

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: P457406

Luminaire Tested: **GALN-SA8D-727-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457406
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-SA8D-727-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53461 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 493
Input Voltage (V): NR
Input Current (A_{in}): 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

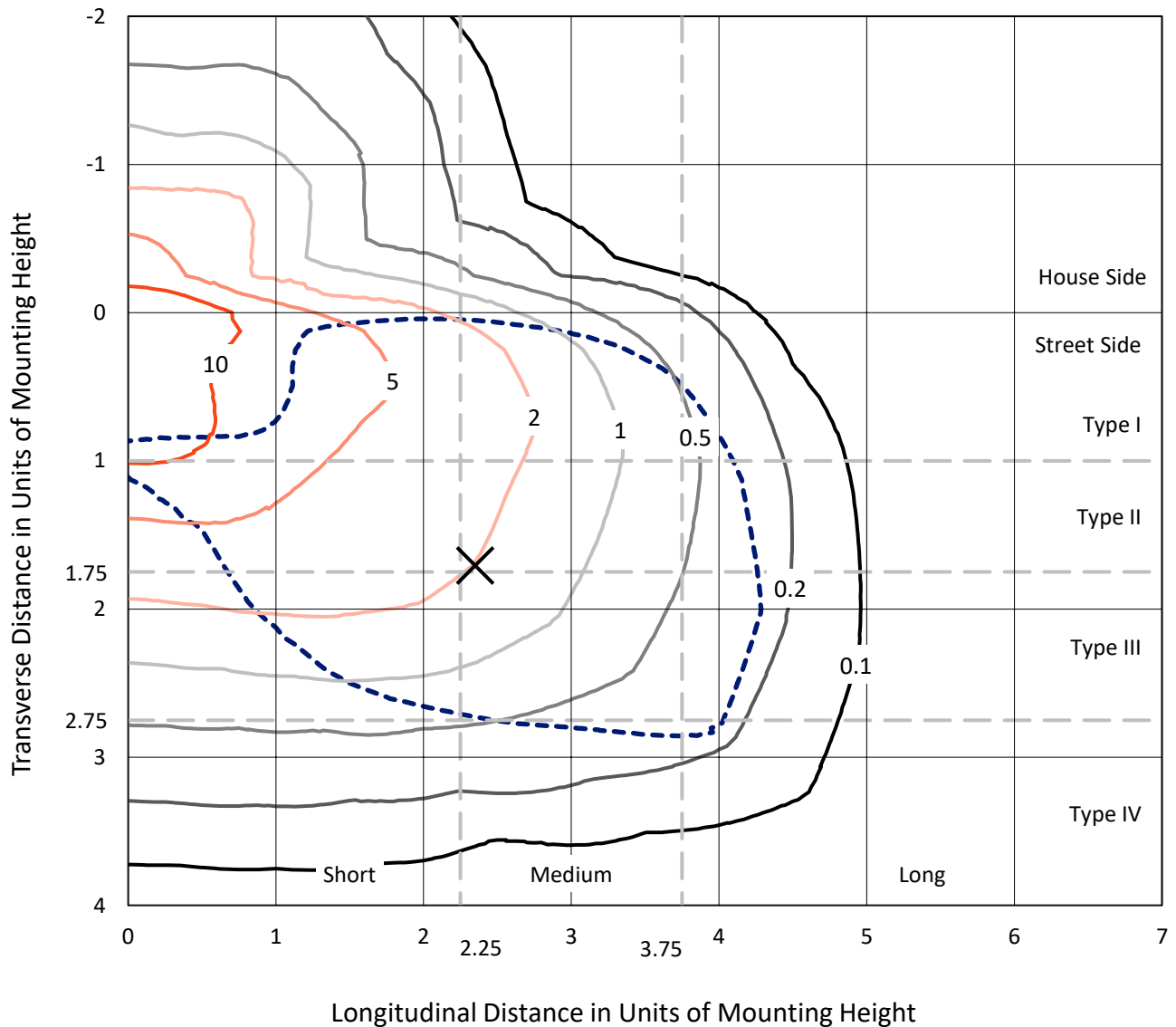




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Iso-Footcandle Lines of Horizontal Illumination

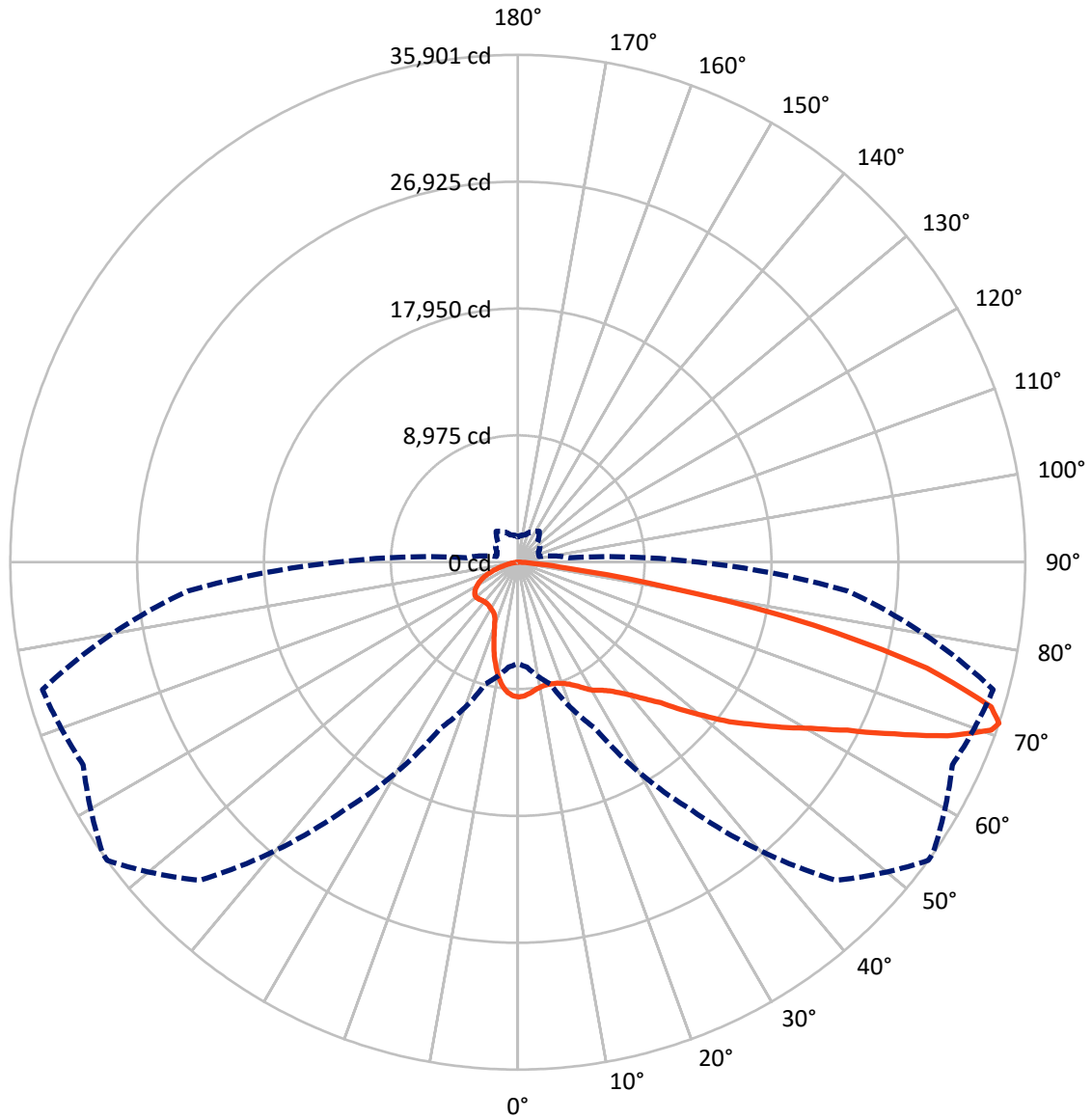
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 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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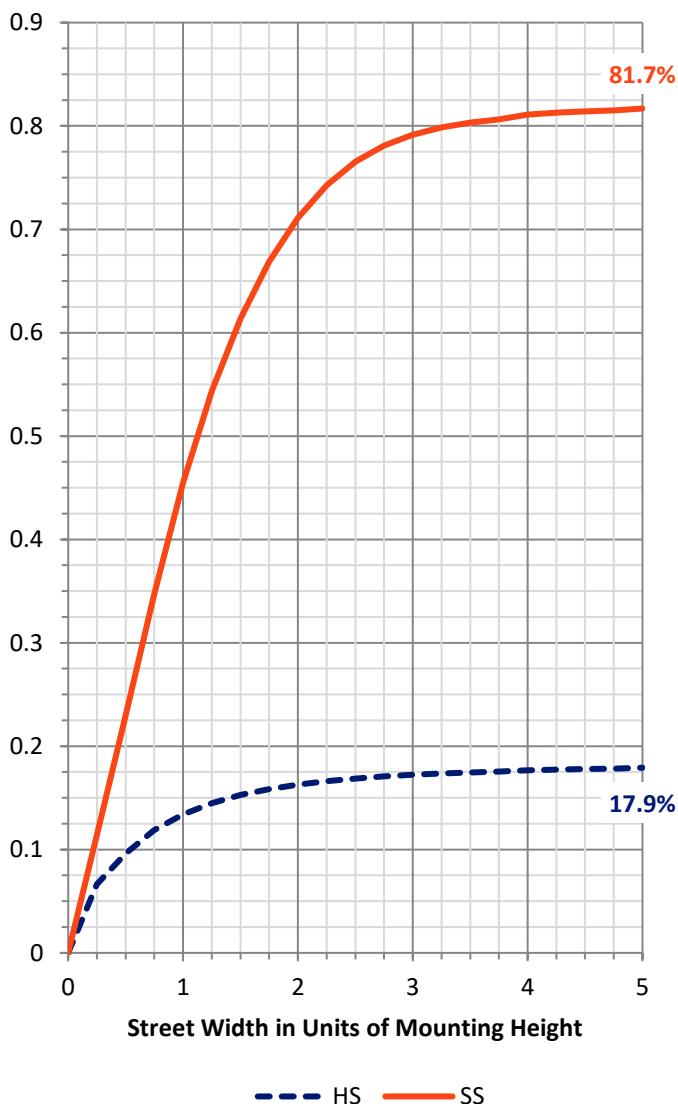
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9652.0	0.0	9652.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	43809.0	0.0	43809.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	53461.0	0.0	53461.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	850.0	1.6
10°-20°	2244.4	4.2
20°-30°	3737.1	7.0
30°-40°	5525.9	10.3
40°-50°	7783.4	14.6
50°-60°	10422.3	19.5
60°-70°	13136.6	24.6
70°-80°	8972.2	16.8
80°-90°	789.0	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°	53461.0	100.0
0°-180°	53461.0	100.0

