

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: P459490

Luminaire Tested: **GALN-SA9B-735-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459490  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA9B-735-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48973 lumens  
Efficiency: N/A  
Efficacy: 134.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G5

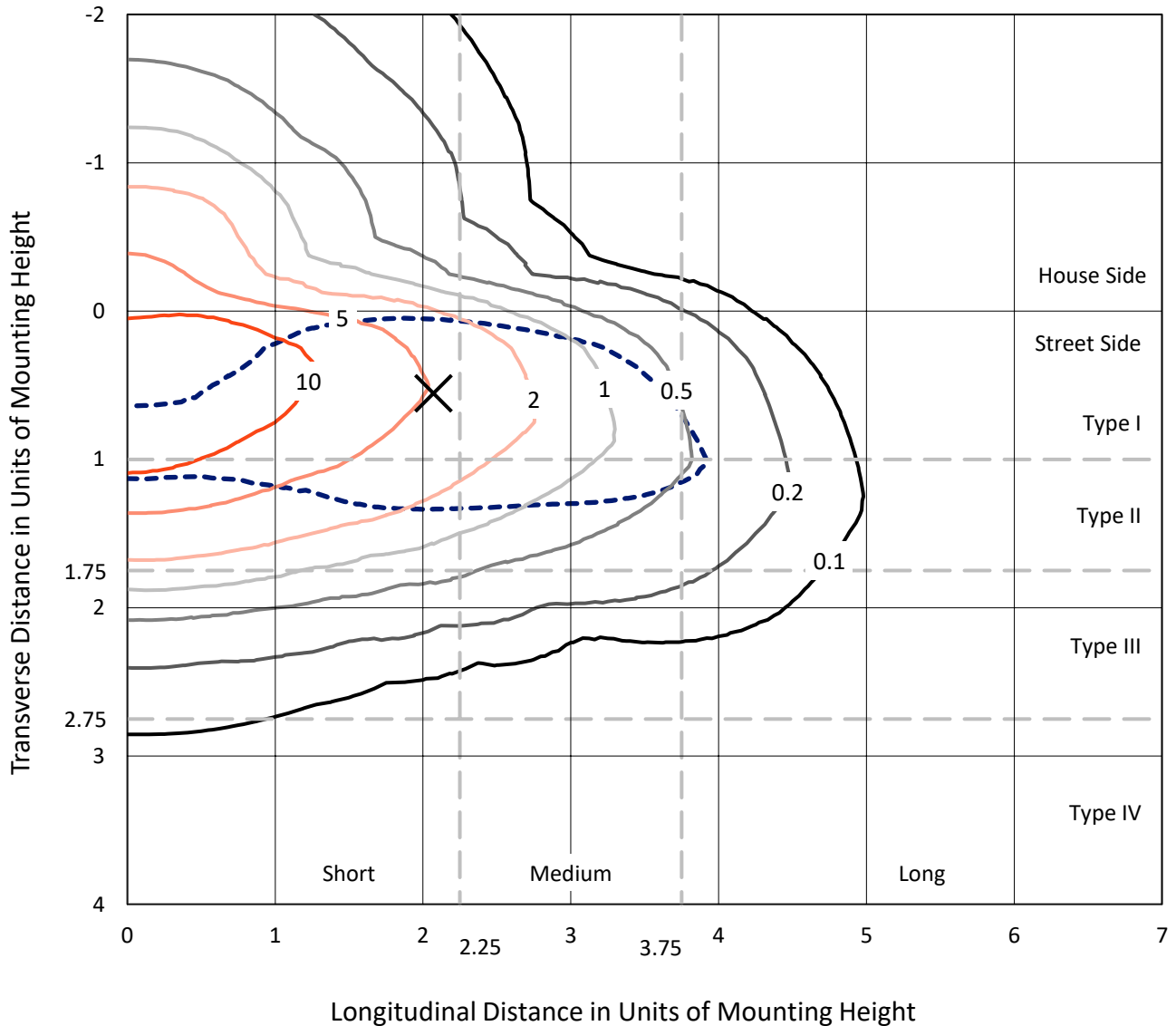
Input Watts (W): 364  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

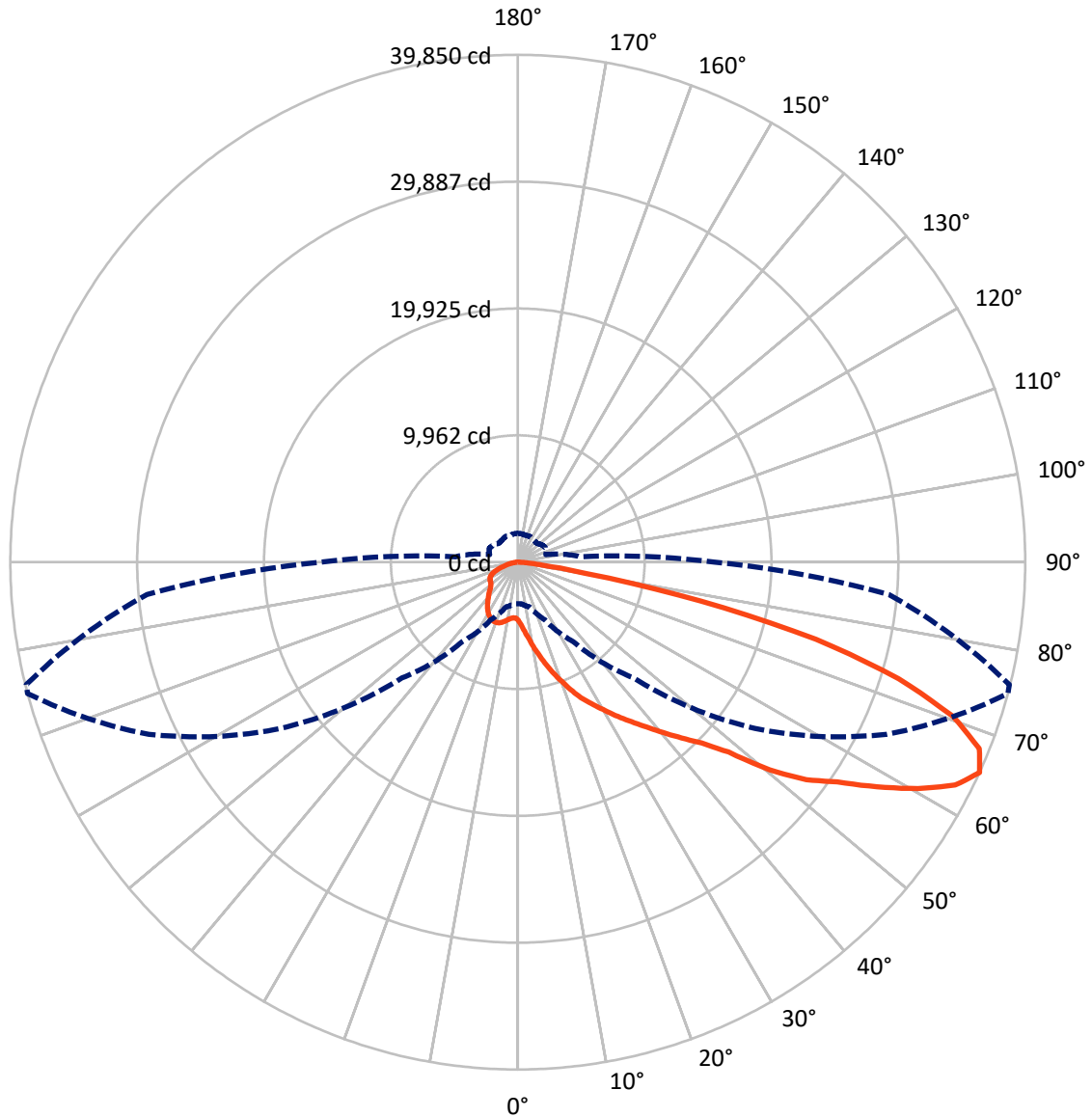
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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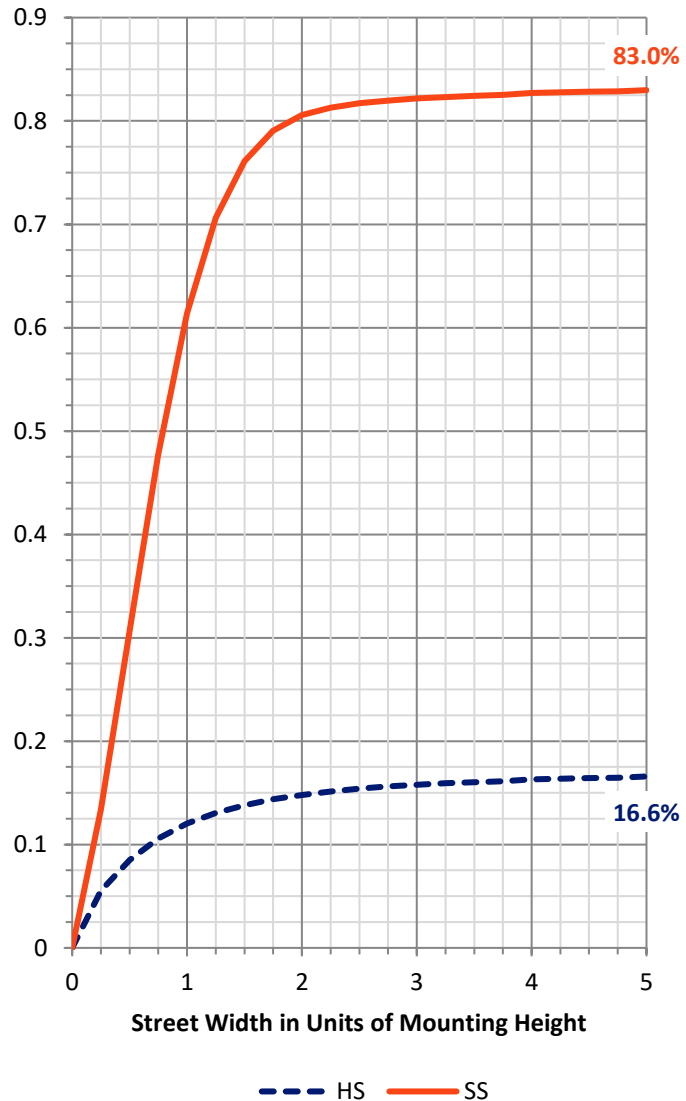
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8233.0	0.0	8233.0
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	40740.0	0.0	40740.0
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	48973.0	0.0	48973.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	552.8	1.1
10°-20°	2165.4	4.4
20°-30°	4182.8	8.5
30°-40°	6794.1	13.9
40°-50°	9345.9	19.1
50°-60°	11034.4	22.5
60°-70°	9667.9	19.7
70°-80°	4615.5	9.4
80°-90°	614.2	1.3
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°	48973.0	100.0
0°-180°	48973.0	100.0

**Coefficient of Utilization**



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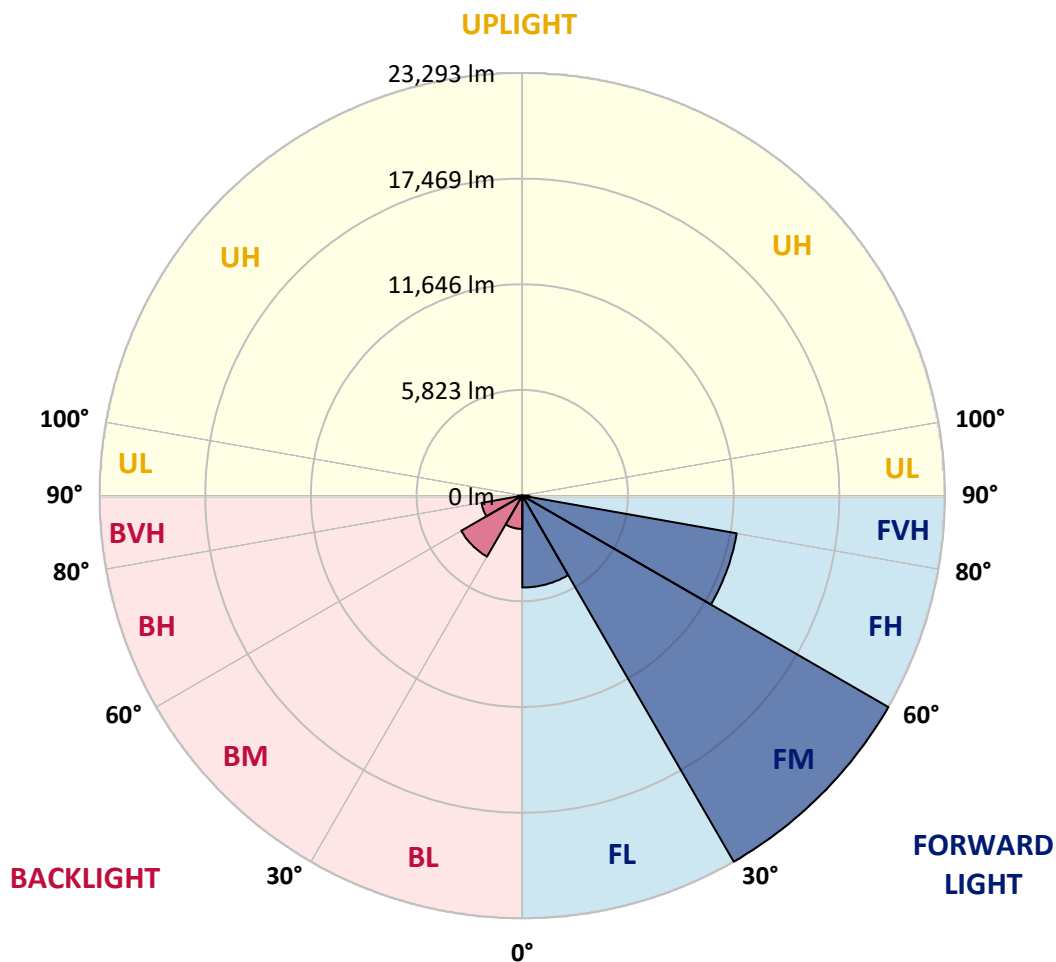
