

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: INVUE

Report Number: P139451

Luminaire Tested: **ENT-E02-LED-E1-BL2-7050**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P139451  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33644)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-E02-LED-E1-BL2-7050  
Description: ENTRI LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5619.2 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

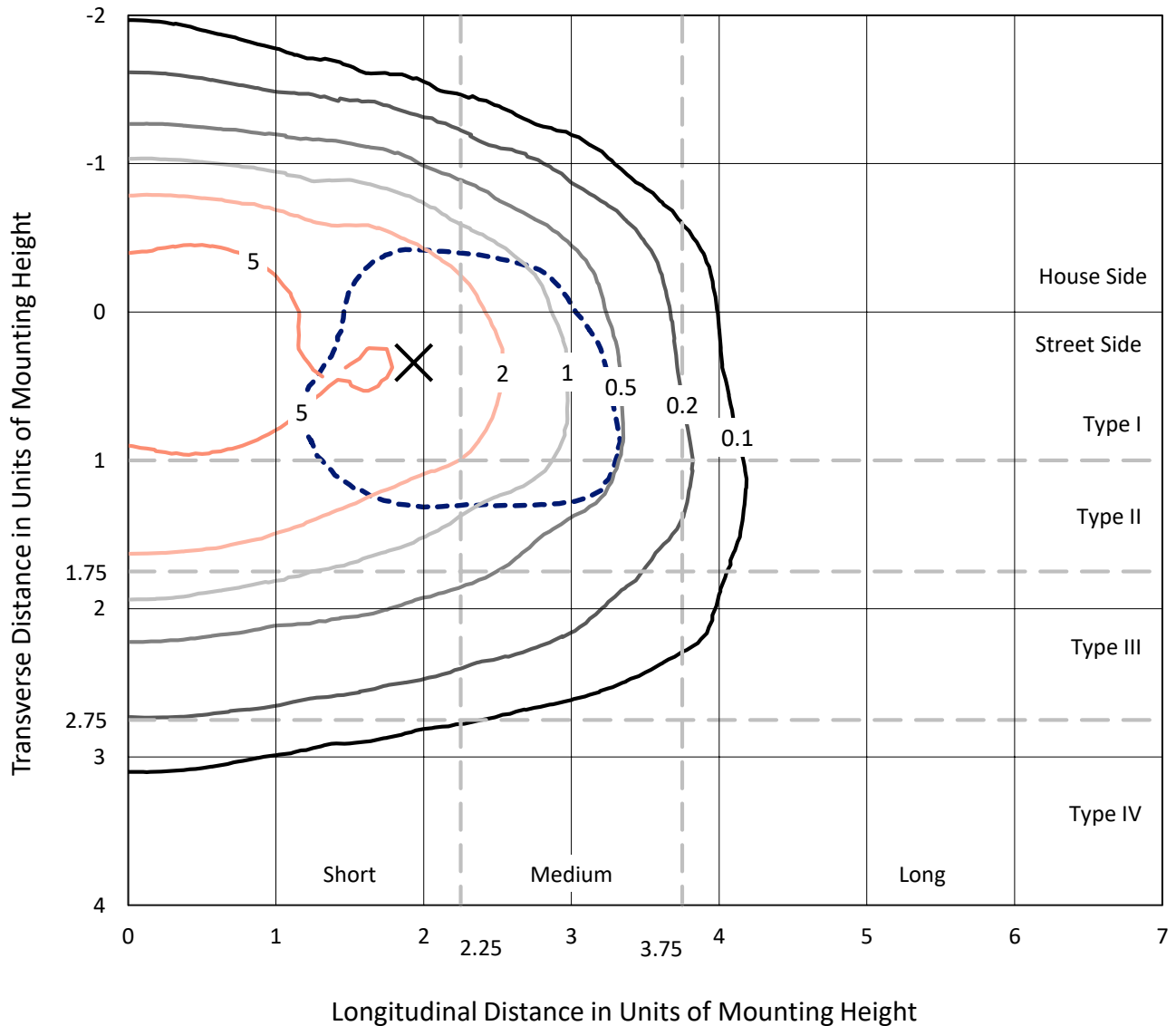
Input Watts (W): 46.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

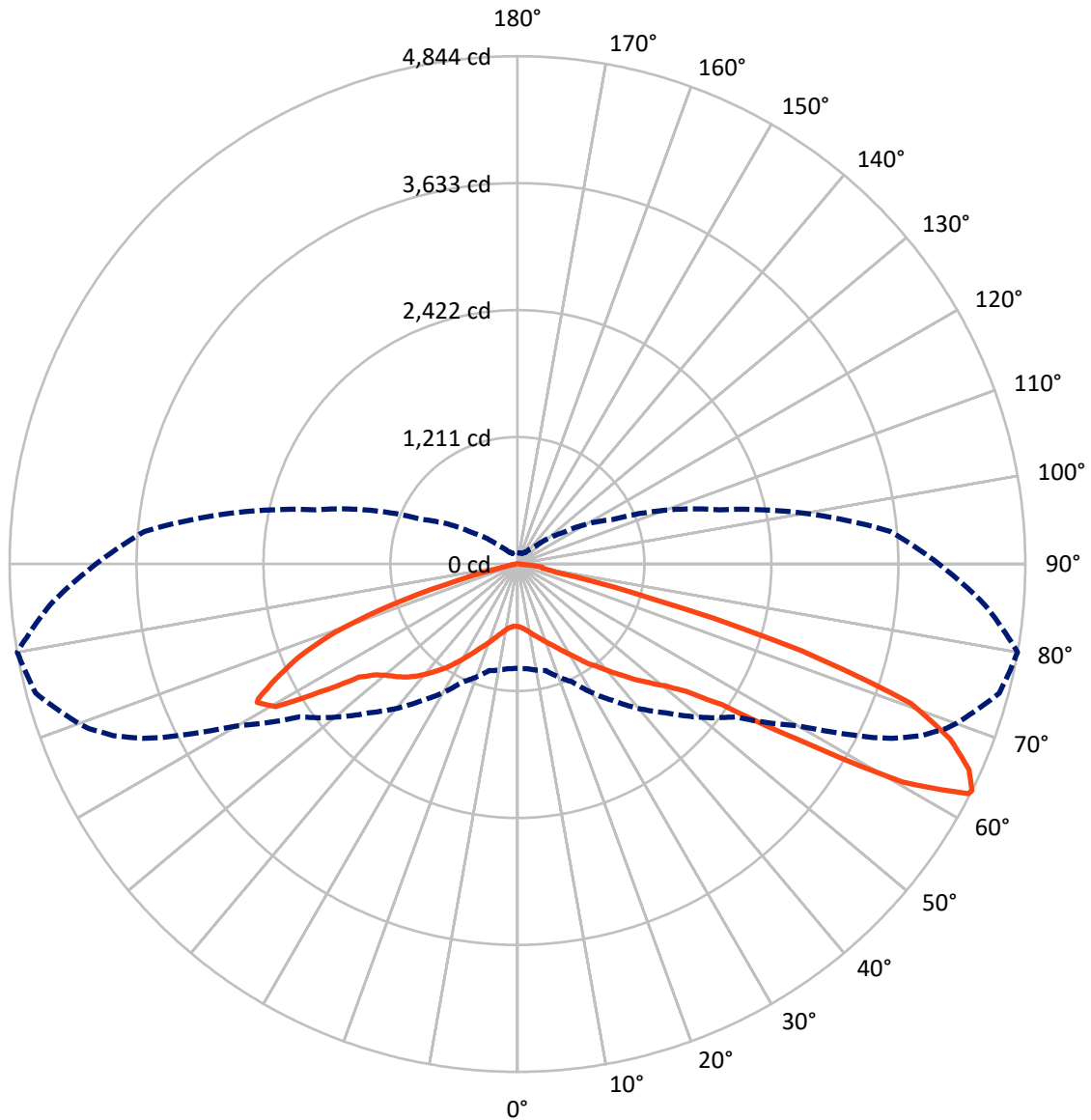
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1750.0	0.0	1750.0
	% Fixture	31.1	0.0	31.1
<b>Street Side</b>	Lumens	3869.2	0.0	3869.2
	% Fixture	68.9	0.0	68.9
<b>Total</b>	Lumens	5619.2	0.0	5619.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	204.6	3.6
20°-30°	384.4	6.8
30°-40°	610.1	10.9
40°-50°	920.9	16.4
50°-60°	1294.5	23.0
60°-70°	1510.3	26.9
70°-80°	583.8	10.4
80°-90°	50.8	0.9
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°	5619.2	100.0
0°-180°	5619.2	100.0



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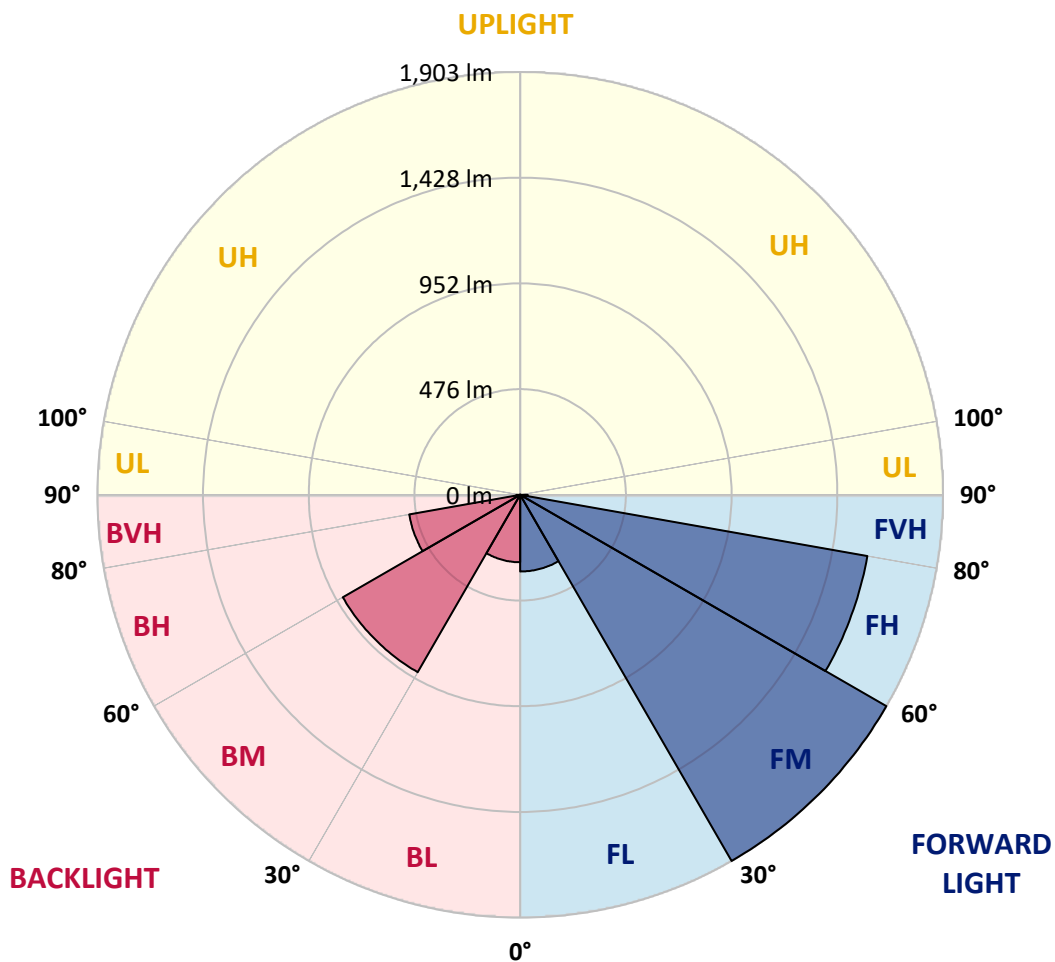
CATALOG NUMBER: ENT-E02-LED-E1-BL2-7050

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	345.1	6.1			
FM (30°-60°)	1903.4	33.9			
FH (60°-80°)	1586.8	28.2			G1/1800
FVH (80°-90°)	33.8	0.6			G1/100
BL (0°-30°)	303.5	5.4	B1/500		
BM (30°-60°)	922.2	16.4	B1/1000		
BH (60°-80°)	507.3	9.0	B2/1000		G2/1000
BVH (80°-90°)	17.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1
