

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: P454752

Luminaire Tested: **GALN-SA5D-827-U-SL3**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454752
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-827-U-SL3
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28227 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

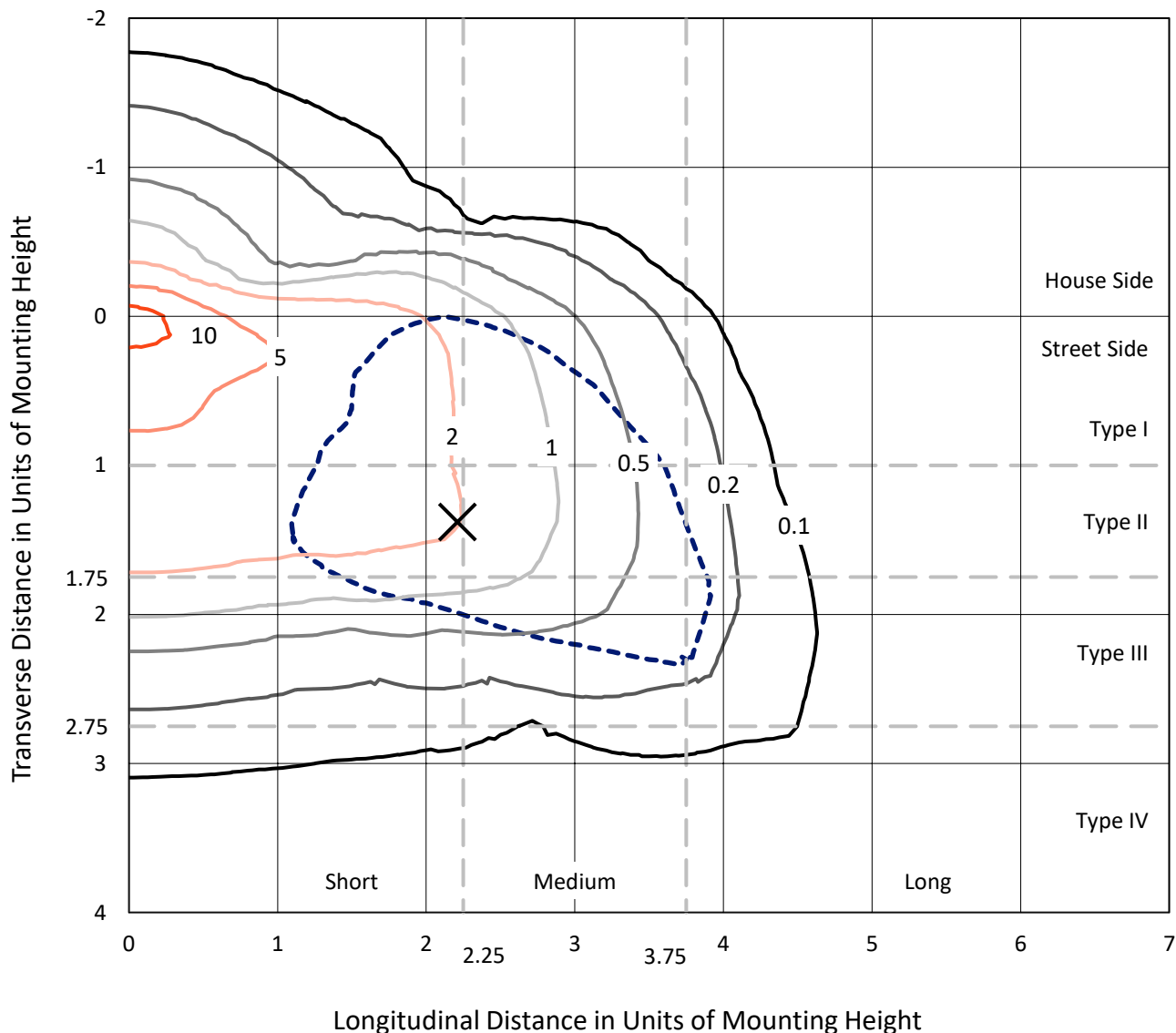
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

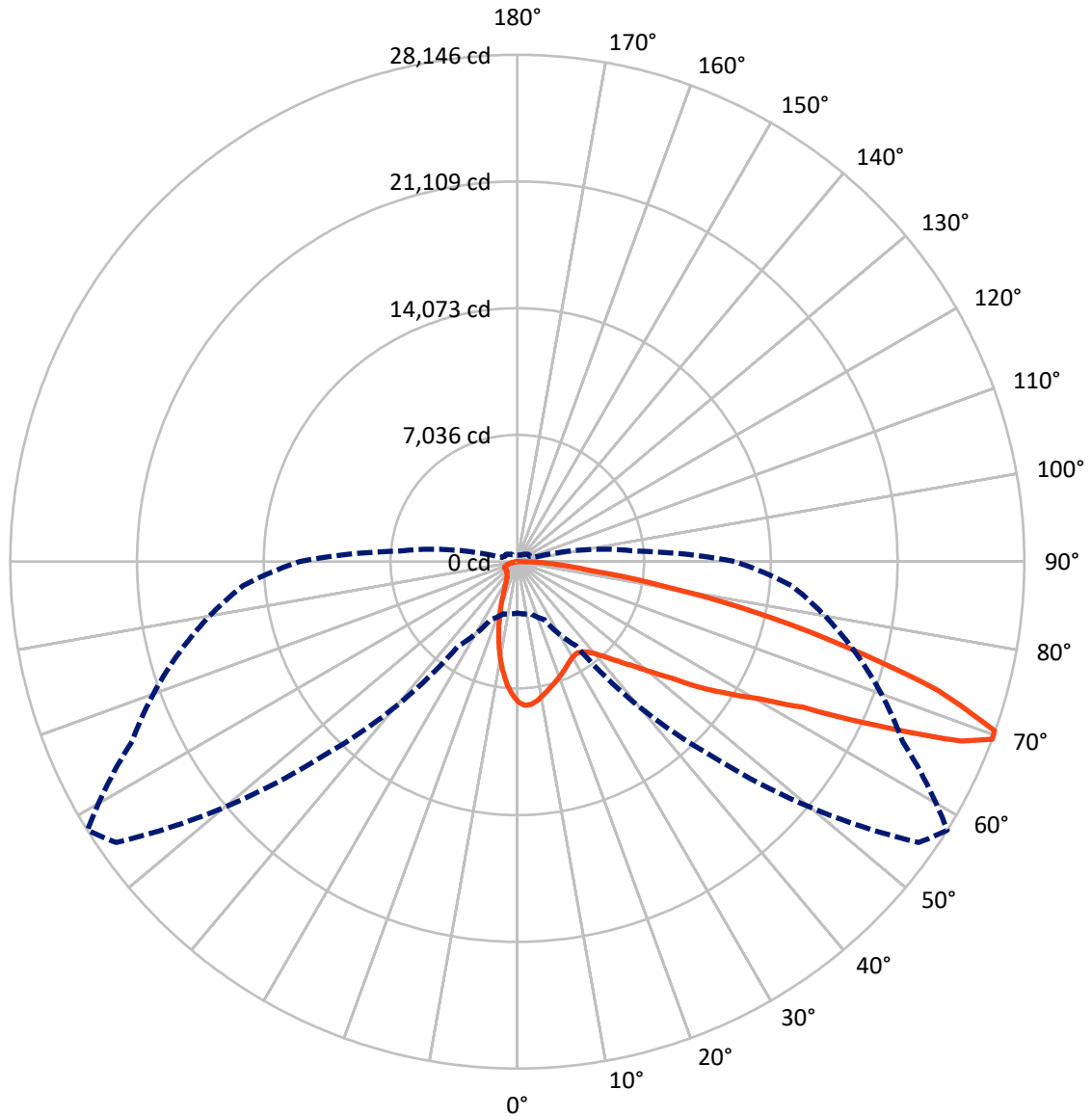
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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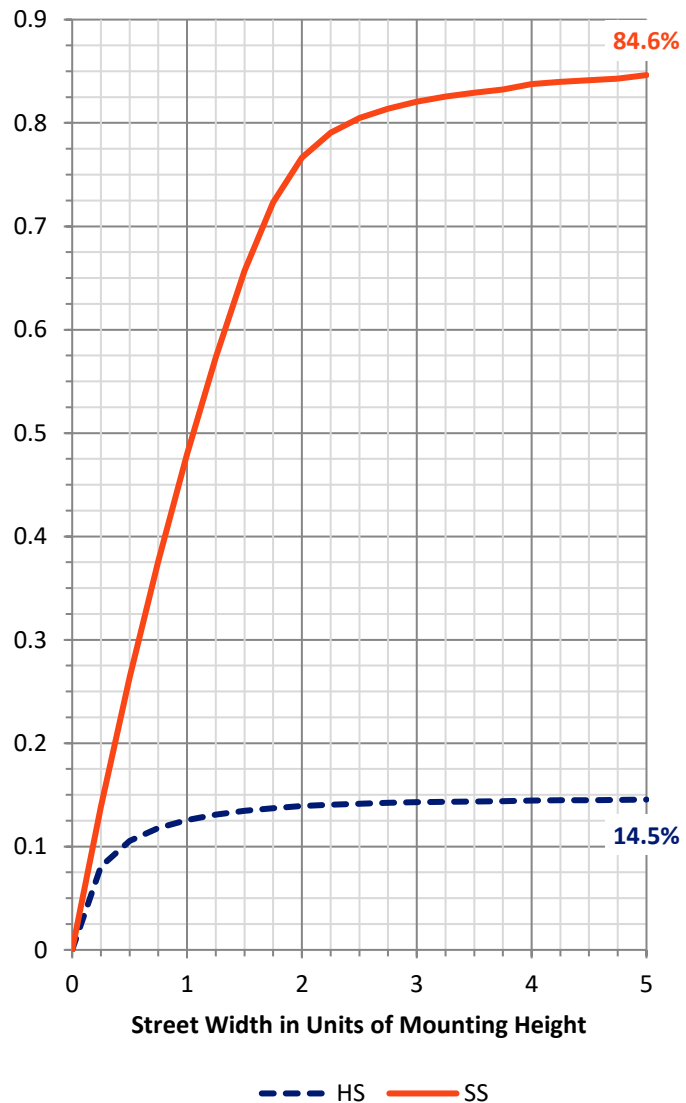
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4136.7	0.0	4136.7
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	24090.3	0.0	24090.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	28227.0	0.0	28227.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	662.4	2.3
10°-20°	1454.6	5.2
20°-30°	1879.4	6.7
30°-40°	2440.9	8.6
40°-50°	3548.7	12.6
50°-60°	5662.6	20.1
60°-70°	7564.6	26.8
70°-80°	4360.7	15.4
80°-90°	653.1	2.3
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°	28227.0	100.0
0°-180°	28227.0	100.0



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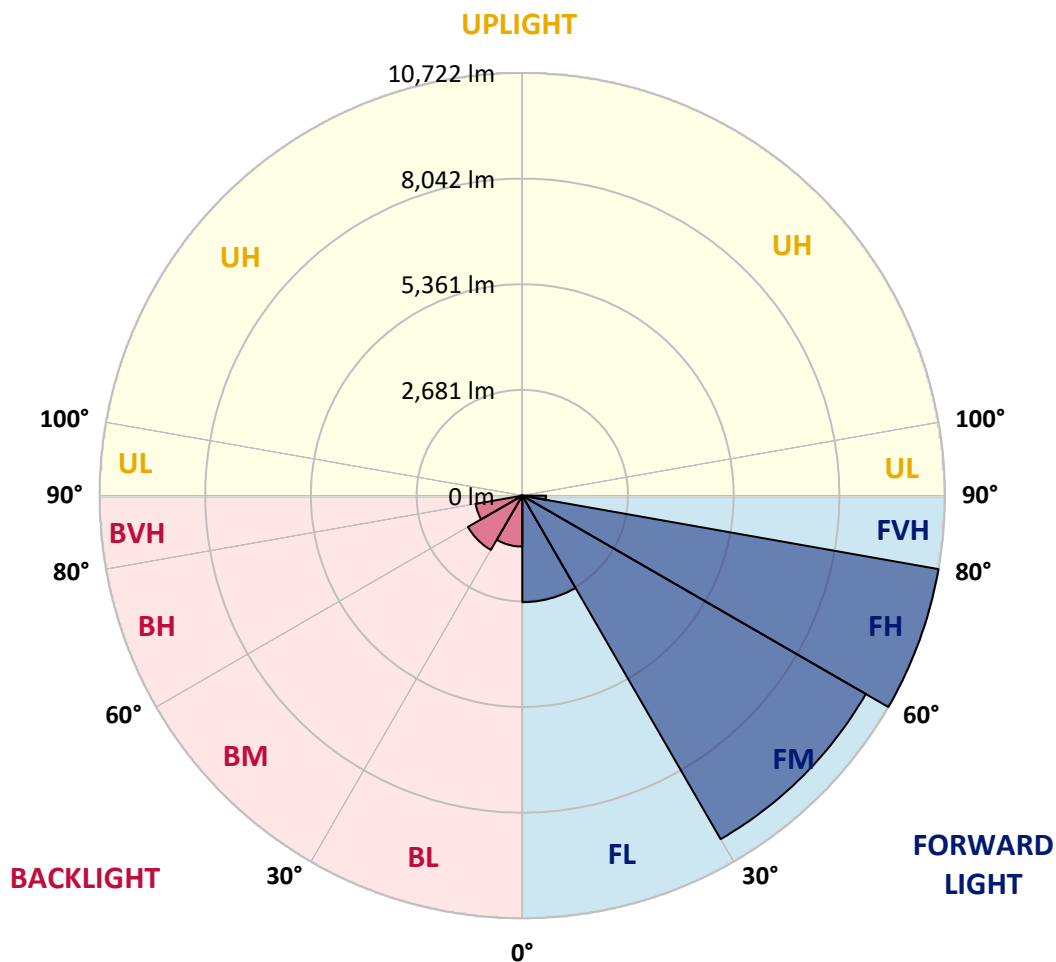