Coefficient of Utilization



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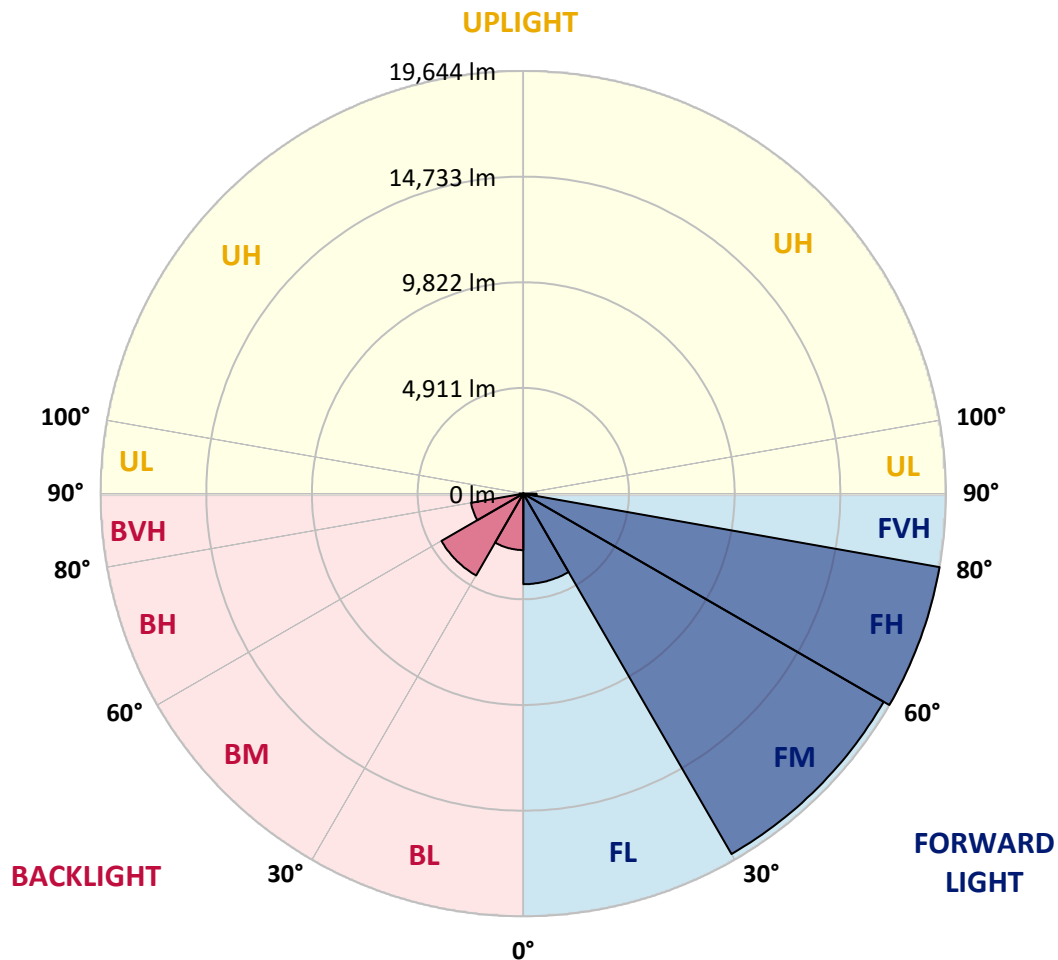
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4208.3	7.9			
FM	(30°-60°)	19340.3	36.2			
FH	(60°-80°)	19643.7	36.7			G5
FVH	(80°-90°)	616.8	1.2			G4/750
BL	(0°-30°)	2623.2	4.9	B4/5000		
BM	(30°-60°)	4391.4	8.2	B3/5000		
BH	(60°-80°)	2465.1	4.6	B3/2500		G3/2500
BVH	(80°-90°)	172.3	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2
2.5°	9214.8	9258.1	9269.7	9298.6	9359.2	9408.3	9457.4	9451.6	9520.9	9549.8	9575.8
5°	8804.7	8816.3	8859.6	8917.4	9024.2	9159.9	9292.8	9295.7	9466.0	9601.8	9668.2
7.5°	8504.4	8542.0	8570.8	8631.5	8744.1	8891.4	9102.2	9119.5	9422.7	9691.3	9832.8
10°	8308.1	8351.4	8383.1	8458.2	8570.8	8735.4	8963.6	8995.3	9391.0	9832.8	10081.1
12.5°	8129.0	8172.3	8201.2	8299.4	8446.7	8648.8	8905.8	8943.4	9402.5	9997.4	10352.6
15°	8238.7	8273.4	8261.8	8290.7	8388.9	8619.9	8928.9	8966.5	9445.8	10156.2	10621.1
17.5°	8726.8	8755.7	8660.4	8550.6	8504.4	8674.8	9001.1	9041.5	9532.5	10320.8	10895.5
20°	9445.8	9523.8	9315.9	9070.4	8848.1	8871.2	9151.3	9194.6	9653.7	10485.4	11175.6
22.5°	10381.5	10439.2	10185.1	9780.8	9370.7	9159.9	9376.5	9402.5	9835.7	10699.1	11481.7
25°	11481.7	11516.3	11164.0	10644.2	10052.3	9653.7	9685.5	9731.7	10136.0	10941.7	11753.1
