

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: P651837

Luminaire Tested: **GALN-SA4A-840-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15186.8 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

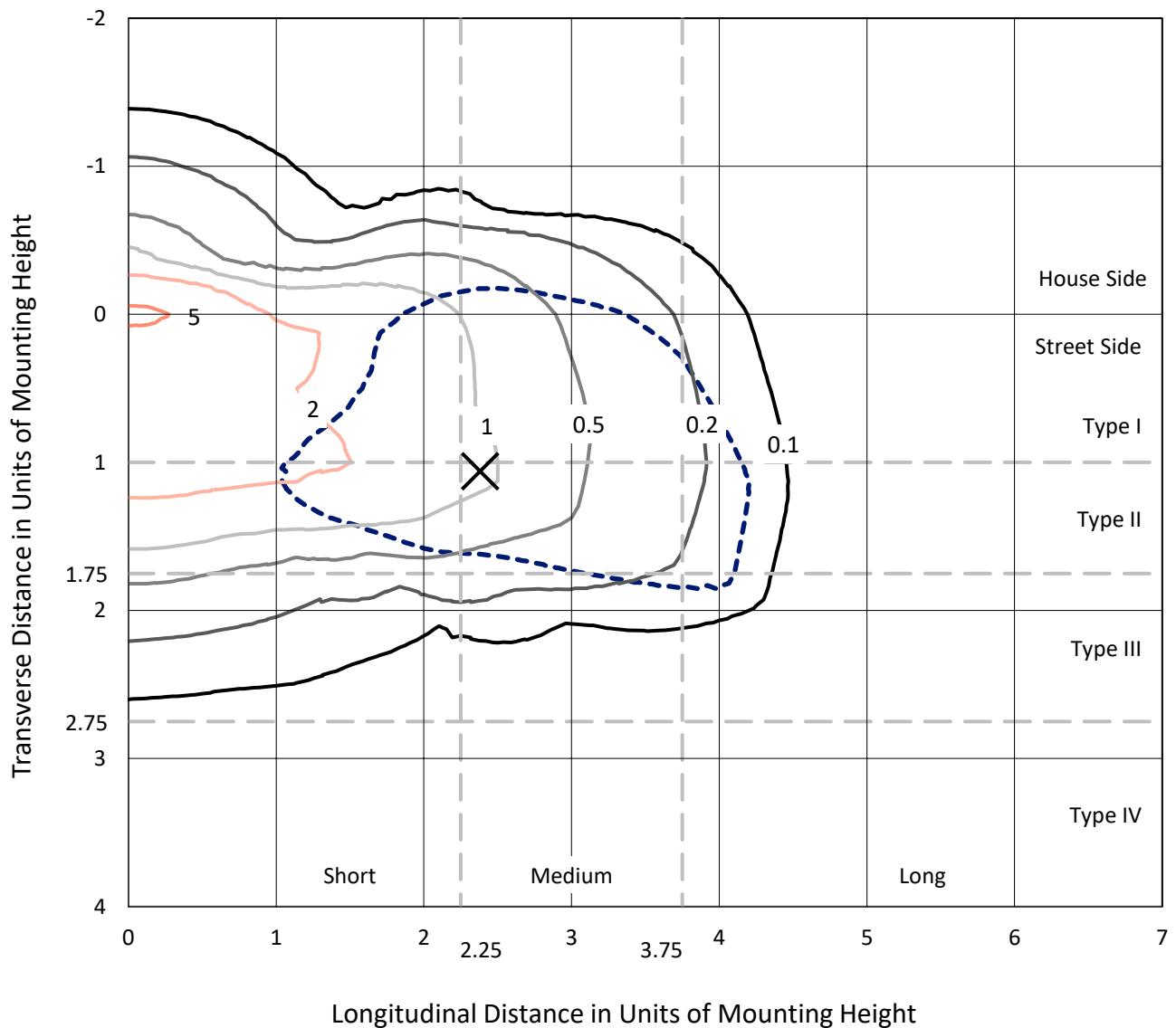
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

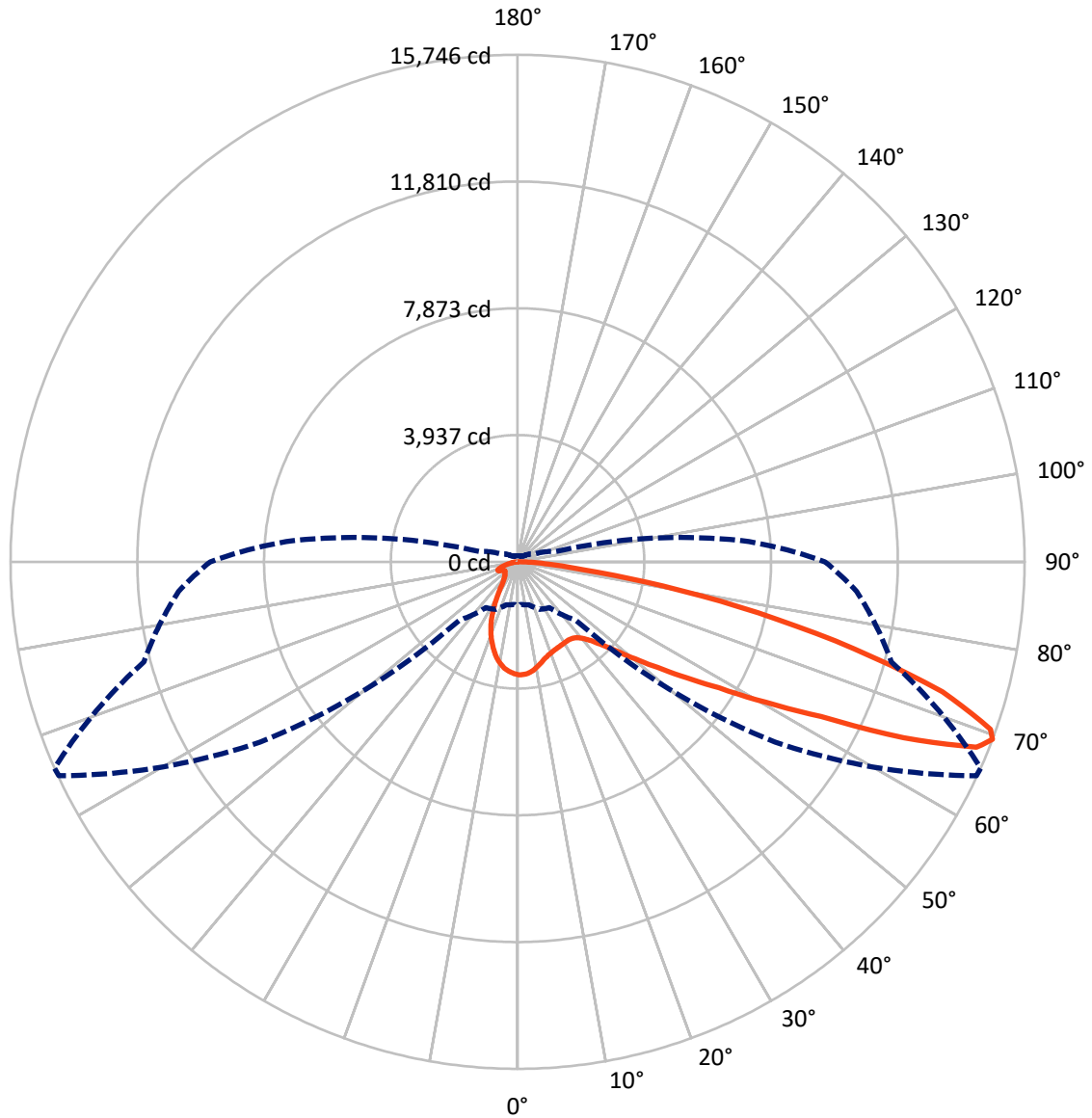
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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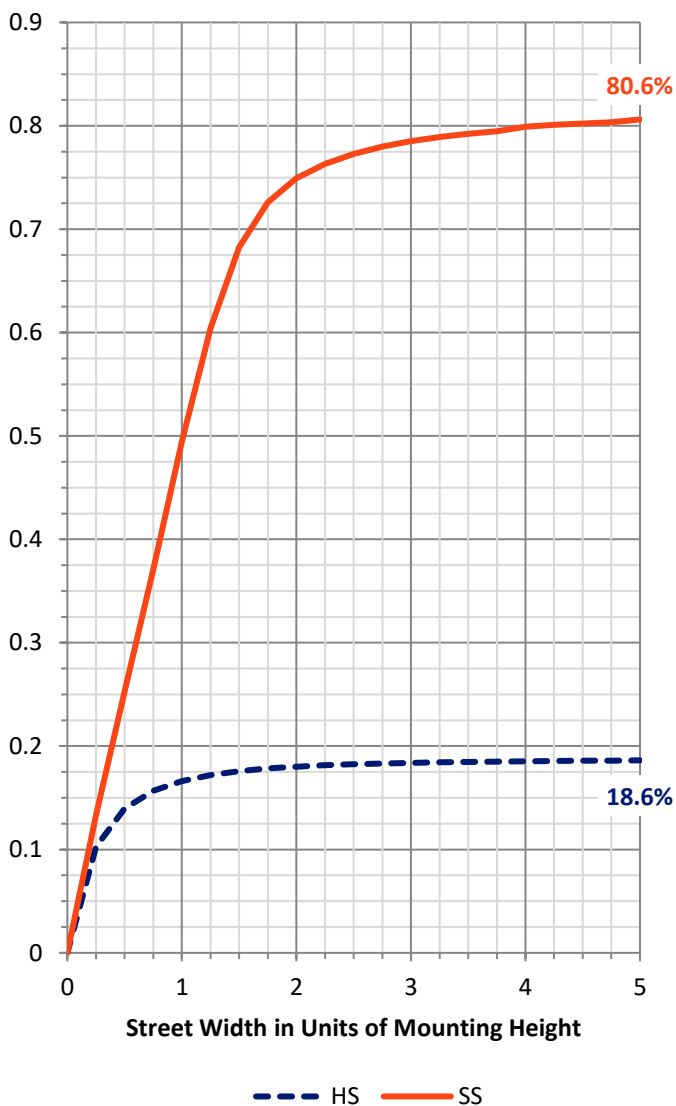
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2856.0	0.0	2856.0
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	12330.7	0.0	12330.7
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	15186.8	0.0	15186.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	304.6	2.0
10°-20°	722.4	4.8
20°-30°	983.4	6.5
30°-40°	1321.5	8.7
40°-50°	1973.2	13.0
50°-60°	3138.7	20.7
60°-70°	3860.4	25.4
70°-80°	2511.8	16.5
80°-90°	370.9	2.4
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°	15186.8	100.0
0°-180°	15186.8	100.0

**Coefficient of Utilization**

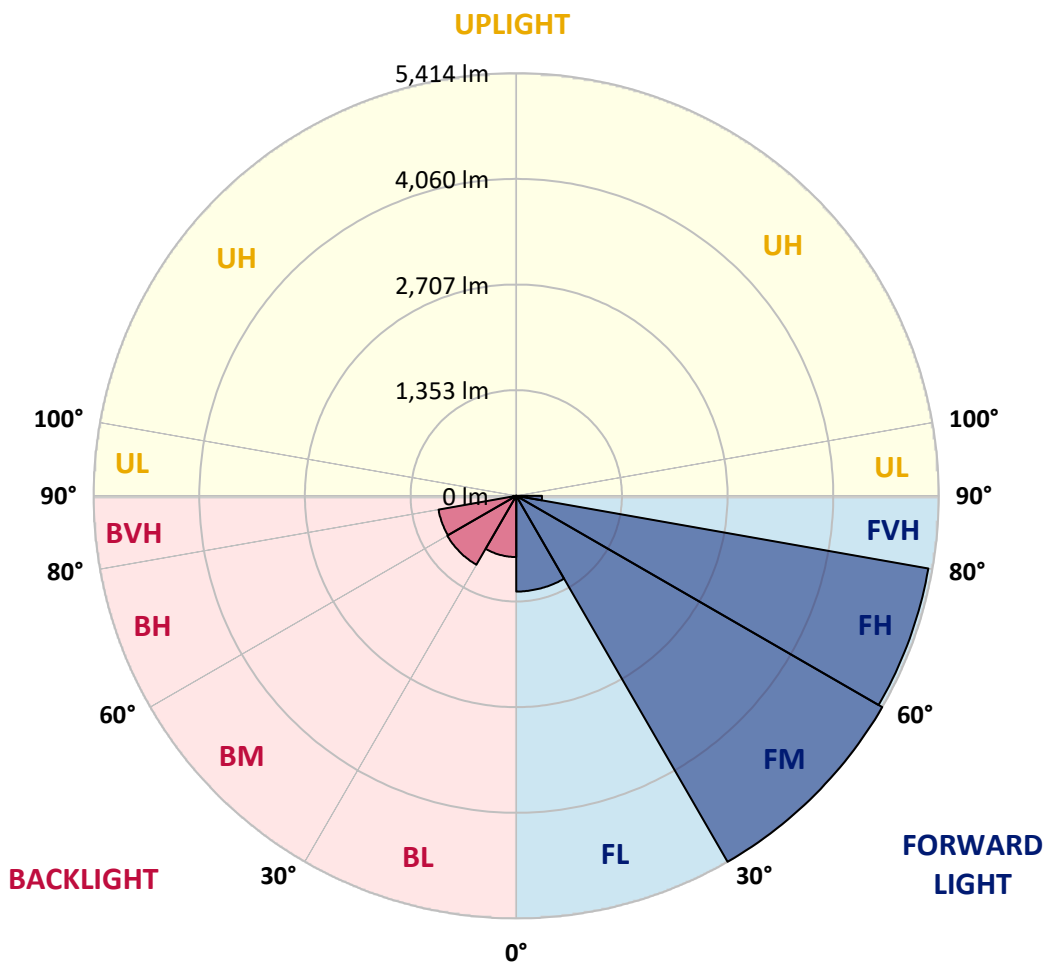


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1226.3	8.1			
FM (30°-60°)	5413.6	35.6			
