

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: P458639

Luminaire Tested: **GALN-SA2A-735-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2A-735-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7047 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

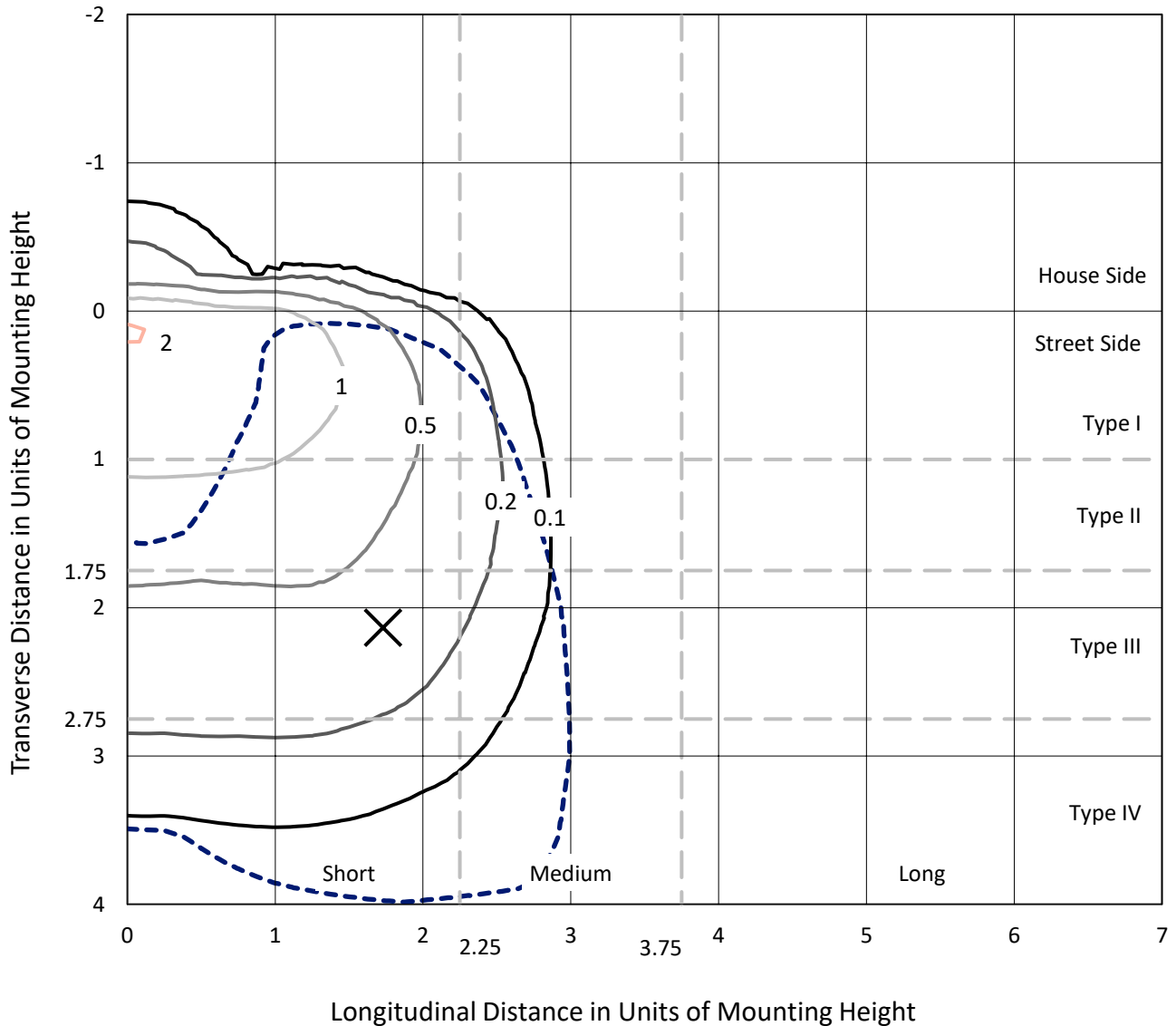
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

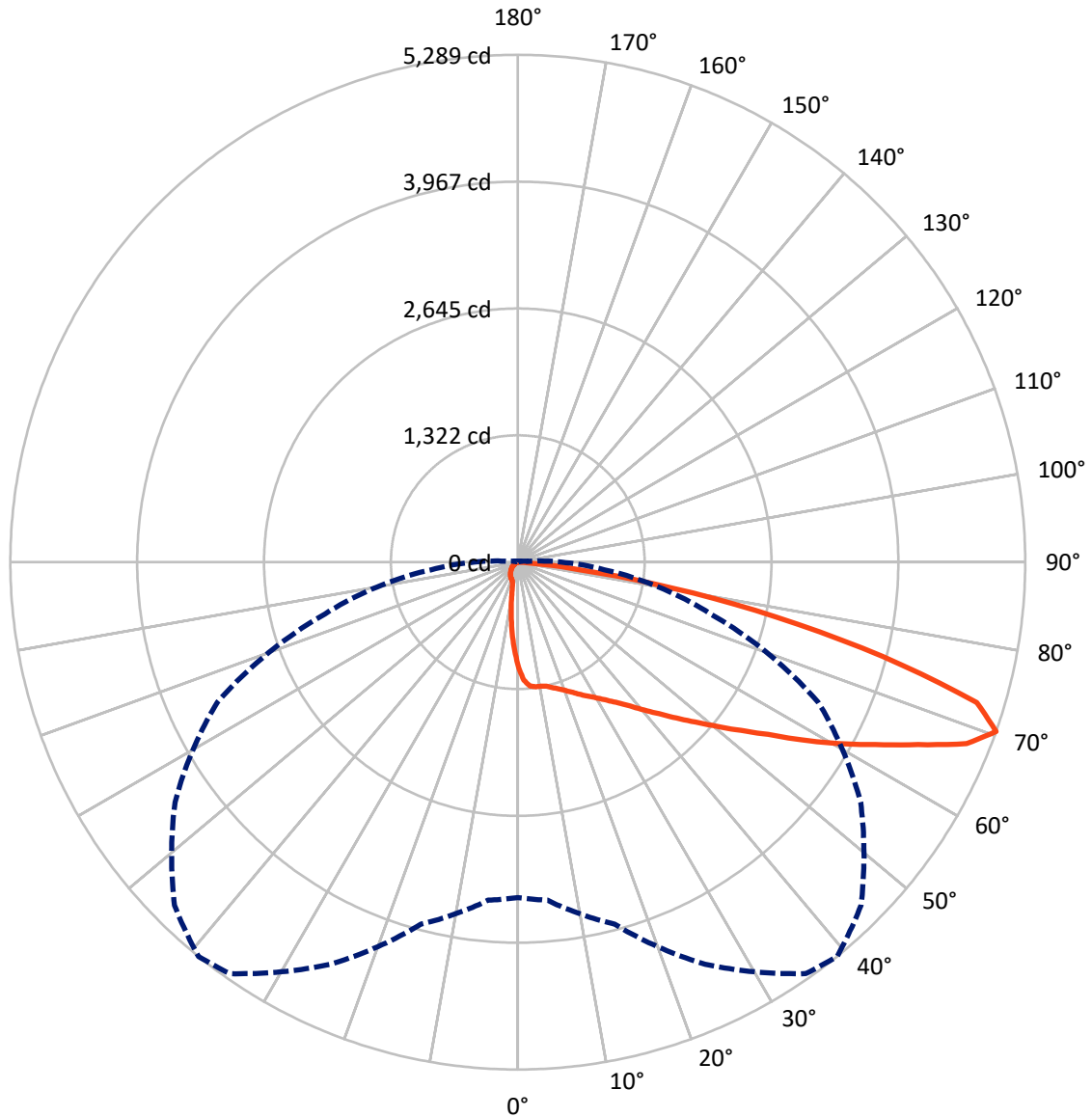
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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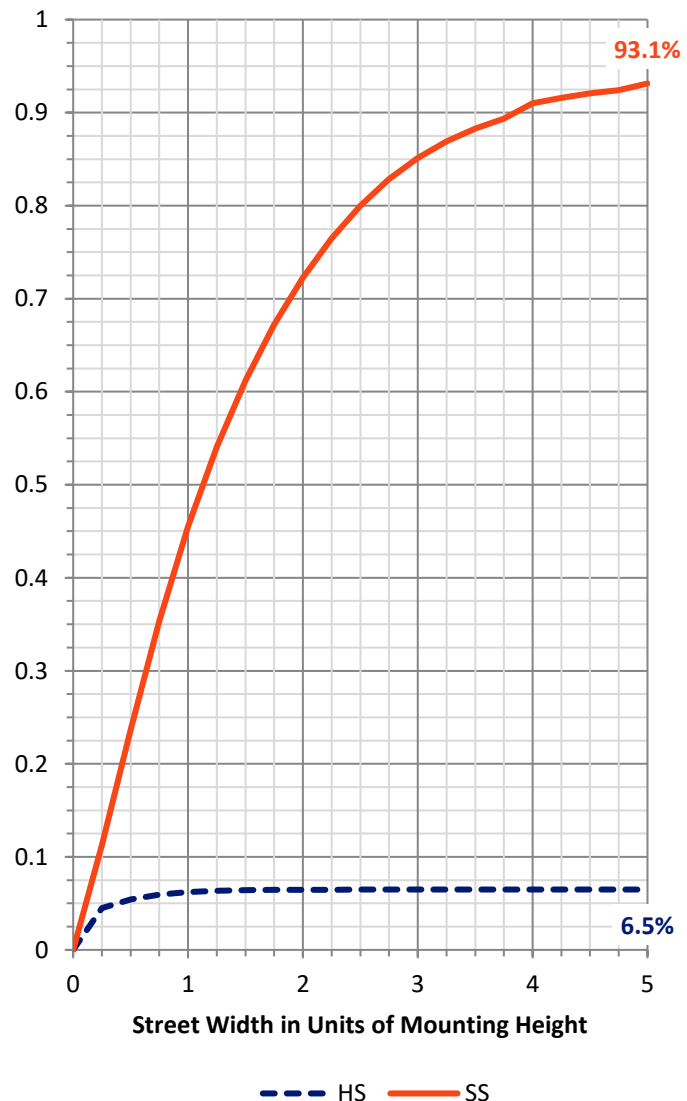
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	459.5	0.0	459.5
	% Fixture	6.5	0.0	6.5
<b>Street Side</b>	Lumens	6587.5	0.0	6587.5
	% Fixture	93.5	0.0	93.5
<b>Total</b>	Lumens	7047.0	0.0	7047.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	1.3
10°-20°	243.7	3.5
20°-30°	408.3	5.8
30°-40°	633.2	9.0
40°-50°	1003.5	14.2
50°-60°	1470.9	20.9
60°-70°	1885.4	26.8
70°-80°	1184.7	16.8
80°-90°	123.4	1.8
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°	7047.0	100.0
0°-180°	7047.0	100.0



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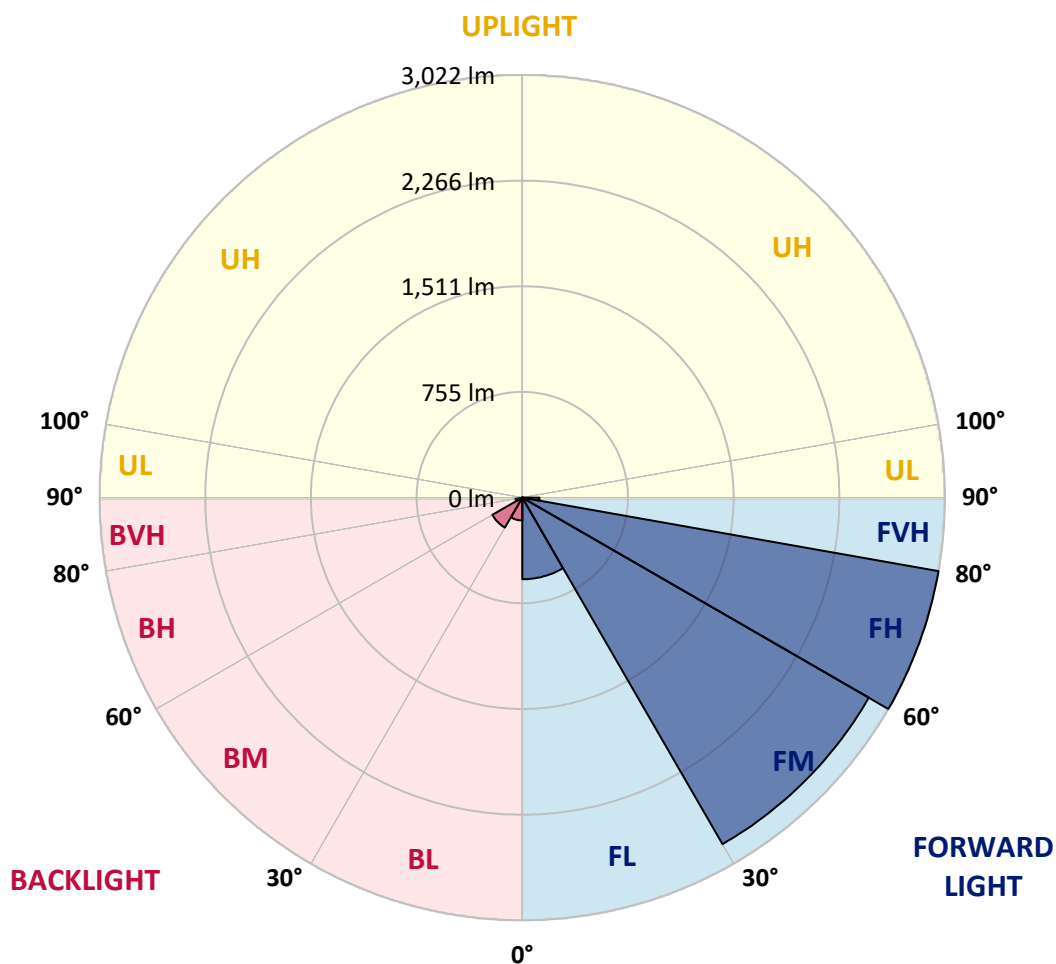
