

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: P651648

Luminaire Tested: **GALN-SA9D-840-U-T3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651648  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-840-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 58488.2 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

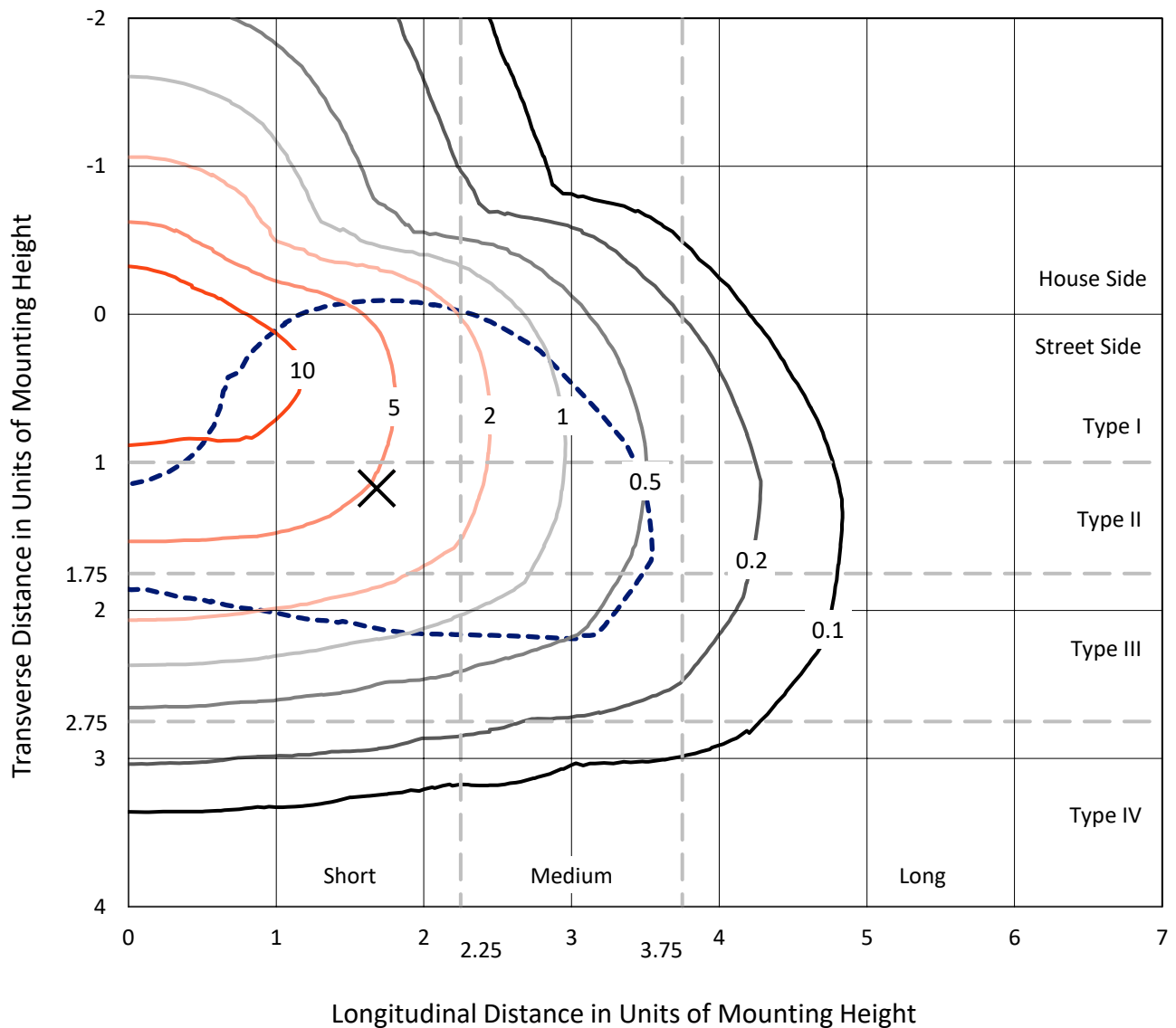
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

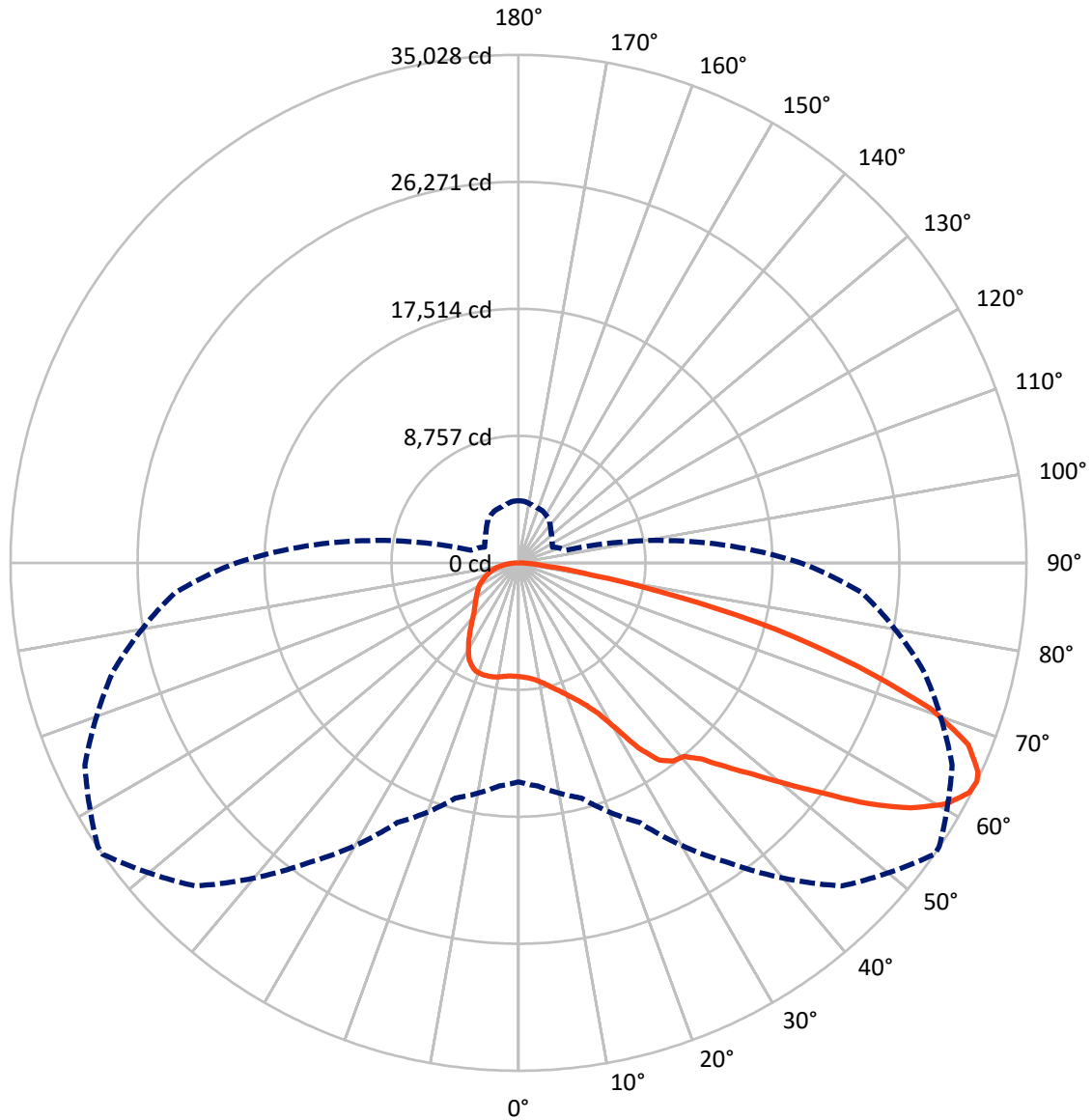
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

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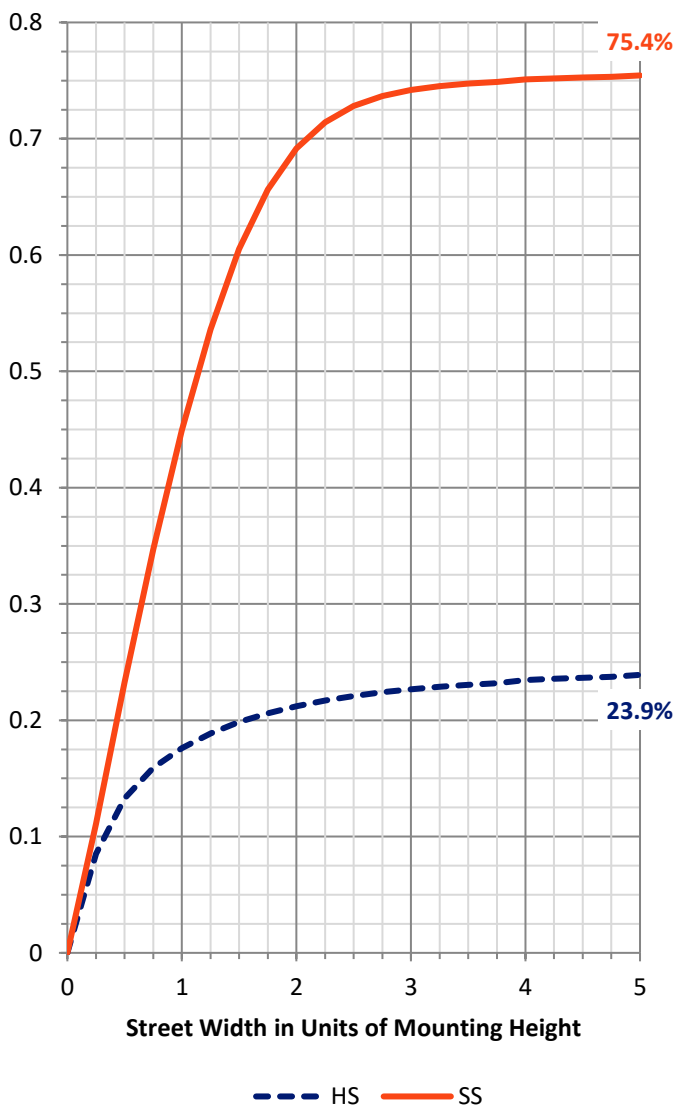
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14207.9	0.0	14207.9
	% Fixture	24.3	0.0	24.3
<b>Street Side</b>	Lumens	44280.3	0.0	44280.3
	% Fixture	75.7	0.0	75.7
<b>Total</b>	Lumens	58488.2	0.0	58488.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	763.3	1.3
10°-20°	2408.6	4.1
20°-30°	4287.9	7.3
30°-40°	6597.4	11.3
40°-50°	9352.3	16.0
50°-60°	13537.2	23.1
60°-70°	14009.6	24.0
70°-80°	6560.7	11.2
80°-90°	971.2	1.7
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°	58488.2	100.0
0°-180°	58488.2	100.0

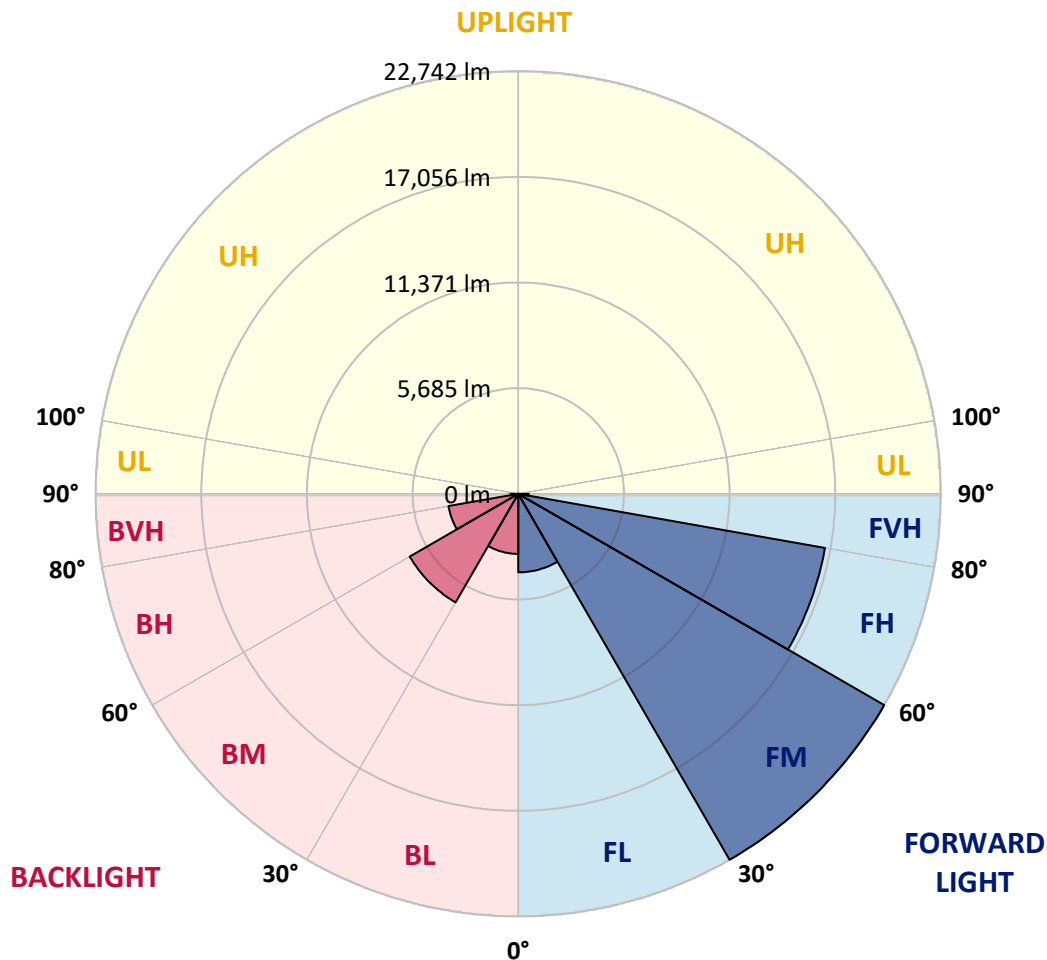


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4223.8	7.2			
FM (30°-60°)	22741.8	38.9			
FH (60°-80°)	16758.6	28.7			G5
