

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: P452194

Luminaire Tested: **GALN-SA3A-827-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452194  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3A-827-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8222 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

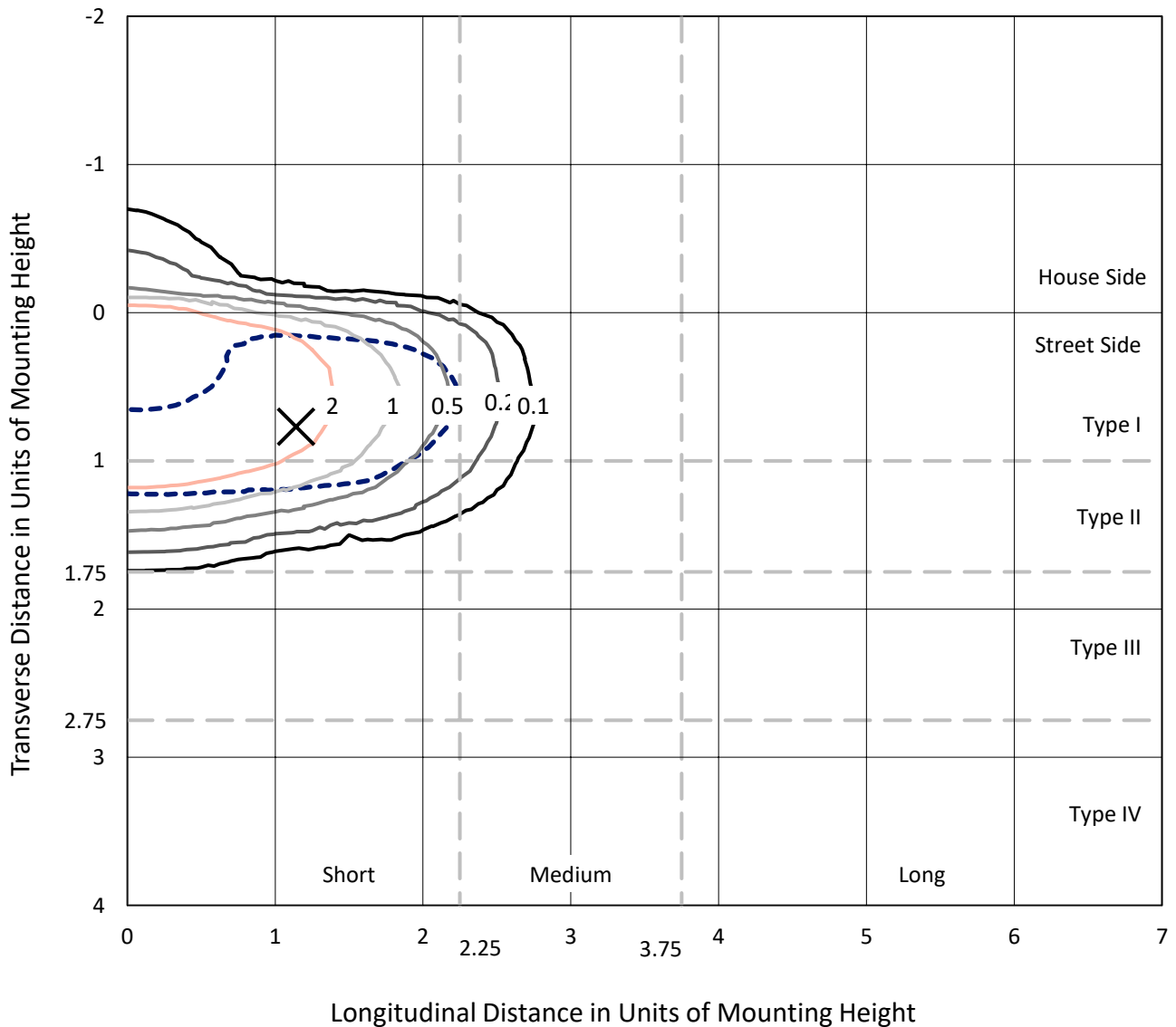
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P452194  
 CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