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	583.1	8.3			
FM (30°-60°)	2860.4	40.6			
FH (60°-80°)	3021.5	42.9			G2/5000
FVH (80°-90°)	122.5	1.7			G2/225
BL (0°-30°)	162.7	2.3	B1/500		
BM (30°-60°)	247.3	3.5	B1/1000		
BH (60°-80°)	48.6	0.7	B0/110		G0/110
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6
2.5°	1270.5	1266.3	1260.6	1253.9	1235.0	1231.7	1220.3	1196.2	1167.3	1143.6	1110.9
5°	1330.7	1333.0	1328.8	1316.9	1303.2	1295.1	1280.9	1243.5	1206.1	1158.3	1104.8
7.5°	1344.4	1349.1	1343.9	1332.6	1319.3	1310.8	1299.4	1267.2	1223.6	1169.2	1095.8
10°	1343.0	1348.7	1345.3	1334.9	1324.0	1316.0	1303.7	1278.1	1243.1	1185.8	1098.6
12.5°	1340.6	1348.2	1347.7	1342.5	1333.5	1327.3	1319.8	1297.0	1264.4	1209.9	1114.3
15°	1334.0	1343.4	1352.0	1356.2	1356.7	1356.7	1347.2	1323.1	1291.8	1241.6	1134.6
17.5°	1336.8	1347.7	1369.0	1381.3	1389.9	1388.9	1379.0	1352.9	1318.4	1274.3	1155.9
20°	1354.3	1369.0	1398.9	1423.5	1432.0	1429.2	1415.9	1385.6	1346.3	1302.3	1176.8
22.5°	1397.4	1410.7	1448.1	1477.0	1483.1	1475.6	1456.6	1415.4	1379.9	1332.6	1201.9