FVH (80°-90°)	556.1	1.0			G4/750
BL (0°-30°)	3236.0	5.5	B4/5000		
BM (30°-60°)	6745.1	11.5	B4/8500		
BH (60°-80°)	3811.7	6.5	B4/5000		G4/5000
BVH (80°-90°)	415.1	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4
2.5°	7935.3	7932.1	7941.9	7932.1	7938.6	7915.8	7906.1	7912.5	7902.8	7886.5	7857.1
5°	8033.1	8030.0	8033.1	8020.1	8026.7	8013.6	7990.8	7997.3	7981.0	7945.2	7902.8
7.5°	8199.4	8186.4	8186.4	8183.2	8170.1	8150.6	8134.2	8127.8	8111.4	8065.8	8000.6
10°	8414.6	8414.6	8417.9	8391.8	8408.1	8372.2	8355.9	8352.6	8297.2	8238.6	8147.3
12.5°	8698.3	8714.5	8704.8	8691.7	8685.3	8672.2	8616.8	8629.8	8567.9	8466.8	8355.9
15°	9050.3	9076.5	9060.2	9053.6	9037.3	8988.4	8965.6	8955.8	8874.3	8727.6	8580.9
17.5°	9516.6	9484.0	9470.9	9454.6	9386.1	9350.3	9311.2	9304.7	9232.9	9060.2	8831.9
20°	9924.1	9969.7	9943.6	9927.3	9858.9	9790.4	9761.1	9751.3	9689.4	9500.3	9135.1
22.5°	10409.9	10419.7	10429.4	10390.3	10357.8	10305.5	10253.4	10237.1	10214.3	10018.7	9572.0
25°	10928.3	10967.4	10934.8	10895.7	10856.6	10853.3	10902.1	10895.7	10885.9	10696.8	10152.3
27.5°	11772.7	11808.5	11818.3	11775.9	11626.0	11639.0	11749.9	11785.7	11935.6	11622.7	10898.9
30°	12248.7	12284.5	12366.0	12525.8	12763.8	12972.4	13239.8	13321.3	13464.7	12874.6	11785.7
32.5°	12542.1	12555.1	12701.8	12998.5	13712.5	14491.7	15218.7	15248.1	15339.3	14511.2	12597.5
