

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: P648402

Luminaire Tested: **GALN-SA4B-835-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648402  
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-SA4B-835-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 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: 18036.4 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

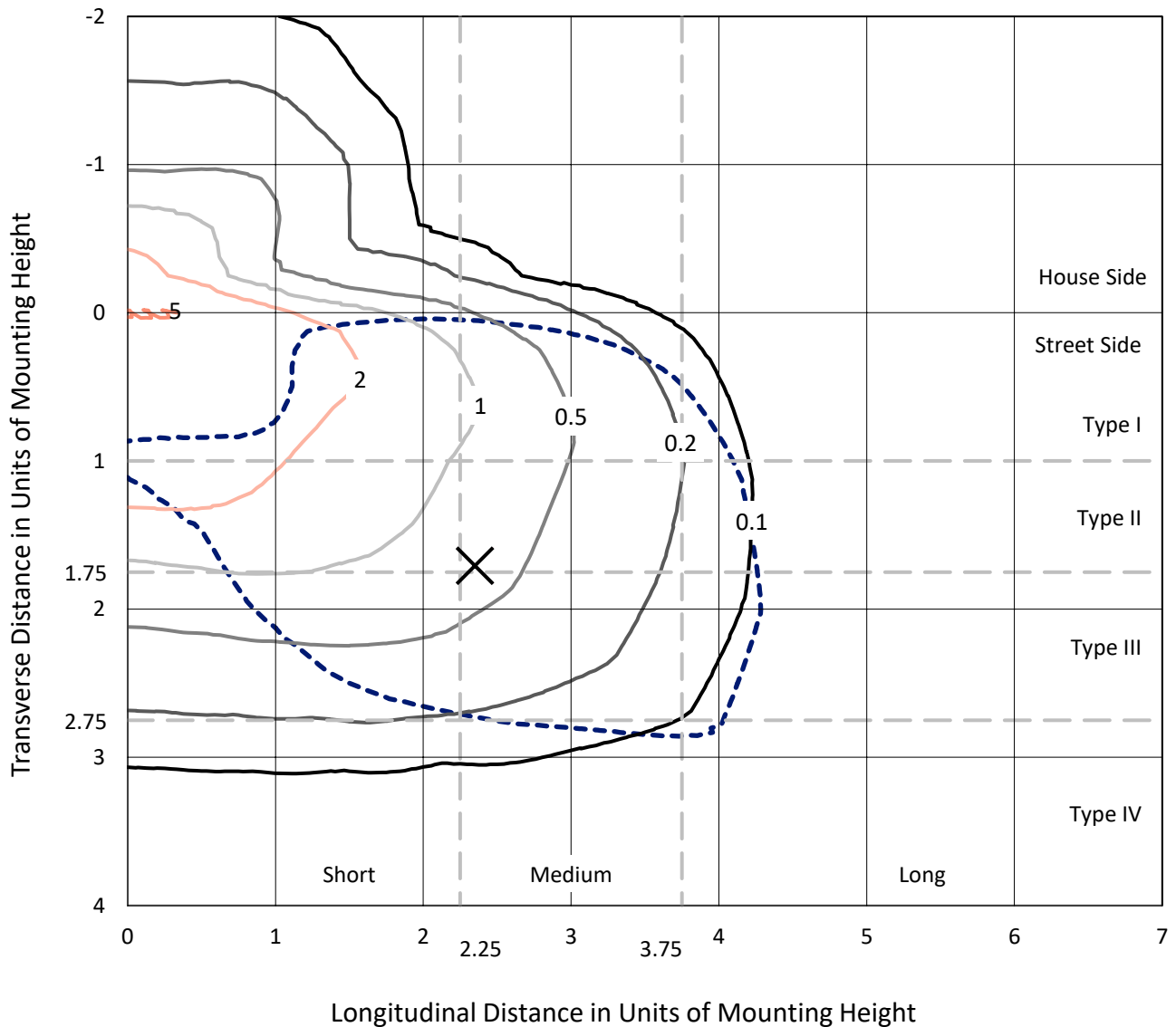
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

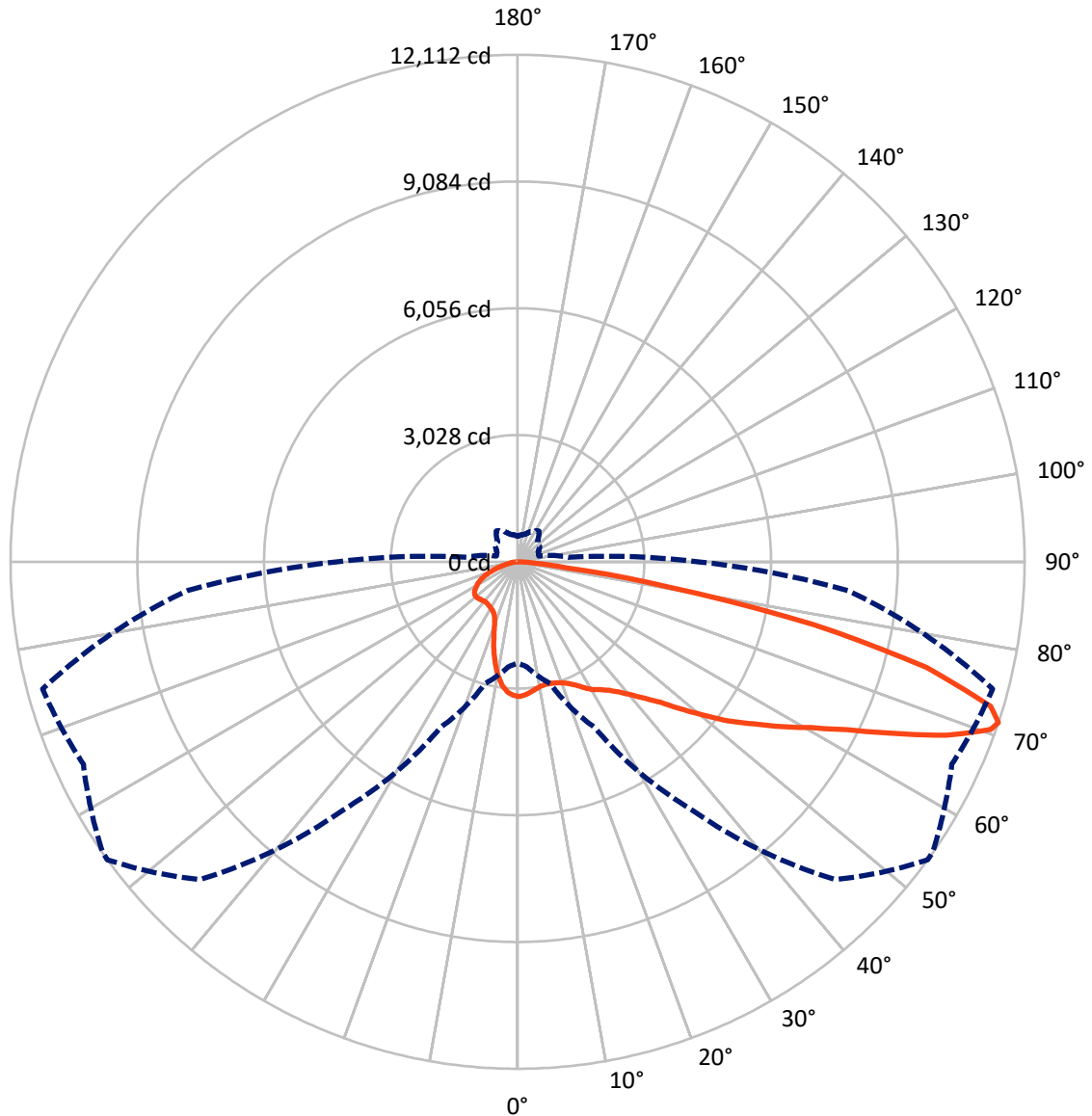
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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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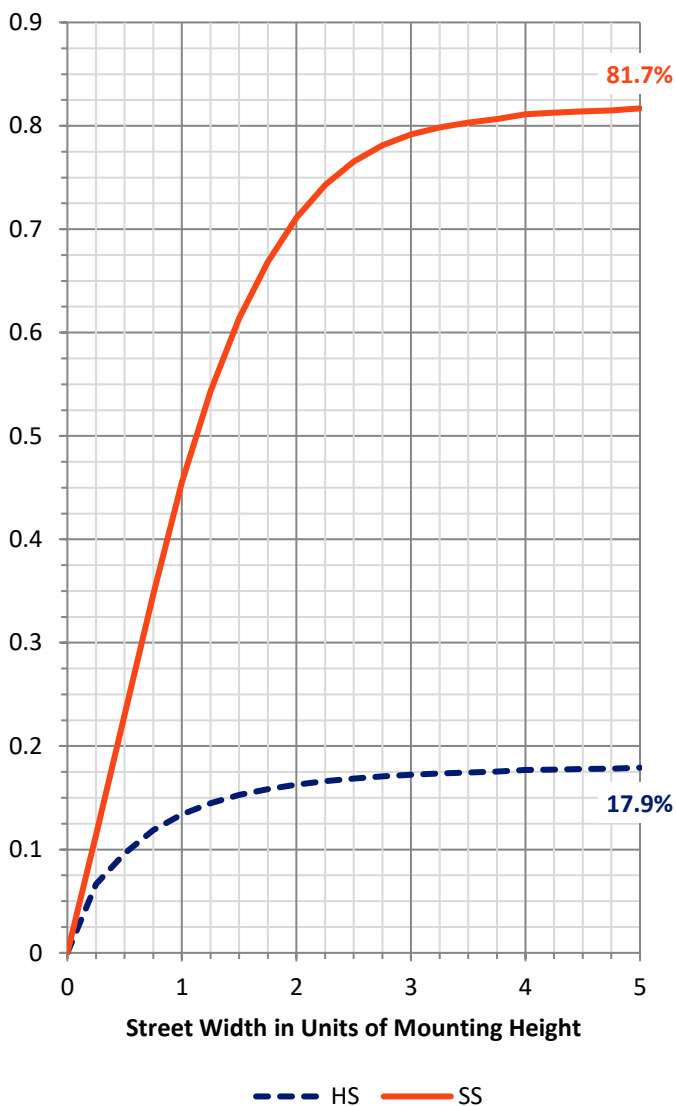
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3256.4	0.0	3256.4
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	14780.0	0.0	14780.0
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	18036.4	0.0	18036.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.8	1.6
10°-20°	757.2	4.2
20°-30°	1260.8	7.0
30°-40°	1864.3	10.3
40°-50°	2625.9	14.6
50°-60°	3516.2	19.5
60°-70°	4431.9	24.6
70°-80°	3027.0	16.8
80°-90°	266.2	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°	18036.4	100.0
0°-180°	18036.4	100.0

