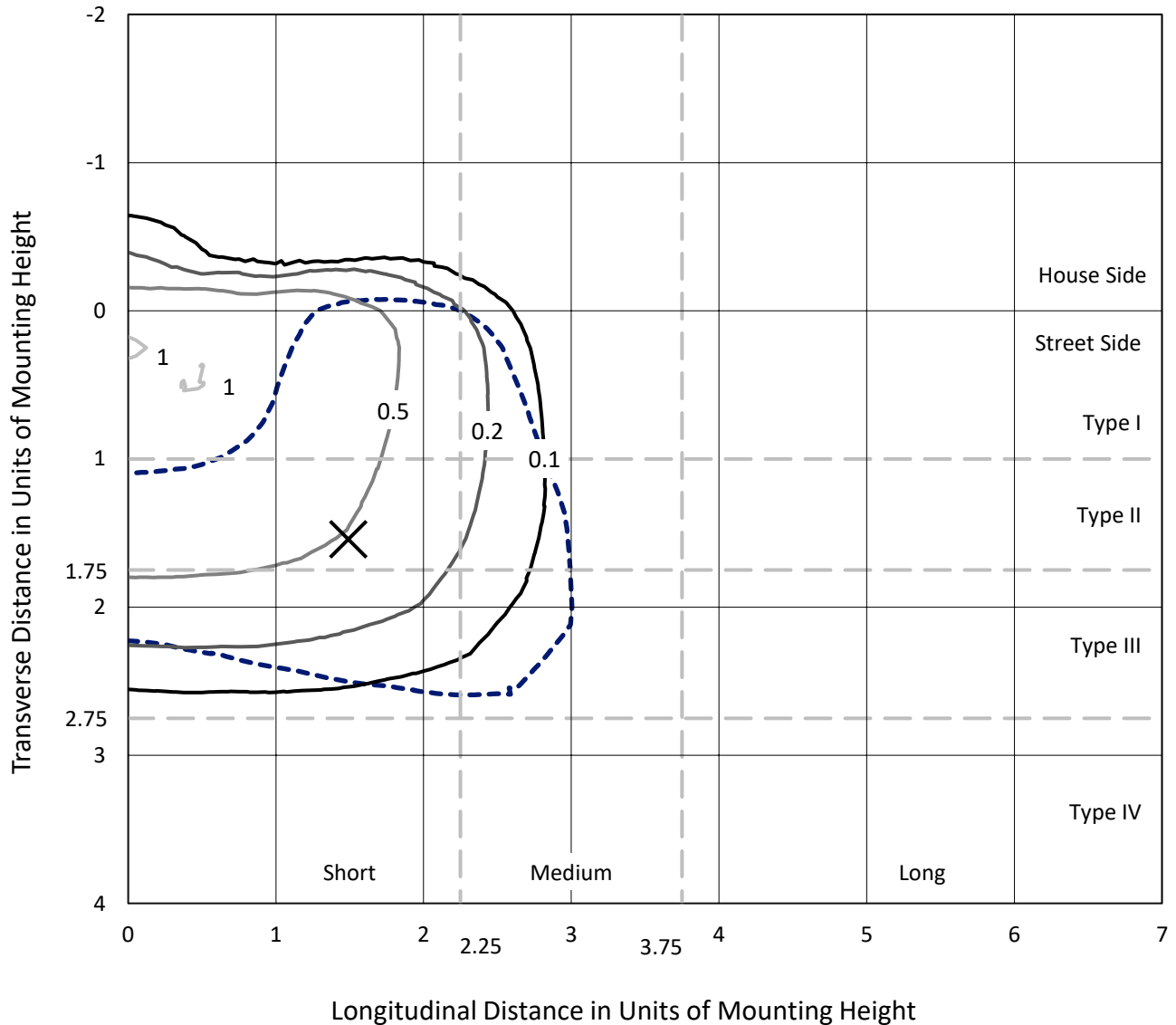
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

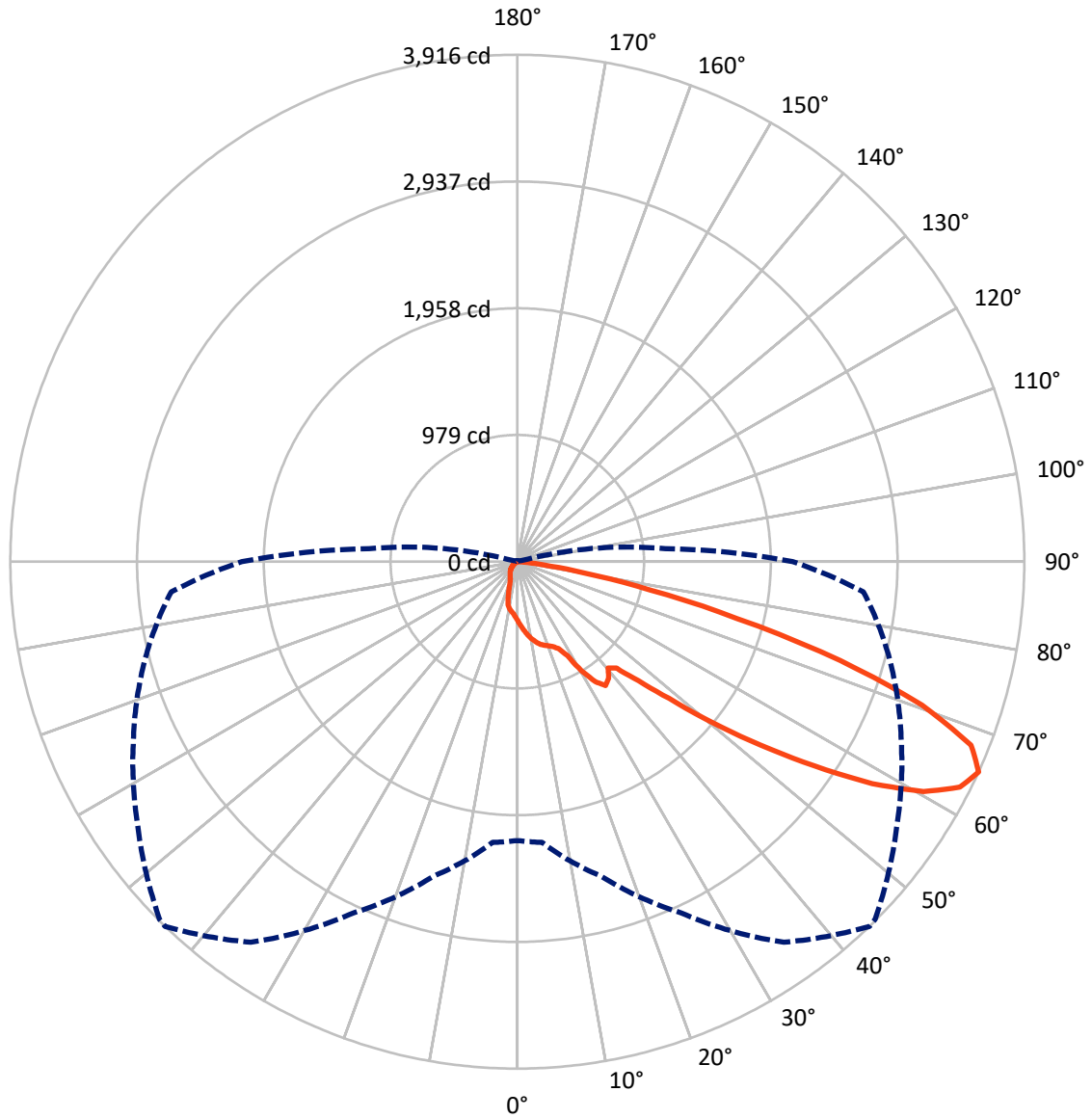
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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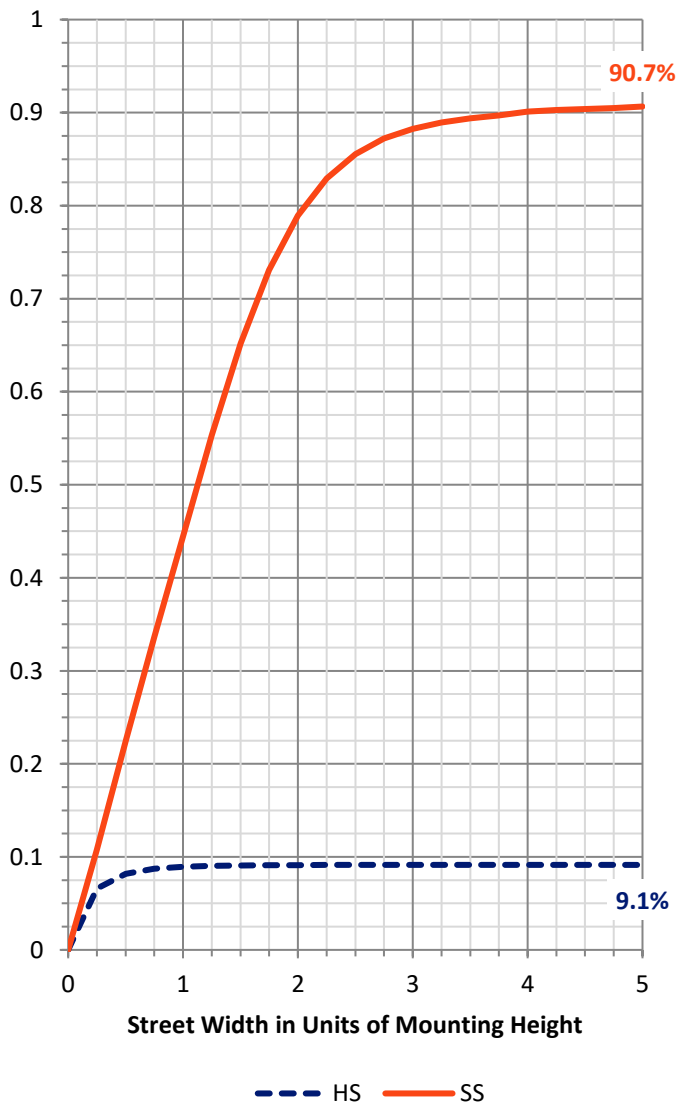
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	450.6	0.0	450.6
	% Fixture	9.2	0.0	9.2
<b>Street Side</b>	Lumens	4440.4	0.0	4440.4
	% Fixture	90.8	0.0	90.8
<b>Total</b>	Lumens	4891.0	0.0	4891.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.3	0.9
10°-20°	136.3	2.8
20°-30°	231.1	4.7
30°-40°	384.2	7.9
40°-50°	670.8	13.7
50°-60°	1310.4	26.8
60°-70°	1520.4	31.1
70°-80°	553.7	11.3
80°-90°	39.0	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°	4891.0	100.0
0°-180°	4891.0	100.0

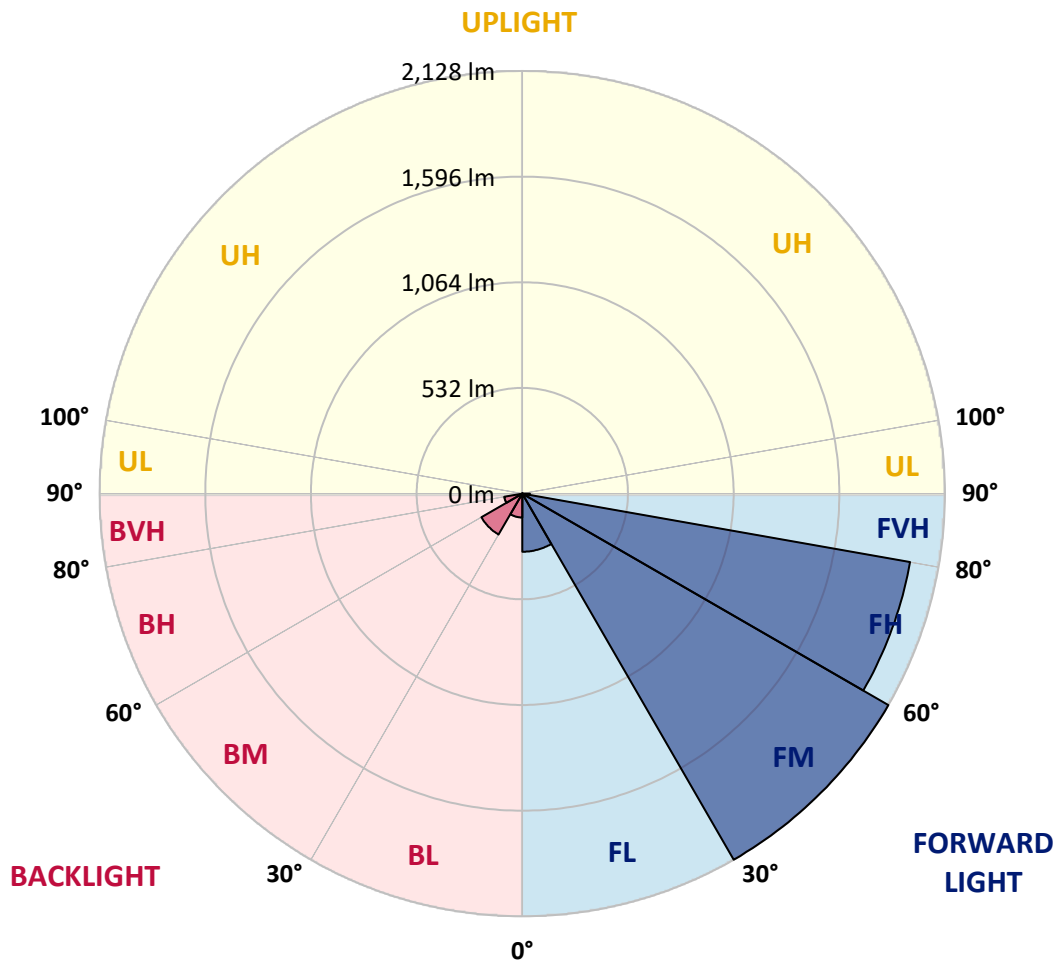


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	292.5	6.0			
FM (30°-60°)	2127.6	43.5			
FH (60°-80°)	1981.8	40.5			G2/5000
FVH (80°-90°)	38.5	0.8			G1/100
BL (0°-30°)	120.1	2.5	B1/500		
