

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: P651358

Luminaire Tested: **GALN-SA4D-840-U-T2-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651358  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-840-U-T2-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15181.7 lumens  
Efficiency: N/A  
Efficacy: 62.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

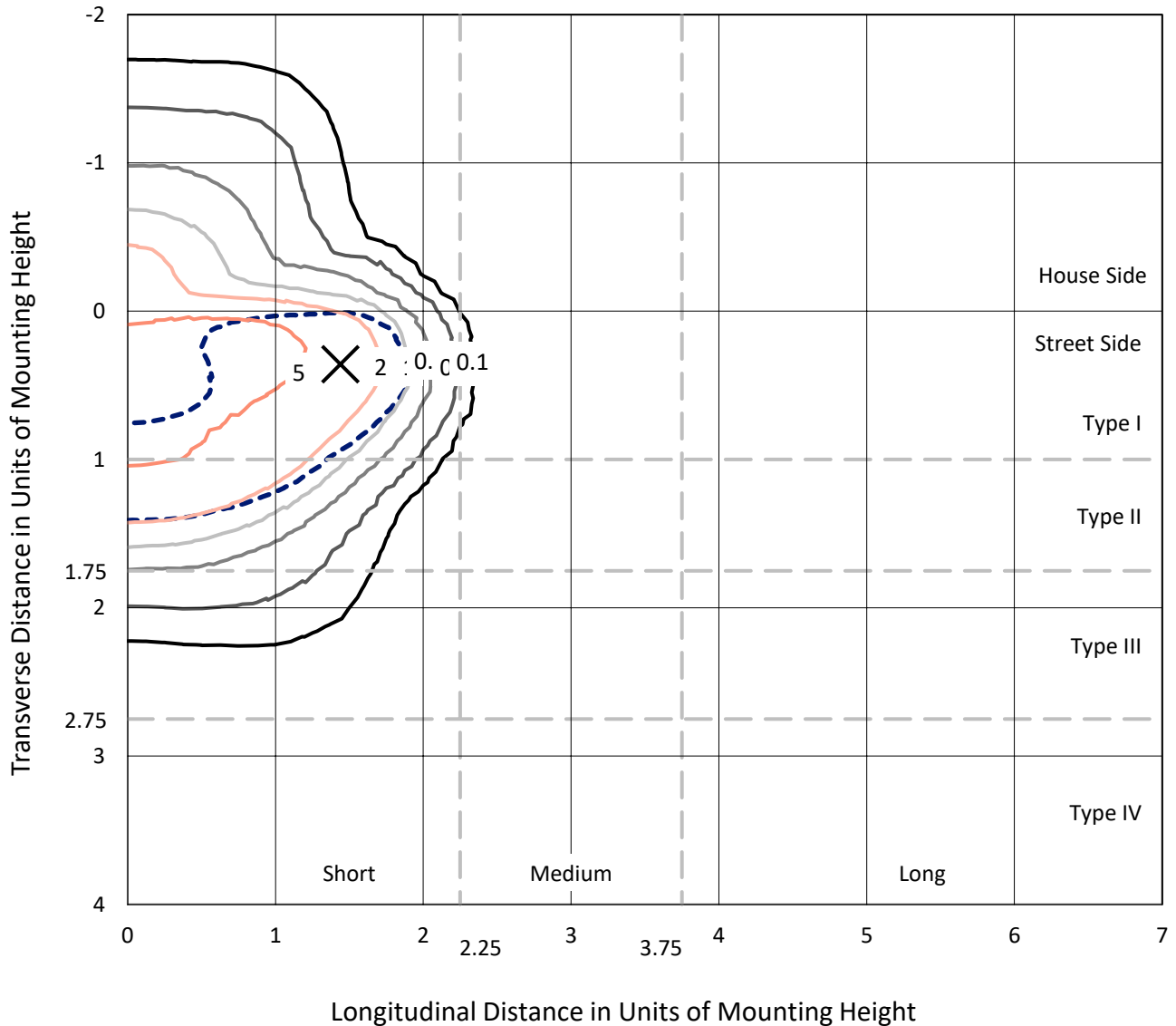
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P651358  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