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5063.0	10.3			
FM	(30°-60°)	23292.6	47.6			
FH	(60°-80°)	12000.6	24.5			G5
FVH	(80°-90°)	383.8	0.8			G3/500
BL	(0°-30°)	1838.0	3.8	B3/2500		
BM	(30°-60°)	3881.8	7.9	B3/5000		
BH	(60°-80°)	2282.9	4.7	B3/2500		G3/2500
BVH	(80°-90°)	230.3	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2
2.5°	6045.7	6005.9	5963.4	5846.5	5721.6	5580.8	5379.0	5185.1	4927.4	4919.4	4728.2
5°	7721.8	7695.2	7506.7	7397.7	7108.2	6723.0	6396.3	5889.0	5418.8	5363.0	4991.2
7.5°	9262.5	9158.9	9087.1	8890.6	8603.7	8109.6	7477.4	6792.1	6005.9	5931.5	5315.2
10°	10423.2	10412.6	10375.4	10205.4	9990.3	9498.9	8797.6	7814.8	6749.6	6603.5	5708.3
12.5°	11291.9	11299.8	11294.5	11291.9	11137.8	10720.8	9961.1	8925.1	7501.3	7397.7	6162.6
15°	11863.0	11942.6	11974.5	12107.3	12120.6	11841.7	11188.3	9998.2	8348.7	8194.6	6651.3
17.5°	12240.1	12280.0	12428.7	12654.5	12837.8	12787.3	12205.6	10991.7	9214.6	8957.0	7158.7
20°	12601.4	12670.5	12784.7	13092.8	13416.9	13565.6	13156.6	12009.0	10072.6	9907.9	7719.2
22.5°	13353.1	13451.4	13491.3	13648.0	13924.2	14187.2	14001.3	12983.9	11012.9	10789.8	8314.2
25°	14625.5	14729.1	14617.5	14580.3	14670.6	14800.8	14761.0	13903.0	11900.1	11581.4	8877.3