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2703.4	9.6			
FM	(30°-60°)	10061.5	35.6			
FH	(60°-80°)	10722.4	38.0			G4/12000
FVH	(80°-90°)	603.1	2.1			G4/750
BL	(0°-30°)	1293.0	4.6	B3/2500		
BM	(30°-60°)	1590.8	5.6	B2/2500		
BH	(60°-80°)	1202.9	4.3	B3/2500		G3/2500
BVH	(80°-90°)	50.0	0.2			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3
2.5°	8089.9	8112.0	8105.7	8097.8	8085.2	8050.6	7993.9	7984.5	7948.3	7871.1	7775.1
5°	7965.6	7984.5	7986.0	7997.1	8012.8	8006.5	7965.6	7960.9	7907.3	7803.4	7642.9
7.5°	7539.0	7564.2	7619.3	7680.6	7735.7	7787.7	7800.3	7808.2	7775.1	7655.5	7441.4
10°	7058.8	7084.0	7109.2	7200.5	7335.9	7465.0	7572.0	7586.2	7594.1	7483.9	7222.5
12.5°	6526.7	6578.7	6632.2	6767.6	6948.6	7151.7	7340.6	7370.5	7424.1	7340.6	7033.6
15°	6074.9	6128.5	6205.6	6326.8	6545.6	6838.4	7104.5	7153.3	7258.8	7216.3	6857.3
17.5°	5761.7	5780.6	5834.1	5972.6	6208.7	6517.3	6873.1	6970.7	7139.1	7128.1	6706.2
20°	5514.5	5538.1	5571.2	5656.2	5901.8	6227.6	6657.4	6783.3	7011.6	7049.4	6556.7
22.5°	5410.6	5427.9	5423.2	5468.9	5635.7	5963.2	6438.6	6588.1	6898.3	6995.9	6418.1
25°	5416.9	5432.7	5409.0	5398.0	5497.2	5730.2	6210.3	6400.8	6807.0	6959.7	6292.2
27.5°	5522.4	5533.4	5489.3	5445.2	5453.1	5585.4	6021.4	6232.4	6729.8	6975.4	6186.7