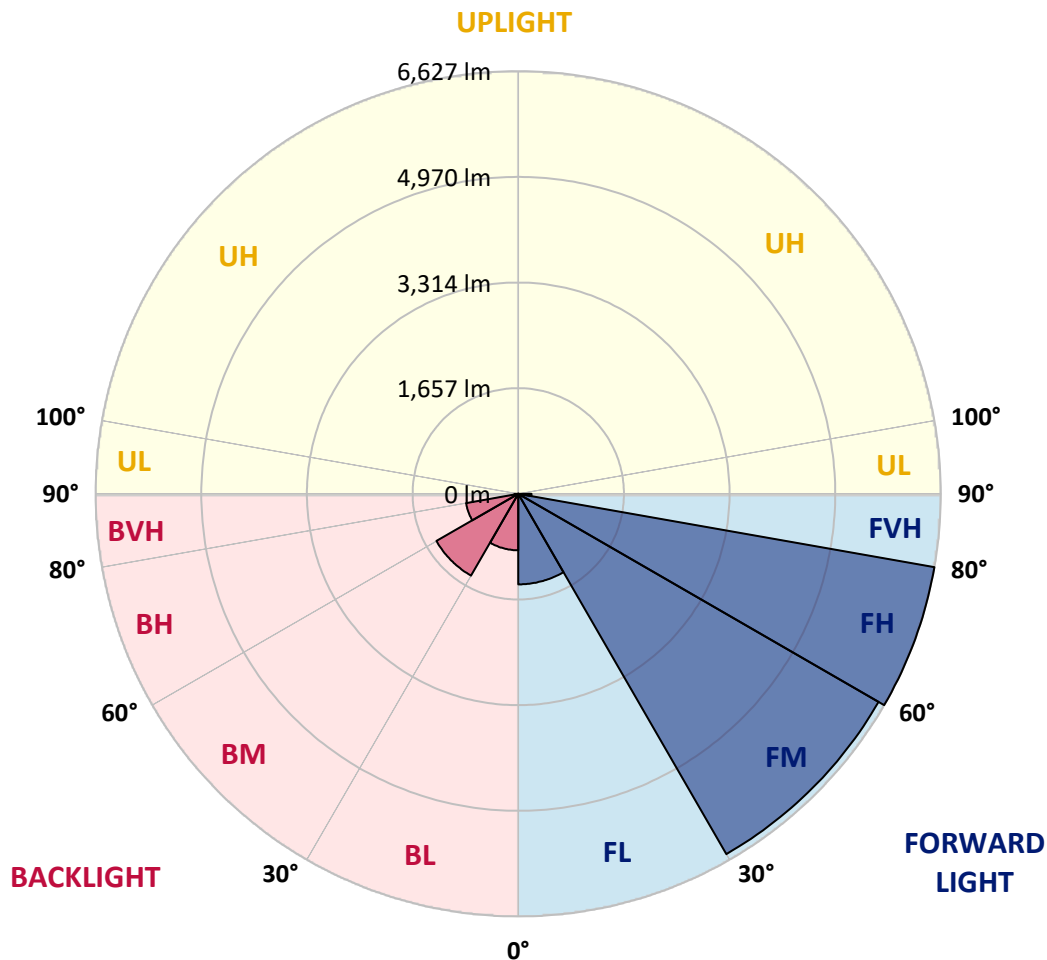


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1419.8	7.9			
FM (30°-60°)	6524.9	36.2			
FH (60°-80°)	6627.3	36.7			G3/7500
FVH (80°-90°)	208.1	1.2			G2/225
BL (0°-30°)	885.0	4.9	B2/1000		
BM (30°-60°)	1481.5	8.2	B2/2500		
BH (60°-80°)	831.7	4.6	B2/1000		G2/1000
BVH (80°-90°)	58.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0
2.5°	3108.8	3123.5	3127.4	3137.1	3157.5	3174.1	3190.6	3188.8	3212.1	3221.9	3230.7
5°	2970.5	2974.4	2989.0	3008.5	3044.5	3090.3	3135.1	3136.1	3193.6	3239.4	3261.8
7.5°	2869.1	2881.8	2891.6	2912.1	2950.0	2999.8	3070.8	3076.7	3179.0	3269.6	3317.3
10°	2802.9	2817.5	2828.3	2853.6	2891.6	2947.1	3024.1	3034.8	3168.3	3317.3	3401.1
12.5°	2742.5	2757.2	2766.9	2800.0	2849.7	2917.9	3004.6	3017.3	3172.2	3372.9	3492.7
15°	2779.6	2791.2	2787.3	2797.1	2830.2	2908.1	3012.4	3025.0	3186.8	3426.5	3583.3
17.5°	2944.2	2953.9	2921.8	2884.7	2869.1	2926.7	3036.8	3050.4	3216.0	3482.0	3675.9
20°	3186.8	3213.1	3143.0	3060.1	2985.1	2992.9	3087.4	3102.0	3257.0	3537.5	3770.4
22.5°	3502.4	3521.9	3436.2	3299.8	3161.4	3090.3	3163.4	3172.2	3318.3	3609.6	3873.7
25°	3873.7	3885.3	3766.5	3591.1	3391.4	3257.0	3267.6	3283.3	3419.6	3691.5	3965.2