2.5°	624.9	622.8	623.9	622.8	622.8	620.8	614.6	614.6	613.6	614.6	612.6
5°	658.8	657.7	656.7	654.7	654.7	650.6	640.3	638.2	639.3	637.2	633.1
7.5°	696.7	695.7	693.6	689.5	687.5	681.3	667.0	664.9	663.9	661.8	658.8
10°	734.7	733.7	730.6	725.5	720.3	711.1	696.7	691.6	690.6	689.5	686.5
12.5°	773.7	770.6	771.6	762.4	754.2	742.9	726.5	721.4	720.3	719.3	718.3
15°	816.8	815.8	813.7	801.4	786.0	770.6	754.2	748.0	743.9	745.0	743.9
17.5°	857.8	856.8	849.6	832.2	811.6	794.2	773.7	769.6	769.6	768.6	768.6
20°	887.6	886.6	879.4	857.8	831.1	811.6	795.2	795.2	794.2	795.2	796.3
22.5°	900.9	900.9	891.7	868.1	839.4	825.0	819.9	822.9	824.0	825.0	827.0
25°	906.1	906.1	896.8	869.1	842.4	844.5	850.6	855.8	857.8	857.8	865.0
27.5°	915.3	916.3	904.0	874.2	852.7	872.2	887.6	894.8	897.8	899.9	909.1
30°	943.0	942.0	931.7	899.9	883.5	911.2	938.9	946.1	953.3	953.3	963.5
32.5°	984.0	983.0	976.9	952.2	945.0	979.9	1004.6	1019.9	1018.9	1021.0	1028.2
35°	1038.4	1039.4	1043.5	1037.4	1043.5	1078.4	1106.1	1112.3	1113.3	1114.4	1115.4
37.5°	1100.0	1101.0	1123.6	1143.1	1170.8	1222.1	1238.5	1241.6	1234.4	1234.4	1232.4
40°	1146.2	1151.3	1201.6	1252.9	1311.4	1381.1	1405.8	1399.6	1394.5	1390.4	1378.1
42.5°	1240.6	1243.6	1297.0	1370.9	1453.0	1549.4	1592.5	1572.0	1571.0	1552.5	1543.3
45°	1335.0	1343.2	1400.6	1483.7	1582.3	1715.6	1779.3	1761.8	1758.7	1750.5	1724.9
47.5°	1409.9	1421.2	1484.8	1583.3	1696.2	1850.1	1964.0	1976.3	1969.1	1959.9	1939.3
50°	1473.5	1482.7	1547.4	1655.1	1784.4	1952.7	2115.8	2160.0	2166.1	2162.0	2156.9
52.5°	1514.5	1523.8	1587.4	1702.3	1835.7	2028.6	2228.7	2315.9	2334.4	2333.4	2354.9