FH (60°-80°)	5361.0	35.3			G3/7500
FVH (80°-90°)	329.8	2.2			G3/500
BL (0°-30°)	784.0	5.2	B2/1000		
BM (30°-60°)	1019.7	6.7	B2/2500		
BH (60°-80°)	1011.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	41.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1
2.5°	3384.3	3397.7	3412.9	3429.7	3461.6	3479.3	3491.9	3506.2	3507.9	3515.5	3509.6
5°	3134.5	3150.5	3173.2	3205.1	3253.1	3327.9	3405.3	3468.4	3475.9	3511.3	3521.4
7.5°	2925.9	2935.2	2953.7	3005.0	3073.1	3156.4	3269.1	3396.9	3415.4	3499.5	3528.9
10°	2756.0	2765.3	2787.2	2840.1	2907.4	3011.7	3135.3	3303.5	3318.7	3463.3	3530.6
12.5°	2629.1	2637.5	2661.0	2713.2	2790.5	2888.1	3024.3	3202.6	3224.5	3415.4	3514.6
15°	2532.3	2548.3	2567.7	2610.5	2692.1	2786.3	2918.4	3110.1	3127.8	3364.9	3503.7
17.5°	2491.1	2498.7	2512.2	2551.7	2611.4	2703.9	2836.8	3037.8	3058.8	3329.6	3501.2
20°	2492.8	2500.4	2502.9	2524.8	2567.7	2647.6	2778.7	2980.6	3005.8	3298.5	3505.4
22.5°	2550.0	2550.8	2541.6	2534.0	2550.8	2617.3	2737.5	2937.7	2967.1	3285.0	3508.7
25°	2638.3	2653.4	2640.0	2604.7	2573.5	2605.5	2721.6	2914.1	2941.9	3265.7	3504.5
27.5°	2781.3	2783.8	2772.9	2724.9	2644.2	2620.6	2714.8	2896.5	2920.0	3251.4	3483.5
30°	2973.0	2965.5	2955.4	2902.4	2775.4	2678.7	2729.1	2880.5	2904.9	3230.4	3458.3