35°	13005.1	13014.8	13132.1	13458.2	14296.1	15593.7	16718.4	16754.2	16679.3	15019.8	12975.7
37.5°	13575.6	13601.7	13676.6	13947.2	14948.1	16516.3	17341.1	17315.0	16649.9	15424.1	13644.0
40°	14406.9	14406.9	14318.9	14684.0	15636.0	17044.5	17559.6	17513.9	17337.9	16594.5	14661.2
42.5°	15140.4	15127.4	15336.1	15583.8	16496.7	17859.5	18475.7	18550.6	18840.8	18064.8	15818.6
45°	16095.7	16154.3	16271.8	16721.7	17960.6	19251.6	20047.1	20118.8	20529.6	19796.0	17171.5
47.5°	17060.7	17080.3	17448.7	18048.6	19773.3	21139.3	21791.3	21908.6	22283.6	21820.7	18628.9
50°	17745.4	17931.2	18521.3	19466.8	21641.4	23440.9	23949.6	24089.8	24751.6	24024.6	20327.5
52.5°	18469.1	18651.7	19372.3	20813.2	23786.6	25794.9	26420.9	26515.4	27203.2	26254.6	22065.1
55°	19088.6	19258.1	20076.4	22006.4	25494.9	28197.6	29332.2	29221.4	29550.6	27972.7	23405.1
57.5°	19189.7	19326.6	20356.8	22769.4	26779.5	30258.1	31884.9	31950.2	31568.7	29257.2	24510.4
60°	18407.2	18687.6	19871.1	22687.9	27356.5	31692.6	33788.9	33834.5	32752.2	29915.8	24950.5
62.5°	17021.6	16992.2	18423.5	21377.3	26547.9	32018.6	34910.4	34861.6	33215.1	29599.5	24523.4
64°	15107.9	15459.9	16796.6	19766.7	25243.9	31516.6	35027.8	35001.7	32993.4	28941.0	23796.3
65°	13940.7	13921.2	15241.5	18449.6	23946.3	30760.2	34819.2	34783.3	32530.5	28350.9	23232.3
