

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: P139591

Luminaire Tested: **ENT-E02-LED-E1-BL3-7050**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P139591  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33645)  
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-BL3-7050  
Description: ENTRI LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5545.9 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

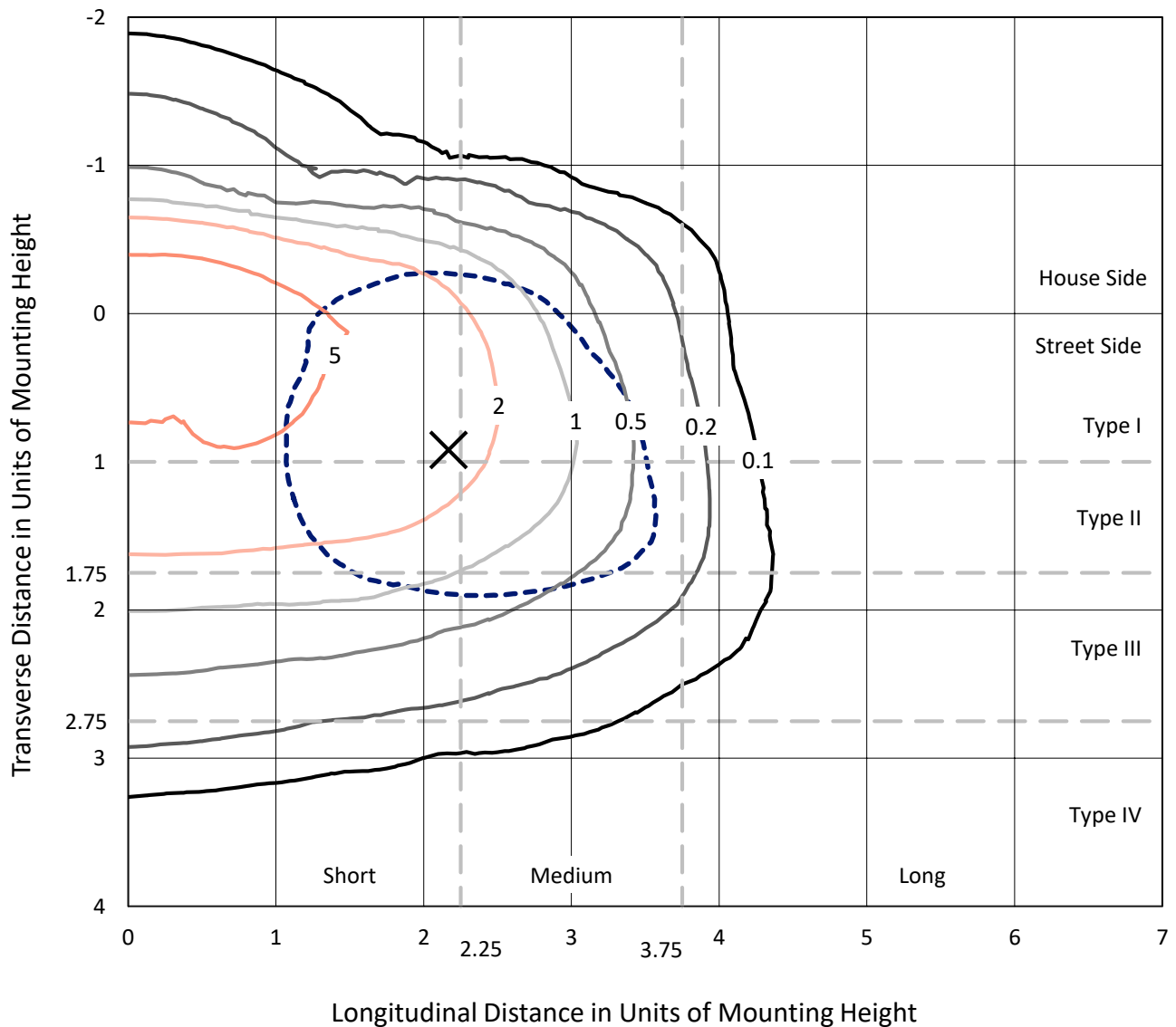
Input Watts (W): 46.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

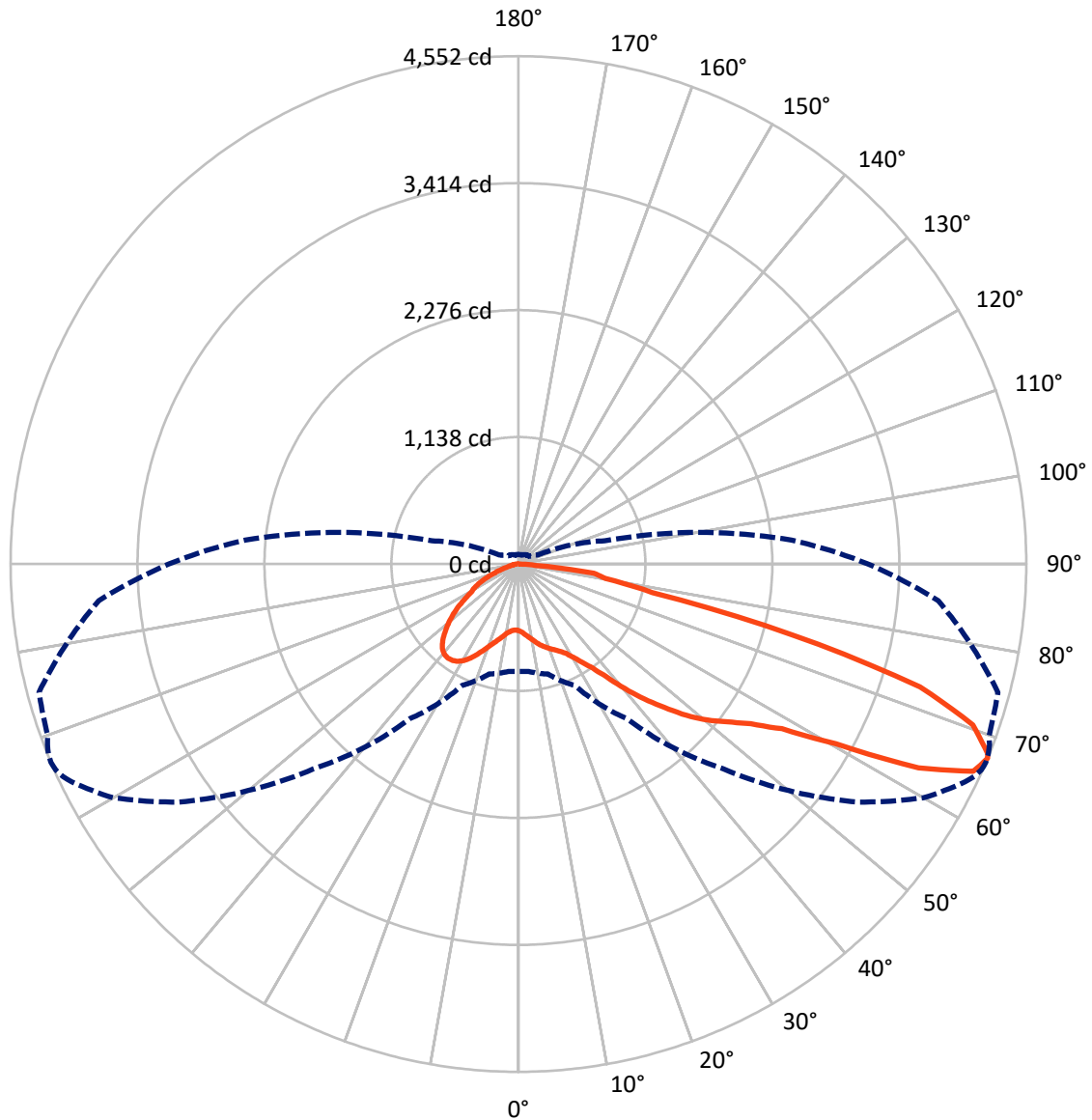
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1346.5	0.0	1346.5
	% Fixture	24.3	0.0	24.3
<b>Street Side</b>	Lumens	4199.3	0.0	4199.3
	% Fixture	75.7	0.0	75.7
<b>Total</b>	Lumens	5545.9	0.0	5545.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.2	1.1
10°-20°	208.2	3.8
20°-30°	377.4	6.8
30°-40°	551.7	9.9
40°-50°	835.8	15.1
50°-60°	1198.7	21.6
60°-70°	1531.8	27.6
70°-80°	715.1	12.9
80°-90°	67.0	1.2
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°	5545.9	100.0
0°-180°	5545.9	100.0



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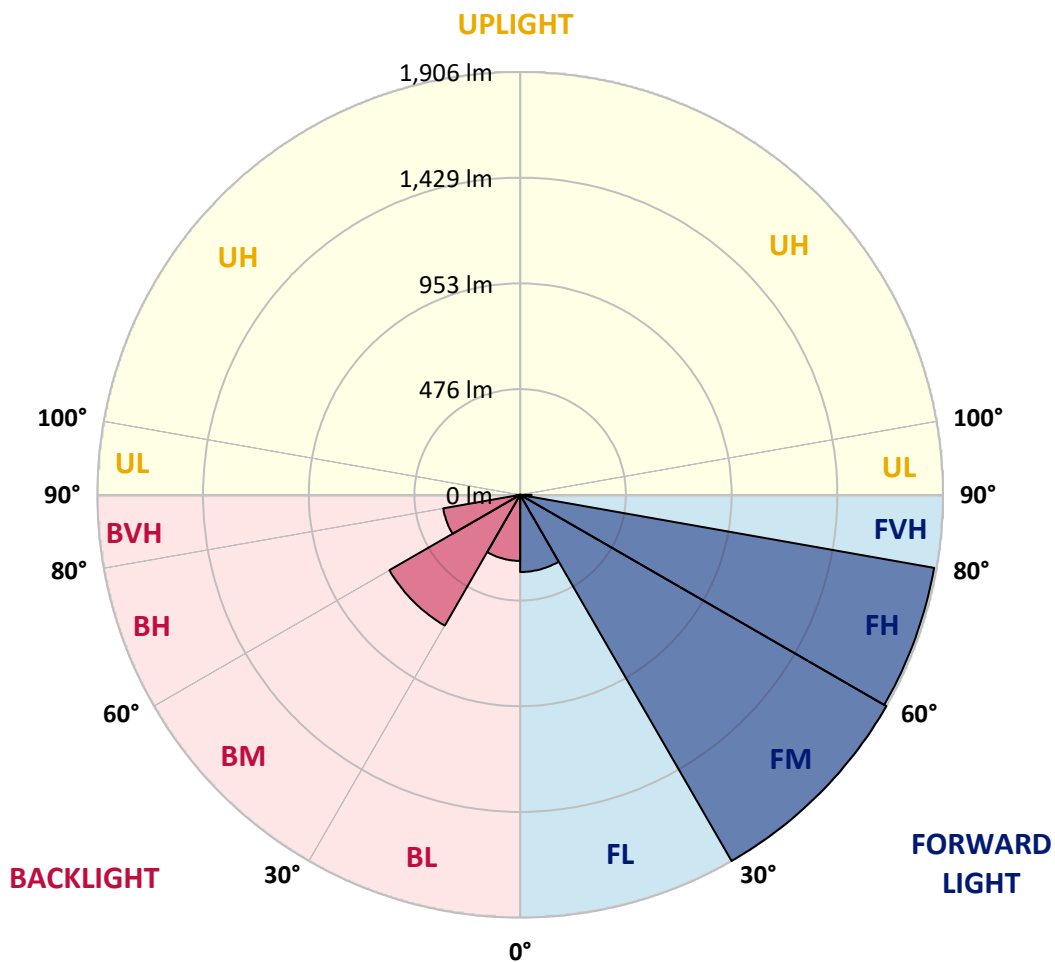
CATALOG NUMBER: ENT-E02-LED-E1-BL3-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	347.9	6.3			
FM	(30°-60°)	1906.0	34.4			
FH	(60°-80°)	1894.7	34.2			G2/5000
FVH	(80°-90°)	50.8	0.9			G1/100
BL	(0°-30°)	297.9	5.4	B1/500		
BM	(30°-60°)	680.2	12.3	B1/1000		
BH	(60°-80°)	352.3	6.4	B1/500		G1/500