32.5°	3167.3	3190.8	3181.6	3119.4	2954.5	2791.4	2775.4	2878.8	2899.0	3214.4	3430.5
35°	3373.3	3384.3	3428.0	3396.0	3227.0	2973.9	2862.0	2904.9	2920.9	3215.2	3411.2
37.5°	3534.8	3564.2	3666.8	3694.6	3535.6	3215.2	3002.5	2978.9	2985.6	3256.4	3418.7
40°	3729.9	3780.4	3912.4	4026.0	3921.7	3528.9	3241.3	3116.0	3124.4	3355.7	3468.4
42.5°	3977.2	4012.5	4189.9	4343.8	4327.0	3943.5	3530.6	3340.5	3344.7	3553.3	3607.1
45°	4266.5	4316.9	4516.3	4747.5	4787.1	4412.8	3948.6	3680.3	3677.8	3860.3	3866.2
47.5°	4636.5	4667.6	4865.3	5117.6	5277.4	5002.4	4455.7	4168.1	4141.2	4307.7	4259.7
50°	4977.1	5025.9	5175.6	5451.4	5849.3	5692.9	5122.6	4800.5	4737.4	4893.0	4812.3
52.5°	5120.1	5171.4	5297.5	5639.9	6339.6	6586.0	5969.6	5554.9	5449.8	5569.2	5539.8
55°	4872.0	4938.4	5056.2	5472.5	6554.9	7616.3	7111.7	6427.1	6350.6	6299.3	6307.7
57.5°	4205.1	4268.2	4427.1	4886.3	6297.6	8363.9	8742.4	7548.1	7384.1	7147.8	7188.2
60°	3200.9	3240.5	3322.9	3831.7	5534.7	8558.2	10594.3	8965.2	8860.9	7993.0	8021.6
62.5°	2273.3	2317.9	2375.1	2629.1	4052.0	8010.7	12044.2	10944.2	10571.6	8868.5	8840.8
65°	1846.0	1815.7	1884.8	2003.3	2377.6	6208.4	12370.5	13691.0	13178.0	10021.6	9636.4
