

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: P451270

Luminaire Tested: **GALN-SA2A-827-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2A-827-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6748 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
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

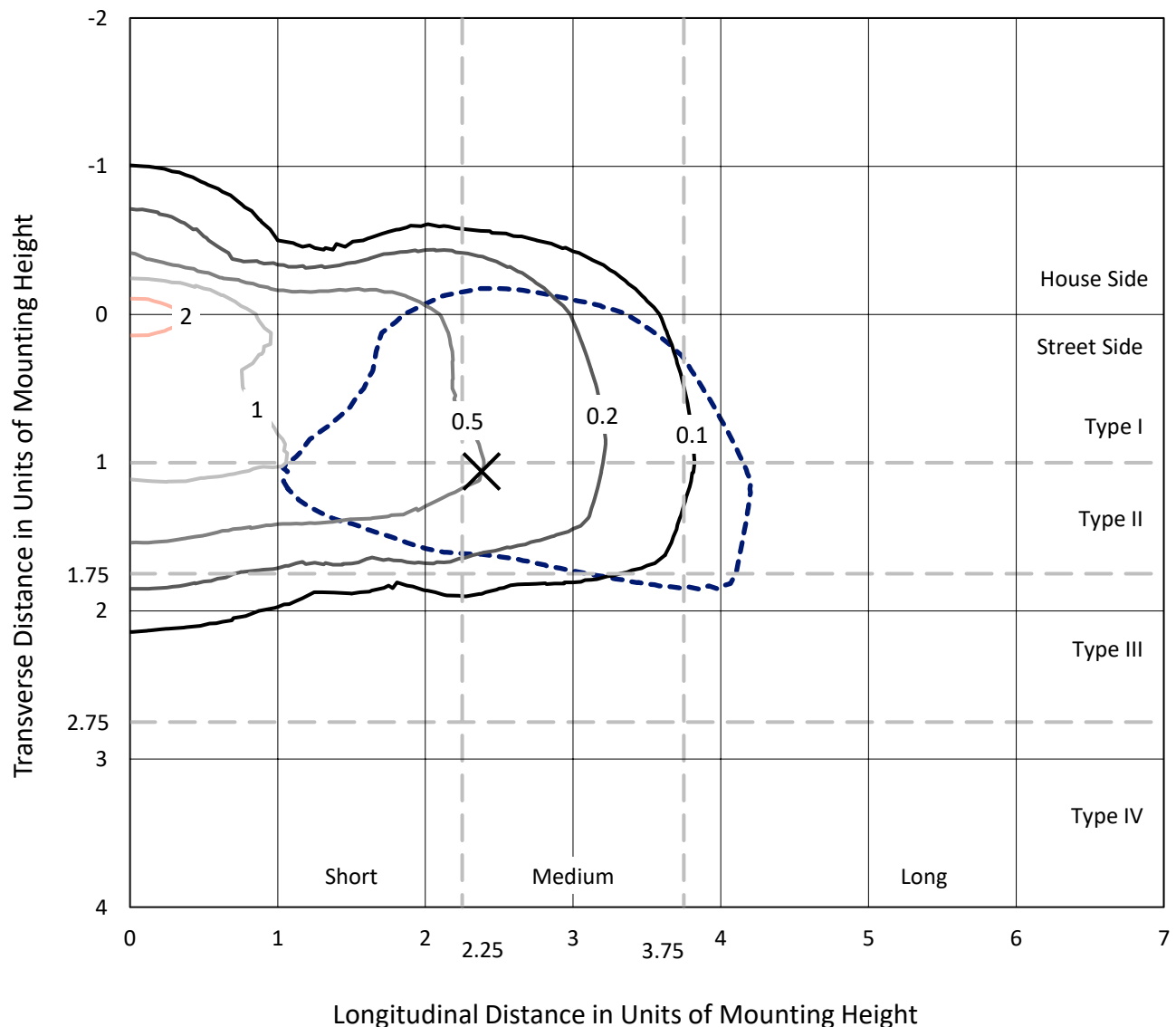


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

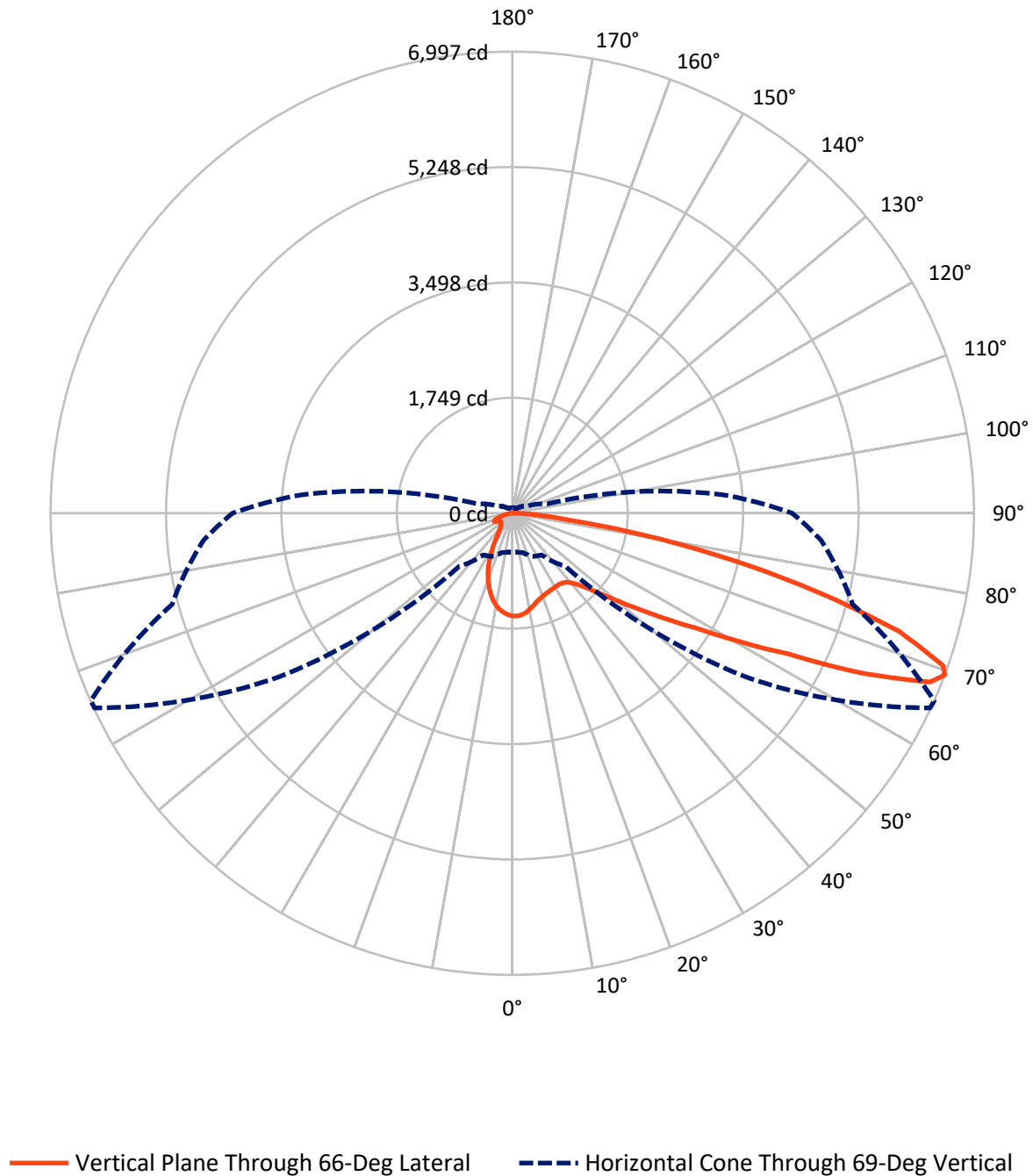


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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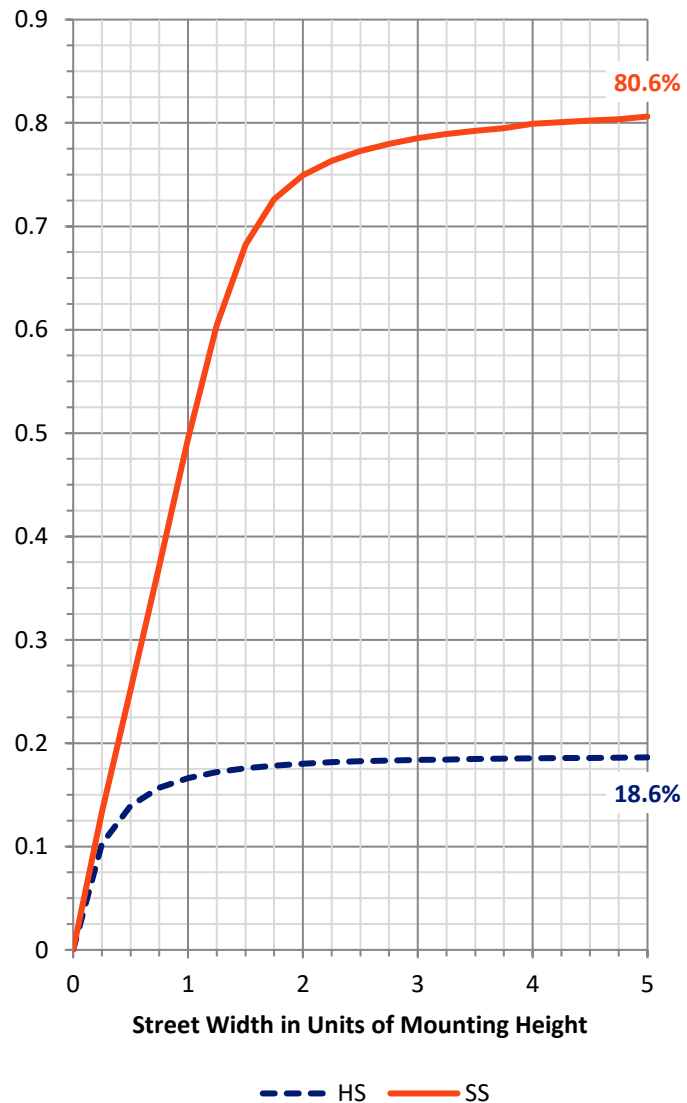
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1269.0	0.0	1269.0
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	5478.9	0.0	5478.9
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	6748.0	0.0	6748.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.3	2.0
10°-20°	321.0	4.8
20°-30°	437.0	6.5
30°-40°	587.2	8.7
40°-50°	876.8	13.0
50°-60°	1394.6	20.7
60°-70°	1715.3	25.4
70°-80°	1116.1	16.5
80°-90°	164.8	2.4
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°	6748.0	100.0
0°-180°	6748.0	100.0

**Coefficient of Utilization**



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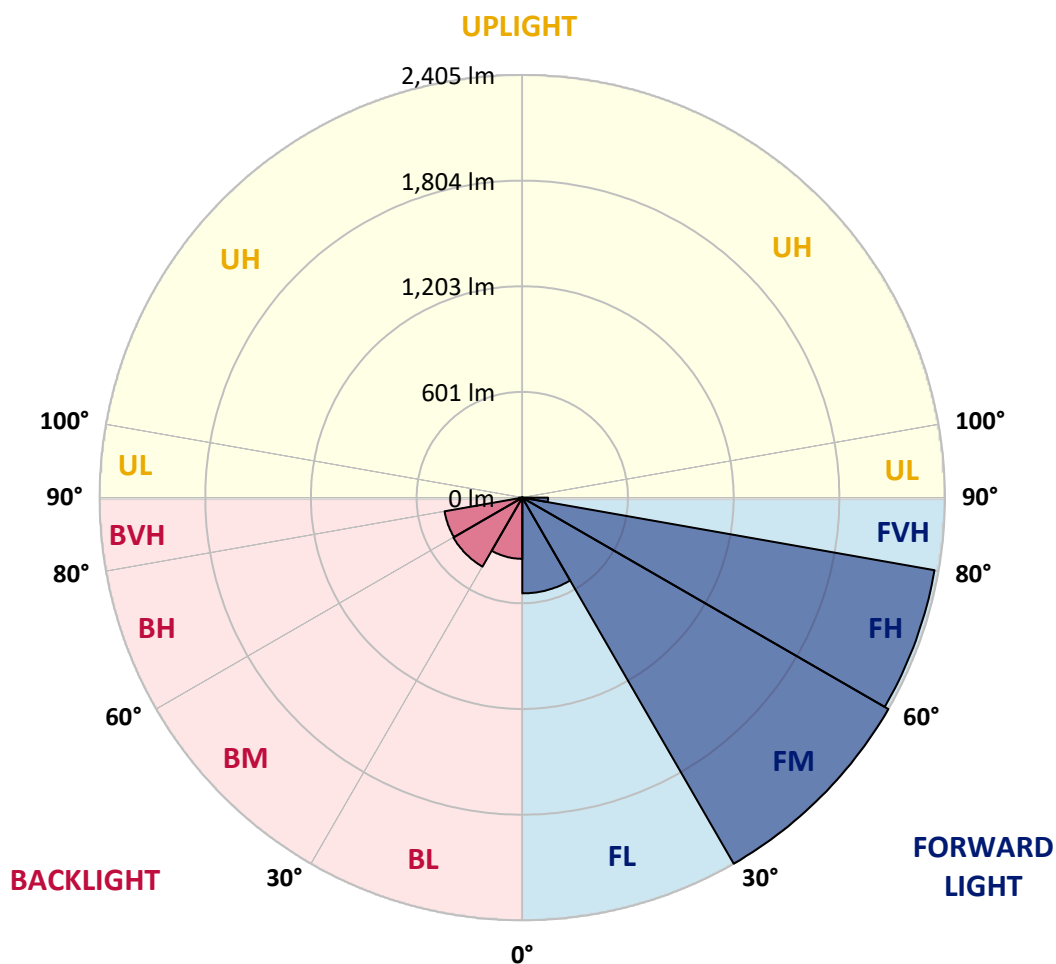