BM (30°-60°)	237.8	4.9	B1/1000		
BH (60°-80°)	92.3	1.9	B0/110		G0/110
BVH (80°-90°)	0.5	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2
2.5°	512.4	510.1	509.0	503.0	498.6	493.0	493.0	485.9	477.6	468.7	460.4
5°	569.6	565.8	561.0	555.7	545.3	530.3	530.3	515.4	498.2	482.9	466.0
7.5°	624.5	621.1	612.9	602.8	585.6	569.9	568.8	547.1	526.6	503.4	479.5
10°	672.7	670.1	663.0	643.6	625.6	605.1	604.7	580.4	556.5	528.1	498.6
12.5°	706.4	706.7	697.4	678.7	655.5	636.1	634.6	610.7	585.6	555.0	518.7
15°	730.3	730.3	720.6	699.6	678.7	661.5	660.0	639.1	613.3	580.0	540.8
17.5°	737.0	739.2	728.8	710.1	693.3	678.3	678.0	660.4	639.8	607.7	563.2
20°	734.4	736.6	728.4	713.8	702.2	693.6	692.5	685.4	666.4	636.1	587.1
22.5°	728.8	731.0	725.0	716.4	710.8	713.5	711.6	717.6	707.5	670.8	615.5
25°	729.9	732.1	727.7	722.8	727.7	743.7	748.6	774.4	765.4	715.0	646.2
27.5°	765.0	769.5	763.2	765.4	782.6	820.0	829.3	873.8	834.2	771.0	694.0
30°	843.1	840.2	828.2	839.0	898.8	978.1	975.4	968.3	906.3	835.7	750.8
32.5°	914.1	911.5	910.8	957.5	1065.9	1104.4	1102.5	1033.7	971.0	909.7	806.9