67.5°	1518.0	1486.0	1554.2	1765.3	1808.2	3603.8	11194.8	15473.9	15371.3	11275.5	10444.6
69°	1343.9	1327.1	1386.8	1627.3	1735.8	2559.2	9752.5	15722.0	15746.4	12014.8	10569.1
70°	1211.0	1217.8	1275.8	1557.5	1703.0	2110.2	8335.3	15379.7	15586.6	12384.0	10434.5
72.5°	891.5	905.8	986.5	1290.1	1671.9	1790.5	4960.3	13433.6	13799.5	12405.8	9545.6
75°	623.2	616.5	687.9	971.4	1579.4	1774.5	2913.3	10389.1	10803.7	10723.0	8020.8
77.5°	407.9	418.8	476.0	686.3	1328.8	1761.1	1899.1	7370.7	7639.8	7171.4	4744.2
80°	287.6	286.8	318.7	468.4	985.7	1692.1	1555.0	4645.8	4577.6	2818.3	1407.0
82.5°	164.8	176.6	213.6	329.7	659.3	1489.4	1430.5	2222.0	2028.6	803.2	475.2
85°	91.7	95.9	127.0	199.3	385.2	1121.9	1248.9	1010.9	953.7	335.6	204.4
87.5°	29.4	32.0	53.0	100.9	174.9	529.8	707.3	466.8	430.6	121.1	82.4
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°	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1	3507.1
2.5°	3512.1	3522.2	3495.3	3469.2	3445.7	3412.9	3383.4	3359.0	3342.2	3339.7	3331.3
5°	3523.9	3524.7	3473.4	3404.5	3337.2	3263.2	3186.6	3132.0	3080.7	3052.1	3037.8
7.5°	3532.3	3524.7	3432.2	3320.4	3190.8	3056.3	2921.7	2814.1	2730.8	2698.0	2710.6
10°	3528.9	3505.4	3370.0	3190.8	3002.5	2801.5	2608.0	2456.6	2317.9	2246.4	2248.1