27.5°	4234.1	4271.1	4133.8	3919.5	3656.4	3432.3	3410.8	3420.6	3529.7	3737.3	4028.5
30°	4661.8	4658.8	4513.7	4265.3	3928.2	3623.3	3546.3	3544.3	3589.1	3759.7	4074.3
32.5°	5002.8	5042.8	4900.5	4629.6	4239.0	3821.0	3639.8	3635.9	3634.9	3798.6	4142.5
35°	5390.6	5396.4	5265.8	4993.0	4575.1	4069.5	3770.4	3750.9	3728.5	3882.4	4235.1
37.5°	5737.4	5764.7	5644.8	5338.9	4905.3	4327.6	3949.6	3936.9	3868.7	4027.6	4383.2
40°	6008.2	6028.7	5956.6	5665.3	5230.8	4606.3	4177.6	4154.2	4071.4	4265.3	4580.9
42.5°	6096.9	6138.8	6167.1	6023.8	5604.9	4936.6	4458.2	4429.0	4365.6	4625.7	4809.0
45°	6103.7	6170.0	6319.0	6325.9	5980.9	5332.1	4785.5	4765.1	4760.2	5087.5	5129.4
47.5°	6052.0	6119.3	6369.7	6505.1	6316.1	5731.6	5258.1	5225.9	5228.8	5658.5	5489.0
50°	5927.4	6007.3	6311.2	6620.0	6578.1	6146.6	5756.9	5746.1	5806.6	6310.3	5862.1
52.5°	5692.6	5789.0	6250.8	6692.1	6773.0	6504.1	6323.9	6293.7	6446.7	7017.6	6270.3
55°	5042.8	5187.9	6029.6	6732.1	6958.1	6846.1	6834.4	6889.0	7091.6	7789.1	6719.4
57.5°	4703.7	4812.8	5549.4	6738.9	7191.9	7243.6	7430.7	7444.3	7798.9	8608.5	7227.0
60°	4518.6	4615.1	5286.3	6694.1	7518.3	7735.6	8040.5	8089.3	8489.7	9496.1	7753.1
62.5°	4356.8	4439.7	5128.5	6539.2	7886.6	8465.3	8830.7	8854.0	9273.9	10476.1	8272.4
65°	3975.9	4070.4	4810.8	6384.3	8204.2	9377.2	9879.0	9851.6	10108.8	11321.8	8597.8
