

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: P648405

Luminaire Tested: **GALN-SA4B-835-U-T4FT**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-835-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17586.2 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

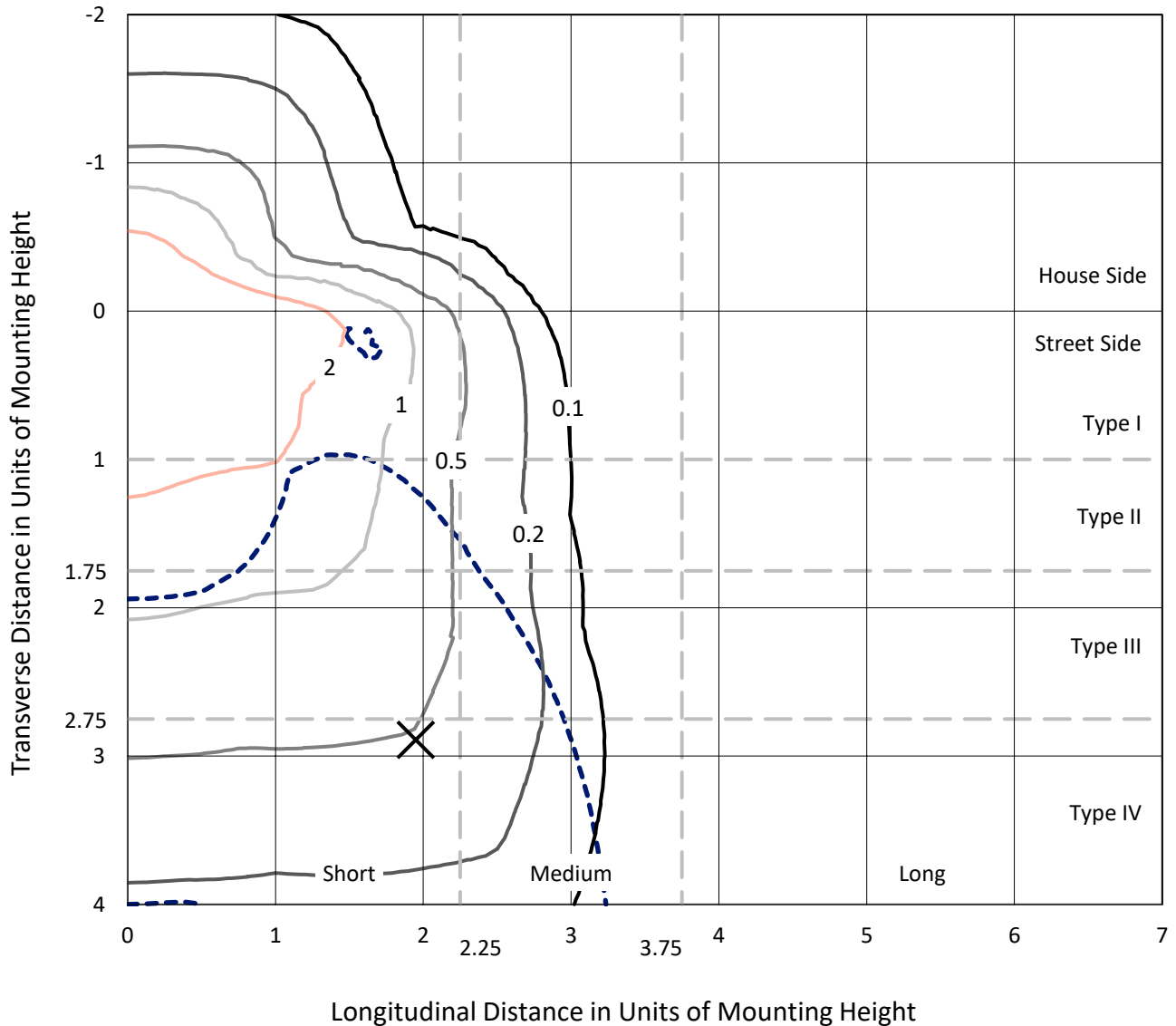
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

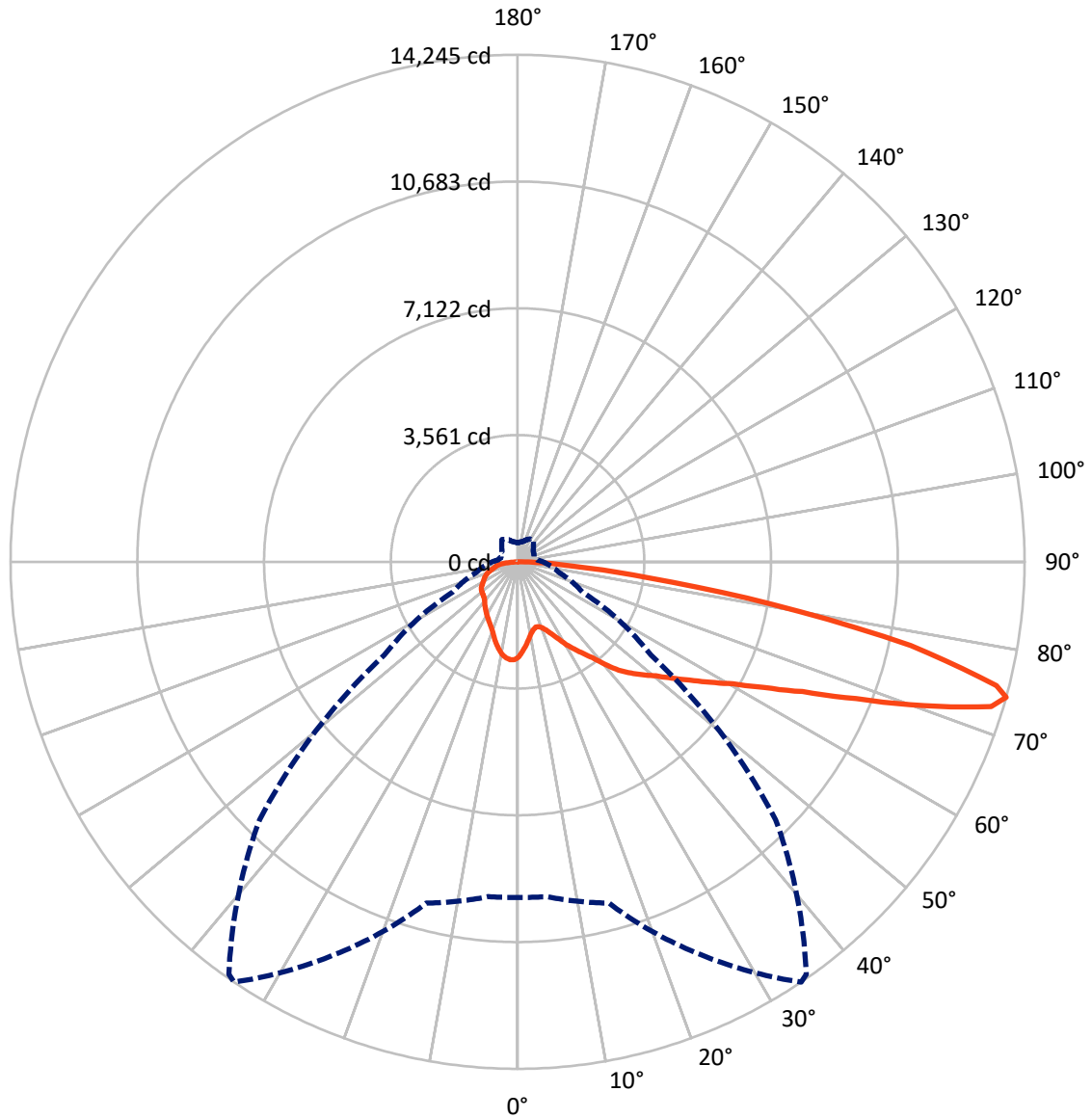
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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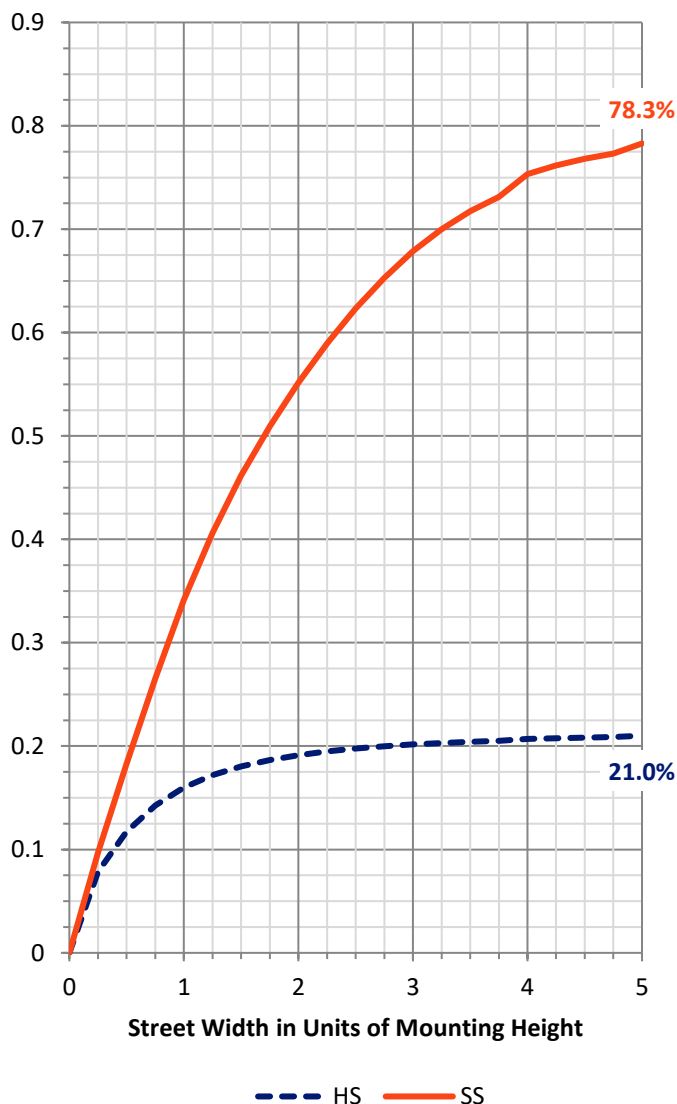
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3742.5	0.0	3742.5
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	13843.7	0.0	13843.7
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	17586.2	0.0	17586.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.2	1.4
10°-20°	668.5	3.8
20°-30°	1102.1	6.3
30°-40°	1650.9	9.4
40°-50°	2399.9	13.6
50°-60°	3352.1	19.1
60°-70°	4196.7	23.9
70°-80°	3470.3	19.7
80°-90°	501.4	2.9
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°	17586.2	100.0
0°-180°	17586.2	100.0

**Coefficient of Utilization**

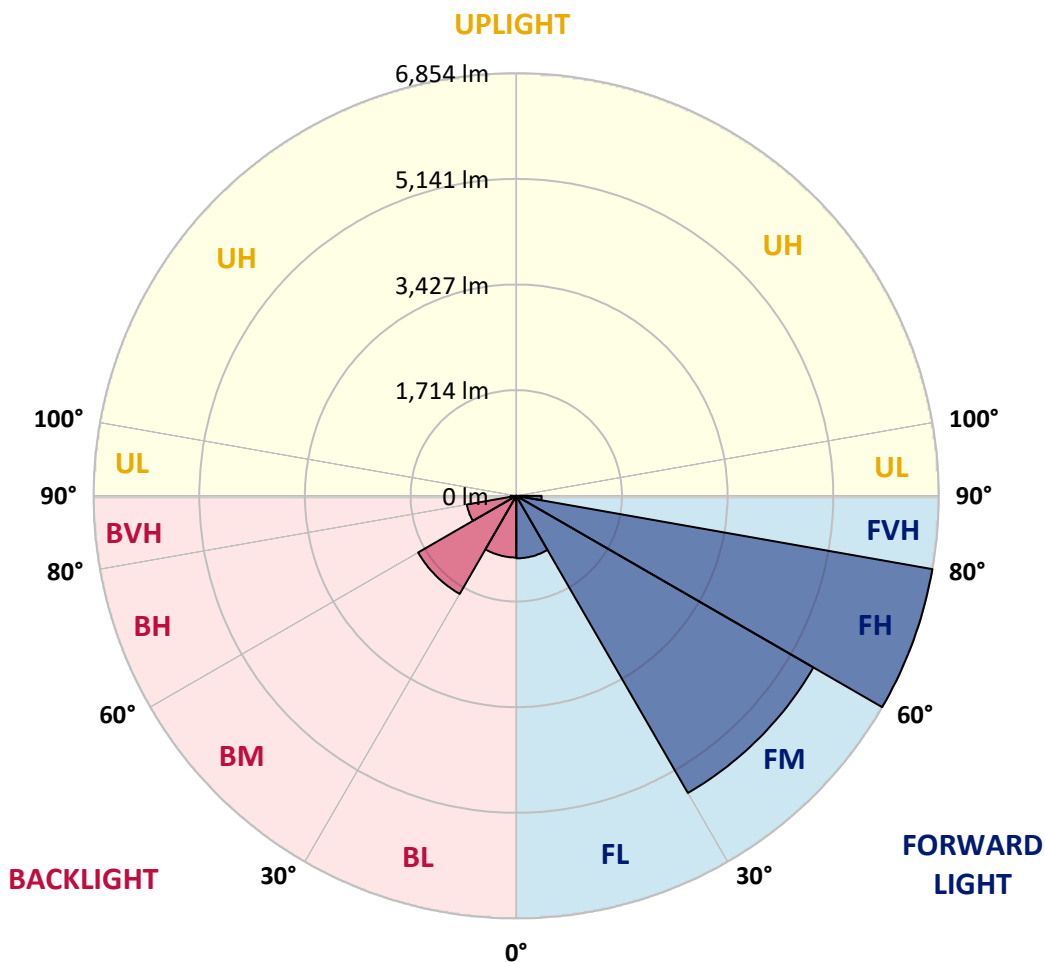


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1013.8	5.8			
