

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: P139588

Luminaire Tested: **ENT-E02-LED-E1-BL3-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P139588
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-BL3-8030
Description: ENTRI LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4561.6 lumens
Efficiency: N/A
Efficacy: 97.3 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 - G1

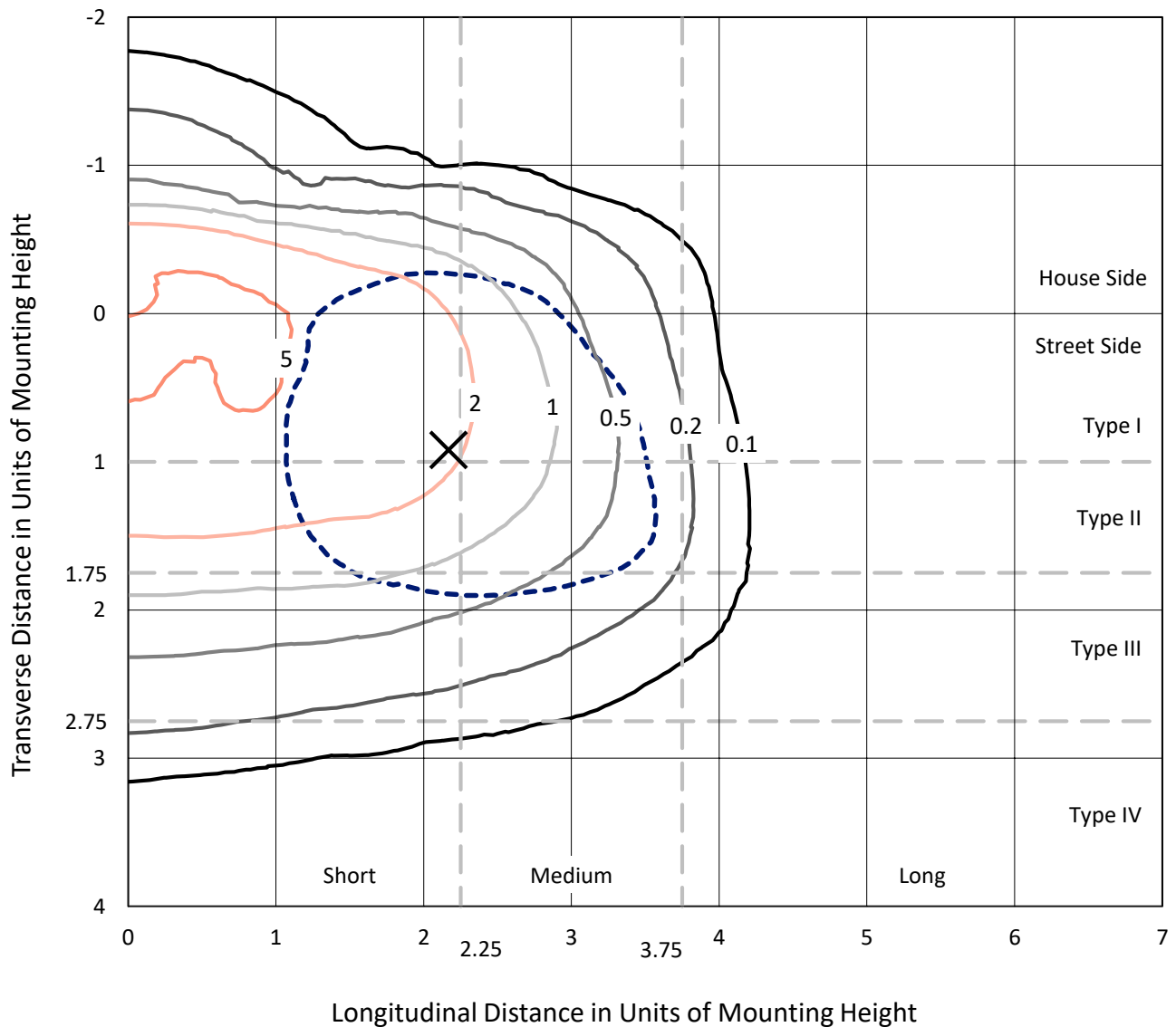
Input Watts (W): 46.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

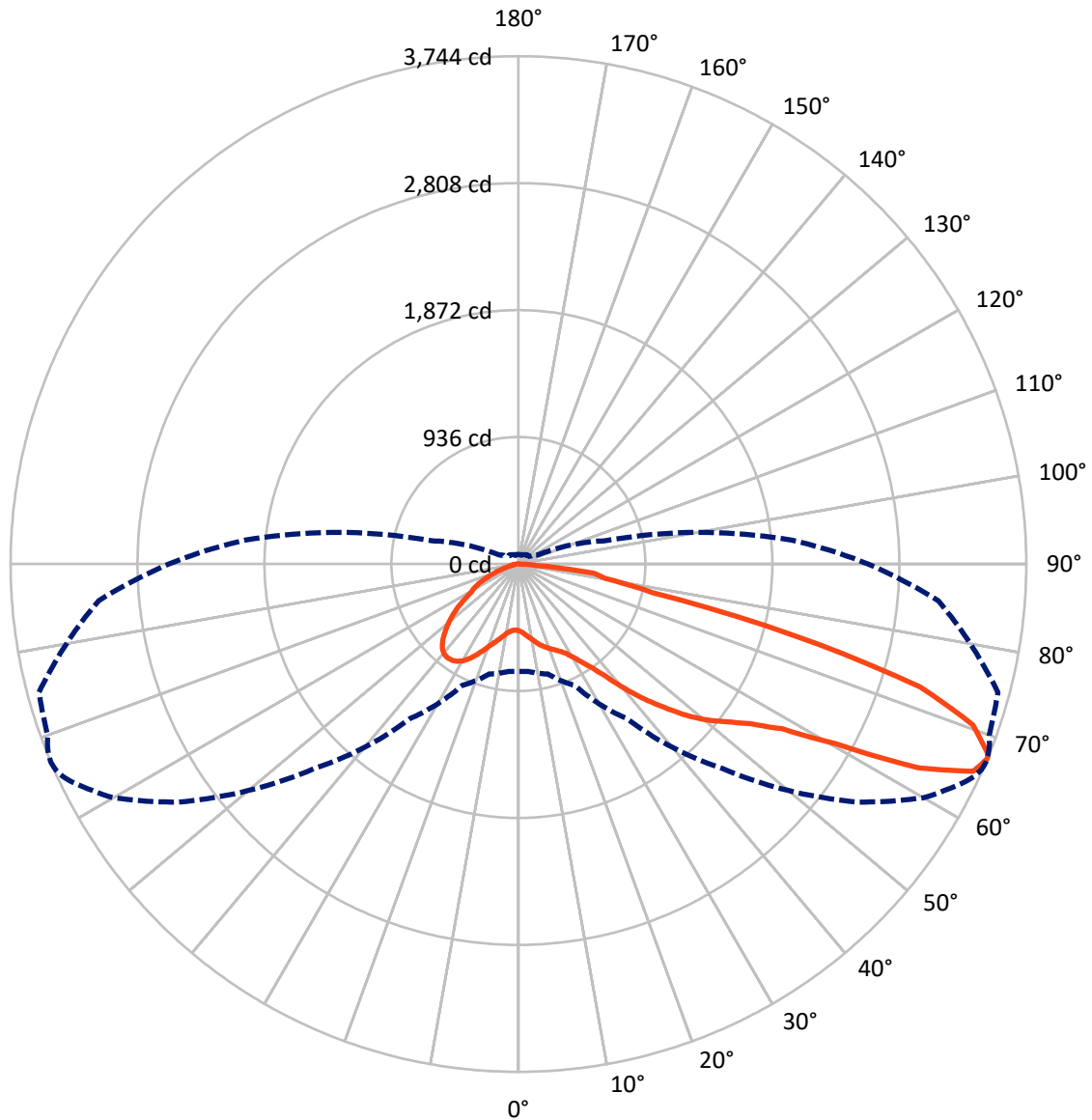
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.3 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
House Side	Lumens	1107.6	0.0	1107.6
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	3454.0	0.0	3454.0
	% Fixture	75.7	0.0	75.7
Total	Lumens	4561.6	0.0	4561.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	1.1
10°-20°	171.2	3.8
20°-30°	310.5	6.8
30°-40°	453.8	9.9
40°-50°	687.5	15.1
50°-60°	985.9	21.6
60°-70°	1259.9	27.6
70°-80°	588.2	12.9
80°-90°	55.1	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°	4561.6	100.0
0°-180°	4561.6	100.0



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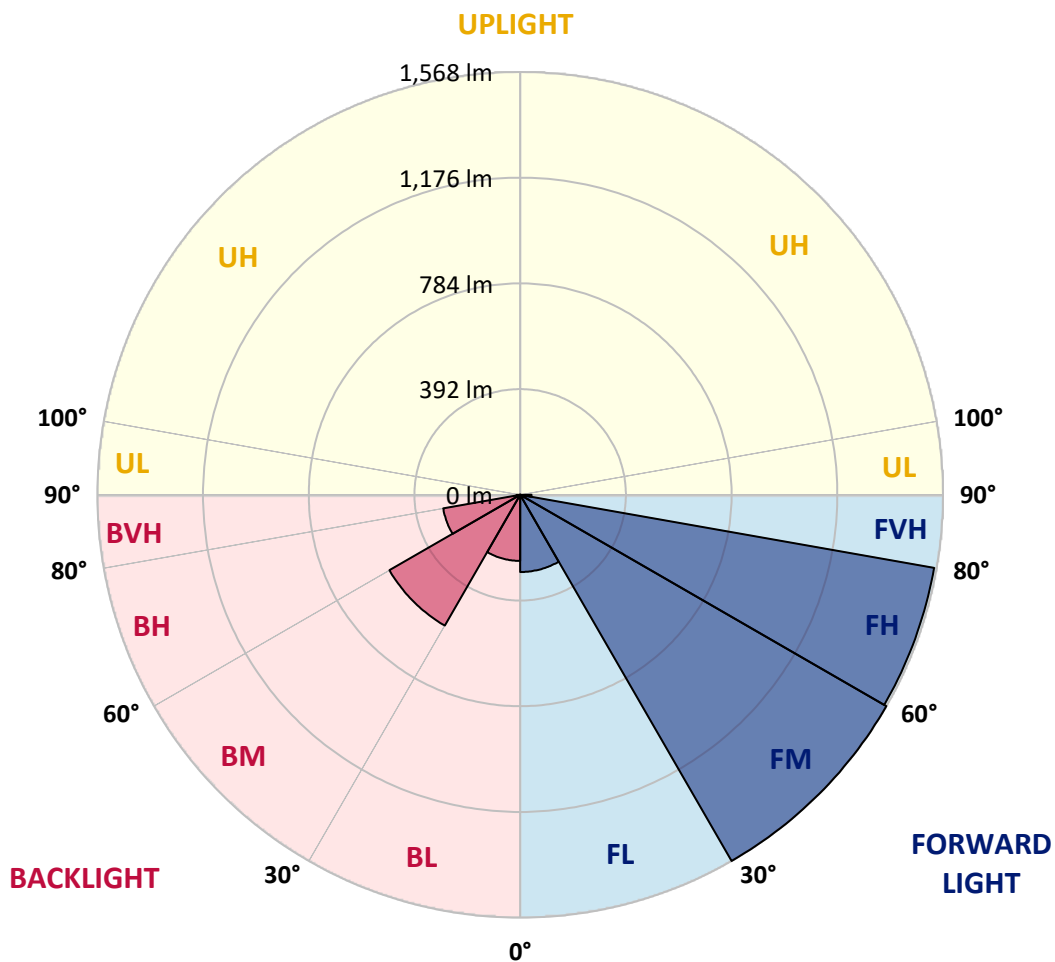
CATALOG NUMBER: ENT-E02-LED-E1-BL3-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	286.1	6.3			
FM	(30°-60°)	1567.7	34.4			
FH	(60°-80°)	1558.4	34.2			G1/1800
FVH	(80°-90°)	41.8	0.9			G1/100
BL	(0°-30°)	245.1	5.4	B1/500		
BM	(30°-60°)	559.5	12.3	B1/1000		
BH	(60°-80°)	289.7	6.4	B1/500		G1/500