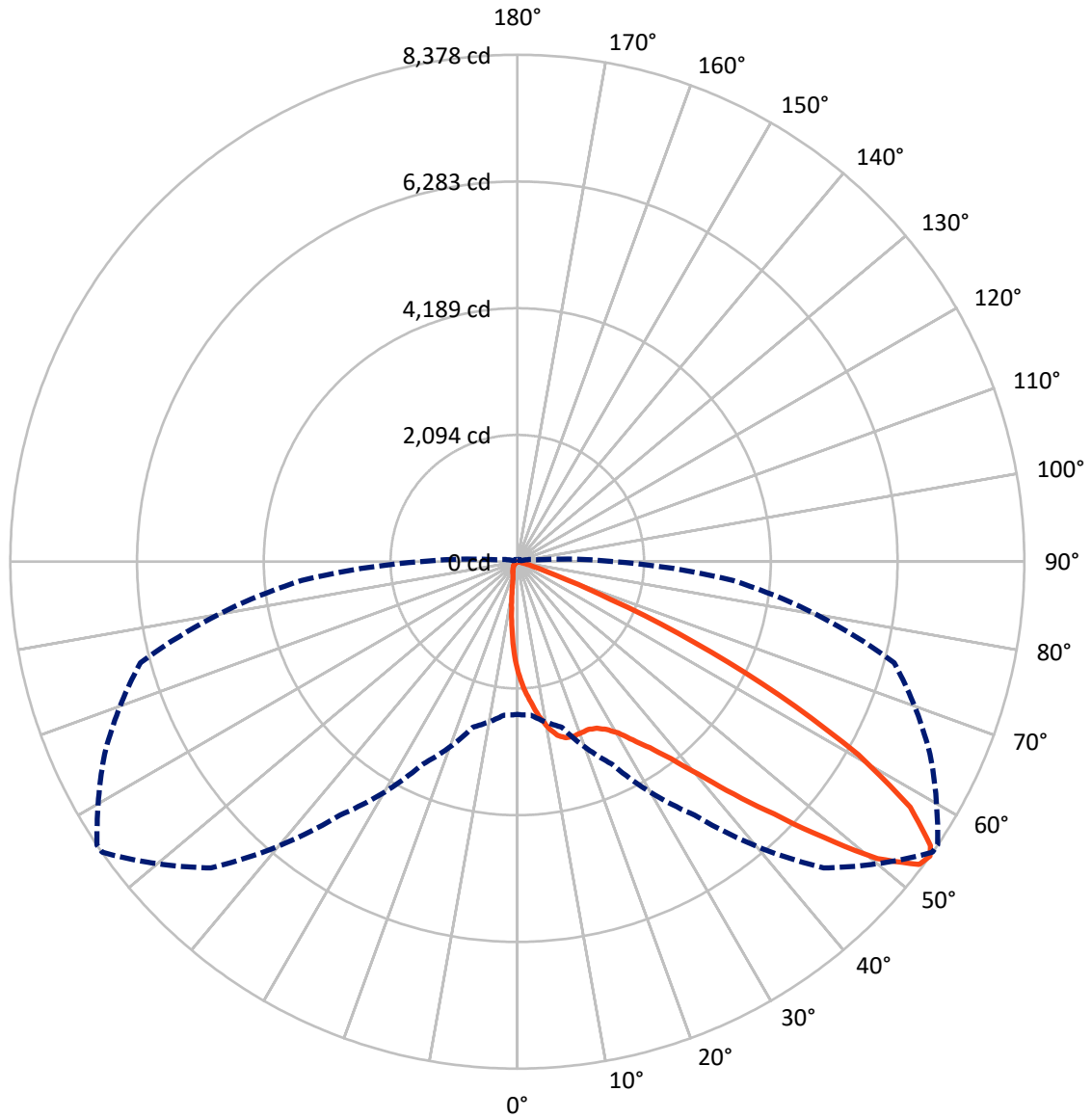
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type II - Short - N/A

REPORT NUMBER: P452194  
CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 54-Deg Vertical