### Iso-Footcandle Lines of Horizontal Illumination

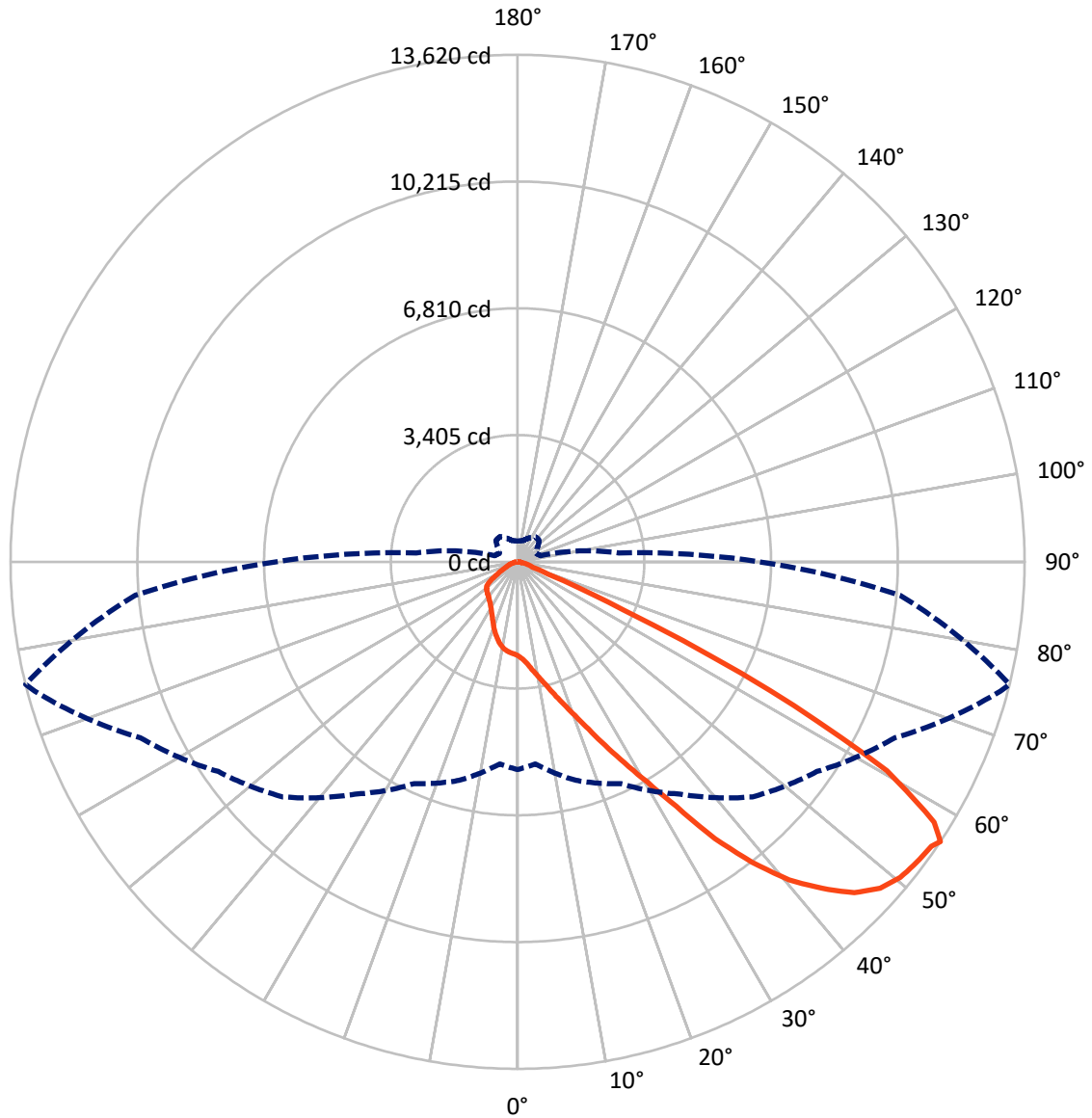
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc  
 Type II - Short - N/A