12.5°	3510.4	3471.7	3277.5	3045.3	2768.7	2499.5	2203.5	1999.1	1838.4	1743.4	1714.0
15°	3494.4	3427.2	3169.0	2847.7	2503.7	2119.4	1758.5	1506.2	1371.7	1296.8	1296.0
17.5°	3477.6	3384.3	3050.4	2638.3	2199.3	1704.7	1326.3	1133.7	1070.6	1078.2	1065.5
20°	3460.0	3333.8	2926.8	2405.3	1828.3	1271.6	993.2	915.0	932.7	967.2	972.2
22.5°	3439.8	3280.0	2793.9	2148.8	1438.1	957.1	805.7	793.9	839.3	893.1	900.7
25°	3408.7	3212.7	2626.5	1880.6	1109.3	771.2	705.6	714.0	758.6	804.0	809.0
27.5°	3364.9	3129.4	2457.5	1545.8	833.4	661.9	645.0	656.0	677.8	705.6	712.3
30°	3306.1	3035.3	2263.2	1256.5	667.8	607.2	600.5	606.4	619.0	630.8	634.1
32.5°	3247.2	2944.4	2067.3	962.1	595.4	571.0	564.3	564.3	564.3	566.0	566.8
35°	3192.5	2858.6	1856.9	749.3	557.6	542.4	533.2	523.1	521.4	515.5	515.5
37.5°	3162.2	2780.4	1633.2	627.4	529.8	518.9	506.3	489.5	480.2	481.1	479.4
40°	3168.1	2729.1	1429.7	558.4	507.1	495.3	476.0	456.7	450.8	450.8	449.1
42.5°	3234.6	2712.3	1234.6	522.3	485.3	471.8	447.4	429.8	426.4	425.5	427.2
45°	3387.6	2753.5	1059.7	498.7	466.8	446.6	422.2	406.2	402.8	402.8	402.0
47.5°	3686.2	2887.2	934.4	483.6	453.3	427.2	402.0	386.0	380.1	378.4	378.4
50°	4150.4	3177.4	841.0	470.1	436.5	409.6	383.5	365.0	355.7	354.9	354.1