67.5°	10064.3	10109.9	11414.1	14237.4	19466.8	27803.1	33459.6	33326.0	30704.7	26394.7	21087.1
70°	6096.6	6122.7	7146.4	9444.9	13973.3	22476.0	30160.3	30166.8	27910.8	23473.6	17947.5
72.5°	3211.4	3279.8	3690.6	5363.1	8486.4	15769.7	24468.0	25048.3	23962.6	20034.0	14178.7
75°	1786.6	1796.4	2086.5	2644.0	4329.6	8825.5	18390.9	18557.2	18971.2	16125.1	10484.8
77.5°	1362.8	1382.4	1473.6	1708.3	2357.2	4091.5	11130.4	11965.0	13370.1	11368.4	5982.5
80°	1105.2	1124.8	1203.1	1343.2	1568.1	1939.9	5170.7	5620.7	7156.2	5046.8	2334.3
82.5°	860.7	847.6	948.7	1040.0	1141.1	1147.6	2122.4	2347.4	2914.7	2171.3	1010.6
85°	639.0	639.0	720.5	701.0	736.8	671.6	935.7	1033.5	1167.1	922.7	469.4
87.5°	254.3	280.4	472.7	423.9	329.3	264.1	345.6	365.2	404.3	361.9	195.6
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°	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4	7847.4
2.5°	7860.4	7870.2	7847.4	7831.1	7824.5	7814.7	7805.0	7808.3	7821.3	7834.3	7831.1
5°	7899.5	7902.8	7863.7	7844.1	7831.1	7818.0	7818.0	7827.8	7853.8	7873.4	7873.4
7.5°	7997.3	7997.3	7941.9	7906.1	7886.5	7863.7	7857.1	7860.4	7879.9	7906.1	7909.3
10°	8150.6	8137.5	8065.8	8010.4	7974.5	7919.1	7870.2	7844.1	7853.8	7870.2	7870.2
12.5°	8336.4	8300.5	8209.3	8134.2	8046.2	7941.9	7840.8	7788.7	7785.4	7801.7	7795.1