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	544.9	8.1			
FM	(30°-60°)	2405.5	35.6			
FH	(60°-80°)	2382.1	35.3			G2/5000
FVH	(80°-90°)	146.5	2.2			G2/225
BL	(0°-30°)	348.4	5.2	B1/500		
BM	(30°-60°)	453.1	6.7	B1/1000		
BH	(60°-80°)	449.3	6.7	B1/500		G1/500
BVH	(80°-90°)	18.3	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3
2.5°	1503.7	1509.7	1516.4	1523.9	1538.1	1546.0	1551.6	1557.9	1558.7	1562.0	1559.4
5°	1392.8	1399.9	1409.9	1424.1	1445.4	1478.7	1513.1	1541.1	1544.5	1560.2	1564.7
7.5°	1300.1	1304.2	1312.4	1335.2	1365.5	1402.5	1452.5	1509.3	1517.6	1554.9	1568.0
10°	1224.6	1228.7	1238.4	1262.0	1291.9	1338.2	1393.1	1467.9	1474.6	1538.9	1568.8
12.5°	1168.2	1171.9	1182.4	1205.5	1239.9	1283.3	1343.8	1423.0	1432.7	1517.6	1561.7
15°	1125.2	1132.3	1140.9	1159.9	1196.2	1238.0	1296.7	1381.9	1389.8	1495.1	1556.8
17.5°	1106.9	1110.2	1116.2	1133.8	1160.3	1201.4	1260.5	1349.8	1359.1	1479.5	1555.7
20°	1107.6	1111.0	1112.1	1121.8	1140.9	1176.4	1234.7	1324.4	1335.6	1465.6	1557.6
22.5°	1133.0	1133.4	1129.3	1125.9	1133.4	1162.9	1216.4	1305.3	1318.4	1459.6	1559.0
25°	1172.3	1179.0	1173.0	1157.3	1143.5	1157.7	1209.3	1294.8	1307.2	1451.1	1557.2