27.5°	12550.2	12659.9	12252.7	11617.4	10837.7	10173.5	10110.0	10138.9	10462.3	11077.4	11940.8
30°	13817.9	13809.2	13378.9	12642.6	11643.4	10739.5	10511.4	10505.6	10638.5	11143.8	12076.6
32.5°	14828.6	14947.0	14525.4	13722.6	12564.6	11325.8	10788.6	10777.1	10774.2	11259.3	12278.7
35°	15977.9	15995.2	15608.3	14799.7	13560.9	12062.1	11175.6	11117.8	11051.4	11507.7	12553.0
37.5°	17006.0	17086.8	16731.6	15824.9	14539.8	12827.4	11706.9	11669.4	11467.3	11938.0	12992.0
40°	17808.7	17869.4	17655.7	16792.3	15504.3	13653.3	12382.7	12313.4	12067.9	12642.6	13578.2
42.5°	18071.5	18195.7	18279.4	17855.0	16613.2	14632.2	13214.3	13127.7	12940.0	13711.0	14253.9
45°	18091.7	18288.1	18729.9	18750.2	17727.9	15804.6	14184.6	14124.0	14109.5	15079.8	15204.0
47.5°	17938.7	18137.9	18880.1	19281.5	18721.3	16988.6	15585.2	15489.9	15498.5	16772.0	16269.6
50°	17569.1	17805.9	18706.8	19622.3	19498.1	18218.8	17063.7	17031.9	17211.0	18703.9	17375.6
52.5°	16873.1	17159.0	18527.8	19835.9	20075.6	19278.6	18744.4	18654.9	19108.2	20800.5	18585.6
55°	14947.0	15377.3	17872.3	19954.3	20624.3	20292.2	20257.6	20419.3	21019.9	23087.6	19916.8
57.5°	13942.1	14265.5	16448.6	19974.6	21317.4	21470.4	22024.9	22065.3	23116.4	25516.1	21421.3
60°	13393.4	13679.3	15668.9	19841.7	22284.8	22928.7	23832.6	23977.0	25163.8	28146.9	22980.7
62.5°	12914.0	13159.5	15201.1	19382.6	23376.3	25091.6	26174.6	26243.9	27488.5	31052.0	24519.9
