

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: P652417

Luminaire Tested: **GALN-SA5B-840-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652417  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5B-840-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24524.4 lumens  
Efficiency: N/A  
Efficacy: 120.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

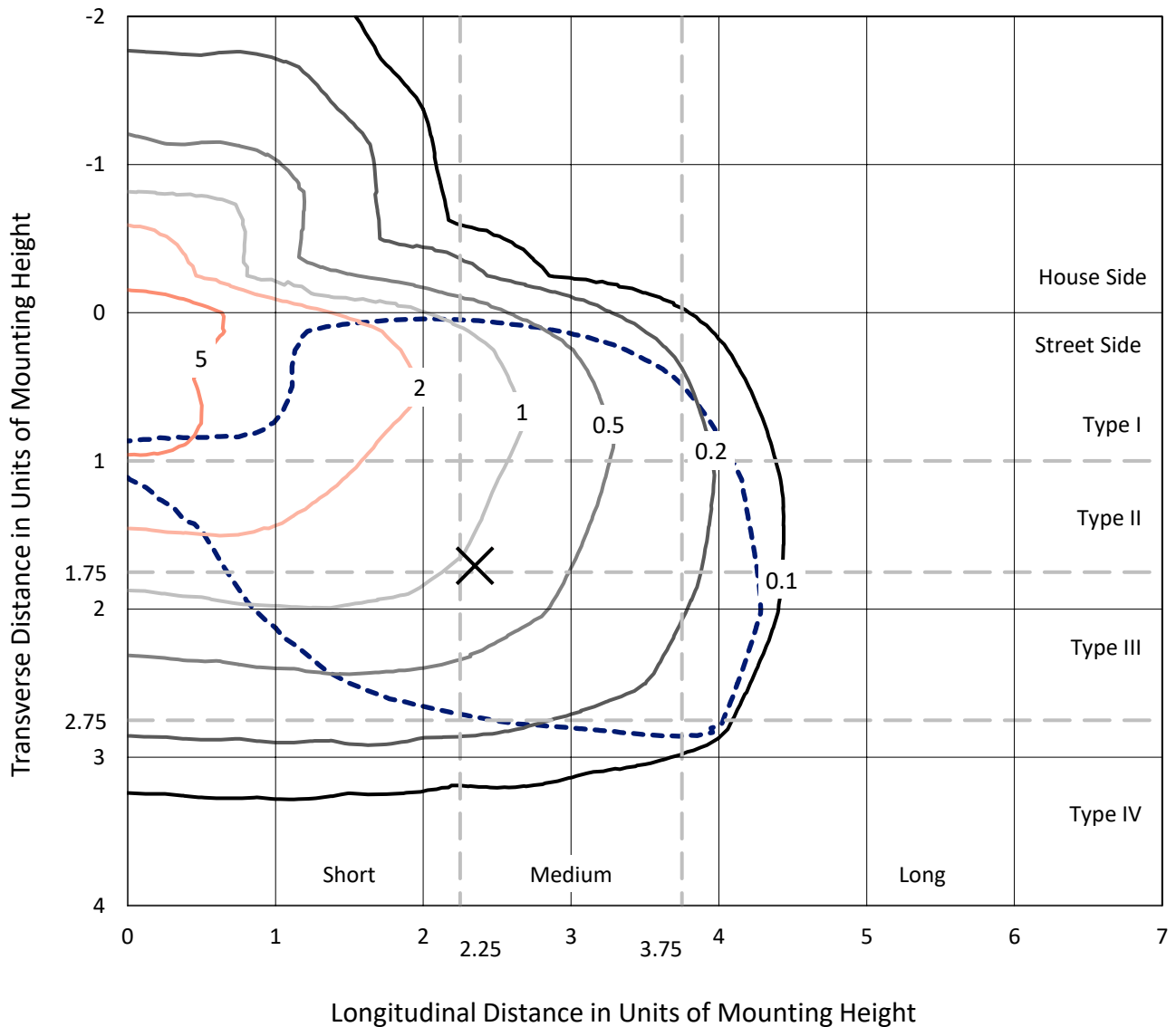
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

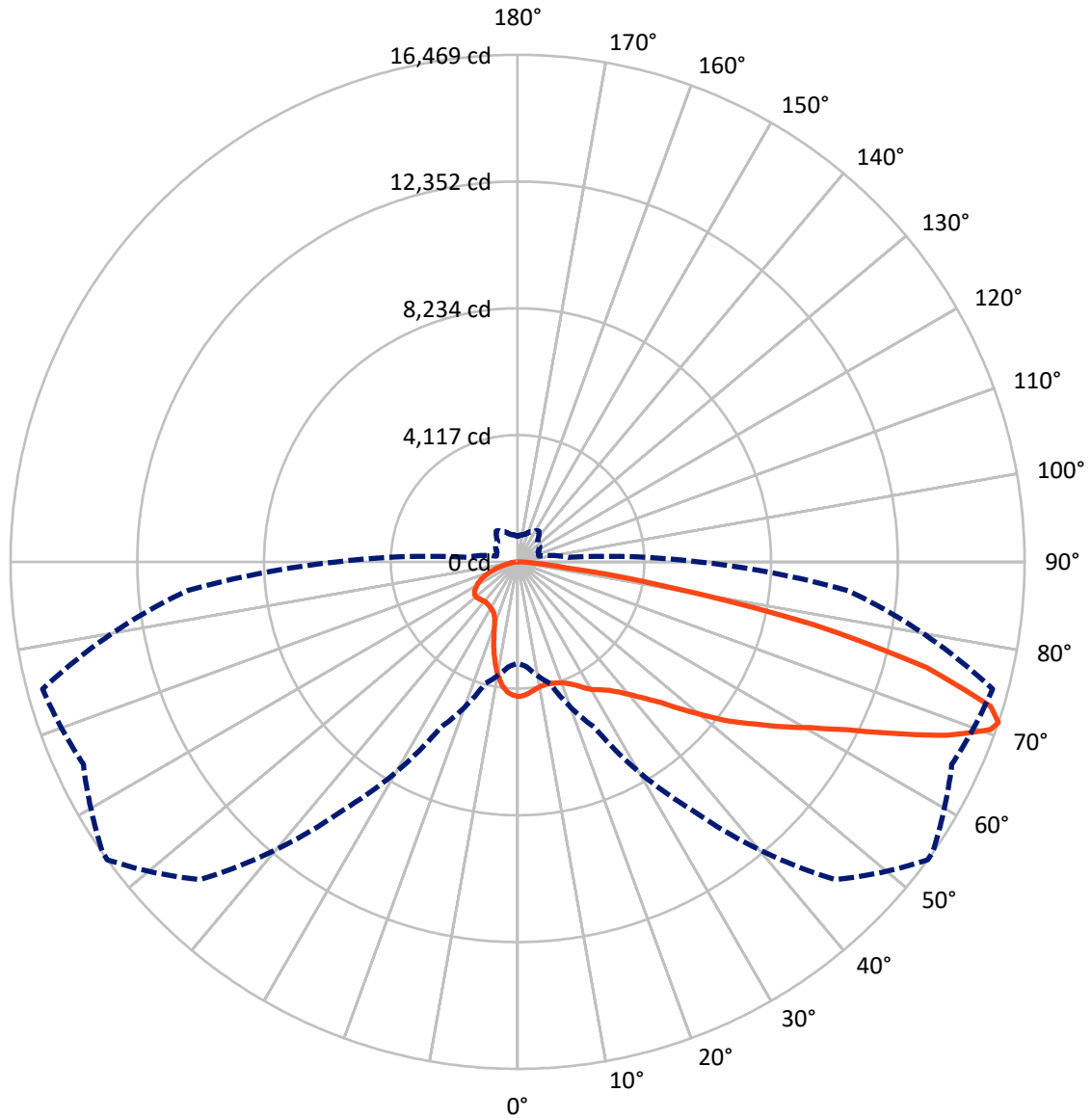
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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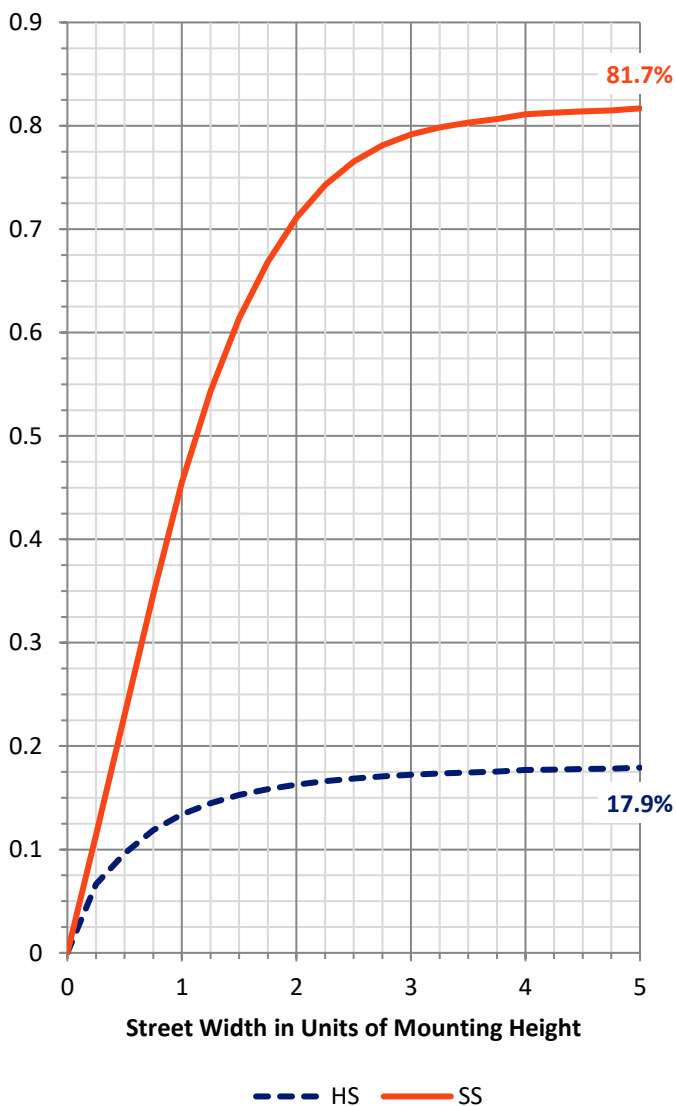
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4427.7	0.0	4427.7
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	20096.7	0.0	20096.7
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	24524.4	0.0	24524.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	389.9	1.6
10°-20°	1029.6	4.2
20°-30°	1714.3	7.0
30°-40°	2534.9	10.3
40°-50°	3570.5	14.6
50°-60°	4781.1	19.5
60°-70°	6026.2	24.6
70°-80°	4115.9	16.8
80°-90°	362.0	1.5
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°	24524.4	100.0
0°-180°	24524.4	100.0

**Coefficient of Utilization**

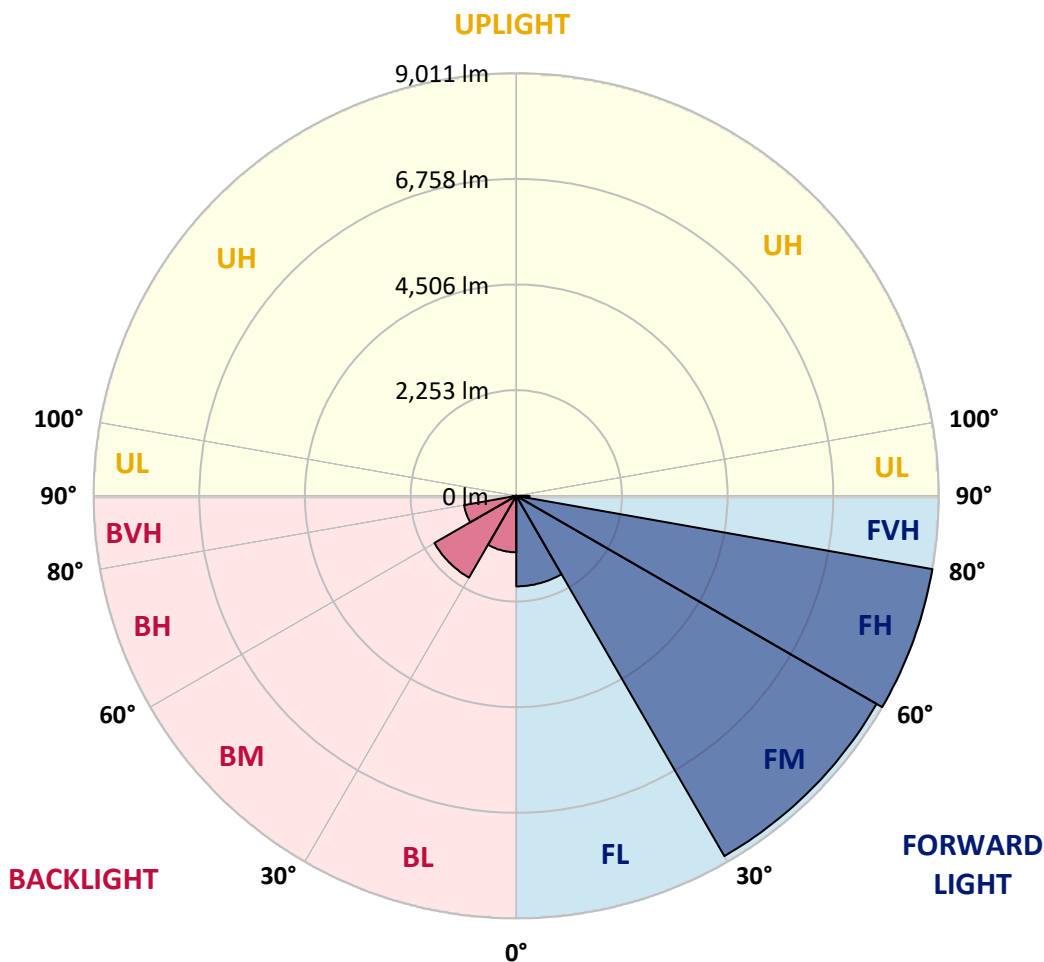