27.5°	1235.8	1236.9	1232.1	1210.8	1174.9	1164.4	1206.3	1287.0	1297.5	1444.7	1547.8
30°	1321.0	1317.6	1313.2	1289.6	1233.2	1190.2	1212.6	1279.9	1290.7	1435.4	1536.6
32.5°	1407.3	1417.8	1413.7	1386.0	1312.8	1240.3	1233.2	1279.2	1288.1	1428.3	1524.3
35°	1498.9	1503.7	1523.2	1509.0	1433.9	1321.4	1271.7	1290.7	1297.8	1428.6	1515.7
37.5°	1570.6	1583.7	1629.3	1641.6	1571.0	1428.6	1334.1	1323.6	1326.6	1446.9	1519.1
40°	1657.3	1679.8	1738.4	1788.9	1742.5	1568.0	1440.2	1384.5	1388.3	1491.0	1541.1
42.5°	1767.2	1782.9	1861.7	1930.1	1922.7	1752.2	1568.8	1484.3	1486.2	1578.9	1602.8
45°	1895.7	1918.2	2006.7	2109.5	2127.1	1960.8	1754.5	1635.3	1634.2	1715.3	1717.9
47.5°	2060.2	2074.0	2161.8	2273.9	2344.9	2222.7	1979.8	1852.0	1840.1	1914.1	1892.8
50°	2211.5	2233.2	2299.7	2422.3	2599.0	2529.5	2276.2	2133.0	2105.0	2174.1	2138.3
52.5°	2275.0	2297.8	2353.9	2506.0	2816.9	2926.4	2652.5	2468.2	2421.5	2474.6	2461.5
55°	2164.8	2194.3	2246.6	2431.6	2912.6	3384.2	3159.9	2855.8	2821.8	2799.0	2802.7
57.5°	1868.5	1896.5	1967.1	2171.2	2798.2	3716.4	3884.5	3353.9	3281.0	3176.0	3194.0
60°	1422.3	1439.8	1476.5	1702.5	2459.3	3802.7	4707.4	3983.6	3937.2	3551.6	3564.3