REPORT NUMBER: P452194  
 CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

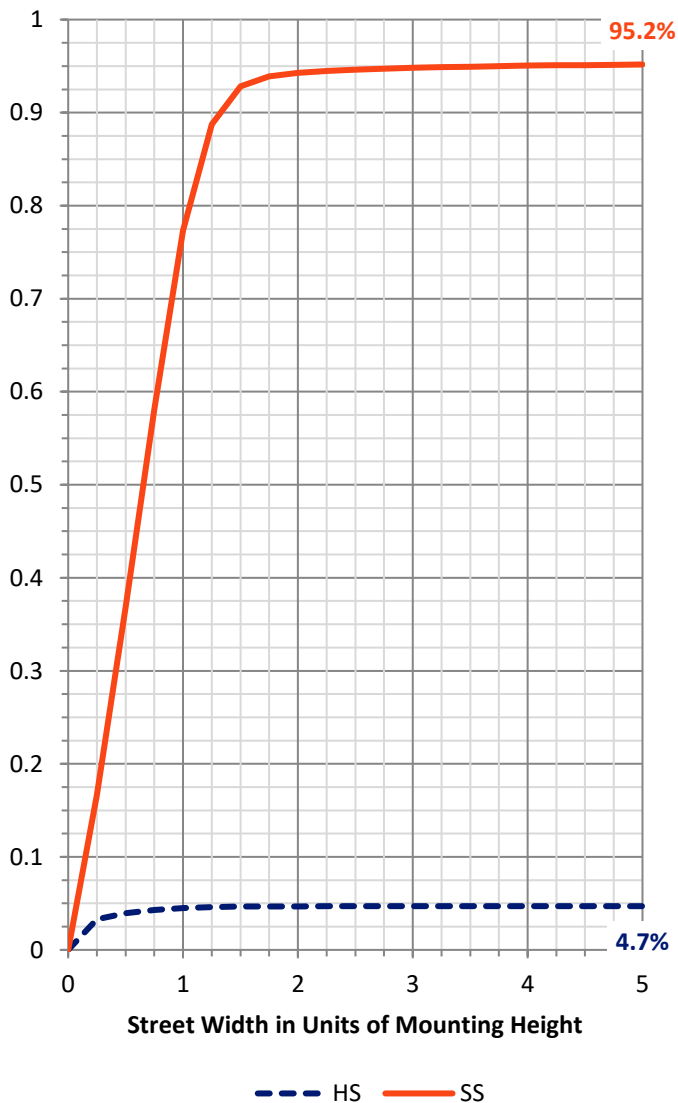
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	388.8	0.0	388.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	7833.2	0.0	7833.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	8222.0	0.0	8222.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.4	2.0
10°-20°	436.4	5.3
20°-30°	755.7	9.2
30°-40°	1304.5	15.9
40°-50°	2220.4	27.0
50°-60°	2197.3	26.7
60°-70°	1002.9	12.2
70°-80°	128.8	1.6
80°-90°	14.5	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°	8222.0	100.0
0°-180°	8222.0	100.0