25°	1461.8	1477.5	1512.0	1533.8	1533.8	1529.6	1503.0	1454.7	1417.8	1374.7	1234.5
27.5°	1540.0	1553.2	1587.3	1606.7	1595.4	1583.1	1556.5	1498.3	1462.8	1427.7	1273.8
30°	1619.1	1627.6	1663.6	1672.1	1660.3	1644.6	1616.2	1558.0	1526.7	1499.7	1330.7
32.5°	1693.9	1712.3	1742.2	1740.3	1724.2	1716.6	1690.6	1628.5	1611.0	1608.2	1410.2
35°	1768.7	1782.9	1809.4	1816.0	1801.8	1800.4	1781.5	1735.5	1736.0	1754.5	1534.3
37.5°	1833.1	1845.9	1877.1	1891.8	1894.7	1901.8	1894.2	1863.9	1907.0	1957.6	1698.6
40°	1887.1	1905.1	1944.9	1970.4	1999.8	2025.8	2027.3	2033.9	2120.5	2207.7	1913.1
42.5°	1929.2	1954.3	2012.1	2059.5	2126.7	2159.8	2186.4	2222.8	2368.7	2498.9	2166.0
45°	1984.2	2013.0	2085.0	2159.4	2264.5	2319.0	2355.9	2453.4	2660.4	2838.0	2425.5
47.5°	2075.1	2090.2	2163.6	2272.1	2410.3	2488.0	2560.0	2707.7	2973.4	3132.5	2641.4
50°	2192.0	2202.0	2257.4	2408.0	2587.0	2689.3	2820.4	2994.2	3298.2	3376.9	2763.6
52.5°	2321.3	2324.6	2366.3	2557.6	2784.9	2913.7	3060.5	3275.0	3563.0	3551.1	2844.6
55°	2471.4	2466.7	2502.2	2720.0	3019.3	3166.6	3337.6	3562.5	3792.6	3674.7	2891.0
57.5°	2643.3	2630.5	2665.1	2935.5	3319.6	3495.7	3669.5	3810.6	3970.7	3778.4	2913.3