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1930.5	7.9			
FM (30°-60°)	8872.0	36.2			
FH (60°-80°)	9011.2	36.7			G4/12000
FVH (80°-90°)	282.9	1.2			G3/500
BL (0°-30°)	1203.4	4.9	B3/2500		
BM (30°-60°)	2014.5	8.2	B2/2500		
BH (60°-80°)	1130.8	4.6	B3/2500		G3/2500
BVH (80°-90°)	79.0	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-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6
2.5°	4227.1	4247.0	4252.3	4265.6	4293.4	4315.9	4338.4	4335.8	4367.6	4380.9	4392.7
5°	4039.1	4044.4	4064.2	4090.7	4139.7	4202.0	4262.9	4264.2	4342.4	4404.7	4435.1
7.5°	3901.2	3918.5	3931.8	3959.6	4011.2	4078.8	4175.5	4183.5	4322.5	4445.7	4510.6
10°	3811.2	3831.1	3845.6	3880.0	3931.8	4007.3	4111.9	4126.5	4307.9	4510.6	4624.6
12.5°	3729.1	3748.9	3762.2	3807.2	3874.7	3967.5	4085.4	4102.7	4313.2	4586.1	4749.0
15°	3779.4	3795.3	3790.0	3803.3	3848.2	3954.3	4096.0	4113.2	4333.1	4659.0	4872.2
17.5°	4003.2	4016.5	3972.8	3922.4	3901.2	3979.4	4129.1	4147.6	4372.9	4734.5	4998.1
20°	4333.1	4368.9	4273.5	4160.9	4058.9	4069.5	4198.0	4217.9	4428.5	4810.0	5126.7
22.5°	4762.3	4788.8	4672.3	4486.8	4298.7	4202.0	4301.3	4313.2	4512.0	4908.1	5267.0
25°	5267.0	5282.9	5121.4	4882.8	4611.3	4428.5	4443.1	4464.3	4649.7	5019.3	5391.6
27.5°	5757.1	5807.5	5620.7	5329.3	4971.7	4667.0	4637.8	4651.1	4799.4	5081.6	5477.7