67.5°	3462.5	3582.3	4217.6	5849.4	8361.0	10373.9	11059.7	11025.7	10933.1	11876.2	8691.3
70°	2806.8	2871.1	3458.6	4924.8	7734.6	10897.0	11992.1	11956.0	11443.6	11949.2	8249.0
71°	2415.2	2515.5	3011.4	4374.4	7213.4	10737.3	12111.9	12102.2	11444.6	11747.6	7915.8
72.5°	1885.2	1946.5	2384.9	3389.5	6131.0	9829.2	11815.8	11852.7	11196.1	11187.3	7229.0
75°	1192.5	1219.8	1496.5	1995.2	3364.1	6961.0	10086.4	10186.8	9941.3	9157.0	5375.9
77.5°	692.7	727.8	896.3	1175.9	1453.6	3778.1	7217.3	7326.4	6907.5	5041.7	2200.9
80°	403.3	442.3	590.4	682.9	667.4	1402.0	3674.9	3861.0	2991.0	1273.3	617.7
82.5°	224.1	250.4	415.1	416.0	355.6	457.9	1156.4	1210.0	853.5	513.4	252.4
85°	162.7	184.2	267.9	242.6	170.5	196.8	402.4	421.9	344.9	216.3	81.8
87.5°	57.5	81.8	147.1	116.9	46.7	41.0	116.0	94.5	87.7	60.4	18.5
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°	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0	3218.0
2.5°	3235.5	3237.5	3227.7	3210.1	3192.6	3170.2	3144.9	3125.4	3116.7	3115.6	3114.7
5°	3270.6	3275.4	3238.4	3183.8	3123.5	3049.4	2986.1	2914.0	2895.5	2866.2	2875.0
7.5°	3327.0	3324.1	3251.1	3135.1	2993.9	2837.0	2704.6	2627.6	2547.6	2525.3	2526.3
10°	3407.9	3389.5	3251.1	3035.8	2800.0	2567.1	2382.0	2265.1	2201.8	2149.2	2129.7