55°	1515.6	1525.8	1591.5	1717.7	1864.4	2080.9	2333.4	2470.9	2493.4	2521.1	2567.3
57.5°	1459.1	1469.4	1551.5	1697.2	1872.6	2122.0	2434.9	2677.1	2738.7	2793.1	2920.3
60°	1302.1	1306.2	1396.5	1591.5	1833.7	2112.8	2511.9	2854.6	2941.8	3059.8	3265.1
62.5°	1061.0	1069.2	1124.6	1314.4	1652.0	2031.7	2542.7	3052.7	3196.3	3368.7	3697.1
63°	994.3	1001.5	1052.8	1240.6	1590.5	2006.0	2541.7	3084.5	3242.5	3420.0	3774.0
65°	767.5	769.6	807.5	949.1	1305.2	1819.3	2486.3	3039.3	3239.4	3446.7	3818.1
67.5°	618.7	625.9	663.9	763.4	1031.2	1527.9	2237.9	2633.0	2769.5	2973.7	3415.9
70°	484.3	496.6	532.5	645.4	879.4	1230.3	1882.9	2197.9	2282.1	2379.5	2755.1
72.5°	320.1	323.2	329.4	392.0	613.6	957.4	1566.9	1781.3	1814.2	1883.9	2067.6
75°	150.8	162.1	171.4	203.2	296.5	627.0	1135.9	1265.2	1304.2	1377.0	1443.7
77.5°	65.7	64.6	68.7	93.4	156.0	279.1	707.0	934.8	948.1	931.7	903.0
80°	20.5	21.5	22.6	24.6	49.3	133.4	305.8	628.0	693.6	737.8	725.5
82.5°	2.1	1.0	3.1	6.2	10.3	19.5	114.9	294.5	370.4	454.6	562.3
85°	0.0	0.0	1.0	1.0	2.1	4.1	7.2	30.8	51.3	59.5	118.0
87.5°	0.0	0.0	1.0	1.0	2.1	3.1	3.1	4.1	4.1	4.1	4.1
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):**

	65°	66°	67°	68°	69°	70°	75°	80°	85°	90°	95°
0°	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1
2.5°	611.6	611.6	609.5	610.5	609.5	609.5	607.5	605.4	604.4	599.2	596.2
5°	633.1	633.1	632.1	630.0	630.0	629.0	623.9	618.7	615.7	609.5	603.4
7.5°	657.7	656.7	654.7	652.6	652.6	651.6	644.4	639.3	633.1	623.9	616.7
10°	686.5	685.4	683.4	680.3	680.3	679.3	672.1	663.9	658.8	647.5	638.2