BVH	(80°-90°)	13.3	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2
2.5°	510.6	510.6	511.5	511.5	510.6	510.6	505.6	505.6	505.6	504.7	504.7
5°	538.5	539.3	539.3	538.5	536.8	533.4	526.7	526.7	526.7	525.8	524.1
7.5°	570.5	569.7	570.5	568.0	564.6	560.4	551.1	550.3	548.6	548.6	546.9
10°	606.0	603.5	606.0	602.6	595.9	588.3	577.3	573.9	573.9	573.9	570.5
12.5°	642.3	641.4	643.1	637.2	625.4	617.0	606.0	601.8	600.9	600.9	599.2
15°	681.9	681.1	676.0	666.8	651.6	644.0	631.3	626.2	625.4	625.4	622.9
17.5°	723.3	723.3	710.6	691.2	670.1	659.2	649.9	646.5	645.7	645.7	644.8
20°	758.7	758.7	741.9	709.8	679.4	667.6	664.2	664.2	664.2	664.2	665.1
22.5°	784.9	782.4	759.6	719.9	682.8	672.7	681.1	681.9	681.9	683.6	684.5
25°	796.7	795.9	768.9	721.6	681.9	680.3	698.8	701.4	703.0	704.7	707.3
27.5°	797.6	797.6	770.6	720.8	681.1	693.8	720.8	728.4	730.1	733.4	737.6
30°	789.1	790.0	767.2	719.9	687.0	719.1	755.4	769.7	773.1	778.2	784.9
32.5°	779.0	780.7	767.2	728.4	713.2	763.0	811.1	831.3	834.7	841.5	848.2
35°	780.7	783.2	785.8	762.1	771.4	838.1	907.3	919.1	918.3	929.2	932.6
37.5°	791.7	797.6	816.1	820.4	855.8	948.6	1021.2	1046.5	1046.5	1056.7	1053.3
40°	793.4	802.6	849.1	898.0	968.1	1082.0	1181.6	1211.1	1211.1	1215.3	1213.7
42.5°	833.0	841.5	908.1	995.1	1094.7	1228.9	1338.6	1364.7	1370.6	1366.4	1369.8
45°	904.8	910.7	992.5	1102.3	1217.0	1369.8	1492.2	1517.5	1523.4	1519.2	1514.1
47.5°	995.9	1004.3	1091.3	1221.3	1339.4	1499.8	1649.2	1678.7	1684.6	1677.9	1680.4
50°	1071.9	1087.9	1180.7	1334.3	1457.6	1611.2	1770.7	1811.2	1816.3	1816.3	1818.0