BVH	(80°-90°)	16.1	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	620.8	620.8	621.8	621.8	620.8	620.8	614.6	614.6	614.6	613.6	613.6
5°	654.7	655.7	655.7	654.7	652.6	648.5	640.3	640.3	640.3	639.3	637.2
7.5°	693.6	692.6	693.6	690.6	686.5	681.3	670.0	669.0	667.0	667.0	664.9
10°	736.7	733.7	736.7	732.6	724.4	715.2	701.9	697.8	697.8	697.8	693.6
12.5°	780.9	779.8	781.9	774.7	760.3	750.1	736.7	731.6	730.6	730.6	728.5
15°	829.1	828.1	821.9	810.6	792.2	782.9	767.5	761.4	760.3	760.3	757.3
17.5°	879.4	879.4	864.0	840.4	814.7	801.4	790.1	786.0	785.0	785.0	783.9
20°	922.5	922.5	901.9	863.0	826.0	811.6	807.5	807.5	807.5	807.5	808.6
22.5°	954.3	951.2	923.5	875.3	830.1	817.8	828.1	829.1	829.1	831.1	832.2
25°	968.6	967.6	934.8	877.3	829.1	827.0	849.6	852.7	854.7	856.8	859.9
27.5°	969.7	969.7	936.8	876.3	828.1	843.5	876.3	885.5	887.6	891.7	896.8
30°	959.4	960.4	932.7	875.3	835.2	874.2	918.4	935.8	939.9	946.1	954.3
32.5°	947.1	949.1	932.7	885.5	867.1	927.6	986.1	1010.7	1014.8	1023.0	1031.2
35°	949.1	952.2	955.3	926.6	937.9	1018.9	1103.1	1117.4	1116.4	1129.7	1133.8
37.5°	962.5	969.7	992.2	997.4	1040.5	1153.3	1241.6	1272.4	1272.4	1284.7	1280.6
40°	964.5	975.8	1032.3	1091.8	1176.9	1315.5	1436.5	1472.5	1472.5	1477.6	1475.5
42.5°	1012.8	1023.0	1104.1	1209.8	1330.9	1494.0	1627.4	1659.2	1666.4	1661.3	1665.4
45°	1100.0	1107.2	1206.7	1340.1	1479.6	1665.4	1814.2	1844.9	1852.1	1847.0	1840.8
47.5°	1210.8	1221.1	1326.8	1484.8	1628.4	1823.4	2005.0	2040.9	2048.1	2039.9	2043.0
50°	1303.2	1322.6	1435.5	1622.3	1772.1	1958.8	2152.8	2202.0	2208.2	2208.2	2210.2