FM (30°-60°)	5565.0	31.6			
FH (60°-80°)	6854.2	39.0			G3/7500
FVH (80°-90°)	410.8	2.3			G3/500
BL (0°-30°)	1001.0	5.7	B3/2500		
BM (30°-60°)	1837.9	10.5	B2/2500		
BH (60°-80°)	812.8	4.6	B2/1000		G2/1000
BVH (80°-90°)	90.6	0.5			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1
2.5°	2481.4	2494.1	2500.9	2525.3	2531.1	2539.0	2559.4	2586.6	2621.7	2652.9	2680.2
5°	2274.9	2294.3	2306.1	2327.5	2369.4	2373.3	2427.8	2490.2	2561.3	2627.6	2682.2
7.5°	2079.1	2100.5	2110.3	2149.3	2204.8	2213.5	2293.4	2391.8	2510.7	2611.0	2694.8
10°	1932.0	1942.7	1964.1	1993.4	2059.6	2065.4	2169.7	2301.2	2455.2	2603.2	2716.2
12.5°	1852.1	1857.9	1862.8	1894.0	1959.2	1968.0	2077.1	2226.1	2411.3	2609.0	2751.3
15°	1863.8	1865.7	1844.3	1850.2	1902.8	1915.4	2023.5	2176.5	2384.0	2623.7	2803.9
17.5°	1962.2	1955.3	1902.8	1875.4	1912.5	1918.4	2012.9	2157.0	2371.3	2650.9	2858.5
20°	2117.1	2107.3	2016.7	1956.3	1977.8	1982.6	2047.9	2171.7	2384.0	2695.8	2943.2
22.5°	2310.0	2306.1	2168.7	2095.6	2094.7	2094.7	2128.7	2224.3	2422.0	2757.2	3031.9
25°	2579.8	2559.4	2380.1	2285.6	2259.3	2257.4	2253.5	2310.9	2470.8	2822.4	3137.1
27.5°	2856.5	2821.5	2661.7	2516.5	2460.0	2453.2	2427.8	2433.7	2533.1	2896.5	3257.0
30°	3105.0	3082.6	2932.5	2771.7	2704.6	2689.0	2618.8	2586.6	2637.3	3030.0	3447.9