60°	2823.3	2797.7	2838.9	3177.5	3673.3	3840.5	3984.9	4022.8	4158.2	3860.8	2874.9
62.5°	2966.8	2967.2	3044.0	3435.1	4037.0	4183.3	4260.0	4294.1	4319.7	3842.8	2673.2
65°	3190.8	3198.3	3321.0	3792.6	4458.0	4584.9	4637.4	4526.6	4326.8	3619.3	2370.1
67.5°	3421.8	3446.0	3670.5	4285.1	4944.3	5046.6	4978.9	4571.6	4133.6	3109.3	1797.1
70°	3497.1	3536.9	3906.8	4624.2	5236.0	5289.0	5059.8	4361.8	3455.5	2078.9	904.5
72.5°	3204.5	3268.9	3770.8	4500.6	5049.9	5004.0	4527.1	3658.1	2196.8	789.4	276.1
75°	2259.8	2288.2	3133.9	3733.4	4061.6	3931.4	3443.6	2358.3	903.5	221.6	94.7
77.5°	1166.8	1153.1	1863.9	2477.1	2896.7	2761.7	2255.0	1220.8	342.4	92.3	58.7
80°	603.3	613.2	806.4	1298.0	1768.2	1627.1	1202.3	565.9	182.3	51.1	45.0
82.5°	338.1	317.3	463.6	566.8	826.8	648.3	461.2	400.6	79.6	30.8	42.6
85°	61.6	64.4	254.3	306.4	287.0	182.3	148.7	267.6	23.2	17.0	29.8
87.5°	0.9	0.9	49.2	88.1	55.9	25.6	46.9	38.4	4.7	6.6	5.2
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°	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6	1099.6
2.5°	1094.4	1076.4	1042.7	1009.6	967.5	932.9	909.7	885.5	860.9	862.8	868.5