65°	11784.9	12065.0	14259.7	18923.4	24317.7	27794.6	29281.8	29200.9	29963.3	33558.5	25484.4
67.5°	10263.1	10618.3	12501.1	17338.0	24782.7	30748.7	32781.7	32680.7	32406.3	35201.7	25761.6
70°	8319.6	8510.2	10251.5	14597.6	22925.8	32299.5	35545.3	35438.5	33919.5	35418.2	24450.6
71°	7158.7	7456.2	8926.0	12966.0	21380.9	31825.9	35900.5	35871.6	33922.4	34820.5	23463.0
72.5°	5587.8	5769.7	7069.2	10046.5	18172.6	29134.5	35022.6	35132.4	33186.0	33160.0	21427.1
75°	3534.6	3615.5	4435.6	5914.1	9971.4	20633.0	29896.9	30194.3	29466.6	27142.0	15934.6
77.5°	2053.2	2157.1	2656.7	3485.5	4308.5	11198.7	21392.4	21715.9	20474.1	14944.1	6523.4
80°	1195.5	1311.0	1750.0	2024.3	1978.1	4155.5	10892.6	11444.1	8865.4	3774.3	1830.8
82.5°	664.2	742.2	1230.2	1233.1	1054.0	1357.2	3427.8	3586.6	2529.7	1521.8	747.9
85°	482.3	545.8	794.1	719.0	505.4	583.3	1192.6	1250.4	1022.3	641.1	242.6
87.5°	170.4	242.6	436.1	346.5	138.6	121.3	343.6	280.1	259.9	179.0	54.9
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°	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2	9538.2
2.5°	9590.2	9596.0	9567.1	9515.1	9463.2	9396.7	9321.7	9263.9	9237.9	9235.0	9232.1
5°	9694.2	9708.6	9598.9	9437.2	9258.1	9038.7	8850.9	8637.3	8582.4	8495.8	8521.7
7.5°	9861.7	9853.0	9636.4	9292.8	8874.1	8409.1	8016.4	7788.3	7551.5	7485.0	7487.9
