

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: P650877

Luminaire Tested: **GALN-SA4C-840-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P650877  
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-SA4C-840-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23935.7 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

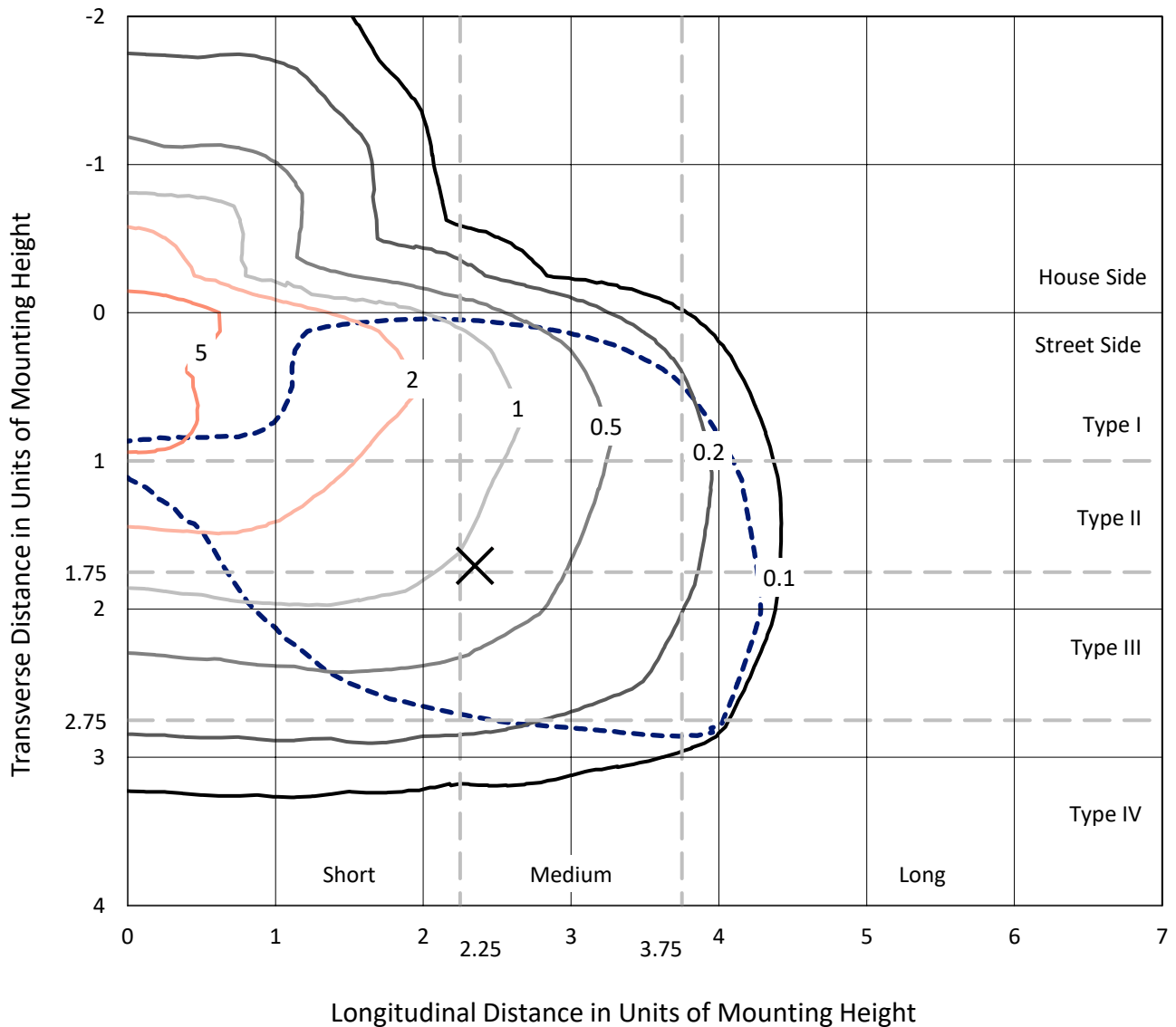
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

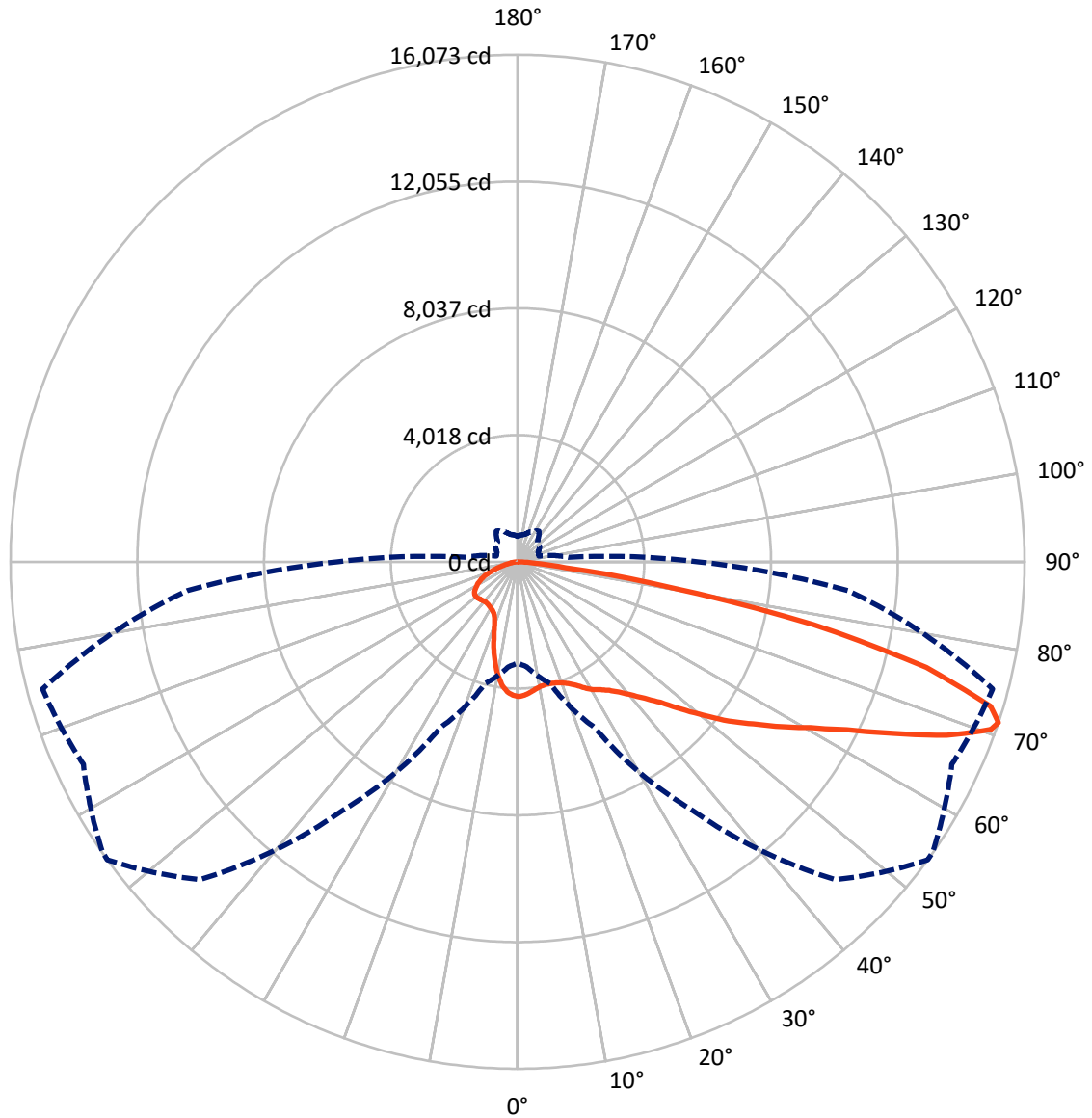
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 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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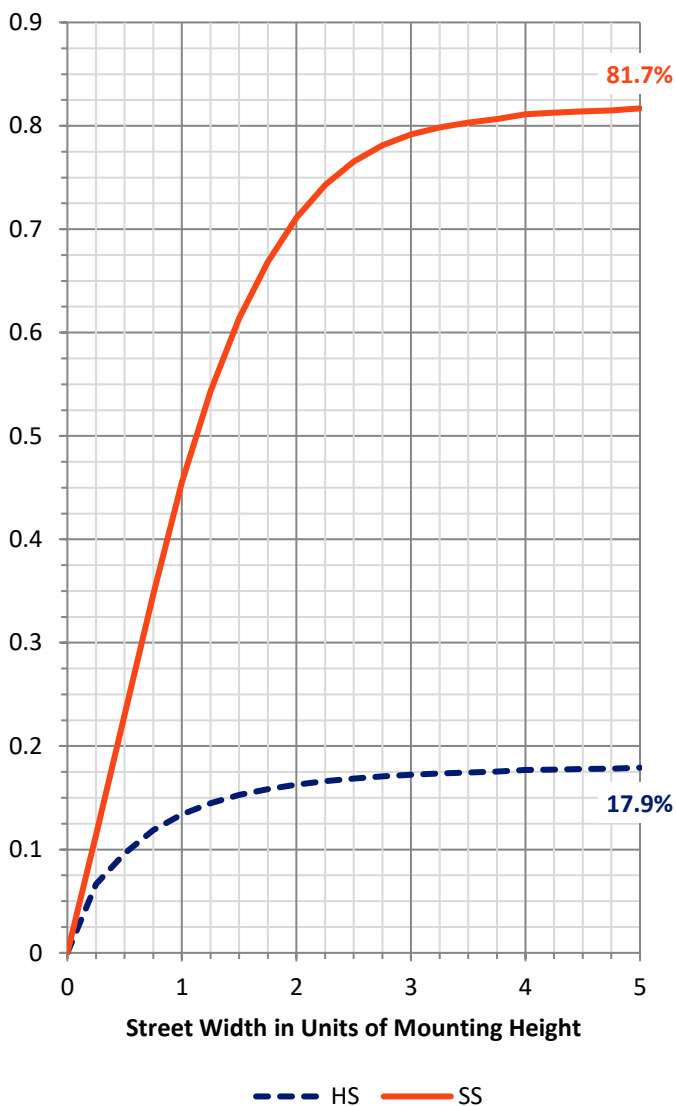
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4321.4	0.0	4321.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	19614.3	0.0	19614.3
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	23935.7	0.0	23935.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	380.6	1.6
10°-20°	1004.9	4.2
20°-30°	1673.2	7.0
30°-40°	2474.1	10.3
40°-50°	3484.8	14.6
50°-60°	4666.3	19.5
60°-70°	5881.5	24.6
70°-80°	4017.1	16.8
80°-90°	353.3	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°	23935.7	100.0
0°-180°	23935.7	100.0

**Coefficient of Utilization**

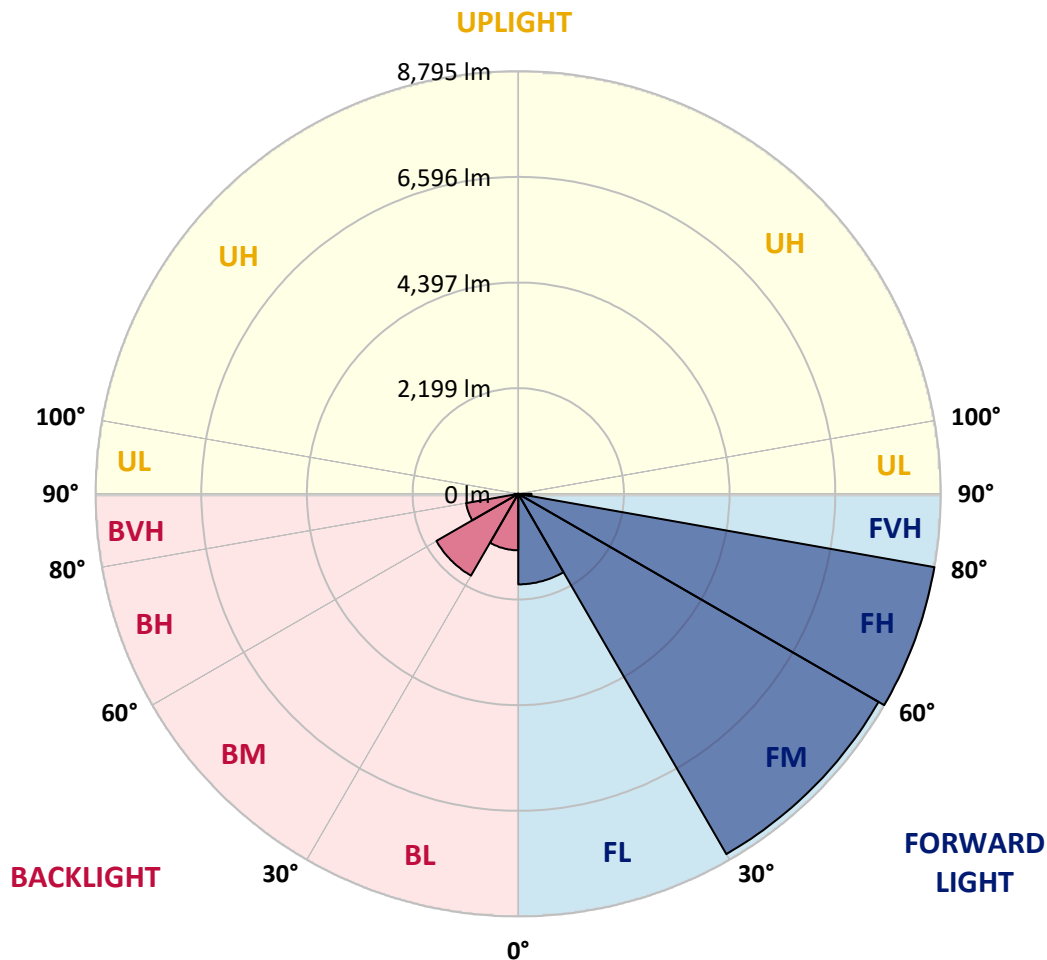