30°	5664.1	5684.5	5656.2	5602.7	5544.4	5550.7	5900.2	6108.0	6693.6	7030.5	6136.3
32.5°	5846.7	5865.6	5853.0	5810.5	5734.9	5651.5	5870.3	6062.3	6696.8	7142.3	6125.3
35°	6038.7	6076.5	6097.0	6093.8	6032.4	5887.6	5988.4	6147.4	6772.3	7329.6	6189.9
37.5°	6256.0	6287.5	6375.6	6432.3	6375.6	6207.2	6254.4	6364.6	6939.2	7600.4	6331.5
40°	6466.9	6514.1	6643.2	6819.5	6797.5	6649.5	6660.6	6733.0	7233.6	8003.4	6608.6
42.5°	6687.3	6744.0	6969.1	7230.4	7282.4	7167.5	7197.4	7261.9	7652.3	8562.2	7084.0
45°	6970.7	7038.4	7315.4	7641.3	7845.9	7775.1	7860.1	7891.6	8212.7	9289.5	7710.6
47.5°	7335.9	7414.6	7756.2	8162.4	8452.0	8516.6	8664.5	8645.6	8907.0	10150.6	8522.9
50°	7951.4	7995.5	8318.2	8732.2	9130.5	9421.7	9582.3	9612.2	9768.1	10988.1	9431.2
52.5°	8683.4	8722.8	8955.8	9317.8	9816.9	10434.0	10830.7	10733.1	10770.9	12008.2	10493.8
55°	9506.8	9572.9	9720.8	9961.7	10608.7	11517.0	12313.6	12337.2	11918.5	12984.2	11512.3
57.5°	10144.3	10256.1	10509.5	10852.7	11672.9	12721.3	13791.8	13807.5	13272.3	14026.4	12636.3
60°	9823.2	9955.4	10534.7	11370.6	13069.2	14822.9	15558.1	15468.3	14589.9	15213.3	14007.5
62.5°	8437.9	8461.5	9303.7	10610.3	13499.0	17634.5	18187.0	17807.6	16348.3	16718.3	15400.7
65°	5461.0	5615.3	6282.7	8113.6	12086.9	19194.5	22793.2	21916.4	18813.6	18426.3	16567.2