REPORT NUMBER: P651358  
CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

REPORT NUMBER: P651358  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

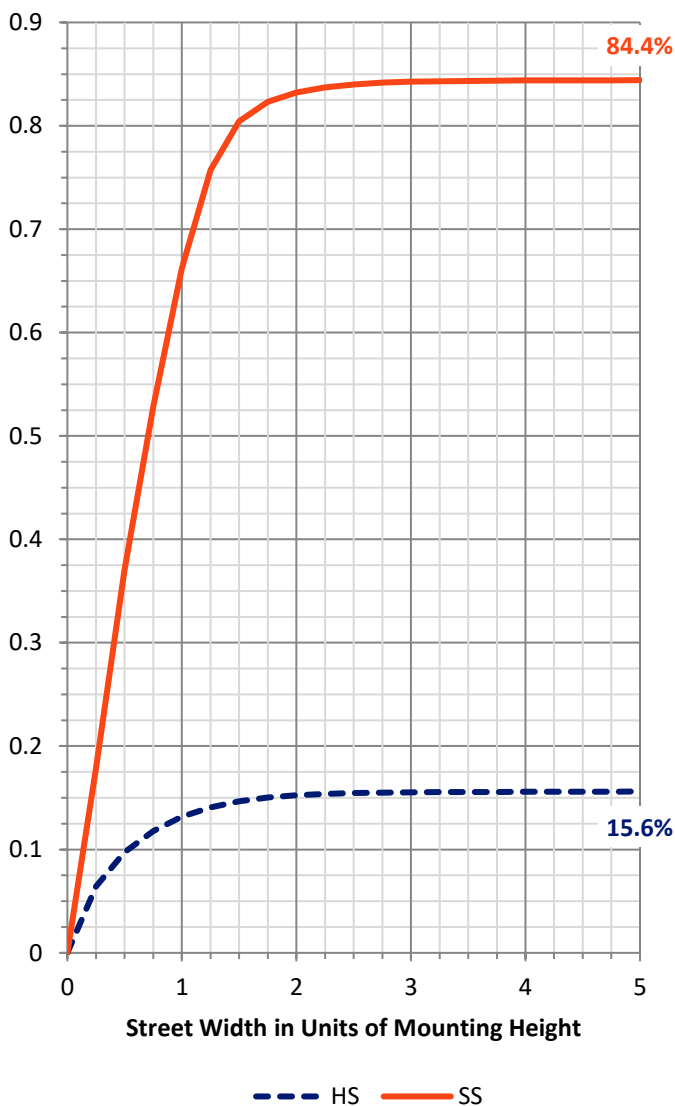
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2385.0	0.0	2385.0
	% Fixture	15.7	0.0	15.7
<b>Street Side</b>	Lumens	12796.8	0.0	12796.8
	% Fixture	84.3	0.0	84.3
<b>Total</b>	Lumens	15181.7	0.0	15181.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.6	1.7
10°-20°	817.8	5.4
20°-30°	1482.9	9.8
30°-40°	2557.4	16.8
40°-50°	4154.5	27.4
50°-60°	4379.0	28.8
60°-70°	1338.0	8.8
70°-80°	171.5	1.1
80°-90°	26.1	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°	15181.7	100.0
0°-180°	15181.7	100.0