5°	1075.4	1044.2	977.9	907.8	840.5	779.9	720.3	666.8	645.0	625.1	626.0
7.5°	1056.5	1012.4	915.4	805.5	703.7	600.5	525.6	464.1	431.4	406.8	399.7
10°	1048.0	989.7	858.1	707.0	562.6	449.9	353.7	303.5	264.7	252.4	255.7
12.5°	1051.7	978.3	806.4	618.0	446.1	313.5	246.2	220.7	212.1	210.7	209.8
15°	1058.8	970.3	755.8	519.5	327.7	233.0	206.9	202.2	201.3	200.3	200.8
17.5°	1068.3	963.2	701.8	427.1	251.5	203.6	196.0	193.7	193.2	193.2	193.2
20°	1077.8	955.1	641.7	344.7	209.8	192.3	187.5	186.1	185.6	185.6	185.2
22.5°	1088.7	948.0	580.6	270.9	193.2	184.2	179.9	179.0	178.5	178.1	178.1
25°	1104.3	939.0	515.7	221.6	182.8	176.6	172.4	171.4	171.0	169.1	169.5
27.5°	1125.1	932.4	448.9	191.3	173.3	167.2	164.3	162.9	162.0	160.5	161.0
30°	1153.6	926.7	377.9	174.7	162.4	157.2	154.4	153.4	152.5	151.1	151.1
32.5°	1202.8	929.1	303.1	161.5	152.5	146.3	143.5	142.5	141.6	140.2	140.2
35°	1276.7	942.8	242.5	150.1	140.6	134.5	131.6	131.6	130.2	128.3	127.9
37.5°	1397.4	977.9	194.6	139.2	129.3	123.6	120.3	119.3	117.9	115.1	114.6
40°	1540.0	1032.3	163.8	128.3	118.9	113.2	110.3	107.5	103.7	100.9	100.4
42.5°	1719.0	1088.2	142.1	117.4	108.9	103.7	100.4	95.7	90.0	86.2	85.7