35°	942.9	932.8	930.6	1043.8	1225.1	1174.3	1162.7	1060.7	1049.4	990.4	864.1
37.5°	1029.6	1022.5	987.8	1058.0	1161.6	1144.7	1135.8	1107.0	1133.2	1061.8	928.7
40°	1208.3	1188.5	1157.1	1088.3	1071.5	1078.6	1087.6	1166.4	1232.2	1159.3	1015.1
42.5°	1430.3	1425.8	1367.5	1239.3	1113.3	1123.1	1134.7	1290.5	1374.6	1306.2	1156.0
45°	1696.7	1703.1	1619.0	1467.6	1302.5	1310.7	1327.5	1473.6	1567.4	1534.5	1377.6
47.5°	1938.9	1934.1	1905.7	1748.3	1595.8	1577.5	1604.8	1708.7	1834.3	1839.5	1652.6
50°	2182.6	2208.4	2166.2	2104.5	1991.2	1952.8	1942.7	1993.5	2184.8	2159.8	1983.0
52.5°	2532.8	2546.2	2467.0	2451.3	2477.1	2352.3	2342.2	2354.5	2525.7	2439.7	2230.4
55°	2752.9	2745.1	2715.5	2838.1	2940.2	2784.3	2771.6	2721.9	2808.6	2637.4	2468.5
57.5°	2822.4	2833.6	2902.4	3124.0	3365.5	3233.2	3210.0	3068.7	3012.7	2821.7	2687.5
60°	2791.4	2812.0	2960.3	3290.0	3624.8	3605.0	3585.2	3347.9	3159.2	2975.7	2841.1
62.5°	2570.5	2599.3	2836.6	3260.4	3712.7	3836.4	3811.7	3522.1	3256.7	3050.4	2868.0