52.5°	1387.3	1404.7	1513.5	1721.8	1888.0	2080.9	2262.6	2326.2	2333.4	2338.5	2342.6
55°	1422.2	1439.6	1548.4	1764.9	1958.8	2194.8	2389.8	2475.0	2479.1	2492.4	2509.9
57.5°	1423.2	1437.6	1544.3	1763.9	1995.8	2297.5	2563.2	2695.6	2712.0	2729.4	2759.2
60°	1326.8	1344.2	1450.9	1712.6	2026.6	2412.4	2825.9	3069.1	3092.7	3143.0	3208.6
62.5°	1181.0	1193.4	1285.7	1543.3	2026.6	2571.4	3248.6	3650.9	3729.9	3812.0	3933.1
65°	1045.6	1054.8	1113.3	1336.0	1882.9	2700.7	3690.9	4153.7	4238.8	4300.4	4403.0
67°	961.5	965.6	1021.0	1202.6	1690.0	2597.1	3720.7	4188.6	4261.4	4325.0	4454.3
67.5°	932.7	935.8	988.1	1168.7	1630.5	2534.5	3675.5	4159.8	4238.8	4303.5	4434.8
70°	717.2	708.0	753.2	919.4	1317.5	2022.5	3227.1	3785.3	3875.6	3961.8	4120.8
72.5°	427.9	414.5	443.3	533.6	853.7	1421.2	2447.3	3106.0	3220.9	3328.7	3537.0
75°	257.6	258.6	280.1	342.7	465.9	893.7	1581.2	2021.4	2129.2	2230.8	2394.9
77.5°	128.3	127.2	146.7	199.1	339.6	555.1	918.4	1165.7	1201.6	1249.8	1230.3
80°	41.0	40.0	43.1	54.4	122.1	372.5	577.7	731.6	748.0	757.3	768.6
82.5°	6.2	7.2	8.2	13.3	22.6	89.3	359.1	508.9	531.5	558.2	609.5
85°	0.0	0.0	1.0	1.0	3.1	7.2	33.9	87.2	91.3	110.8	130.3
87.5°	0.0	0.0	0.0	1.0	2.1	3.1	5.1	5.1	5.1	5.1	5.1
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°	85°	90°	95°	105°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	612.6	612.6	611.6	610.5	610.5	610.5	608.5	607.5	601.3	599.2	595.1
5°	637.2	637.2	635.2	634.1	633.1	633.1	630.0	623.9	615.7	610.5	602.3
7.5°	663.9	662.9	660.8	660.8	656.7	656.7	652.6	641.3	633.1	625.9	615.7