52.5°	4795.5	3629.8	804.8	460.0	418.0	391.1	362.5	344.8	333.0	330.5	328.8
55°	5549.8	4261.4	854.5	452.5	398.6	370.0	340.6	322.1	311.2	306.1	305.3
57.5°	6423.7	5020.0	1042.8	442.4	381.0	347.3	318.7	300.2	288.5	282.6	280.9
60°	7208.4	5799.7	1371.7	436.5	365.8	322.9	293.5	276.7	265.8	259.9	259.0
62.5°	8070.4	6543.1	1764.4	452.5	359.1	299.4	270.0	254.8	245.6	239.7	239.7
65°	8991.3	7287.4	2024.4	506.3	369.2	280.9	244.7	232.1	223.7	219.5	218.7
67.5°	9612.0	7544.8	1667.7	561.8	394.4	260.7	220.3	210.2	205.2	201.0	201.0
69°	9544.8	7219.3	1230.4	576.1	402.0	250.6	206.9	199.3	192.6	190.9	189.2
70°	9331.9	6848.4	1031.1	566.8	396.1	241.4	198.5	189.2	183.3	181.7	180.8
72.5°	8311.8	5939.3	767.8	492.8	337.2	209.4	175.8	167.4	162.3	159.8	159.8
75°	6905.6	4854.3	599.6	391.9	264.1	176.6	150.5	143.8	139.6	137.9	137.1
77.5°	3870.4	2710.6	430.6	307.0	200.2	143.0	126.2	120.3	116.1	114.4	114.4
80°	1078.2	774.6	253.1	202.7	136.2	108.5	100.1	95.9	90.0	85.8	88.3
82.5°	406.2	335.6	144.7	121.9	86.6	72.3	69.8	66.4	63.9	58.0	58.0
85°	197.6	163.2	92.5	64.8	47.9	37.8	36.2	34.5	32.8	28.6	29.4
87.5°	68.1	72.3	40.4	23.5	14.3	9.3	7.6	4.2	4.2	4.2	4.2
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)