32.5°	3294.9	3281.3	3164.4	3018.2	2918.9	2916.0	2813.6	2787.3	2800.0	3191.7	3666.2
35°	3448.9	3453.7	3394.3	3267.7	3153.7	3137.1	3068.9	3035.8	2998.8	3425.5	3940.9
37.5°	3659.4	3670.1	3666.2	3557.0	3417.7	3421.6	3406.0	3351.5	3253.1	3686.6	4245.8
40°	3891.2	3899.0	3898.0	3856.1	3783.1	3787.0	3781.1	3718.8	3571.7	4018.8	4584.9
42.5°	4211.8	4174.7	4078.3	4120.1	4163.0	4181.5	4221.5	4162.0	3960.3	4373.4	4903.5
45°	4570.3	4500.1	4281.9	4301.3	4460.2	4495.2	4715.4	4633.6	4382.2	4780.7	5278.5
47.5°	4796.3	4727.1	4543.0	4539.1	4749.5	4783.6	5173.4	5143.1	4766.1	5220.1	5736.4
50°	4998.0	4988.2	4780.7	4830.4	5035.9	5086.6	5672.1	5643.9	5148.9	5738.4	6235.3
52.5°	5297.1	5218.1	5052.5	5154.8	5426.7	5492.9	6167.1	6084.2	5500.7	6196.3	6719.5
55°	5431.5	5413.0	5403.2	5491.9	5865.1	5912.8	6648.4	6458.3	5800.8	6584.1	7087.7
57.5°	5791.0	5756.9	5853.4	5913.8	6381.4	6454.5	7151.1	6849.1	6063.8	6891.9	7267.0
60°	6256.7	6238.2	6326.9	6435.9	6958.1	7069.2	7723.9	7182.2	6275.2	7046.8	7168.6
62.5°	6952.3	6950.4	6933.8	7167.7	7775.6	7877.8	8381.5	7506.7	6308.3	6930.9	6660.0
65°	7950.0	7914.9	7770.7	8026.0	8792.7	8912.5	9066.4	7687.9	6108.6	6335.6	5607.8
67.5°	8993.4	8991.4	8874.5	9205.8	10253.2	10376.9	9922.9	7648.0	5554.3	5132.4	3982.8