67.5°	3447.6	3408.2	3685.3	4632.9	8313.5	17820.2	26724.1	26585.5	22037.6	19504.7	16288.5
69°	2858.8	2902.9	2997.3	3551.5	5720.7	15214.9	27188.5	28145.6	23600.8	19419.7	15276.3
70°	2592.8	2613.2	2712.4	3148.5	4414.1	12743.4	26426.5	28103.1	24214.7	19063.9	14542.7
72.5°	2057.5	2055.9	2226.0	2619.5	3299.6	7274.5	21699.1	24398.9	23528.4	17407.8	12016.1
75°	1563.2	1588.4	1775.7	2216.5	3039.8	3974.9	15142.5	18790.0	18791.5	13749.3	7498.0
77.5°	1127.1	1142.9	1361.7	1860.7	2863.5	3222.4	10086.1	13476.9	12669.4	6300.1	2356.6
80°	738.3	747.8	914.6	1473.5	2581.7	3039.8	5980.5	8248.9	5975.8	1671.8	779.2
82.5°	404.6	451.8	558.9	954.0	2071.7	2808.4	3634.9	4174.8	2241.7	744.6	406.2
85°	203.1	215.7	314.8	557.3	1353.8	2323.6	2531.4	2394.4	1157.1	369.9	210.9
87.5°	59.8	75.6	130.7	215.7	549.4	1210.6	1408.9	1264.1	445.5	133.8	44.1
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°	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3	7800.3
2.5°	7735.7	7707.4	7581.5	7468.1	7364.2	7254.0	7161.2	7079.3	7087.2	7088.7	7005.3
5°	7559.4	7494.9	7255.6	7032.1	6843.2	6603.9	6399.2	6267.0	6200.9	6112.7	6144.2
7.5°	7320.2	7195.8	6863.6	6492.1	6144.2	5834.1	5497.2	5265.8	5117.8	4974.6	4993.4