**Coefficient of Utilization**

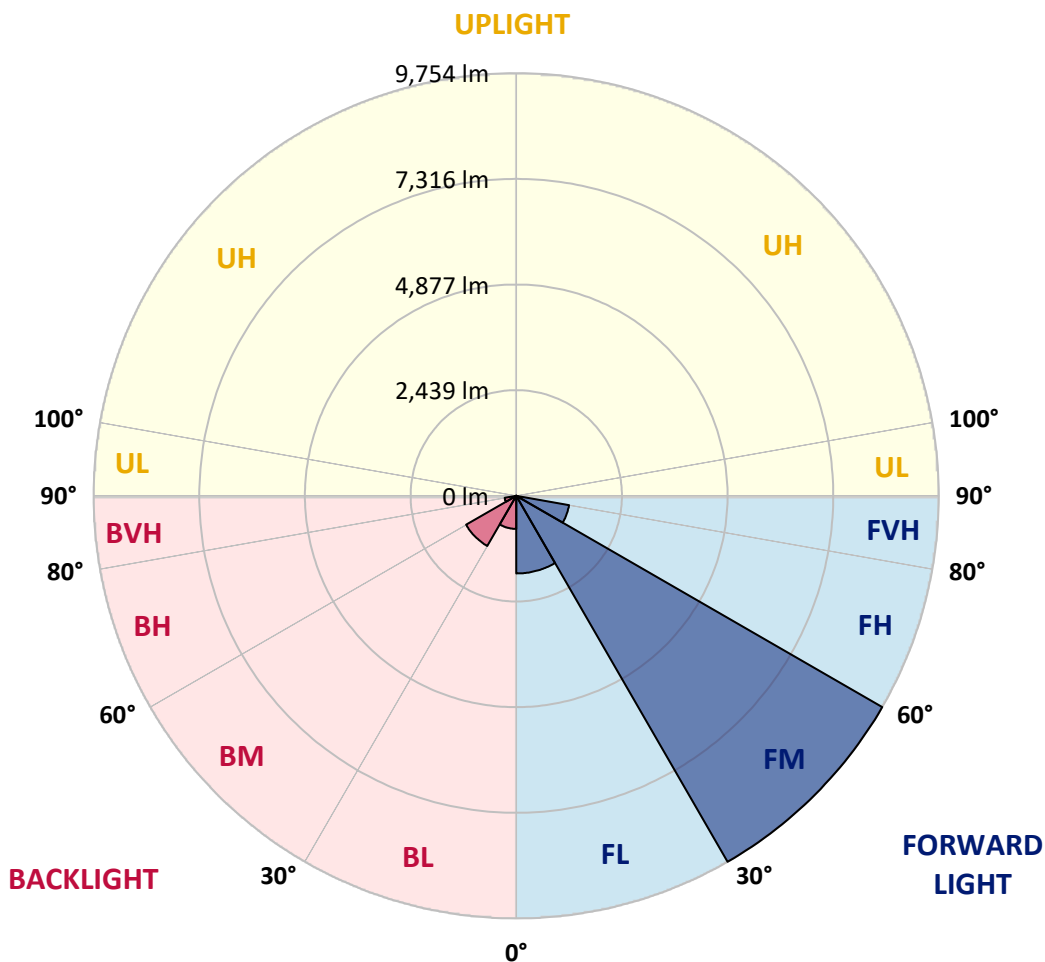


REPORT NUMBER: P651358  
 CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1792.3	11.8			
FM (30°-60°)	9754.2	64.2			
FH (60°-80°)	1237.4	8.2			G1/1800
FVH (80°-90°)	12.8	0.1			G1/100
BL (0°-30°)	763.0	5.0	B2/1000		
BM (30°-60°)	1336.6	8.8	B2/2500		
BH (60°-80°)	272.1	1.8	B1/500		G1/500
BVH (80°-90°)	13.3	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**  
 Type II Short