30°	6338.7	6334.7	6137.4	5799.6	5341.2	4926.6	4822.0	4819.3	4880.2	5112.0	5539.9
32.5°	6802.3	6856.7	6663.3	6295.1	5763.8	5195.5	4949.1	4943.8	4942.5	5165.0	5632.7
35°	7329.7	7337.6	7160.0	6789.1	6220.9	5533.3	5126.7	5100.2	5069.6	5279.0	5758.5
37.5°	7801.2	7838.3	7675.4	7259.4	6669.9	5884.4	5370.4	5353.1	5260.5	5476.3	5959.8
40°	8169.5	8197.3	8099.3	7703.2	7112.3	6263.3	5680.4	5648.6	5536.0	5799.6	6228.8
42.5°	8290.1	8347.0	8385.4	8190.7	7621.1	6712.3	6061.8	6022.1	5936.0	6289.8	6538.8
45°	8299.3	8389.4	8592.1	8601.3	8132.4	7250.2	6507.0	6479.1	6472.5	6917.6	6974.6
47.5°	8229.1	8320.5	8661.0	8845.0	8588.1	7793.3	7149.4	7105.8	7109.7	7693.9	7463.5
50°	8059.6	8168.1	8581.5	9001.4	8944.5	8357.6	7827.7	7813.1	7895.3	8580.1	7970.7
52.5°	7740.3	7871.4	8499.3	9099.5	9209.4	8843.8	8598.7	8557.6	8765.6	9541.9	8525.8
55°	6856.7	7054.1	8198.7	9153.8	9461.1	9308.8	9292.8	9367.1	9642.6	10591.0	9136.5
57.5°	6395.7	6544.1	7545.5	9163.0	9779.0	9849.2	10103.5	10122.1	10604.3	11705.1	9826.7
60°	6144.0	6275.1	7187.9	9102.1	10222.8	10518.2	10932.8	10999.1	11543.5	12912.0	10542.0
62.5°	5924.1	6036.7	6973.2	8891.5	10723.5	11510.4	12007.2	12039.0	12610.0	14244.6	11248.1
65°	5406.1	5534.6	6541.4	8680.8	11155.4	12750.3	13432.5	13395.4	13745.2	15394.4	11690.6