65°	2154.2	2175.5	2516.3	2992.5	3587.8	3915.6	3906.6	3576.6	3272.0	2982.0	2683.8
67.5°	1535.7	1608.2	1924.0	2521.9	3218.6	3780.3	3795.6	3511.2	3128.1	2686.4	2222.6
70°	965.4	1014.7	1241.2	1805.5	2580.2	3316.5	3367.0	3211.9	2714.8	2094.0	1487.8
72.5°	460.4	497.1	658.5	1142.9	1821.2	2609.4	2649.4	2636.7	2099.3	1319.3	767.6
75°	205.2	219.0	314.3	583.4	1175.8	1753.9	1857.5	1874.6	1311.8	645.4	298.6
77.5°	104.6	105.0	147.3	282.5	587.1	1046.5	1067.0	1127.2	711.2	284.4	103.9
80°	55.7	59.4	78.1	133.4	304.6	515.4	512.8	563.6	315.4	139.4	34.8
82.5°	25.0	27.7	44.1	69.9	148.7	195.5	210.8	230.6	135.3	88.9	15.3
85°	7.5	9.0	21.7	35.1	53.8	56.4	63.2	81.5	76.6	63.2	7.8
87.5°	1.1	1.1	9.0	9.7	7.8	10.1	10.5	11.6	24.7	23.2	4.1
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°	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2	455.2
2.5°	456.0	453.3	444.0	436.1	429.4	425.3	420.4	417.5	416.0	414.8	415.2
5°	457.8	451.5	435.4	422.7	413.0	402.5	395.4	391.3	389.4	386.4	386.4
7.5°	468.3	458.2	435.8	416.3	399.5	385.3	371.9	367.0	363.6	362.9	362.1