10°	694.7	693.6	690.6	689.5	687.5	685.4	681.3	668.0	659.8	650.6	638.2
12.5°	728.5	726.5	724.4	723.4	721.4	719.3	715.2	702.9	694.7	685.4	671.1
15°	758.3	757.3	755.2	754.2	754.2	752.1	749.1	737.8	729.6	719.3	708.0
17.5°	785.0	783.9	782.9	782.9	781.9	781.9	780.9	770.6	765.5	757.3	746.0
20°	807.5	808.6	808.6	808.6	809.6	810.6	812.7	807.5	802.4	795.2	789.1
22.5°	832.2	833.2	836.3	836.3	838.3	839.4	846.5	845.5	843.5	838.3	833.2
25°	861.9	864.0	866.0	869.1	870.1	873.2	885.5	890.7	886.6	883.5	888.6
27.5°	900.9	905.0	907.1	911.2	913.2	917.3	935.8	947.1	944.0	945.0	956.3
30°	959.4	963.5	969.7	971.7	978.9	981.0	1002.5	1019.9	1019.9	1017.9	1038.4
32.5°	1037.4	1040.5	1047.7	1052.8	1056.9	1061.0	1081.5	1100.0	1102.0	1108.2	1116.4
35°	1140.0	1142.1	1146.2	1154.4	1153.3	1155.4	1166.7	1185.2	1195.4	1209.8	1185.2
37.5°	1275.4	1282.6	1280.6	1281.6	1273.4	1278.5	1282.6	1302.1	1323.7	1338.0	1242.6
40°	1468.4	1473.5	1468.4	1461.2	1455.0	1451.9	1445.8	1467.3	1485.8	1475.5	1287.8
42.5°	1656.1	1658.2	1654.1	1641.8	1636.6	1626.4	1610.0	1636.6	1646.9	1598.7	1311.4
45°	1841.9	1838.8	1831.6	1829.5	1819.3	1809.0	1799.8	1817.2	1813.1	1718.7	1321.6
47.5°	2036.8	2033.7	2028.6	2020.4	2009.1	2007.1	1998.9	1996.8	1967.0	1821.3	1316.5
50°	2207.2	2209.2	2197.9	2202.0	2196.9	2186.6	2179.4	2183.6	2112.8	1911.6	1306.2
52.5°	2353.9	2353.9	2348.8	2353.9	2351.8	2346.7	2352.9	2419.6	2272.8	2038.9	1290.8
55°	2524.2	2530.4	2526.3	2531.4	2534.5	2545.8	2571.4	2727.4	2511.9	2194.8	1256.0
57.5°	2773.6	2789.0	2784.9	2805.4	2823.8	2853.6	2947.0	3111.2	2808.5	2366.2	1187.2