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1884.1	7.9			
FM (30°-60°)	8659.1	36.2			
FH (60°-80°)	8794.9	36.7			G4/12000
FVH (80°-90°)	276.1	1.2			G3/500
BL (0°-30°)	1174.5	4.9	B3/2500		
BM (30°-60°)	1966.1	8.2	B2/2500		
BH (60°-80°)	1103.7	4.6	B3/2500		G3/2500
BVH (80°-90°)	77.1	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-G4**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5
2.5°	4125.7	4145.0	4150.3	4163.2	4190.3	4212.3	4234.3	4231.7	4262.7	4275.6	4287.2
5°	3942.1	3947.2	3966.7	3992.5	4040.3	4101.1	4160.6	4161.9	4238.1	4298.9	4328.6
7.5°	3807.6	3824.4	3837.4	3864.5	3914.9	3980.9	4075.2	4083.0	4218.8	4339.0	4402.4
10°	3719.7	3739.1	3753.3	3786.9	3837.4	3911.1	4013.2	4027.4	4204.6	4402.4	4513.6
12.5°	3639.5	3658.9	3671.9	3715.8	3781.7	3872.3	3987.3	4004.2	4209.7	4476.1	4635.1
15°	3688.7	3704.2	3699.1	3711.9	3755.9	3859.3	3997.7	4014.5	4229.1	4547.2	4755.4
17.5°	3907.2	3920.1	3877.4	3828.3	3807.6	3883.9	4030.0	4048.1	4267.9	4620.9	4878.1
20°	4229.1	4264.0	4170.9	4061.0	3961.4	3971.8	4097.3	4116.6	4322.2	4694.5	5003.5
22.5°	4648.0	4673.9	4560.1	4379.1	4195.5	4101.1	4198.1	4209.7	4403.6	4790.3	5140.6
25°	5140.6	5156.1	4998.4	4765.7	4500.6	4322.2	4336.4	4357.1	4538.1	4898.8	5262.1