REPORT NUMBER: P452194

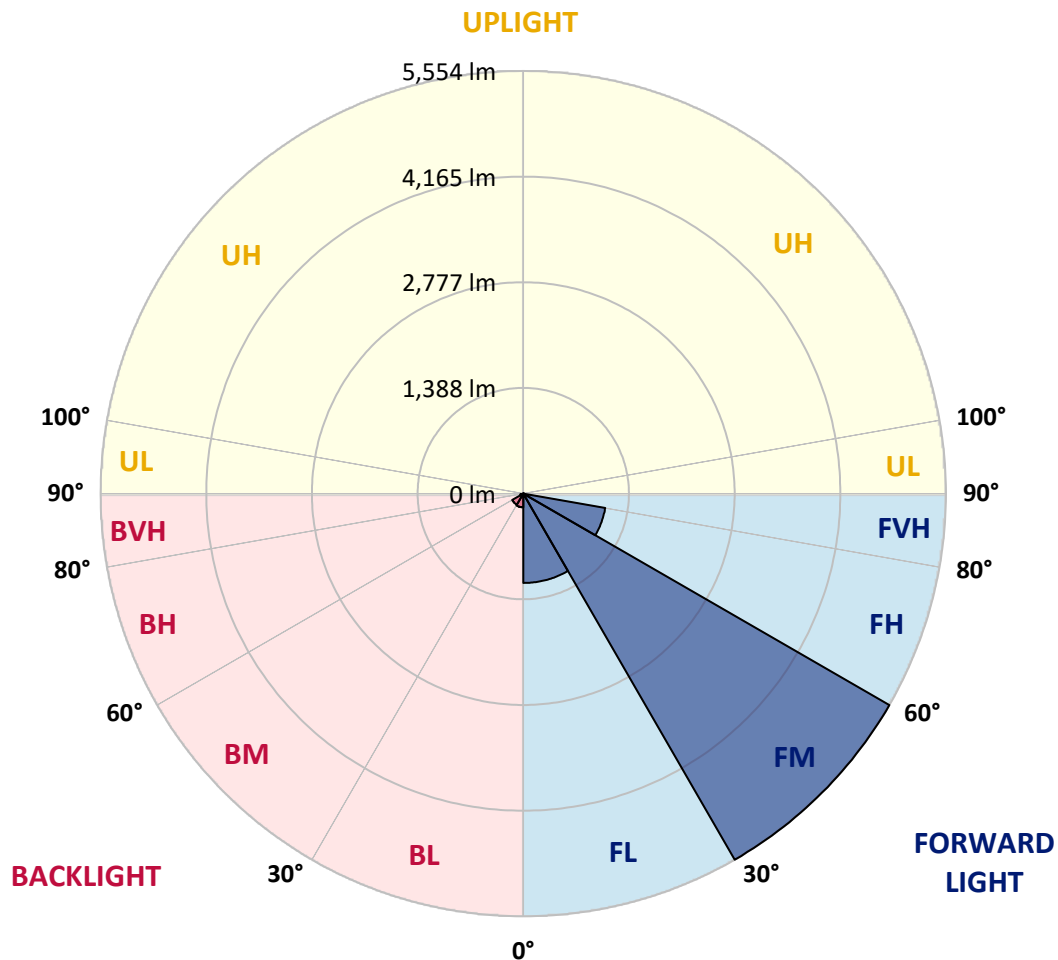
CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1173.7	14.3			
FM (30°-60°)	5553.7	67.5			
FH (60°-80°)	1092.8	13.3			G1/1800
FVH (80°-90°)	13.0	0.2			G1/100
BL (0°-30°)	179.8	2.2	B1/500		
BM (30°-60°)	168.5	2.0	B0/220		
BH (60°-80°)	38.9	0.5	B0/110		G0/110
BVH (80°-90°)	1.6	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-G1**