52.5°	1141.1	1155.4	1244.9	1416.2	1552.9	1711.6	1861.0	1913.3	1919.2	1923.5	1926.8
55°	1169.8	1184.1	1273.6	1451.7	1611.2	1805.3	1965.7	2035.7	2039.1	2050.1	2064.4
57.5°	1170.6	1182.4	1270.2	1450.8	1641.6	1889.7	2108.3	2217.2	2230.7	2245.0	2269.5
60°	1091.3	1105.6	1193.4	1408.6	1666.9	1984.2	2324.4	2524.4	2543.8	2585.1	2639.2
62.5°	971.4	981.6	1057.5	1269.4	1666.9	2115.0	2672.1	3002.9	3067.9	3135.4	3235.0
65°	860.0	867.6	915.7	1098.9	1548.7	2221.4	3035.8	3416.5	3486.5	3537.2	3621.6
67°	790.8	794.2	839.8	989.2	1390.1	2136.1	3060.3	3445.2	3505.1	3557.4	3663.8
67.5°	767.2	769.7	812.8	961.3	1341.1	2084.7	3023.2	3421.5	3486.5	3539.7	3647.7
70°	589.9	582.4	619.5	756.2	1083.7	1663.5	2654.4	3113.5	3187.8	3258.6	3389.5
72.5°	351.9	341.0	364.6	438.9	702.2	1168.9	2012.9	2554.8	2649.3	2737.9	2909.2
75°	211.8	212.7	230.4	281.9	383.2	735.1	1300.6	1662.7	1751.3	1834.8	1969.9
77.5°	105.5	104.7	120.7	163.7	279.4	456.6	755.4	958.8	988.3	1028.0	1011.9
80°	33.8	32.9	35.4	44.7	100.4	306.4	475.2	601.8	615.3	622.9	632.1
82.5°	5.1	5.9	6.8	11.0	18.6	73.4	295.4	418.6	437.2	459.1	501.3
85°	0.0	0.0	0.8	0.8	2.5	5.9	27.9	71.7	75.1	91.2	107.2
87.5°	0.0	0.0	0.0	0.8	1.7	2.5	4.2	4.2	4.2	4.2	4.2
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):

	65°	66°	67°	68°	69°	70°	75°	85°	90°	95°	105°
0°	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2
2.5°	503.9	503.9	503.0	502.2	502.2	502.2	500.5	499.6	494.6	492.9	489.5
5°	524.1	524.1	522.4	521.6	520.7	520.7	518.2	513.1	506.4	502.2	495.4