60°	3220.9	3271.2	3269.2	3305.1	3342.0	3375.9	3539.0	3570.8	3144.0	2589.9	1135.9
62.5°	3965.9	4006.9	4024.4	4063.4	4087.0	4093.1	4224.5	3991.6	3443.6	2793.1	1107.2
65°	4448.2	4464.6	4480.0	4474.8	4460.5	4436.9	4445.1	3952.6	3344.1	2662.7	950.2
67°	4505.6	4539.5	4551.8	4543.6	4522.0	4489.2	4449.2	3776.1	3132.7	2459.6	803.4
67.5°	4489.2	4524.1	4535.4	4528.2	4509.7	4485.1	4437.9	3709.4	3060.9	2393.9	765.5
70°	4225.5	4275.8	4322.0	4337.3	4338.4	4334.3	4287.1	3238.4	2605.3	2010.1	580.8
72.5°	3602.7	3667.3	3763.8	3733.0	3782.2	3750.4	3642.7	2213.3	1785.4	1436.5	407.4
75°	2430.8	2459.6	2537.6	2448.3	2456.5	2400.1	1981.4	1285.7	1107.2	934.8	245.2
77.5°	1223.1	1241.6	1229.3	1175.9	1155.4	1109.2	857.8	279.1	279.1	332.5	128.3
80°	775.7	782.9	791.1	803.4	818.8	820.9	595.1	82.1	73.9	77.0	69.8
82.5°	636.2	655.7	681.3	686.5	692.6	697.8	410.4	45.1	36.9	41.0	49.3
85°	147.8	160.1	152.9	135.4	144.7	111.8	57.5	18.5	16.4	20.5	33.9
87.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.1	7.2	17.4
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):**

	115°	125°	135°	145°	155°	165°	175°	180°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	591.0	588.0	583.9	582.8	581.8	579.7	578.7	577.7
5°	594.1	588.0	581.8	577.7	575.6	573.6	571.5	571.5
7.5°	606.4	599.2	590.0	585.9	581.8	578.7	576.7	576.7
10°	627.0	618.7	607.5	602.3	597.2	594.1	592.1	590.0
12.5°	657.7	647.5	634.1	625.9	620.8	619.8	617.7	616.7
15°	695.7	684.4	670.0	661.8	653.6	651.6	649.5	648.5
17.5°	733.7	724.4	713.1	698.8	682.4	669.0	662.9	661.8