10°	483.2	470.5	439.9	413.0	389.1	369.6	350.6	333.7	320.7	312.8	311.7
12.5°	501.9	483.6	446.2	410.7	380.1	345.7	295.2	261.2	238.4	231.3	232.5
15°	519.1	499.3	452.6	408.9	363.6	286.7	229.5	190.6	179.0	177.9	178.3
17.5°	539.7	516.1	460.1	406.2	318.4	219.0	170.4	160.0	162.2	165.9	165.6
20°	561.0	534.1	469.0	390.6	254.1	164.8	150.6	151.7	155.1	158.5	159.2
22.5°	583.8	554.6	479.5	352.8	194.0	143.5	142.8	144.3	147.6	151.4	152.1
25°	615.2	580.4	487.3	303.5	146.9	132.7	134.2	136.8	139.8	143.9	144.6
27.5°	655.5	615.2	491.5	239.2	127.1	123.0	123.3	127.1	130.8	134.5	134.5
30°	707.8	656.6	483.2	180.9	117.4	113.6	112.1	114.4	119.2	123.0	123.3
32.5°	754.6	695.9	461.6	138.3	110.3	105.0	101.3	101.7	103.5	105.8	106.1
35°	801.3	734.0	424.6	116.2	102.8	96.8	91.2	88.2	86.7	85.6	86.7
37.5°	861.1	781.5	375.2	105.8	96.4	88.9	81.1	74.7	69.5	66.2	66.9
40°	938.1	847.3	316.9	99.0	90.4	81.5	71.0	62.8	53.8	50.8	49.3
42.5°	1065.1	947.0	255.6	93.4	84.5	73.6	60.5	49.3	41.1	38.1	38.9
45°	1265.8	1073.0	197.0	87.5	78.5	65.0	50.8	38.9	32.1	30.6	31.4