7.5°	546.1	545.2	543.5	543.5	540.2	540.2	536.8	527.5	520.7	514.8	506.4
10°	571.4	570.5	568.0	567.2	565.5	563.8	560.4	549.4	542.7	535.1	525.0
12.5°	599.2	597.5	595.9	595.0	593.3	591.6	588.3	578.1	571.4	563.8	552.0
15°	623.7	622.9	621.2	620.3	620.3	618.6	616.1	606.8	600.1	591.6	582.4
17.5°	645.7	644.8	644.0	644.0	643.1	643.1	642.3	633.8	629.6	622.9	613.6
20°	664.2	665.1	665.1	665.1	665.9	666.8	668.4	664.2	660.0	654.1	649.0
22.5°	684.5	685.3	687.9	687.9	689.5	690.4	696.3	695.4	693.8	689.5	685.3
25°	709.0	710.6	712.3	714.9	715.7	718.2	728.4	732.6	729.2	726.7	730.9
27.5°	741.0	744.4	746.1	749.5	751.2	754.5	769.7	779.0	776.5	777.3	786.6
30°	789.1	792.5	797.6	799.3	805.2	806.9	824.6	838.9	838.9	837.2	854.1
32.5°	853.3	855.8	861.7	865.9	869.3	872.7	889.6	904.8	906.4	911.5	918.3
35°	937.7	939.4	942.7	949.5	948.6	950.3	959.6	974.8	983.2	995.1	974.8
37.5°	1049.1	1055.0	1053.3	1054.1	1047.4	1051.6	1055.0	1071.0	1088.7	1100.6	1022.1
40°	1207.8	1212.0	1207.8	1201.8	1196.8	1194.2	1189.2	1206.9	1222.1	1213.7	1059.2
42.5°	1362.2	1363.9	1360.5	1350.4	1346.2	1337.7	1324.2	1346.2	1354.6	1314.9	1078.6
45°	1515.0	1512.4	1506.5	1504.8	1496.4	1488.0	1480.4	1494.7	1491.3	1413.7	1087.1
47.5°	1675.3	1672.8	1668.6	1661.8	1652.5	1650.8	1644.1	1642.4	1617.9	1498.1	1082.8
50°	1815.4	1817.1	1807.8	1811.2	1807.0	1798.5	1792.6	1796.0	1737.8	1572.4	1074.4
52.5°	1936.1	1936.1	1931.9	1936.1	1934.4	1930.2	1935.3	1990.1	1869.4	1677.0	1061.7
55°	2076.2	2081.3	2077.9	2082.1	2084.7	2093.9	2115.0	2243.3	2066.1	1805.3	1033.0