20°	776.8	772.7	755.2	723.4	687.5	659.8	648.5	648.5
22.5°	831.1	819.9	777.8	721.4	668.0	629.0	613.6	613.6
25°	890.7	852.7	774.7	698.8	633.1	584.9	564.4	564.4
27.5°	943.0	861.9	756.2	660.8	580.8	528.4	504.8	503.8
30°	984.0	856.8	723.4	607.5	519.2	459.7	433.0	433.0
32.5°	1006.6	839.4	678.3	544.9	444.3	376.6	343.7	344.8
35°	1012.8	809.6	618.7	461.7	354.0	287.3	257.6	257.6
37.5°	1006.6	762.4	544.9	370.4	264.7	217.5	195.0	192.9
40°	986.1	691.6	446.4	270.9	197.0	169.3	160.1	158.0
42.5°	945.0	606.4	335.5	193.9	158.0	146.7	144.7	143.7
45°	880.4	491.5	232.9	151.9	141.6	138.5	138.5	137.5
47.5°	799.3	375.6	166.2	134.4	133.4	133.4	133.4	133.4
50°	709.0	265.8	135.4	127.2	126.2	128.3	129.3	129.3
52.5°	615.7	185.7	124.2	122.1	120.1	123.1	124.2	124.2
55°	514.1	145.7	119.0	117.0	113.9	114.9	117.0	117.0
57.5°	409.4	129.3	117.0	113.9	107.7	107.7	109.8	109.8
60°	325.3	124.2	115.9	108.8	100.6	100.6	102.6	103.6
62.5°	271.9	123.1	115.9	103.6	97.5	94.4	96.5	96.5
65°	226.8	123.1	112.9	103.6	92.3	88.2	90.3	90.3
67°	189.8	121.1	110.8	103.6	90.3	85.2	85.2	85.2
67.5°	179.6	120.1	111.8	103.6	89.3	84.1	83.1	83.1
70°	134.4	108.8	111.8	104.7	87.2	77.0	74.9	74.9
72.5°	104.7	99.5	108.8	107.7	85.2	70.8	66.7	65.7
75°	85.2	90.3	109.8	104.7	80.0	64.6	58.5	57.5
77.5°	72.9	77.0	92.3	84.1	66.7	57.5	51.3	50.3
80°	57.5	65.7	65.7	57.5	49.3	46.2	43.1	43.1
82.5°	46.2	50.3	43.1	39.0	36.9	35.9	33.9	33.9
85°	38.0	41.0	31.8	28.7	27.7	26.7	24.6	24.6
87.5°	29.8	25.7	16.4	15.4	15.4	14.4	14.4	15.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)