27.5°	16283.0	16296.3	16078.5	15871.3	15648.2	15581.7	15459.6	14718.5	12670.5	12404.8	9443.1
30°	18062.7	17999.0	17637.7	17263.2	16886.0	16514.1	16163.5	15504.7	13528.4	13223.0	9998.2
32.5°	19714.9	19680.4	19279.3	18697.6	18060.1	17709.4	17000.2	16298.9	14447.5	14152.7	10569.3
35°	20952.7	21003.2	20562.3	19927.4	19231.5	18920.7	18025.5	17133.0	15398.5	15077.1	11190.9
37.5°	21832.0	21805.4	21414.9	20865.1	20254.1	19983.2	19223.5	18044.1	16421.1	16113.0	11870.9
40°	22145.4	22129.5	21839.9	21438.8	21051.0	20955.4	20477.3	19026.9	17592.6	17231.3	12689.1
42.5°	21946.2	21980.7	21789.5	21680.6	21608.9	21677.9	21723.1	20315.2	18870.2	18538.2	13576.3
45°	21335.3	21316.7	21290.1	21468.1	21871.8	22326.0	22955.6	21531.8	20259.5	19993.8	14766.3
47.5°	20243.5	20376.3	20442.7	20934.2	21816.0	22891.8	24374.0	23162.8	22275.6	22044.5	16580.5
50°	18716.2	18822.4	19215.5	20089.5	21404.3	23104.3	25760.6	25829.7	25638.4	25205.5	18551.5
52.5°	16330.8	16495.5	17305.7	18907.4	20559.6	23016.7	26600.0	28116.7	28369.1	28045.0	20493.2
55°	13661.3	13892.4	14747.7	16848.8	19396.2	22538.5	27179.1	29442.2	30449.0	30148.8	22363.2
57.5°	11047.5	11291.9	12171.1	14205.8	17366.8	21481.3	27558.9	30919.1	33280.6	32890.1	24690.1
60°	8279.6	8534.6	9289.0	11384.8	14476.7	19414.8	27301.3	32199.4	36109.5	35942.1	27019.7