27.5°	5619.0	5668.1	5485.8	5201.4	4852.3	4554.9	4526.5	4539.4	4684.2	4959.6	5346.2
30°	6186.6	6182.7	5990.0	5660.4	5213.0	4808.3	4706.2	4703.6	4763.1	4989.3	5407.0
32.5°	6639.1	6692.1	6503.4	6143.9	5625.4	5070.8	4830.3	4825.2	4823.8	5041.0	5497.4
35°	7153.7	7161.5	6988.2	6626.2	6071.5	5400.5	5003.5	4977.7	4947.9	5152.2	5620.3
37.5°	7613.9	7650.2	7491.1	7085.2	6509.8	5743.1	5241.4	5224.6	5134.1	5344.9	5816.8
40°	7973.4	8000.5	7904.9	7518.3	6941.6	6112.9	5544.0	5513.0	5403.1	5660.4	6079.3
42.5°	8091.0	8146.6	8184.1	7994.0	7438.1	6551.1	5916.4	5877.6	5793.6	6138.7	6381.8
45°	8100.1	8188.0	8385.8	8394.9	7937.2	7076.1	6350.8	6323.6	6317.2	6751.5	6807.1
47.5°	8031.6	8120.8	8453.1	8632.8	8381.9	7606.2	6977.9	6935.1	6939.1	7509.2	7284.2
50°	7866.0	7972.1	8375.4	8785.3	8729.7	8156.9	7639.8	7625.6	7705.7	8374.2	7779.4
52.5°	7554.5	7682.5	8295.3	8881.0	8988.4	8631.4	8392.3	8352.2	8555.2	9312.8	8321.2
55°	6692.1	6884.8	8001.9	8934.0	9233.9	9085.3	9069.8	9142.2	9411.1	10336.8	8917.2
57.5°	6242.2	6387.0	7364.4	8943.0	9544.3	9612.8	9861.1	9879.1	10349.8	11424.1	9590.8
60°	5996.5	6124.5	7015.4	8883.6	9977.4	10265.8	10670.4	10735.0	11266.5	12602.0	10289.0
62.5°	5781.9	5891.8	6805.9	8678.0	10466.1	11234.1	11718.9	11749.9	12307.2	13902.7	10978.1
65°	5276.3	5401.7	6384.4	8472.4	10887.6	12444.3	13110.1	13073.9	13415.2	15024.9	11409.9
