

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: P458741

Luminaire Tested: **GALN-SA2D-735-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458741  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2D-735-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10435 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

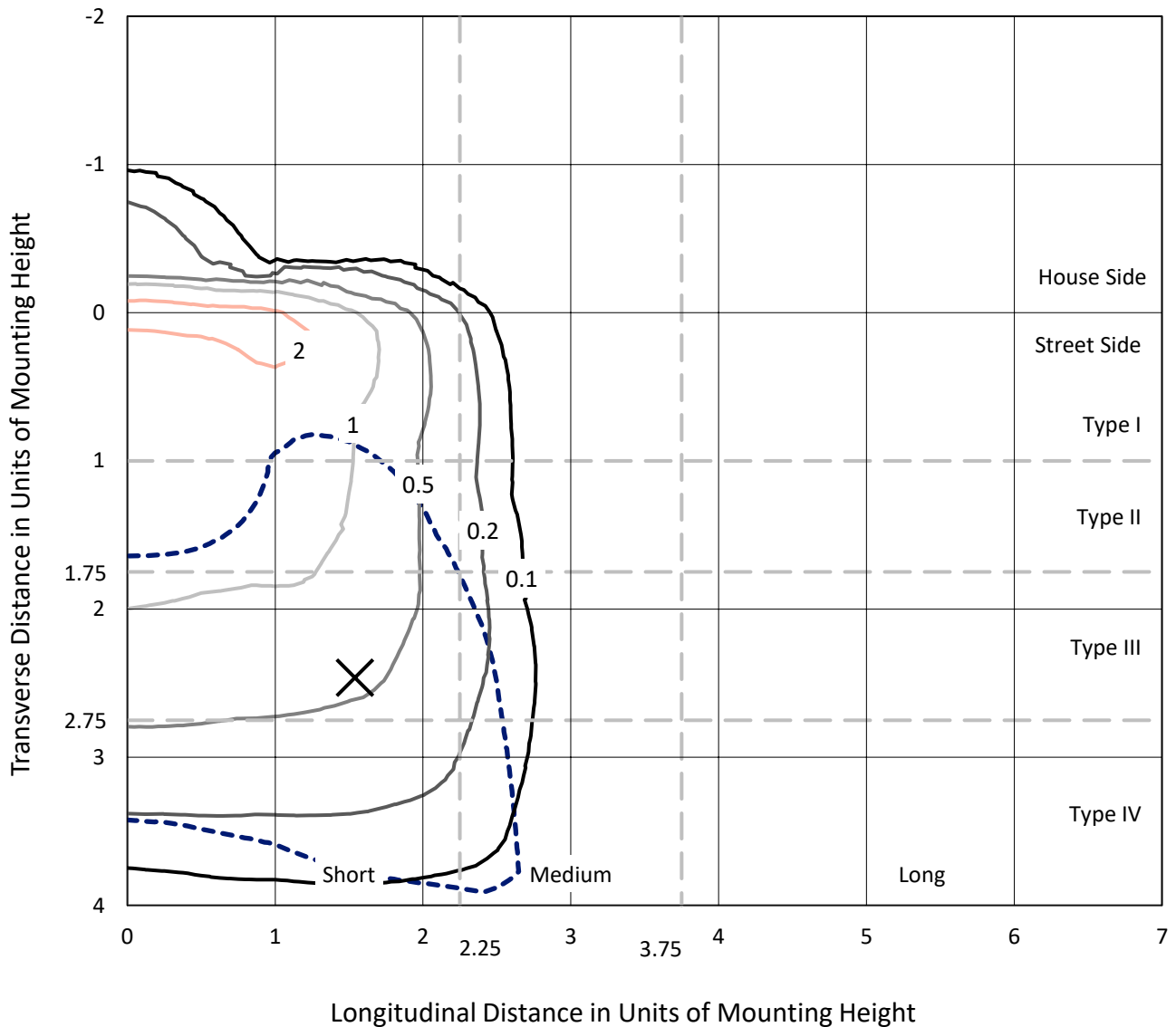
Input Watts (W): 125  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

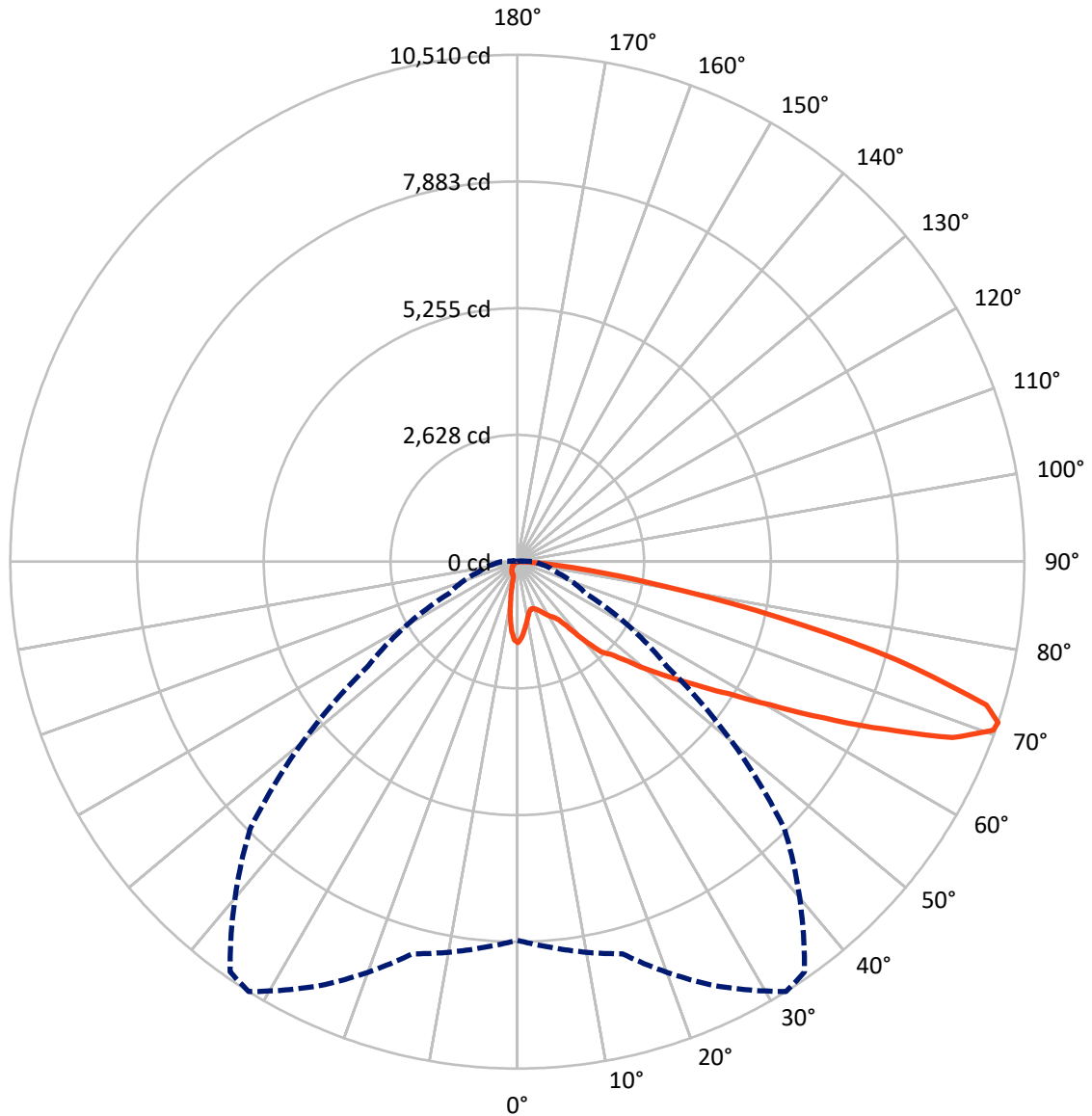
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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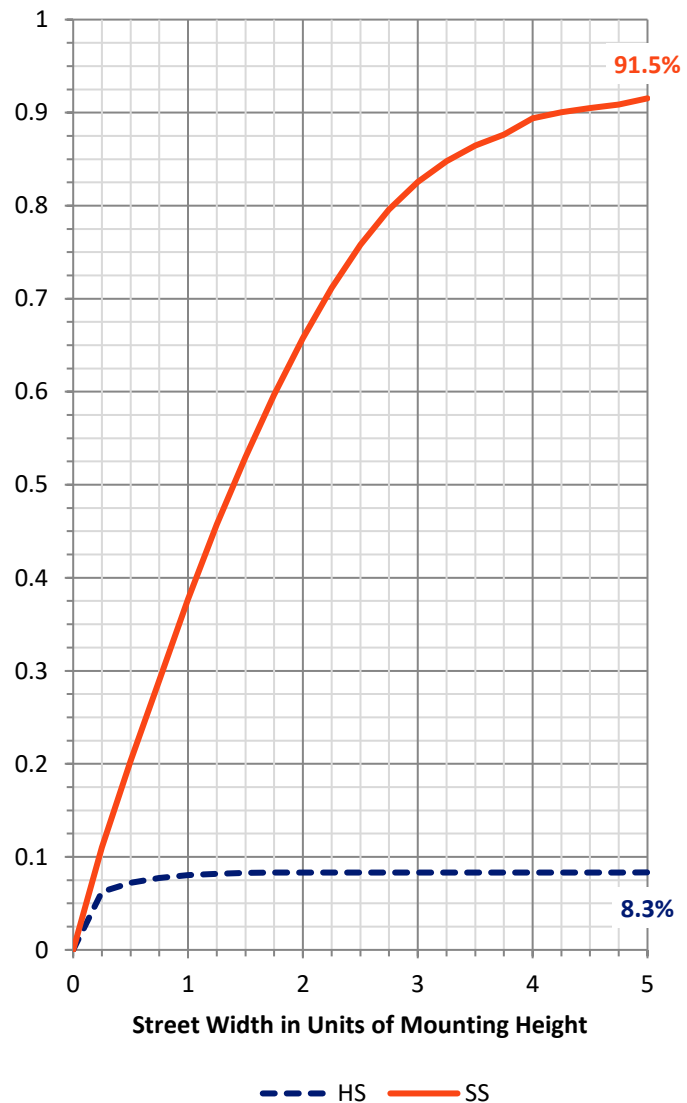
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	874.0	0.0	874.0
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	9560.9	0.0	9560.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	10435.0	0.0	10435.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	1.3
10°-20°	296.1	2.8
20°-30°	460.7	4.4
30°-40°	767.5	7.4
40°-50°	1427.8	13.7
50°-60°	2292.3	22.0
60°-70°	3083.3	29.5
70°-80°	1829.4	17.5
80°-90°	141.4	1.4
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°	10435.0	100.0
0°-180°	10435.0	100.0