67.5°	4708.0	4871.0	5734.7	7953.6	11368.6	14105.5	15038.1	14991.8	14865.9	16148.2	11817.7
70°	3816.5	3903.9	4702.7	6696.4	10516.9	14816.9	16305.8	16256.9	15560.0	16247.5	11216.3
71°	3283.9	3420.4	4094.7	5948.0	9808.2	14599.6	16468.8	16455.5	15561.4	15973.4	10763.3
72.5°	2563.3	2646.8	3242.9	4608.7	8336.4	13365.0	16066.0	16116.4	15223.5	15211.7	9829.4
75°	1621.4	1658.5	2034.7	2713.0	4574.2	9465.0	13714.7	13851.2	13517.3	12450.9	7309.7
77.5°	941.8	989.5	1218.7	1598.9	1976.4	5137.2	9813.5	9961.8	9392.2	6855.4	2992.5
80°	548.4	601.4	802.7	928.6	907.4	1906.3	4996.8	5249.9	4066.8	1731.4	839.9
82.5°	304.7	340.4	564.3	565.7	483.5	622.6	1572.4	1645.2	1160.4	698.1	343.1
85°	221.3	250.4	364.3	329.8	231.9	267.6	547.1	573.6	468.9	294.1	111.3
87.5°	78.1	111.3	200.0	158.9	63.6	55.7	157.6	128.5	119.3	82.2	25.1
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°	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6	4375.6
2.5°	4399.4	4402.0	4388.8	4365.0	4341.1	4310.6	4276.1	4249.7	4237.7	4236.5	4235.1
5°	4447.0	4453.7	4403.3	4329.1	4247.0	4146.4	4060.3	3962.2	3937.1	3897.3	3909.2
7.5°	4523.9	4519.9	4420.5	4262.9	4070.9	3857.6	3677.4	3572.7	3464.1	3433.6	3435.0
10°	4633.8	4608.7	4420.5	4127.8	3807.2	3490.6	3238.9	3079.9	2993.9	2922.3	2895.8