12.5°	3493.7	3446.9	3219.9	2896.5	2550.6	2265.1	2066.4	1908.6	1867.6	1824.8	1825.7
15°	3575.5	3497.6	3158.5	2700.6	2281.7	1942.7	1749.8	1655.3	1642.6	1647.4	1646.5
17.5°	3649.6	3533.6	3065.0	2482.4	1968.0	1666.0	1563.7	1570.5	1604.6	1629.0	1631.9
20°	3724.6	3555.1	2925.7	2190.1	1671.8	1498.4	1502.3	1555.9	1607.5	1640.6	1645.6
22.5°	3795.7	3564.8	2762.0	1907.6	1457.5	1427.3	1484.7	1542.3	1592.9	1625.0	1629.9
25°	3842.5	3542.4	2530.1	1612.4	1352.2	1402.0	1462.3	1511.0	1553.9	1587.1	1594.9
27.5°	3855.1	3470.3	2242.7	1373.7	1303.5	1377.6	1433.1	1469.1	1502.3	1533.5	1539.3
30°	3848.3	3364.1	1927.0	1233.4	1275.3	1349.3	1392.2	1418.5	1458.5	1482.8	1487.7
32.5°	3837.6	3240.4	1597.8	1158.4	1251.9	1323.0	1348.4	1371.7	1370.8	1361.0	1367.8
35°	3841.5	3092.3	1330.9	1113.6	1231.4	1303.5	1325.0	1295.8	1212.0	1208.1	1204.2
37.5°	3861.9	2946.1	1136.9	1082.4	1220.8	1300.6	1312.3	1177.9	1103.8	1069.7	1061.0
40°	3914.5	2775.7	1009.4	1059.0	1219.8	1323.0	1254.8	1118.4	976.2	909.9	905.1
42.5°	3984.7	2608.1	931.4	1044.4	1231.4	1357.2	1231.4	1034.7	879.8	840.8	834.9
45°	4089.0	2416.2	888.5	1037.6	1249.0	1369.8	1223.7	973.3	840.8	809.6	809.6
47.5°	4206.8	2233.0	865.1	1032.7	1271.4	1361.0	1154.5	953.8	822.3	826.1	844.7