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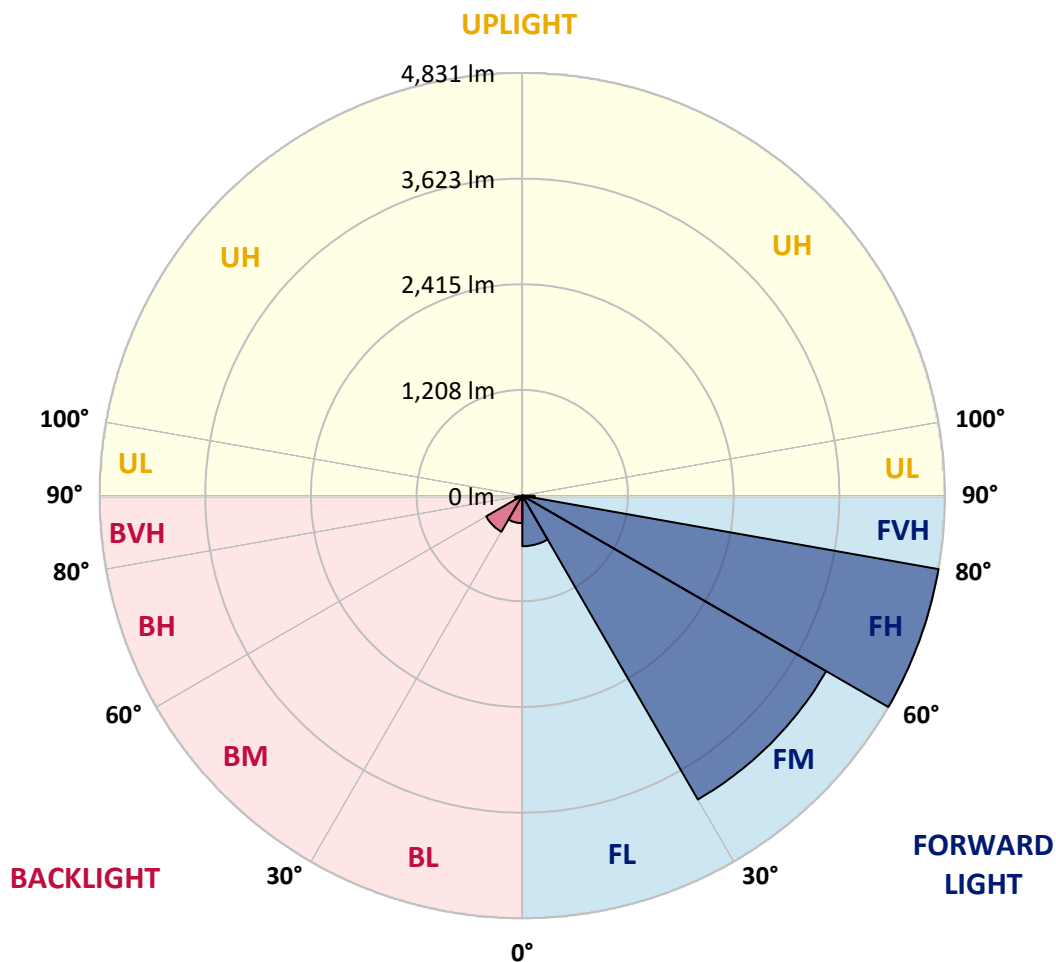
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	578.4	5.5			
FM (30°-60°)	4010.8	38.4			
FH (60°-80°)	4830.9	46.3			G2/5000
FVH (80°-90°)	140.8	1.3			G2/225
BL (0°-30°)	314.9	3.0	B1/500		
BM (30°-60°)	476.8	4.6	B1/1000		
BH (60°-80°)	81.7	0.8	B0/110		G0/110
BVH (80°-90°)	0.5	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°	32°	35°	45°	55°	65°	75°	85°
0°	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1
2.5°	1556.4	1572.4	1570.0	1575.6	1589.2	1594.8	1610.0	1626.8	1650.1	1666.1	1676.5
5°	1393.8	1405.8	1407.4	1435.4	1449.0	1464.2	1509.1	1558.0	1612.4	1655.7	1684.5
7.5°	1219.9	1226.3	1239.2	1276.0	1310.4	1325.7	1393.8	1478.7	1564.4	1645.3	1697.3
10°	1076.6	1083.8	1107.0	1146.2	1178.3	1198.3	1292.8	1399.4	1519.5	1639.7	1715.8
12.5°	994.9	998.9	1007.7	1042.9	1083.8	1105.4	1207.1	1328.9	1483.5	1642.1	1747.0
15°	989.2	987.6	977.2	991.6	1028.5	1050.9	1150.2	1280.8	1451.4	1650.1	1783.8
17.5°	1018.9	1014.9	990.0	990.0	1020.5	1038.9	1126.2	1255.2	1435.4	1668.5	1835.9
20°	1064.5	1058.1	1017.3	1014.1	1043.7	1062.9	1140.6	1256.8	1438.6	1702.9	1905.6
22.5°	1122.2	1115.0	1053.3	1054.9	1087.0	1106.2	1182.3	1285.6	1458.6	1745.4	1980.1