REPORT NUMBER: P651358

CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0
2.5°	2910.4	2843.3	2846.0	2840.5	2832.1	2801.3	2708.9	2694.9	2633.3	2616.6	2560.6
5°	3260.2	3201.4	3235.1	3184.7	3137.1	3109.1	2958.0	2888.0	2790.1	2753.7	2675.3
7.5°	3478.5	3450.5	3439.4	3442.1	3397.4	3327.4	3260.2	3106.3	2974.8	2946.8	2781.7
10°	3584.8	3568.0	3584.8	3576.4	3596.0	3604.4	3486.9	3394.5	3201.4	3153.9	2896.4
12.5°	3610.0	3643.6	3657.6	3694.0	3741.5	3822.7	3814.4	3688.4	3430.9	3400.2	3072.8
15°	3671.6	3699.6	3685.6	3744.4	3834.0	3971.0	4043.8	4024.2	3747.2	3691.1	3277.0
17.5°	3727.6	3677.2	3724.8	3842.3	3931.8	4141.8	4318.0	4399.2	4091.4	4027.0	3464.5
20°	3803.1	3789.1	3780.7	3839.5	3999.0	4278.8	4628.7	4777.0	4477.6	4410.4	3733.2
22.5°	4032.6	4035.4	4029.8	3943.0	4057.8	4374.0	4900.1	5266.8	4939.3	4883.4	4038.2
25°	4334.9	4298.4	4270.4	4200.5	4186.5	4460.7	5174.3	5865.6	5493.4	5454.2	4368.4
27.5°	4653.8	4653.8	4569.9	4505.6	4416.0	4676.2	5426.2	6447.7	6162.3	6109.1	4656.7
30°	5000.8	5020.4	5009.2	4872.2	4816.2	4911.4	5683.7	7192.1	6929.0	6861.9	5132.4
32.5°	5513.0	5471.0	5518.6	5403.8	5238.8	5322.7	6089.5	7858.1	7925.2	7830.1	5756.5
35°	6190.3	6165.0	6134.3	5946.8	5750.8	5818.0	6663.2	8678.0	9176.2	9128.6	6386.1
37.5°	6797.5	6783.5	6758.3	6629.6	6402.9	6484.0	7315.2	9531.6	10396.4	10239.6	7276.0
40°	7435.5	7511.1	7430.0	7315.2	7108.1	7287.3	8082.0	10038.1	11423.4	11233.1	7956.0
42.5°	8300.2	8241.5	8277.9	8068.0	7956.0	8152.0	8851.6	10544.6	12220.9	11994.3	8678.0
45°	9221.0	9223.8	9125.9	9058.7	8767.6	8980.3	9324.5	10824.5	12856.2	12679.9	9223.8
47.5°	9811.4	9808.7	9915.0	10021.4	9721.9	9512.0	9646.4	11090.4	13183.6	13102.4	9422.5
50°	9719.1	9747.1	9884.2	10281.6	10438.3	10155.7	9948.6	11012.0	13332.0	13323.5	9593.2
52.5°	8454.2	8546.6	8776.0	9349.7	10138.8	10488.7	10264.8	11157.5	13404.7	13418.7	9847.9
55°	6436.5	6486.9	6923.4	7620.2	8493.3	9691.1	10138.8	11272.3	13460.6	13485.9	10155.7
56°	5583.0	5448.7	6078.3	6573.6	7617.4	8927.1	9819.9	11182.7	13427.1	13620.2	10309.6
57.5°	4214.5	4124.9	4634.2	5252.7	6257.4	7639.8	8829.2	10760.2	13200.4	13197.6	10088.5
60°	2563.4	2473.9	2865.6	3229.4	3791.9	4704.2	5966.3	8568.9	11160.3	11395.4	8168.7
62.5°	1525.2	1581.2	1967.4	2188.4	2370.3	2465.5	3086.7	5093.3	7446.7	7614.7	5068.0
65°	1015.8	1035.4	1326.5	1690.2	1771.4	1410.4	1256.5	2062.5	3229.4	3125.9	2090.5
67.5°	626.9	671.6	889.9	1270.5	1407.7	1029.8	596.1	769.6	889.9	889.9	604.5
70°	380.6	403.0	593.2	864.7	965.5	663.2	433.8	433.8	428.2	419.7	361.0
72.5°	181.9	195.9	302.3	445.0	453.4	349.8	335.8	366.6	358.2	355.4	299.4
75°	78.4	83.9	106.3	139.9	159.5	148.4	204.3	263.1	271.5	263.1	215.5
77.5°	25.1	28.0	39.2	50.4	53.2	64.3	86.8	109.2	125.9	117.6	106.3
80°	2.8	5.6	11.2	25.1	39.2	50.4	64.3	72.7	81.2	81.2	75.5
82.5°	2.8	2.8	11.2	22.4	36.4	47.6	61.6	70.0	81.2	83.9	78.4
85°	0.0	2.8	8.4	19.6	30.8	30.8	28.0	28.0	19.6	19.6	19.6
87.5°	0.0	0.0	2.8	2.8	2.8	5.6	5.6	5.6	5.6	5.6	5.6
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: P651358