45°	1905.5	1139.4	127.4	107.5	99.4	95.2	91.4	83.8	76.7	72.0	71.5
47.5°	2044.8	1148.8	115.5	98.0	91.4	87.1	81.9	72.5	63.0	58.7	57.3
50°	2110.6	1102.9	103.2	88.6	83.3	78.6	72.0	61.1	50.7	45.5	44.5
52.5°	2133.8	1023.3	93.3	80.0	75.3	69.6	61.6	49.2	39.8	34.6	34.1
55°	2124.3	922.9	84.3	72.0	65.8	59.2	51.1	39.3	29.4	25.1	24.2
57.5°	2074.6	795.1	75.3	63.9	56.4	49.7	40.7	29.4	19.9	16.1	15.6
60°	1940.6	620.8	66.3	54.9	47.8	40.7	32.2	20.8	12.3	9.0	9.0
62.5°	1714.2	460.8	57.8	45.9	40.3	32.7	22.7	13.3	6.6	4.7	4.3
65°	1432.5	340.0	48.3	38.8	33.6	25.6	16.1	8.1	3.3	1.4	0.9
67.5°	999.7	209.8	40.3	31.7	27.5	18.5	9.9	3.3	1.4	0.0	0.0
70°	454.1	99.9	30.8	24.2	20.8	13.3	5.2	1.9	0.9	0.0	0.0
72.5°	141.1	52.6	21.8	17.5	14.2	8.5	2.8	1.4	0.9	0.0	0.0
75°	65.3	33.6	13.7	9.5	8.1	4.3	1.9	0.9	0.5	0.0	0.0
77.5°	48.8	26.0	8.1	5.2	4.3	2.8	1.4	0.9	0.5	0.0	0.0
80°	42.6	13.3	4.7	3.3	2.4	1.9	0.9	0.5	0.0	0.0	0.0
82.5°	38.4	6.6	2.8	1.9	1.4	0.9	0.5	0.5	0.0	0.0	0.0
85°	20.8	3.8	1.9	1.4	0.9	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	3.8	1.9	1.4	0.9	0.9	0.5	0.5	0.5	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)