15°	8535.2	8496.1	8369.0	8232.0	8078.8	7925.6	7805.0	7730.0	7671.3	7655.0	7690.9
17.5°	8766.8	8685.3	8509.2	8320.1	8091.8	7893.0	7703.9	7550.7	7446.4	7417.0	7426.8
20°	9047.1	8939.5	8701.5	8404.9	8082.1	7775.6	7482.2	7276.8	7107.3	7055.1	7061.6
22.5°	9435.1	9249.2	8900.4	8447.3	8000.6	7553.9	7146.4	6879.0	6673.7	6592.2	6641.0
25°	9875.2	9673.1	9089.5	8437.4	7788.7	7198.5	6748.7	6399.8	6214.0	6093.4	6119.5
27.5°	10481.6	10122.9	9291.6	8349.4	7485.5	6764.9	6243.3	5914.1	5744.5	5682.6	5711.9
30°	11257.5	10706.6	9510.0	8111.4	7006.2	6217.3	5734.7	5519.6	5418.5	5340.3	5366.3
32.5°	11818.3	11117.3	9559.0	7710.5	6487.8	5718.5	5389.1	5229.4	5118.6	5043.6	5059.9
35°	12219.3	11466.2	9536.2	7218.1	5946.6	5307.6	5115.3	4984.9	4805.6	4642.6	4613.2
37.5°	12757.2	11903.1	9369.8	6680.2	5412.0	5030.5	4893.6	4652.3	4394.8	4176.3	4166.6
40°	13582.1	12414.9	9014.5	6047.7	4955.5	4825.2	4658.9	4345.9	4068.8	3892.7	3879.7
42.5°	14433.0	12887.7	8532.0	5382.7	4580.6	4609.9	4407.8	4098.1	3928.6	3814.4	3801.4
45°	15473.0	13399.5	8010.4	4805.6	4303.5	4407.8	4189.4	4010.1	3909.0	3834.0	3814.4
47.5°	16597.8	13924.4	7423.5	4287.2	4068.8	4222.0	4098.1	4016.6	3961.2	3909.0	3886.2
50°	17810.6	14511.2	6872.6	3869.9	3856.8	4029.7	4088.4	4059.0	4026.4	4010.1	3990.5
52.5°	19140.7	15111.1	6409.6	3576.4	3671.0	3892.7	4091.5	4114.4	4114.4	4104.6	4091.5