57.5°	2281.3	2294.0	2290.6	2307.5	2322.7	2347.1	2423.9	2559.0	2310.0	1946.2	976.5
60°	2649.3	2690.6	2689.0	2718.5	2748.9	2776.7	2910.9	2937.1	2586.0	2130.2	934.3
62.5°	3262.0	3295.8	3310.1	3342.2	3361.6	3366.7	3474.7	3283.1	2832.4	2297.3	910.7
65°	3658.7	3672.2	3684.9	3680.6	3668.8	3649.4	3656.2	3251.1	2750.6	2190.2	781.5
67°	3706.0	3733.8	3743.9	3737.2	3719.5	3692.5	3659.5	3105.9	2576.7	2023.0	660.8
67.5°	3692.5	3721.2	3730.4	3724.5	3709.3	3689.1	3650.3	3051.0	2517.6	1969.0	629.6
70°	3475.6	3516.9	3554.9	3567.5	3568.4	3565.0	3526.2	2663.6	2142.9	1653.4	477.7
72.5°	2963.3	3016.4	3095.8	3070.4	3111.0	3084.8	2996.2	1820.5	1468.5	1181.6	335.1
75°	1999.4	2023.0	2087.2	2013.8	2020.5	1974.1	1629.7	1057.5	910.7	768.9	201.7
77.5°	1006.0	1021.2	1011.1	967.2	950.3	912.4	705.6	229.6	229.6	273.5	105.5
80°	638.1	644.0	650.7	660.8	673.5	675.2	489.5	67.5	60.8	63.3	57.4
82.5°	523.3	539.3	560.4	564.6	569.7	573.9	337.6	37.1	30.4	33.8	40.5
85°	121.5	131.7	125.8	111.4	119.0	92.0	47.3	15.2	13.5	16.9	27.9
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.4	5.9	14.3
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°	491.2	491.2	491.2	491.2	491.2	491.2	491.2	491.2
2.5°	486.1	483.6	480.2	479.4	478.5	476.9	476.0	475.2
5°	488.7	483.6	478.5	475.2	473.5	471.8	470.1	470.1
7.5°	498.8	492.9	485.3	481.9	478.5	476.0	474.3	474.3
10°	515.7	508.9	499.6	495.4	491.2	488.7	487.0	485.3
12.5°	541.0	532.6	521.6	514.8	510.6	509.8	508.1	507.2
15°	572.2	562.9	551.1	544.4	537.6	535.9	534.2	533.4