12.5°	717.2	714.2	713.1	711.1	709.0	709.0	702.9	694.7	690.6	678.3	669.0
15°	742.9	740.8	739.8	738.8	737.8	735.7	730.6	723.4	720.3	710.1	702.9
17.5°	767.5	767.5	768.6	766.5	765.5	763.4	760.3	758.3	755.2	746.0	741.9
20°	796.3	796.3	798.3	797.3	796.3	799.3	798.3	797.3	797.3	789.1	786.0
22.5°	830.1	829.1	832.2	831.1	832.2	835.2	839.4	837.3	841.4	836.3	834.2
25°	869.1	868.1	871.2	873.2	875.3	877.3	885.5	887.6	892.7	891.7	887.6
27.5°	913.2	914.3	915.3	920.4	923.5	925.5	936.8	943.0	953.3	949.1	953.3
30°	964.5	969.7	973.8	978.9	979.9	982.0	1000.5	1006.6	1011.7	1014.8	1021.0
32.5°	1035.3	1038.4	1039.4	1045.6	1047.7	1050.7	1070.2	1078.4	1085.6	1086.6	1097.9
35°	1121.5	1123.6	1126.7	1129.7	1133.8	1131.8	1154.4	1166.7	1175.9	1176.9	1189.3
37.5°	1235.4	1228.2	1231.3	1227.2	1221.1	1221.1	1228.2	1240.6	1250.8	1259.0	1271.3
40°	1371.9	1366.8	1365.7	1356.5	1346.3	1337.0	1332.9	1340.1	1348.3	1355.5	1370.9
42.5°	1527.9	1522.7	1505.3	1499.1	1481.7	1471.4	1443.7	1446.8	1461.2	1465.3	1474.5
45°	1710.5	1692.0	1685.9	1647.9	1640.7	1626.4	1574.0	1569.9	1582.3	1583.3	1577.1
47.5°	1918.8	1905.5	1891.1	1864.4	1836.7	1813.1	1733.1	1691.0	1704.4	1703.3	1673.6
50°	2145.6	2143.5	2122.0	2104.5	2079.9	2046.1	1903.4	1826.5	1836.7	1827.5	1773.1
52.5°	2362.1	2355.9	2354.9	2341.6	2332.3	2321.1	2147.6	2015.3	1991.7	1972.2	1902.4
55°	2589.9	2605.3	2595.0	2616.6	2633.0	2630.9	2559.1	2365.2	2245.1	2229.7	2123.0
57.5°	2969.5	3006.5	3055.7	3057.8	3101.9	3165.5	3294.8	3155.3	2854.6	2795.1	2652.5
60°	3404.6	3500.0	3623.2	3683.7	3778.1	3876.6	4200.9	4222.4	3801.7	3571.9	3310.2