Type II Short





REPORT NUMBER: P452194

CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7
2.5°	2321.5	2305.4	2283.2	2266.0	2225.5	2167.3	2105.7	2105.7	2046.4	1963.7	1879.4
5°	2677.6	2667.1	2645.5	2601.1	2555.6	2474.0	2350.3	2328.7	2222.8	2073.0	1915.4
7.5°	2822.4	2827.4	2828.5	2816.9	2795.2	2714.8	2592.2	2577.2	2408.0	2207.2	1962.6
10°	2683.7	2708.1	2732.0	2780.3	2848.5	2867.9	2798.6	2783.0	2616.6	2343.1	2013.6
12.5°	2477.4	2490.7	2504.0	2580.0	2717.0	2874.0	2946.7	2946.1	2805.2	2478.5	2078.5
15°	2381.4	2393.1	2394.2	2428.0	2546.7	2775.3	3009.9	3018.2	2989.4	2645.5	2148.4
17.5°	2401.4	2410.8	2403.0	2411.4	2473.5	2666.5	3002.7	3030.4	3138.6	2805.8	2211.7
20°	2531.7	2550.0	2520.1	2496.8	2515.7	2637.7	2978.3	3017.1	3244.0	2962.2	2269.4
22.5°	2765.8	2775.8	2738.1	2674.3	2641.0	2698.2	2971.6	3009.9	3333.9	3090.3	2302.6
25°	3026.0	3022.7	2981.1	2909.5	2839.6	2820.2	3015.5	3049.8	3408.2	3205.7	2312.6
27.5°	3286.2	3296.1	3226.2	3137.5	3053.7	3003.3	3113.6	3139.2	3492.0	3337.2	2324.8
30°	3588.5	3572.4	3503.6	3402.1	3306.1	3235.7	3271.7	3278.9	3607.3	3511.4	2357.0
32.5°	3981.8	3937.4	3860.3	3682.8	3614.0	3494.7	3503.6	3512.5	3747.7	3683.9	2395.8
35°	4515.4	4513.2	4362.3	4123.2	3955.7	3807.6	3768.8	3776.0	3960.1	3940.2	2481.8
37.5°	5157.8	5166.7	4994.7	4753.9	4445.5	4210.3	4130.4	4131.6	4283.0	4294.1	2612.7
40°	5680.9	5704.2	5601.6	5439.0	5134.5	4766.7	4632.5	4620.3	4736.8	4722.9	2799.7
42.5°	5906.1	5927.7	5966.0	6022.6	5855.1	5551.6	5234.9	5251.5	5287.0	5190.0	3009.4
45°	5795.7	5830.1	5980.4	6329.9	6487.4	6385.4	6007.6	5949.4	5799.0	5697.5	3220.1
47.5°	5335.8	5419.6	5670.9	6252.8	6804.2	7149.2	6879.6	6802.5	6311.6	6068.1	3354.4
50°	4579.8	4584.8	4934.8	5678.7	6640.0	7631.3	7770.0	7712.3	6789.2	6276.1	3422.1
52.5°	3320.0	3429.3	3749.9	4611.4	5928.8	7558.1	8337.4	8313.6	7281.8	6382.6	3519.7
54°	2524.0	2545.1	2830.2	3685.0	5111.7	7155.9	8372.4	8377.9	7526.4	6447.0	3577.4
55°	2069.1	2018.6	2318.2	3139.2	4554.2	6800.3	8258.1	8284.7	7636.3	6480.2	3620.1
57.5°	980.7	981.3	1210.4	1655.8	2852.4	5280.4	7559.7	7654.0	7648.5	6537.4	3751.6
60°	496.5	499.8	550.3	764.4	1409.0	3510.3	6250.6	6475.2	7059.9	6545.7	3794.8
62.5°	347.3	343.4	335.1	367.8	593.0	1784.0	4653.5	4848.8	5998.2	6228.9	3657.3
65°	297.3	289.0	265.7	260.7	299.5	710.6	2898.4	3216.8	4579.8	5393.5	3265.6
67.5°	254.1	250.7	229.7	216.9	211.9	309.5	1495.5	1663.0	3130.3	3876.9	2473.5
70°	215.8	214.1	201.4	185.3	171.4	185.3	554.7	687.3	1744.6	2087.4	1167.1
72.5°	175.3	177.0	179.2	158.6	144.2	131.5	236.9	275.7	730.0	746.1	408.3
75°	153.7	152.0	152.0	138.1	120.4	97.6	130.4	140.3	223.6	207.5	94.9
77.5°	108.2	104.3	122.0	113.7	100.4	69.3	74.3	78.8	92.6	79.3	44.4
80°	74.9	74.9	78.2	102.1	90.4	50.5	45.5	48.8	54.9	47.2	25.5