25°	1197.5	1189.5	1116.6	1113.4	1147.0	1163.9	1244.0	1336.9	1486.7	1798.3	2077.8
27.5°	1297.6	1280.8	1193.5	1188.7	1224.7	1246.4	1318.5	1405.8	1536.3	1871.2	2209.2
30°	1380.1	1361.7	1278.4	1265.6	1304.0	1320.9	1395.4	1498.7	1634.1	1998.5	2391.0
32.5°	1488.3	1461.0	1363.3	1329.7	1370.5	1392.2	1506.7	1671.7	1779.0	2133.1	2607.3
35°	1731.8	1715.0	1595.6	1477.9	1475.5	1502.7	1670.9	1846.3	1928.0	2342.9	2902.1
37.5°	2080.2	2068.2	1941.6	1783.8	1738.2	1725.4	1870.4	2038.6	2165.9	2631.3	3244.9
40°	2484.7	2456.7	2340.5	2206.8	2147.5	2109.9	2105.8	2324.5	2476.7	3023.0	3602.1
42.5°	2774.7	2723.4	2582.4	2572.8	2560.0	2520.8	2407.0	2742.7	2878.0	3444.3	3984.2
45°	3079.1	3001.4	2791.5	2755.5	2750.7	2748.3	2862.0	3237.7	3315.4	3900.9	4376.7
47.5°	3315.4	3253.7	3081.5	3065.5	3085.5	3139.9	3463.6	3763.1	3747.1	4307.8	4705.9
50°	3630.2	3583.7	3392.3	3422.7	3526.0	3614.9	4142.0	4335.9	4102.0	4628.2	4945.4
52.5°	4001.8	3916.1	3738.3	3820.8	3979.4	4127.6	4862.1	4837.3	4351.1	4869.3	5124.0
55°	4323.8	4263.0	4202.1	4287.8	4524.9	4709.9	5512.5	5213.0	4532.1	5063.2	5202.5
57.5°	4868.5	4854.1	4791.6	4878.9	5166.5	5358.7	6094.9	5504.5	4648.2	5164.1	5110.4