47.5°	1531.9	1235.9	151.7	80.7	71.0	55.7	40.0	30.6	26.5	26.2	25.8
50°	1782.3	1387.7	126.7	73.3	62.0	46.3	32.9	25.8	23.2	22.8	22.8
52.5°	2008.8	1496.4	103.2	64.7	52.3	38.1	27.7	22.8	20.6	19.4	19.4
55°	2210.3	1567.4	83.7	54.2	41.1	30.3	23.9	20.6	17.9	16.4	16.1
57.5°	2362.4	1576.0	62.8	43.4	30.6	23.5	20.6	17.9	14.9	13.1	12.3
60°	2427.4	1501.7	46.3	32.9	22.8	18.7	16.4	14.6	11.2	9.3	9.0
62.5°	2362.0	1357.0	34.4	25.0	17.6	13.8	11.6	10.8	7.8	5.6	5.2
65°	2127.7	1148.1	27.3	19.1	13.1	10.1	7.5	7.1	4.9	2.6	2.2
67.5°	1704.6	899.2	21.7	14.2	9.3	6.7	4.9	4.5	2.6	0.7	0.7
70°	1108.5	574.8	17.6	10.5	6.0	4.5	3.0	2.2	1.5	0.4	0.0
72.5°	548.3	268.7	14.2	8.2	4.1	2.2	1.1	0.7	1.1	0.0	0.0
75°	212.7	95.7	10.5	5.6	2.2	1.1	0.7	0.0	0.4	0.0	0.0
77.5°	70.6	31.8	6.4	3.0	1.5	0.7	0.0	0.0	0.0	0.0	0.0
80°	26.2	12.3	3.4	1.9	0.7	0.4	0.0	0.0	0.0	0.0	0.0
82.5°	10.5	4.9	2.2	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	3.0	1.5	1.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	2.2	1.5	1.1	0.7	0.4	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)