82.5°	42.2	43.3	51.0	54.4	52.7	33.8	30.0	30.5	36.6	32.2	16.1
85°	5.0	8.3	29.4	28.8	21.6	15.0	16.6	17.2	22.7	20.0	9.4
87.5°	0.6	1.1	6.1	7.8	5.5	6.1	6.1	6.1	7.8	8.9	6.7
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: P452194  
 CATALOG NUMBER: GALN-SA3A-827-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7	1826.7
2.5°	1833.9	1791.7	1691.3	1574.8	1500.5	1379.6	1277.5	1203.7	1185.4	1149.9	1160.5
5°	1831.7	1744.0	1539.3	1323.0	1092.2	920.3	792.1	691.2	646.8	617.4	596.9
7.5°	1832.8	1695.8	1367.4	1022.9	747.2	578.6	459.9	398.3	357.2	340.0	342.3
10°	1836.1	1641.4	1167.7	757.7	504.2	373.9	301.2	271.8	257.9	255.7	255.2
12.5°	1843.9	1582.1	976.9	562.5	352.8	271.8	244.1	234.1	229.7	229.7	228.0
15°	1852.2	1516.6	818.2	418.3	271.8	233.5	220.8	215.8	213.0	213.0	212.5
17.5°	1852.2	1441.2	670.1	324.5	234.1	214.7	204.7	198.0	195.8	195.8	195.3
20°	1840.6	1353.5	538.6	261.3	212.5	196.9	186.9	179.7	177.0	175.8	175.3
22.5°	1800.1	1236.5	428.8	224.7	194.7	181.4	168.6	160.3	158.1	157.0	157.5
25°	1728.0	1104.4	339.5	197.5	178.6	162.5	151.4	145.3	143.1	143.1	143.7
27.5°	1653.6	966.3	269.0	177.0	159.2	144.8	135.9	132.0	131.5	133.1	133.7
30°	1584.8	827.6	218.0	160.3	142.0	129.8	123.7	122.6	122.6	123.1	123.7
32.5°	1508.3	706.2	182.5	145.9	128.1	117.6	114.3	114.3	115.4	115.4	116.5
35°	1460.0	601.9	160.3	132.0	117.6	108.7	106.5	107.1	108.7	110.9	112.1
37.5°	1434.0	518.7	145.9	120.9	107.6	101.5	99.3	100.4	104.3	108.2	108.7
40°	1436.2	456.0	134.2	111.5	99.8	93.2	91.5	94.9	98.7	102.6	103.2
42.5°	1460.6	409.4	123.1	100.4	93.2	83.8	83.2	86.5	88.2	92.1	92.6
45°	1489.4	375.5	111.5	88.8	81.0	72.7	73.2	76.0	78.2	84.3	85.4
47.5°	1498.3	352.2	98.2	75.4	66.6	63.8	64.3	66.0	70.4	76.0	76.6
50°	1508.3	337.8	85.4	63.8	56.6	56.0	56.6	57.7	60.5	62.7	62.1
52.5°	1551.0	337.3	74.9	55.5	48.3	49.4	49.9	49.4	47.2	43.8	42.7
54°	1590.9	338.9	69.9	51.6	44.4	46.0	45.5	42.7	37.2	33.8	32.2
55°	1623.1	340.6	67.1	48.8	42.2	42.7	43.3	37.7	30.5	27.2	26.1
57.5°	1686.3	336.7	60.5	42.7	37.2	34.9	34.4	25.0	16.6	14.4	13.3
60°	1654.7	304.0	54.9	36.6	31.6	28.3	23.3	13.9	8.3	6.1	6.1
62.5°	1530.5	257.9	48.8	30.0	26.1	21.6	12.2	7.8	3.9	2.2	1.7
65°	1369.0	216.9	43.8	23.9	20.5	13.9	6.7	5.0	1.7	0.0	0.0
67.5°	1017.9	160.9	37.2	18.9	15.5	8.9	4.4	2.8	0.6	0.0	0.0
70°	471.5	98.2	31.6	14.4	11.1	6.7	3.3	1.7	0.0	0.0	0.0
72.5°	135.4	61.6	26.1	10.5	7.8	5.5	2.8	1.1	0.6	0.0	0.0
75°	47.2	49.4	19.4	7.8	6.1	3.9	2.2	1.1	0.6	0.0	0.0
77.5°	28.3	39.9	12.2	6.7	5.0	3.3	2.2	1.1	0.6	0.6	0.0
80°	16.1	26.6	7.8	5.5	4.4	2.8	1.7	1.1	0.6	0.6	0.0
82.5°	8.9	12.8	6.1	5.0	3.9	2.8	1.7	1.1	0.6	0.6	0.6
85°	7.2	6.7	5.0	4.4	3.3	2.2	1.7	0.6	0.0	0.0	0.0
87.5°	5.5	4.4	4.4	4.4	3.3	2.2	1.7	0.6	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)