70°	9858.5	9816.6	9965.7	10848.4	12118.8	12262.0	10672.1	7177.4	4424.1	3389.5	2366.5
72.5°	10066.1	10068.0	10377.8	12115.0	13910.5	13932.9	10942.0	5817.3	2960.8	1869.6	1183.7
74°	9426.9	9443.5	9923.8	12178.2	14244.6	14143.3	10252.1	4572.2	2002.1	1220.8	853.5
75°	8604.7	8500.4	9195.1	11756.4	13897.9	13788.7	9444.5	3669.1	1527.6	975.2	747.3
77.5°	4600.4	4706.7	5778.3	8773.2	11290.7	11165.0	6403.8	1759.5	825.2	679.1	537.8
80°	1637.7	1806.3	2539.0	4590.7	7238.8	7277.8	3056.3	806.7	580.7	500.8	380.0
82.5°	668.4	686.8	1090.2	2037.2	3675.9	3711.0	1248.0	479.4	415.1	344.9	227.0
85°	261.1	268.9	482.2	915.8	1568.6	1670.8	431.6	253.3	255.3	197.8	116.0
87.5°	87.7	99.4	197.8	305.0	532.9	522.2	125.7	75.0	91.6	85.7	36.0
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°	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1	2685.1
2.5°	2693.8	2712.3	2725.0	2738.6	2751.3	2755.2	2752.3	2761.1	2762.0	2763.0	2764.0
5°	2709.4	2734.8	2759.1	2772.8	2778.6	2773.7	2757.2	2748.4	2740.6	2734.8	2736.7
7.5°	2730.9	2766.9	2789.3	2795.2	2779.6	2757.2	2716.2	2684.1	2663.6	2650.0	2649.0
10°	2764.0	2799.1	2817.5	2801.0	2758.1	2703.5	2639.3	2578.9	2533.1	2519.5	2518.4
12.5°	2805.9	2845.8	2844.9	2796.1	2721.1	2623.7	2519.5	2449.3	2387.0	2355.7	2368.4