62.5°	3841.7	3966.9	4112.6	4207.0	4324.0	4401.0	4743.7	4825.8	4442.0	4018.2	3587.3
63°	3934.1	4062.4	4188.6	4280.9	4379.4	4450.2	4758.1	4844.2	4476.9	4019.3	3569.8
65°	3982.3	4102.4	4200.9	4283.0	4348.6	4396.9	4640.0	4733.4	4430.7	3870.5	3373.8
67.5°	3616.0	3808.9	3933.1	4032.6	4099.3	4166.0	4389.7	4448.2	4233.7	3581.1	3076.3
70°	2993.1	3215.8	3411.8	3566.7	3681.7	3783.3	4018.2	3978.2	3793.5	3112.2	2609.4
72.5°	2202.0	2396.0	2586.8	2762.3	2912.1	3041.4	3196.3	2834.1	2553.0	2069.7	1805.9
75°	1480.7	1522.7	1610.0	1697.2	1751.6	1788.5	1693.1	1349.3	1095.9	983.0	859.9
77.5°	874.2	845.5	848.6	827.0	812.7	809.6	679.3	377.6	199.1	203.2	213.4
80°	697.8	665.9	632.1	594.1	569.5	542.8	442.3	242.2	86.2	69.8	72.9
82.5°	564.4	556.1	537.7	498.7	459.7	413.5	316.0	232.9	49.3	39.0	42.1
85°	109.8	123.1	110.8	121.1	90.3	85.2	50.3	54.4	19.5	17.4	21.5
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	8.2
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):**

	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1	595.1
2.5°	591.0	586.9	583.9	579.7	577.7	574.6	573.6	570.5	571.5
5°	593.1	585.9	579.7	573.6	569.5	567.4	565.4	563.3	563.3
7.5°	603.4	594.1	586.9	579.7	576.7	572.6	571.5	568.5	568.5
10°	624.9	614.6	605.4	597.2	593.1	588.0	585.9	582.8	582.8
12.5°	656.7	647.5	637.2	624.9	616.7	610.5	605.4	603.4	603.4
15°	692.6	685.4	677.2	660.8	647.5	636.2	625.9	621.8	620.8
17.5°	735.7	729.6	721.4	702.9	681.3	657.7	640.3	632.1	631.1
20°	788.0	781.9	769.6	743.9	710.1	673.1	645.4	633.1	632.1
22.5°	841.4	841.4	820.9	778.8	728.5	679.3	642.3	625.9	622.8
25°	899.9	903.0	872.2	806.5	738.8	676.2	629.0	608.5	604.4