10°	10101.3	10046.5	9636.4	8998.2	8299.4	7609.2	7060.5	6714.0	6526.3	6370.4	6312.6
12.5°	10355.5	10216.9	9544.0	8585.3	7560.1	6714.0	6124.9	5657.1	5535.8	5408.8	5411.6
15°	10598.0	10367.0	9362.1	8004.8	6763.1	5758.2	5186.4	4906.3	4868.7	4883.2	4880.3
17.5°	10817.5	10473.9	9084.9	7358.0	5833.3	4938.1	4634.8	4655.1	4756.1	4828.3	4837.0
20°	11039.9	10537.4	8671.9	6491.7	4955.4	4441.4	4452.9	4611.7	4764.8	4863.0	4877.4
22.5°	11250.7	10566.3	8186.8	5654.2	4320.1	4230.6	4400.9	4571.3	4721.5	4816.8	4831.2
25°	11389.3	10499.9	7499.5	4779.2	4008.2	4155.5	4334.5	4478.9	4606.0	4704.1	4727.2
27.5°	11426.8	10286.2	6647.6	4071.7	3863.8	4083.3	4247.9	4354.7	4452.9	4545.3	4562.6
30°	11406.6	9971.4	5712.0	3655.9	3780.1	3999.5	4126.6	4204.6	4323.0	4395.2	4409.6
32.5°	11374.8	9604.7	4735.9	3433.5	3710.8	3921.6	3996.6	4066.0	4063.1	4034.2	4054.4
35°	11386.4	9165.7	3944.7	3300.7	3650.1	3863.8	3927.3	3840.7	3592.4	3580.8	3569.3
37.5°	11447.0	8732.6	3370.0	3208.3	3618.3	3855.1	3889.8	3491.3	3271.8	3170.7	3144.8
40°	11603.0	8227.2	2991.7	3139.0	3615.5	3921.6	3719.4	3315.1	2893.5	2697.2	2682.7
42.5°	11810.9	7730.5	2760.7	3095.7	3650.1	4022.6	3650.1	3066.8	2607.6	2492.1	2474.8
45°	12119.9	7161.6	2633.6	3075.5	3702.1	4060.2	3627.0	2884.9	2492.1	2399.7	2399.7
47.5°	12469.3	6618.7	2564.3	3061.0	3768.5	4034.2	3422.0	2827.1	2437.3	2448.8	2503.7