CATALOG NUMBER: GALN-SA4D-840-U-T2-GRSBK

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0	2527.0
2.5°	2549.4	2543.8	2468.3	2420.7	2395.5	2345.1	2314.3	2292.0	2275.2	2255.6	2258.3
5°	2583.0	2563.4	2437.5	2350.7	2247.2	2191.2	2143.6	2104.4	2079.3	2073.7	2062.5
7.5°	2678.2	2574.6	2384.3	2227.6	2096.0	2040.1	1998.1	1972.9	1984.1	1958.9	1978.5
10°	2750.9	2597.0	2319.9	2093.2	1961.7	1919.8	1897.4	1917.0	1945.0	1933.7	1919.8
12.5°	2840.5	2619.4	2216.4	1964.5	1841.4	1810.6	1849.8	1886.2	1942.1	1964.5	1936.6
15°	2941.2	2644.5	2084.8	1816.2	1737.8	1763.1	1830.2	1894.6	1950.5	1978.5	1995.3
17.5°	3064.4	2636.2	1956.2	1698.7	1639.9	1712.7	1793.9	1852.6	1936.6	1978.5	1967.4
20°	3179.1	2608.2	1813.4	1581.2	1583.9	1651.1	1718.2	1813.4	1858.2	1914.1	1894.6
22.5°	3288.2	2557.8	1665.1	1500.0	1500.0	1603.5	1637.1	1698.7	1737.8	1765.8	1763.1
25°	3442.1	2462.6	1542.0	1421.6	1455.2	1522.4	1550.4	1570.0	1553.2	1575.5	1578.3
27.5°	3551.3	2364.7	1441.2	1351.7	1413.2	1463.6	1455.2	1444.0	1404.8	1374.0	1393.6
30°	3668.8	2250.0	1354.4	1304.1	1337.7	1382.4	1348.9	1315.3	1253.7	1203.3	1206.2
32.5°	3836.7	2196.8	1278.9	1248.1	1292.9	1298.5	1262.1	1211.7	1150.2	1102.6	1099.8
35°	4150.2	2163.2	1214.6	1211.7	1220.1	1222.9	1186.6	1125.0	1099.8	1060.6	1074.6
37.5°	4463.6	2146.4	1169.7	1158.6	1155.8	1158.6	1116.6	1057.8	1105.4	1102.6	1108.2
40°	4863.8	2222.0	1105.4	1091.4	1094.2	1094.2	1041.1	1024.3	1108.2	1116.6	1119.4
42.5°	5269.5	2317.1	1063.4	1018.6	1029.8	1029.8	1001.9	982.3	1041.1	985.1	976.7
45°	5622.2	2457.1	1018.6	945.9	973.9	987.8	979.4	945.9	909.5	814.3	814.3
47.5°	5736.9	2580.2	965.5	875.9	898.3	959.9	934.7	864.7	800.4	722.0	716.4
50°	5938.4	2714.5	923.5	794.7	842.3	917.9	892.7	822.8	750.0	694.0	696.9
52.5°	6145.4	2868.4	845.1	699.6	758.4	884.3	884.3	805.9	694.0	654.8	649.3
55°	6456.1	2862.8	705.2	573.6	677.3	833.9	847.9	722.0	621.2	590.5	590.5
56°	6500.8	2734.1	635.3	537.3	640.8	820.0	822.8	699.6	593.2	559.7	559.7
57.5°	6165.0	2468.3	556.9	492.5	596.1	794.7	797.6	680.0	570.9	523.4	517.7
60°	4743.4	1670.7	464.6	439.3	540.1	716.4	730.4	618.5	500.9	464.6	461.7
62.5°	2678.2	926.3	408.6	397.4	464.6	610.1	652.0	540.1	425.4	405.8	411.4
65°	1222.9	509.3	344.2	321.9	375.0	470.1	526.1	445.0	349.8	327.4	327.4
67.5°	447.7	347.0	293.8	254.7	263.1	305.0	341.4	288.2	232.3	198.7	207.1
70°	319.0	291.1	257.4	221.1	204.3	198.7	195.9	162.3	114.7	89.6	95.1
72.5°	257.4	240.7	215.5	187.5	159.5	134.3	114.7	83.9	53.2	36.4	33.6
75°	184.7	176.3	156.7	134.3	111.9	95.1	78.4	53.2	28.0	14.0	14.0
77.5°	95.1	95.1	92.3	83.9	70.0	56.0	44.7	30.8	16.8	5.6	5.6
80°	72.7	78.4	81.2	72.7	64.3	50.4	36.4	22.4	11.2	2.8	2.8
82.5°	70.0	81.2	86.8	75.5	64.3	47.6	36.4	22.4	11.2	2.8	2.8
85°	16.8	16.8	25.1	28.0	36.4	39.2	30.8	19.6	8.4	2.8	2.8
87.5°	5.6	5.6	5.6	5.6	5.6	5.6	2.8	2.8	2.8	2.8	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)