62.5°	1010.1	1029.9	1055.3	1168.2	1800.5	3559.4	5351.7	4862.9	4697.3	3940.6	3928.3
65°	820.3	806.8	837.4	890.1	1056.4	2758.6	5496.7	6083.4	5855.4	4452.9	4281.8
67.5°	674.5	660.3	690.6	784.4	803.4	1601.3	4974.2	6875.6	6830.0	5010.1	4640.9
69°	597.2	589.7	616.2	723.1	771.3	1137.1	4333.3	6985.8	6996.7	5338.6	4696.2
70°	538.1	541.1	566.9	692.1	756.7	937.6	3703.7	6833.7	6925.7	5502.6	4636.4
72.5°	396.1	402.5	438.3	573.2	742.9	795.6	2204.0	5969.0	6131.6	5512.3	4241.4
75°	276.9	273.9	305.7	431.6	701.8	788.5	1294.5	4616.2	4800.5	4764.6	3563.9
77.5°	181.2	186.1	211.5	304.9	590.4	782.5	843.8	3275.0	3394.6	3186.5	2108.0
80°	127.8	127.4	141.6	208.1	438.0	751.9	691.0	2064.3	2034.0	1252.2	625.2
82.5°	73.2	78.5	94.9	146.5	293.0	661.8	635.7	987.3	901.3	356.9	211.1
85°	40.7	42.6	56.4	88.6	171.2	498.5	554.9	449.2	423.8	149.1	90.8
87.5°	13.1	14.2	23.5	44.8	77.7	235.4	314.3	207.4	191.3	53.8	36.6
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°	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3	1558.3
2.5°	1560.5	1565.0	1553.1	1541.5	1531.0	1516.4	1503.4	1492.5	1485.1	1483.9	1480.2
5°	1565.8	1566.1	1543.4	1512.7	1482.8	1449.9	1415.9	1391.6	1368.8	1356.1	1349.8
7.5°	1569.5	1566.1	1525.0	1475.3	1417.8	1358.0	1298.2	1250.4	1213.4	1198.8	1204.4