50°	12815.8	6148.0	2512.3	3029.2	3826.3	4019.7	3338.2	2824.2	2451.7	2599.0	2697.2
52.5°	13217.2	5815.9	2448.8	2977.3	3826.3	3927.3	3312.2	2882.0	2492.1	2535.4	2578.8
55°	13702.4	5712.0	2368.0	2864.6	3757.0	3696.3	3297.8	2965.7	2521.0	2419.9	2437.3
57.5°	14343.4	5879.5	2290.0	2723.1	3598.1	3456.6	3292.0	2988.8	2454.6	2370.8	2353.5
60°	15088.5	6211.5	2266.9	2578.8	3381.6	3251.6	3257.4	2922.4	2362.2	2275.5	2290.0
62.5°	15611.2	6410.8	2252.4	2469.0	3144.8	3026.4	3173.6	2841.5	2321.7	2246.7	2261.1
65°	15611.2	6168.2	2119.6	2301.5	2838.7	2754.9	3072.6	2740.5	2269.8	2183.1	2168.7
67.5°	15019.2	5460.7	1917.5	2050.3	2500.8	2445.9	2931.1	2619.2	2191.8	2125.4	2090.7
70°	13477.1	4141.0	1663.3	1755.8	2073.4	2122.5	2749.1	2454.6	2061.9	1981.0	1929.0
71°	12798.5	3606.8	1556.5	1605.6	1908.8	1981.0	2662.5	2385.3	2004.1	1888.6	1796.2
72.5°	11490.4	3037.9	1394.8	1415.0	1631.6	1761.5	2480.6	2252.4	1894.4	1729.8	1625.8
75°	8729.7	2217.8	1123.3	1111.8	1207.1	1397.7	2099.4	2007.0	1660.5	1438.1	1377.5
77.5°	3771.4	1207.1	840.3	849.0	820.1	1059.8	1651.8	1724.0	1423.7	1169.5	1114.7
80°	1143.5	695.9	574.7	586.2	548.7	710.4	1163.8	1351.5	1143.5	909.6	834.6
82.5°	586.2	415.8	392.7	387.0	349.4	401.4	704.6	924.1	817.2	568.9	502.5
85°	254.1	222.4	193.5	187.7	164.6	144.4	251.2	462.0	433.2	317.7	303.2
87.5°	63.5	57.8	37.5	34.7	20.2	2.9	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)