17.5°	603.5	595.9	586.6	574.8	561.3	550.3	545.2	544.4
20°	638.9	635.5	621.2	595.0	565.5	542.7	533.4	533.4
22.5°	683.6	674.3	639.7	593.3	549.4	517.4	504.7	504.7
25°	732.6	701.4	637.2	574.8	520.7	481.1	464.2	464.2
27.5°	775.6	709.0	622.0	543.5	477.7	434.7	415.2	414.4
30°	809.4	704.7	595.0	499.6	427.1	378.1	356.2	356.2
32.5°	828.0	690.4	557.9	448.2	365.4	309.7	282.7	283.6
35°	833.0	665.9	508.9	379.8	291.2	236.3	211.8	211.8
37.5°	828.0	627.1	448.2	304.7	217.7	178.9	160.4	158.7
40°	811.1	568.8	367.1	222.8	162.0	139.3	131.7	130.0
42.5°	777.3	498.8	276.0	159.5	130.0	120.7	119.0	118.2
45°	724.1	404.3	191.6	124.9	116.5	113.9	113.9	113.1
47.5°	657.5	308.9	136.7	110.6	109.7	109.7	109.7	109.7
50°	583.2	218.6	111.4	104.7	103.8	105.5	106.3	106.3
52.5°	506.4	152.8	102.1	100.4	98.7	101.3	102.1	102.1
55°	422.8	119.8	97.9	96.2	93.7	94.5	96.2	96.2
57.5°	336.8	106.3	96.2	93.7	88.6	88.6	90.3	90.3
60°	267.5	102.1	95.4	89.5	82.7	82.7	84.4	85.2
62.5°	223.7	101.3	95.4	85.2	80.2	77.6	79.3	79.3
65°	186.5	101.3	92.8	85.2	76.0	72.6	74.3	74.3
67°	156.1	99.6	91.2	85.2	74.3	70.1	70.1	70.1
67.5°	147.7	98.7	92.0	85.2	73.4	69.2	68.4	68.4
70°	110.6	89.5	92.0	86.1	71.7	63.3	61.6	61.6
72.5°	86.1	81.9	89.5	88.6	70.1	58.2	54.9	54.0
75°	70.1	74.3	90.3	86.1	65.8	53.2	48.1	47.3
77.5°	59.9	63.3	76.0	69.2	54.9	47.3	42.2	41.4
80°	47.3	54.0	54.0	47.3	40.5	38.0	35.4	35.4
82.5°	38.0	41.4	35.4	32.1	30.4	29.5	27.9	27.9
85°	31.2	33.8	26.2	23.6	22.8	21.9	20.3	20.3
87.5°	24.5	21.1	13.5	12.7	12.7	11.8	11.8	12.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)