10°	1568.0	1557.6	1497.4	1417.8	1334.1	1244.8	1158.8	1091.6	1029.9	998.1	998.9
12.5°	1559.8	1542.6	1456.3	1353.1	1230.2	1110.6	979.1	888.3	816.9	774.7	761.6
15°	1552.7	1522.8	1408.1	1265.3	1112.5	941.7	781.4	669.3	609.5	576.2	575.9
17.5°	1545.2	1503.7	1355.4	1172.3	977.2	757.5	589.3	503.7	475.7	479.1	473.5
20°	1537.4	1481.3	1300.5	1068.8	812.4	565.0	441.3	406.6	414.4	429.7	432.0
22.5°	1528.4	1457.4	1241.4	954.8	639.0	425.3	358.0	352.8	372.9	396.9	400.2
25°	1514.6	1427.5	1167.0	835.6	492.9	342.7	313.5	317.3	337.1	357.3	359.5
27.5°	1495.1	1390.5	1091.9	686.8	370.3	294.1	286.6	291.5	301.2	313.5	316.5
30°	1469.0	1348.7	1005.6	558.3	296.7	269.8	266.8	269.4	275.0	280.3	281.8
32.5°	1442.8	1308.3	918.5	427.5	264.6	253.7	250.7	250.7	250.7	251.5	251.9
35°	1418.5	1270.2	825.1	333.0	247.8	241.0	236.9	232.4	231.7	229.1	229.1
37.5°	1405.1	1235.4	725.7	278.8	235.4	230.6	225.0	217.5	213.4	213.8	213.0
40°	1407.7	1212.6	635.3	248.1	225.3	220.1	211.5	202.9	200.3	200.3	199.6
42.5°	1437.2	1205.2	548.6	232.1	215.6	209.6	198.8	191.0	189.5	189.1	189.8
45°	1505.2	1223.5	470.9	221.6	207.4	198.4	187.6	180.5	179.0	179.0	178.6
47.5°	1637.9	1282.9	415.2	214.9	201.4	189.8	178.6	171.5	168.9	168.2	168.2