62.5°	5341.8	5623.3	6279.4	8014.0	11127.2	16591.1	25922.7	32906.0	38558.6	38356.7	28719.7
65°	3253.9	3285.8	3647.1	4975.2	7615.6	12845.8	22769.6	31968.3	39849.5	39788.4	29237.7
67.5°	2103.8	2154.2	2318.9	2980.3	4566.1	8922.4	18206.2	28873.8	39095.2	39073.9	28167.2
70°	1777.1	1793.0	1867.4	2010.8	2653.6	5410.8	12784.7	23941.1	36229.0	36229.0	25593.3
72.5°	1588.5	1609.7	1636.3	1681.4	1893.9	3065.3	7628.8	18636.5	31280.4	31487.6	21784.2
75°	1442.4	1437.0	1453.0	1461.0	1615.0	2002.8	3944.6	13783.4	24198.7	23784.3	15775.7
77.5°	1235.2	1243.1	1235.2	1269.7	1426.4	1524.7	2002.8	9249.2	14665.3	14128.8	7918.4
80°	1014.7	1028.0	1041.3	1062.5	1219.2	1158.1	1203.3	4215.5	5424.1	5309.9	2446.4
82.5°	762.4	780.9	802.2	852.7	958.9	765.0	759.7	1801.0	1957.7	1793.0	900.5
85°	308.1	363.9	549.9	600.3	603.0	419.7	467.5	751.7	799.5	780.9	353.3
87.5°	71.7	85.0	178.0	268.3	247.0	156.7	172.7	244.4	278.9	257.7	119.5
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°	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2	4550.2
2.5°	4640.5	4547.6	4388.2	4266.0	4178.3	4101.3	4053.5	4024.3	4013.6	4011.0	4013.6
5°	4797.2	4632.6	4380.2	4220.8	4133.2	4082.7	4053.5	4050.8	4053.5	4056.1	4048.2
7.5°	5012.4	4776.0	4446.6	4297.9	4231.5	4194.3	4181.0	4175.7	4178.3	4175.7	4175.7
10°	5299.3	4975.2	4576.8	4422.7	4366.9	4324.4	4303.2	4289.9	4279.3	4268.6	4263.3