10°	7073.0	6873.1	6389.8	5898.6	5448.4	4952.5	4522.8	4154.4	3880.5	3778.1	3710.5
12.5°	6819.5	6556.7	5942.7	5289.4	4667.6	4074.1	3464.9	3069.7	2767.5	2606.9	2627.4
15°	6588.1	6268.6	5476.7	4680.2	3872.6	3165.8	2558.1	2181.9	1970.9	1926.9	1952.0
17.5°	6374.0	5955.3	5040.7	4088.3	3145.3	2373.9	1922.1	1709.6	1624.6	1601.0	1599.4
20°	6153.6	5689.3	4551.1	3455.4	2451.1	1840.3	1577.4	1478.2	1462.5	1471.9	1473.5
22.5°	5930.1	5360.2	4047.3	2827.3	1952.0	1505.0	1379.0	1352.3	1364.9	1386.9	1390.0
25°	5723.9	5070.6	3562.5	2276.3	1558.5	1322.3	1261.0	1261.0	1289.3	1322.3	1323.9
27.5°	5553.9	4790.4	3079.2	1807.2	1305.0	1190.1	1169.6	1180.7	1220.0	1245.2	1246.8
30°	5413.8	4529.0	2622.7	1448.3	1147.6	1084.6	1079.9	1098.8	1127.1	1150.8	1152.3
32.5°	5308.3	4299.2	2196.0	1216.9	1039.0	1004.4	1002.8	1017.0	1032.7	1039.0	1045.3
35°	5267.4	4108.7	1805.6	1070.5	966.6	944.5	944.5	943.0	949.3	952.4	955.6
37.5°	5300.4	3962.3	1503.4	976.0	913.1	897.3	887.9	878.4	875.3	875.3	876.8
40°	5440.5	3885.2	1278.3	914.6	875.3	851.7	834.3	823.3	812.3	815.4	818.6
42.5°	5738.1	3899.4	1125.6	873.7	842.2	809.2	784.0	771.4	763.5	772.9	771.4
45°	6211.9	4041.0	1028.0	845.4	809.2	766.6	743.0	730.4	730.4	744.6	749.3
47.5°	6874.6	4311.8	976.0	823.3	784.0	733.6	710.0	700.5	703.7	727.3	728.9