12.5°	4750.4	4686.8	4378.2	3938.4	3468.1	3079.9	2809.7	2595.1	2539.5	2481.2	2482.5
15°	4861.7	4755.7	4294.7	3672.1	3102.4	2641.5	2379.2	2250.7	2233.4	2240.1	2238.7
17.5°	4962.4	4804.7	4167.6	3375.4	2675.9	2265.2	2126.1	2135.5	2181.8	2214.9	2218.9
20°	5064.3	4833.9	3978.1	2978.0	2273.2	2037.4	2042.7	2115.5	2185.8	2230.8	2237.4
22.5°	5161.0	4847.1	3755.6	2593.8	1981.7	1940.7	2018.8	2097.0	2165.9	2209.6	2216.2
25°	5224.6	4816.7	3440.3	2192.4	1838.7	1906.3	1988.4	2054.6	2112.9	2157.9	2168.5
27.5°	5241.9	4718.6	3049.5	1867.9	1772.5	1873.2	1948.7	1997.6	2042.7	2085.1	2093.1
30°	5232.6	4574.2	2620.3	1677.1	1734.1	1834.7	1893.0	1928.7	1983.1	2016.2	2022.9
32.5°	5218.1	4406.0	2172.6	1575.1	1702.3	1799.0	1833.4	1865.2	1863.9	1850.6	1859.9
35°	5223.4	4204.7	1809.6	1514.1	1674.4	1772.5	1801.6	1761.9	1647.9	1642.6	1637.3
37.5°	5251.1	4005.9	1545.9	1471.8	1659.9	1768.5	1784.3	1601.6	1500.9	1454.5	1442.6
40°	5322.7	3774.1	1372.4	1440.0	1658.5	1799.0	1706.2	1520.8	1327.4	1237.3	1230.6
42.5°	5418.1	3546.2	1266.5	1420.1	1674.4	1845.3	1674.4	1406.8	1196.2	1143.3	1135.3
45°	5559.8	3285.3	1208.1	1410.8	1698.3	1862.6	1663.8	1323.4	1143.3	1100.9	1100.9
47.5°	5720.1	3036.3	1176.3	1404.2	1728.8	1850.6	1569.8	1296.9	1118.0	1123.3	1148.6
50°	5879.1	2820.3	1152.5	1389.6	1755.3	1844.0	1531.4	1295.6	1124.7	1192.2	1237.3