50°	4323.7	2074.2	847.6	1022.0	1290.9	1356.2	1126.3	952.8	827.2	876.8	909.9
52.5°	4459.2	1962.1	826.1	1004.4	1290.9	1325.0	1117.5	972.3	840.8	855.4	870.0
55°	4622.8	1927.0	798.9	966.5	1267.5	1247.1	1112.6	1000.6	850.5	816.4	822.3
57.5°	4839.1	1983.6	772.6	918.7	1213.9	1166.2	1110.7	1008.3	828.1	799.8	794.0
60°	5090.4	2095.6	764.8	870.0	1140.8	1097.0	1098.9	986.0	796.9	767.7	772.6
62.5°	5266.8	2162.9	759.9	833.0	1061.0	1021.0	1070.7	958.7	783.3	757.9	762.9
65°	5266.8	2081.0	715.1	776.5	957.7	929.4	1036.6	924.6	765.8	736.6	731.6
67.5°	5067.1	1842.3	646.9	691.7	843.7	825.2	988.9	883.6	739.5	717.1	705.3
70°	4546.9	1397.1	561.2	592.3	699.5	716.1	927.5	828.1	695.6	668.4	650.8
71°	4317.9	1216.9	525.2	541.7	644.0	668.4	898.3	804.8	676.1	637.1	606.0
72.5°	3876.6	1024.9	470.6	477.4	550.4	594.3	836.9	759.9	639.1	583.6	548.5
75°	2945.2	748.2	379.0	375.1	407.2	471.5	708.3	677.1	560.2	485.1	464.7
77.5°	1272.4	407.2	283.5	286.4	276.7	357.5	557.3	581.6	480.3	394.6	376.1
80°	385.8	234.8	193.9	197.8	185.1	239.7	392.6	455.9	385.8	306.9	281.6
82.5°	197.8	140.3	132.5	130.5	117.9	135.5	237.7	311.8	275.7	191.9	169.5
85°	85.7	75.0	65.3	63.3	55.5	48.7	84.8	155.9	146.1	107.2	102.3
87.5°	21.5	19.5	12.7	11.7	6.8	0.9	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)