67.5°	4595.0	4754.0	5597.0	7762.6	11095.7	13766.9	14677.1	14631.9	14509.0	15760.6	11534.1
70°	3724.9	3810.2	4589.8	6535.7	10264.4	14461.2	15914.4	15866.6	15186.5	15857.6	10947.0
71°	3205.1	3338.3	3996.3	5805.2	9572.7	14249.1	16073.4	16060.5	15187.8	15590.0	10504.9
72.5°	2501.8	2583.2	3165.0	4498.0	8136.3	13044.2	15680.4	15729.6	14858.1	14846.5	9593.4
75°	1582.5	1618.8	1985.9	2647.9	4464.4	9237.9	13385.5	13518.7	13192.9	12152.0	7134.3
77.5°	919.3	965.8	1189.5	1560.6	1929.0	5013.9	9577.9	9722.7	9166.7	6690.8	2920.7
80°	535.3	587.0	783.5	906.3	885.7	1860.5	4876.9	5123.8	3969.3	1689.8	819.7
82.5°	297.4	332.3	550.8	552.0	471.9	607.7	1534.7	1605.8	1132.6	681.4	334.9
85°	215.9	244.4	355.6	321.9	226.2	261.1	534.0	559.9	457.7	287.0	108.6
87.5°	76.3	108.6	195.2	155.2	62.1	54.3	153.8	125.4	116.4	80.1	24.6
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°	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5	4270.5
2.5°	4293.7	4296.3	4283.4	4260.2	4236.9	4207.1	4173.5	4147.6	4136.0	4134.7	4133.4
5°	4340.3	4346.8	4297.6	4225.3	4145.0	4046.8	3962.8	3867.1	3842.5	3803.8	3815.4
7.5°	4415.2	4411.4	4314.4	4160.6	3973.1	3765.0	3589.1	3487.0	3381.0	3351.2	3352.5
10°	4522.6	4498.0	4314.4	4028.7	3715.8	3406.8	3161.2	3006.0	2922.0	2852.2	2826.3