60°	5674.3	5651.1	5535.0	5646.3	6021.2	6323.2	6631.5	5766.5	4674.7	5124.8	4845.3
62.5°	6643.6	6564.3	6464.9	6629.1	7143.4	7276.4	7137.0	5921.8	4576.2	4812.5	4206.1
65°	7548.7	7467.0	7469.4	7815.4	8375.3	8465.8	7726.5	5898.6	4287.8	4029.9	3102.3
67.5°	8241.6	8228.0	8325.7	9000.9	9733.0	9670.6	8253.6	5551.0	3433.1	2612.1	1648.5
70°	8276.8	8303.2	8583.6	9723.4	10466.8	10367.4	8208.7	4512.1	2140.3	1201.5	649.6
71°	7850.7	8028.5	8416.2	9701.0	10510.0	10381.1	7830.7	3779.2	1570.0	837.9	468.6
72.5°	6690.0	6783.7	7621.6	9129.9	10168.0	9892.4	6871.8	2648.9	1005.3	512.6	269.1
75°	3684.6	3915.3	5104.0	7162.6	8132.6	7890.7	4478.4	1258.4	501.4	280.4	111.3
77.5°	1754.2	1709.4	2490.3	4259.8	5514.1	5501.3	2256.4	559.1	292.4	189.8	56.1
80°	501.4	563.9	953.2	2024.9	3061.5	3095.1	866.7	269.9	202.7	148.2	28.8
82.5°	151.4	154.6	350.0	895.5	1522.7	1435.4	325.2	137.8	145.8	117.7	16.8
85°	26.4	32.8	103.3	315.6	580.7	440.6	81.7	65.7	96.1	77.7	9.6
87.5°	1.6	2.4	34.4	36.0	51.3	29.6	14.4	9.6	20.8	20.8	5.6
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°	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1	1678.1
2.5°	1683.7	1688.5	1685.3	1678.1	1666.1	1651.7	1632.5	1616.4	1602.8	1595.6	1604.4