15°	2860.5	2890.6	2862.4	2774.7	2655.9	2522.4	2393.8	2298.3	2228.1	2195.0	2196.9
17.5°	2923.7	2950.0	2875.0	2736.7	2564.2	2392.8	2243.7	2153.1	2097.6	2073.2	2071.3
20°	3002.6	3010.5	2875.0	2670.4	2446.4	2241.8	2099.5	2036.2	2005.0	1992.3	1996.3
22.5°	3087.4	3071.9	2859.4	2576.9	2291.4	2084.0	1988.4	1960.2	1944.7	1942.7	1944.7
25°	3182.9	3139.0	2827.3	2450.2	2129.8	1947.6	1892.0	1896.9	1899.8	1899.8	1906.6
27.5°	3299.8	3212.1	2773.7	2290.5	1940.7	1820.9	1805.3	1839.4	1855.0	1857.9	1862.8
30°	3453.7	3292.0	2685.1	2090.8	1780.0	1706.9	1734.2	1780.0	1797.5	1808.3	1806.3
32.5°	3636.9	3379.7	2565.3	1891.0	1650.4	1627.0	1660.1	1706.9	1726.4	1732.2	1724.5
35°	3852.2	3479.1	2407.4	1704.0	1537.4	1551.0	1590.0	1604.6	1622.1	1622.1	1626.1
37.5°	4084.1	3559.0	2214.5	1532.5	1449.7	1499.4	1527.6	1514.0	1506.2	1496.5	1501.3
40°	4319.9	3618.4	1964.1	1363.0	1362.0	1445.8	1453.6	1414.6	1383.5	1373.7	1368.8
42.5°	4525.4	3655.4	1738.1	1231.5	1279.2	1393.2	1399.1	1336.7	1287.0	1257.7	1248.0
45°	4768.0	3698.3	1516.9	1122.4	1202.2	1351.3	1365.9	1282.2	1209.0	1147.6	1132.1
47.5°	5100.2	3795.7	1342.5	1037.6	1146.7	1325.0	1345.4	1237.3	1140.8	1061.0	1048.3
50°	5475.4	3929.2	1207.1	980.1	1103.9	1301.6	1327.0	1191.5	1077.6	988.9	979.1