12.5°	4636.3	4574.3	4273.0	3843.8	3384.9	3006.0	2742.2	2532.8	2478.5	2421.7	2422.9
15°	4745.0	4641.6	4191.6	3583.9	3028.0	2578.1	2322.1	2196.7	2179.9	2186.3	2185.0
17.5°	4843.2	4689.4	4067.5	3294.4	2611.6	2210.9	2075.1	2084.2	2129.4	2161.7	2165.7
20°	4942.8	4717.8	3882.6	2906.5	2218.6	1988.5	1993.7	2064.7	2133.3	2177.3	2183.7
22.5°	5037.2	4730.8	3665.4	2531.5	1934.2	1894.1	1970.4	2046.7	2113.9	2156.6	2163.1
25°	5099.2	4701.0	3357.7	2139.8	1794.5	1860.5	1940.7	2005.3	2062.2	2106.1	2116.5
27.5°	5116.1	4605.3	2976.3	1823.0	1729.9	1828.2	1901.8	1949.7	1993.7	2035.1	2042.8
30°	5107.0	4464.4	2557.4	1636.8	1692.4	1790.7	1847.6	1882.5	1935.5	1967.8	1974.2
32.5°	5092.8	4300.2	2120.4	1537.3	1661.4	1755.8	1789.4	1820.4	1819.2	1806.2	1815.2
35°	5098.0	4103.7	1766.1	1477.8	1634.2	1729.9	1758.4	1719.6	1608.4	1603.2	1598.1
37.5°	5125.1	3909.7	1508.8	1436.4	1620.0	1726.1	1741.5	1563.2	1464.9	1419.6	1408.0
40°	5194.9	3683.5	1339.5	1405.4	1618.8	1755.8	1665.3	1484.3	1295.5	1207.6	1201.1
42.5°	5288.0	3461.1	1236.0	1386.0	1634.2	1801.0	1634.2	1373.1	1167.5	1115.8	1108.0
45°	5426.4	3206.4	1179.2	1377.0	1657.5	1817.8	1623.9	1291.6	1115.8	1074.4	1074.4
47.5°	5582.8	2963.3	1148.1	1370.5	1687.2	1806.2	1532.1	1265.8	1091.2	1096.4	1121.0