12.5°	5615.4	5195.7	4717.6	4568.8	4489.1	4422.7	4374.9	4340.4	4316.5	4292.6	4287.2
15°	5968.7	5429.4	4874.3	4667.1	4552.9	4454.6	4372.2	4316.5	4274.0	4239.4	4236.8
17.5°	6306.0	5649.9	4980.5	4712.2	4544.9	4406.8	4297.9	4220.8	4167.7	4122.5	4117.2
20°	6667.3	5859.8	5028.3	4683.0	4465.2	4297.9	4154.4	4061.5	4000.4	3949.9	3941.9
22.5°	7031.2	6037.7	5023.0	4590.1	4327.1	4130.5	3979.1	3880.8	3809.1	3758.6	3740.0
25°	7379.2	6181.2	4956.6	4441.3	4135.8	3931.3	3777.2	3686.9	3623.2	3562.1	3562.1
27.5°	7692.6	6266.2	4831.8	4260.7	3939.3	3724.1	3601.9	3519.6	3461.1	3421.3	3397.4
30°	8000.7	6306.0	4661.8	4032.2	3732.1	3548.8	3450.5	3402.7	3349.6	3304.4	3299.1
32.5°	8277.0	6298.0	4449.3	3809.1	3535.5	3405.4	3365.5	3328.3	3272.5	3208.8	3192.9
35°	8545.3	6244.9	4196.9	3564.7	3370.8	3320.4	3331.0	3277.9	3176.9	3097.2	3083.9
37.5°	8837.4	6149.3	3920.7	3365.5	3232.7	3280.5	3307.1	3190.2	3025.5	2900.7	2871.4
40°	9174.8	6040.4	3633.8	3166.3	3123.8	3243.3	3243.3	3028.2	2802.4	2725.3	2704.1
42.5°	9570.6	5950.1	3394.7	2998.9	3033.5	3153.0	3139.7	2813.0	2720.0	2680.2	2669.6
45°	10197.5	5918.2	3147.7	2852.8	2959.1	3046.8	2937.8	2738.6	2685.5	2653.6	2643.0
47.5°	11188.3	5955.4	2929.9	2743.9	2874.1	2940.5	2712.1	2688.2	2651.0	2605.8	2600.5