27.5°	970.7	967.6	916.3	828.1	739.8	663.9	607.5	582.8	578.7
30°	1048.7	1028.2	952.2	840.4	732.6	641.3	578.7	551.0	547.9
32.5°	1126.7	1082.5	978.9	842.4	712.1	608.5	540.8	512.0	507.9
35°	1209.8	1130.8	995.3	831.1	678.3	564.4	493.6	465.9	461.7
37.5°	1279.6	1167.7	1000.5	801.4	627.0	513.1	450.5	421.7	414.5
40°	1343.2	1194.4	991.2	753.2	569.5	462.8	405.3	380.7	378.6
42.5°	1401.7	1206.7	958.4	690.6	512.0	419.7	367.3	343.7	341.7
45°	1446.8	1198.5	903.0	621.8	464.8	382.7	333.5	311.9	307.8
47.5°	1475.5	1168.7	827.0	564.4	425.8	344.8	296.5	274.0	269.9
50°	1498.1	1124.6	750.1	520.2	387.9	305.8	258.6	238.1	235.0
52.5°	1527.9	1068.2	683.4	480.2	343.7	261.7	219.6	200.1	197.0
55°	1593.5	1019.9	636.2	436.1	296.5	215.5	180.6	168.3	164.2
57.5°	1816.2	1036.4	606.4	382.7	242.2	173.4	149.8	142.6	141.6
60°	2050.2	1106.1	592.1	321.2	187.8	140.6	127.2	125.2	124.2
62.5°	2037.8	1043.5	532.5	252.4	144.7	115.9	109.8	110.8	110.8
63°	1996.8	1005.6	513.1	237.0	137.5	112.9	106.7	106.7	106.7
65°	1748.5	852.7	416.6	179.6	114.9	100.6	95.4	96.5	97.5
67.5°	1443.7	615.7	274.0	125.2	103.6	91.3	85.2	83.1	83.1
70°	1104.1	414.5	162.1	108.8	102.6	85.2	74.9	72.9	72.9
72.5°	724.4	253.4	109.8	108.8	101.6	81.1	69.8	65.7	65.7
75°	332.5	125.2	91.3	104.7	96.5	74.9	61.6	56.4	55.4
77.5°	129.3	79.0	82.1	88.2	74.9	61.6	55.4	51.3	50.3
80°	74.9	63.6	71.8	63.6	54.4	47.2	47.2	44.1	43.1
82.5°	54.4	54.4	55.4	46.2	41.0	39.0	39.0	35.9	34.9
85°	39.0	40.0	46.2	36.9	31.8	27.7	25.7	25.7	24.6
87.5°	19.5	31.8	25.7	15.4	14.4	13.3	13.3	13.3	12.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)