52.5°	6063.2	2668.0	1123.3	1365.8	1755.3	1801.6	1519.4	1322.1	1143.3	1163.1	1183.0
55°	6285.7	2620.3	1086.2	1314.1	1723.5	1695.6	1512.8	1360.5	1156.5	1110.1	1118.0
57.5°	6579.8	2697.1	1050.5	1249.2	1650.5	1585.7	1510.2	1371.1	1126.0	1087.6	1079.7
60°	6921.6	2849.5	1039.9	1183.0	1551.2	1491.6	1494.3	1340.6	1083.6	1043.8	1050.5
62.5°	7161.4	2940.9	1033.3	1132.7	1442.6	1388.3	1455.9	1303.6	1065.0	1030.6	1037.3
65°	7161.4	2829.5	972.4	1055.8	1302.2	1263.8	1409.5	1257.1	1041.2	1001.5	994.8
67.5°	6889.8	2505.0	879.6	940.6	1147.2	1122.1	1344.6	1201.5	1005.4	975.0	959.1
70°	6182.4	1899.7	763.0	805.4	951.2	973.6	1261.2	1126.0	945.9	908.8	884.9
71°	5871.1	1654.6	714.0	736.5	875.6	908.8	1221.4	1094.2	919.4	866.4	823.9
72.5°	5271.1	1393.6	639.8	649.1	748.5	808.0	1138.0	1033.3	869.0	793.5	745.8
75°	4004.6	1017.4	515.3	510.0	553.7	641.2	963.0	920.6	761.7	659.7	631.9
77.5°	1730.1	553.7	385.5	389.5	376.2	486.2	757.7	790.9	653.1	536.5	511.3
80°	524.6	319.2	263.7	269.0	251.7	325.9	533.9	620.0	524.6	417.3	382.8
82.5°	269.0	190.7	180.1	177.5	160.3	184.1	323.2	423.9	374.9	261.0	230.5
85°	116.6	102.0	88.7	86.1	75.5	66.3	115.2	211.9	198.7	145.7	139.1
87.5°	29.2	26.5	17.2	15.9	9.3	1.3	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)