50°	12107.3	5920.9	2775.8	2682.8	2799.7	2813.0	2619.1	2627.1	2605.8	2555.3	2544.7
52.5°	12859.1	5811.9	2677.5	2651.0	2736.0	2589.9	2531.4	2560.7	2552.7	2488.9	2478.3
55°	13685.2	5745.5	2629.7	2651.0	2693.5	2396.0	2449.1	2491.6	2481.0	2435.8	2433.2
57.5°	14686.6	5758.8	2595.2	2658.9	2651.0	2297.7	2366.7	2417.2	2414.6	2401.3	2401.3
60°	15711.9	5764.1	2542.1	2656.3	2600.5	2220.7	2281.7	2353.5	2358.8	2366.7	2366.7
62.5°	16051.9	5533.0	2438.5	2608.5	2488.9	2146.3	2202.1	2300.3	2295.0	2316.3	2318.9
65°	15417.1	4892.9	2284.4	2499.6	2345.5	2093.1	2141.0	2231.3	2202.1	2257.8	2268.5
67.5°	14033.1	4048.2	2045.3	2303.0	2186.1	2037.4	2101.1	2135.7	2082.5	2191.4	2194.1
70°	12128.6	3161.0	1742.5	2024.1	2005.5	1978.9	2069.2	2016.1	1941.7	2074.6	2048.0
72.5°	10141.7	2414.6	1391.9	1654.9	1763.8	1891.3	2013.5	1862.1	1758.5	1798.3	1750.5
75°	7618.2	1785.0	1118.3	1296.3	1468.9	1766.4	1963.0	1676.1	1516.7	1479.5	1468.9
77.5°	3883.5	1166.1	836.7	969.5	1102.4	1596.4	1893.9	1458.3	1256.4	1198.0	1171.4
80°	1386.6	725.2	589.7	669.4	743.8	1373.3	1654.9	1206.0	974.9	964.2	974.9
82.5°	642.8	467.5	395.8	438.3	440.9	916.4	1261.7	900.5	741.1	1126.3	950.9
85°	276.3	233.8	223.1	217.8	201.9	409.1	709.2	483.4	754.4	337.3	310.8
87.5°	82.3	93.0	82.3	61.1	45.2	45.2	71.7	26.6	18.6	13.3	13.3
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)