50°	5738.0	2752.6	1124.8	1356.3	1713.1	1799.7	1494.6	1264.4	1097.7	1163.6	1207.6
52.5°	5917.6	2603.9	1096.4	1333.0	1713.1	1758.4	1482.9	1290.3	1115.8	1135.2	1154.6
55°	6134.8	2557.4	1060.2	1282.6	1682.1	1654.9	1476.5	1327.9	1128.7	1083.5	1091.2
57.5°	6421.9	2632.3	1025.3	1219.2	1610.9	1547.6	1473.9	1338.2	1098.9	1061.5	1053.7
60°	6755.4	2781.0	1014.9	1154.6	1514.0	1455.9	1458.4	1308.4	1057.6	1018.8	1025.3
62.5°	6989.5	2870.2	1008.4	1105.4	1408.0	1354.9	1420.9	1272.3	1039.5	1005.9	1012.3
65°	6989.5	2761.7	949.0	1030.5	1270.9	1233.4	1375.6	1226.9	1016.3	977.4	970.9
67.5°	6724.5	2444.9	858.5	918.0	1119.6	1095.1	1312.3	1172.7	981.3	951.6	936.0
70°	6034.0	1854.1	744.7	786.1	928.3	950.3	1230.9	1098.9	923.2	886.9	863.6
71°	5730.2	1614.8	696.9	718.9	854.6	886.9	1192.0	1068.0	897.3	845.5	804.2
72.5°	5144.5	1360.1	624.4	633.5	730.5	788.7	1110.6	1008.4	848.1	774.5	727.9
75°	3908.5	993.0	502.9	497.8	540.4	625.8	940.0	898.6	743.4	643.9	616.7
77.5°	1688.6	540.4	376.3	380.1	367.2	474.5	739.6	771.9	637.4	523.6	499.0
80°	512.0	311.6	257.3	262.5	245.7	318.1	521.1	605.1	512.0	407.3	373.7
82.5°	262.5	186.2	175.9	173.2	156.4	179.7	315.5	413.8	365.9	254.7	225.0
85°	113.8	99.6	86.6	84.0	73.7	64.7	112.4	206.9	193.9	142.2	135.7
87.5°	28.4	25.8	16.8	15.5	9.1	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)