52.5°	5819.3	4001.3	1090.2	928.5	1062.0	1258.8	1302.6	1158.4	1015.2	916.8	908.0
55°	6007.3	3884.4	975.2	877.8	1004.4	1203.2	1268.5	1112.6	954.8	878.8	866.2
57.5°	6032.6	3642.8	871.0	823.2	944.1	1135.0	1205.2	1057.0	915.8	852.5	841.7
60°	5836.8	3282.3	790.1	778.5	882.7	1058.1	1134.0	1008.3	875.9	823.2	812.5
62.5°	5349.7	2890.6	733.6	737.5	820.3	977.2	1081.4	961.6	837.9	791.1	781.4
65°	4511.8	2386.0	679.1	695.6	764.8	913.8	1033.7	922.6	799.8	766.7	757.9
67.5°	3134.2	1722.5	634.2	651.8	712.2	849.6	978.1	880.7	757.0	739.5	725.8
70°	1735.1	1060.0	581.6	602.1	657.6	777.4	915.8	817.4	694.7	686.8	667.4
72.5°	911.9	675.2	522.2	544.6	583.6	684.9	820.3	748.2	633.3	600.2	574.8
74°	712.2	553.3	482.2	505.7	532.0	630.3	763.8	698.5	589.4	550.4	531.0
75°	620.6	493.0	448.2	478.3	501.7	593.4	720.0	663.4	565.1	528.1	510.5
77.5°	438.4	369.3	366.3	402.4	415.1	520.2	648.9	604.0	503.7	464.7	448.2
80°	307.9	276.7	290.3	312.7	330.3	459.9	602.1	522.2	413.1	367.3	361.4
82.5°	200.7	181.2	207.5	228.0	233.8	339.0	486.2	396.5	301.1	244.5	227.0
85°	92.6	90.6	118.9	116.0	114.9	165.6	288.4	231.8	173.4	129.6	121.8
87.5°	23.4	22.4	29.2	24.4	29.2	25.4	26.3	6.8	0.9	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)