50°	7683.8	4782.5	966.6	812.3	771.4	710.0	683.2	673.8	681.6	706.8	710.0
52.5°	8576.4	5388.6	1012.2	813.9	760.4	695.8	661.2	647.0	654.9	675.3	681.6
55°	9634.3	6147.4	1130.3	820.2	744.6	687.9	645.4	613.9	623.4	637.6	639.1
57.5°	10714.2	7104.5	1338.1	821.7	732.0	673.8	618.7	577.7	577.7	587.2	591.9
60°	12033.4	8146.6	1612.0	823.3	733.6	653.3	582.5	536.8	530.5	535.2	536.8
62.5°	13343.1	9018.7	1657.7	818.6	749.3	632.8	543.1	495.9	484.9	483.3	480.1
65°	13920.9	8856.6	1358.6	796.6	766.6	620.2	511.6	456.5	437.6	431.3	431.3
67.5°	12979.5	7491.7	1021.7	766.6	755.6	607.7	481.7	423.5	401.4	388.8	388.8
69°	12094.8	6663.7	917.8	746.2	727.3	587.2	462.8	406.2	379.4	365.2	360.5
70°	11411.6	6093.8	873.7	728.9	700.5	563.6	448.7	393.6	363.6	347.9	344.8
72.5°	9106.9	4780.9	765.1	662.7	596.6	473.8	398.3	354.2	325.9	308.5	303.8
75°	5248.5	2591.2	634.4	576.2	480.1	368.4	336.9	308.5	286.5	270.8	266.0
77.5°	1615.2	1001.2	459.7	455.0	352.6	284.9	269.2	258.2	242.4	225.1	222.0
80°	680.1	510.0	311.7	307.0	234.6	198.4	193.6	192.1	185.8	171.6	166.9
82.5°	373.1	288.1	217.2	188.9	141.7	114.9	119.6	121.2	116.5	102.3	92.9
85°	182.6	157.4	105.5	85.0	64.5	40.9	39.4	47.2	44.1	31.5	34.6
87.5°	36.2	44.1	28.3	12.6	6.3	0.0	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)