50°	1844.2	1411.8	373.7	208.9	193.9	182.0	170.4	162.2	158.1	157.7	157.3
52.5°	2130.8	1612.9	357.6	204.4	185.7	173.8	161.1	153.2	148.0	146.9	146.1
55°	2466.0	1893.5	379.7	201.0	177.1	164.4	151.3	143.1	138.3	136.0	135.7
57.5°	2854.3	2230.6	463.4	196.6	169.3	154.3	141.6	133.4	128.2	125.6	124.8
60°	3202.9	2577.0	609.5	193.9	162.6	143.5	130.4	122.9	118.1	115.5	115.1
62.5°	3586.0	2907.3	784.0	201.0	159.6	133.0	120.0	113.2	109.1	106.5	106.5
65°	3995.2	3238.1	899.5	225.0	164.1	124.8	108.7	103.1	99.4	97.5	97.2
67.5°	4270.9	3352.4	741.0	249.6	175.3	115.8	97.9	93.4	91.2	89.3	89.3
69°	4241.0	3207.8	546.7	256.0	178.6	111.4	91.9	88.6	85.6	84.8	84.1
70°	4146.5	3043.0	458.1	251.9	176.0	107.2	88.2	84.1	81.5	80.7	80.3
72.5°	3693.2	2639.0	341.2	219.0	149.9	93.0	78.1	74.4	72.1	71.0	71.0
75°	3068.4	2157.0	266.4	174.1	117.3	78.5	66.9	63.9	62.0	61.3	60.9
77.5°	1719.7	1204.4	191.3	136.4	88.9	63.5	56.1	53.4	51.6	50.8	50.8
80°	479.1	344.2	112.5	90.1	60.5	48.2	44.5	42.6	40.0	38.1	39.2
82.5°	180.5	149.1	64.3	54.2	38.5	32.1	31.0	29.5	28.4	25.8	25.8
85°	87.8	72.5	41.1	28.8	21.3	16.8	16.1	15.3	14.6	12.7	13.1
87.5°	30.3	32.1	17.9	10.5	6.4	4.1	3.4	1.9	1.9	1.9	1.9
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)