5°	1694.1	1700.5	1684.5	1648.5	1594.0	1534.7	1467.4	1415.4	1374.5	1361.7	1356.9
7.5°	1710.2	1714.2	1670.9	1590.8	1475.5	1335.3	1212.7	1109.4	1029.3	1005.3	970.0
10°	1731.0	1728.6	1646.9	1497.9	1295.2	1084.6	894.7	753.7	647.2	608.8	605.6
12.5°	1763.0	1750.2	1616.4	1371.3	1080.6	805.0	570.3	446.2	378.9	356.4	351.6
15°	1803.1	1772.6	1568.4	1223.1	827.4	519.9	351.6	314.0	305.2	303.6	302.0
17.5°	1850.3	1802.3	1505.1	1041.3	581.5	337.2	294.0	293.2	294.0	292.4	291.6
20°	1914.4	1833.5	1429.8	825.8	384.5	284.4	280.4	280.4	281.2	280.4	280.4
22.5°	1982.5	1870.4	1336.9	630.4	290.0	269.9	269.1	270.7	272.3	271.5	271.5
25°	2066.6	1918.4	1214.3	431.7	259.5	257.9	258.7	261.9	265.1	265.9	265.1
27.5°	2188.4	1977.7	1083.0	297.2	237.9	239.5	247.5	255.5	260.3	261.1	261.1
30°	2325.3	2043.4	911.5	241.1	220.3	220.3	229.9	245.1	255.5	257.1	257.9
32.5°	2501.5	2119.5	721.7	217.1	203.5	201.9	210.7	229.1	248.3	253.9	253.9
35°	2719.4	2209.2	536.7	201.9	191.4	187.4	192.2	207.5	232.3	248.3	249.9
37.5°	2974.9	2294.1	392.5	188.2	180.2	174.6	177.8	189.8	209.9	233.9	240.3
40°	3211.2	2369.4	293.2	177.0	169.0	165.0	167.4	173.0	189.8	212.3	216.3
42.5°	3469.2	2427.9	233.1	165.0	157.8	156.2	156.2	158.6	169.8	182.6	183.4