55°	20040.6	15528.4	5940.2	3338.4	3481.9	3781.9	4085.1	4173.0	4205.7	4192.6	4179.6
57.5°	20705.7	15756.6	5350.0	3133.1	3322.2	3674.2	4049.2	4179.6	4212.2	4228.5	4222.0
60°	20842.6	15544.7	4577.3	2917.9	3149.4	3517.8	3918.8	4081.8	4124.2	4225.3	4235.0
62.5°	20226.4	14892.7	3808.0	2706.0	2937.4	3279.8	3742.7	3970.9	4055.7	4212.2	4228.5
64°	19470.0	14162.4	3380.8	2572.3	2800.5	3146.1	3654.7	3941.6	4052.4	4261.1	4274.1
65°	18915.8	13631.0	3113.6	2487.5	2712.5	3058.0	3605.8	3951.4	4081.8	4336.1	4355.6
67.5°	16874.9	11802.0	2575.6	2288.7	2503.8	2908.1	3615.5	4032.9	4075.2	4365.5	4362.2
70°	13963.5	9396.0	2158.3	2106.1	2301.7	2787.5	3576.4	3902.5	3905.8	4098.1	4052.4
72.5°	10455.6	6944.3	1871.4	1917.0	2076.8	2500.6	3377.6	3726.5	3671.0	3697.1	3651.5
75°	7182.2	4593.6	1610.5	1714.9	1842.0	2210.4	3097.2	3384.1	3296.0	3263.5	3230.9
77.5°	3834.0	2539.7	1340.0	1516.0	1600.8	1910.5	2702.7	2979.8	2888.6	2761.4	2719.0
80°	1551.9	1196.5	1079.2	1255.2	1304.1	1538.9	2249.6	2422.3	2353.9	2132.2	2060.4
82.5°	779.2	717.3	847.6	987.8	991.1	1098.7	1672.5	1835.5	1682.3	1411.7	1349.7
85°	407.5	420.6	583.6	694.4	612.9	593.3	1004.2	1111.7	1020.5	886.8	798.8
87.5°	146.7	169.5	306.5	303.2	215.2	114.1	221.7	107.6	58.7	35.8	45.7
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)