45°	3726.3	2448.7	195.4	150.6	145.8	147.4	146.6	145.0	149.8	148.2	148.2
47.5°	3909.7	2423.8	161.8	137.0	137.0	139.4	135.4	129.8	127.4	117.7	118.5
50°	4035.5	2333.3	133.0	121.0	127.4	130.6	122.6	113.7	104.9	94.5	92.1
52.5°	4087.5	2172.3	108.9	100.1	112.9	116.9	107.3	96.9	83.3	74.5	72.1
55°	4053.9	1973.7	90.5	81.7	95.3	100.1	90.5	78.5	63.3	53.7	52.1
57.5°	3905.7	1736.6	76.9	64.9	76.1	79.3	72.9	60.1	44.9	35.2	35.2
60°	3649.4	1491.5	62.5	51.3	56.9	61.7	55.3	43.3	30.4	21.6	20.0
62.5°	3129.5	1211.1	50.5	40.1	40.1	44.1	38.4	31.2	19.2	11.2	10.4
65°	2259.6	830.6	40.1	29.6	28.8	28.8	24.0	20.8	11.2	4.8	3.2
67.5°	1227.9	468.6	32.0	22.4	20.0	19.2	15.2	12.0	4.8	0.8	0.0
70°	483.0	180.2	24.8	15.2	12.8	12.0	8.0	5.6	3.2	0.0	0.0
71°	327.6	124.2	21.6	12.8	10.4	8.8	6.4	4.8	2.4	0.0	0.0
72.5°	187.4	76.9	16.8	9.6	8.0	6.4	4.8	3.2	2.4	0.0	0.0
75°	81.7	39.2	10.4	7.2	5.6	4.0	3.2	2.4	0.8	0.0	0.0
77.5°	41.7	21.6	7.2	5.6	3.2	2.4	1.6	0.8	0.0	0.0	0.0
80°	23.2	11.2	4.8	3.2	2.4	1.6	0.8	0.8	0.0	0.0	0.0
82.5°	12.8	6.4	2.4	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.0	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	1.6	0.0	0.0	0.0	0.0	0.8	0.8	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)