

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: P140745

Luminaire Tested: **ECM-F01-LED-E1-RW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140745  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33689)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F01-LED-E1-RW  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE  
Light Source: (7) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2441.3 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

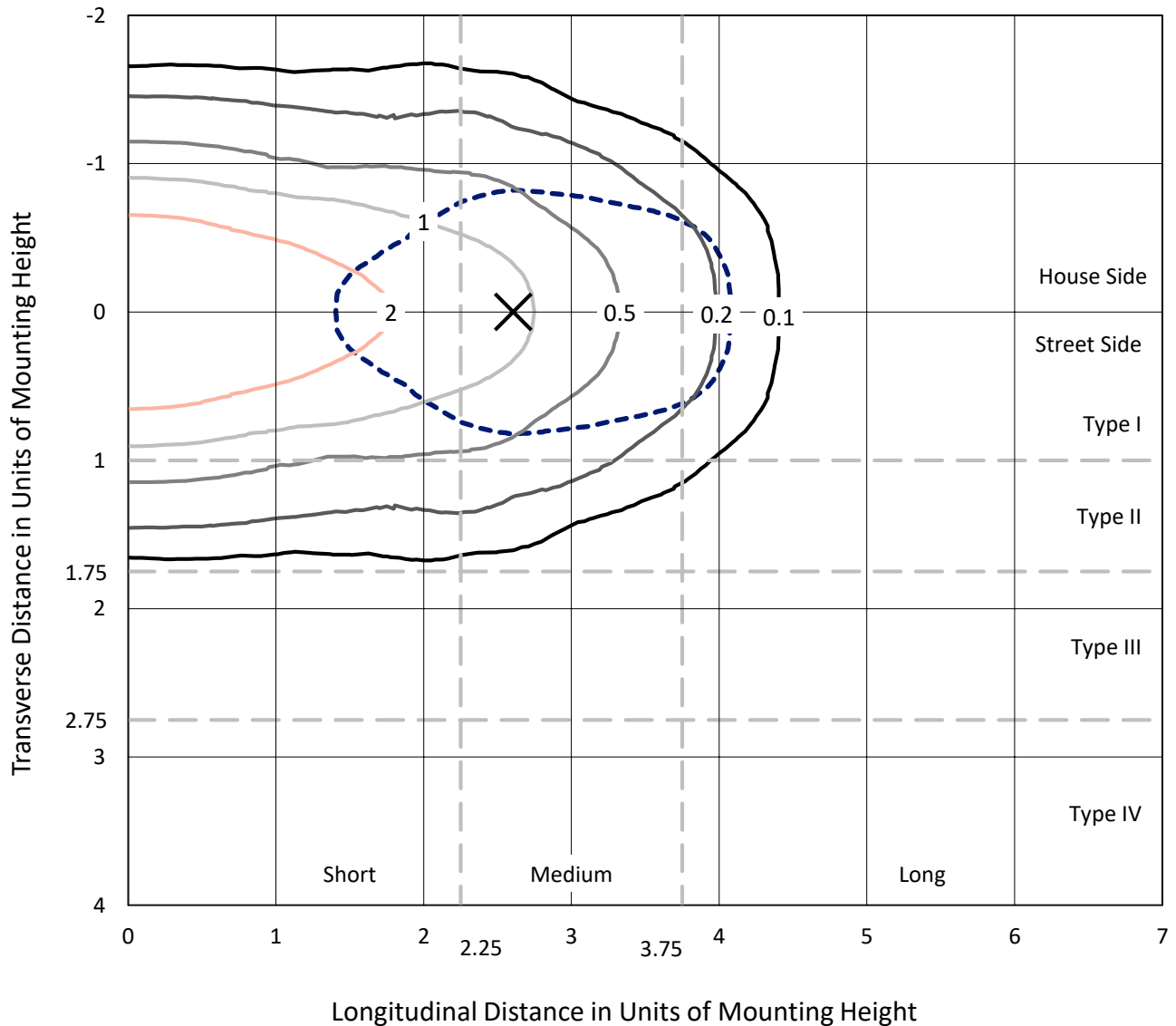
Input Watts (W): 25.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

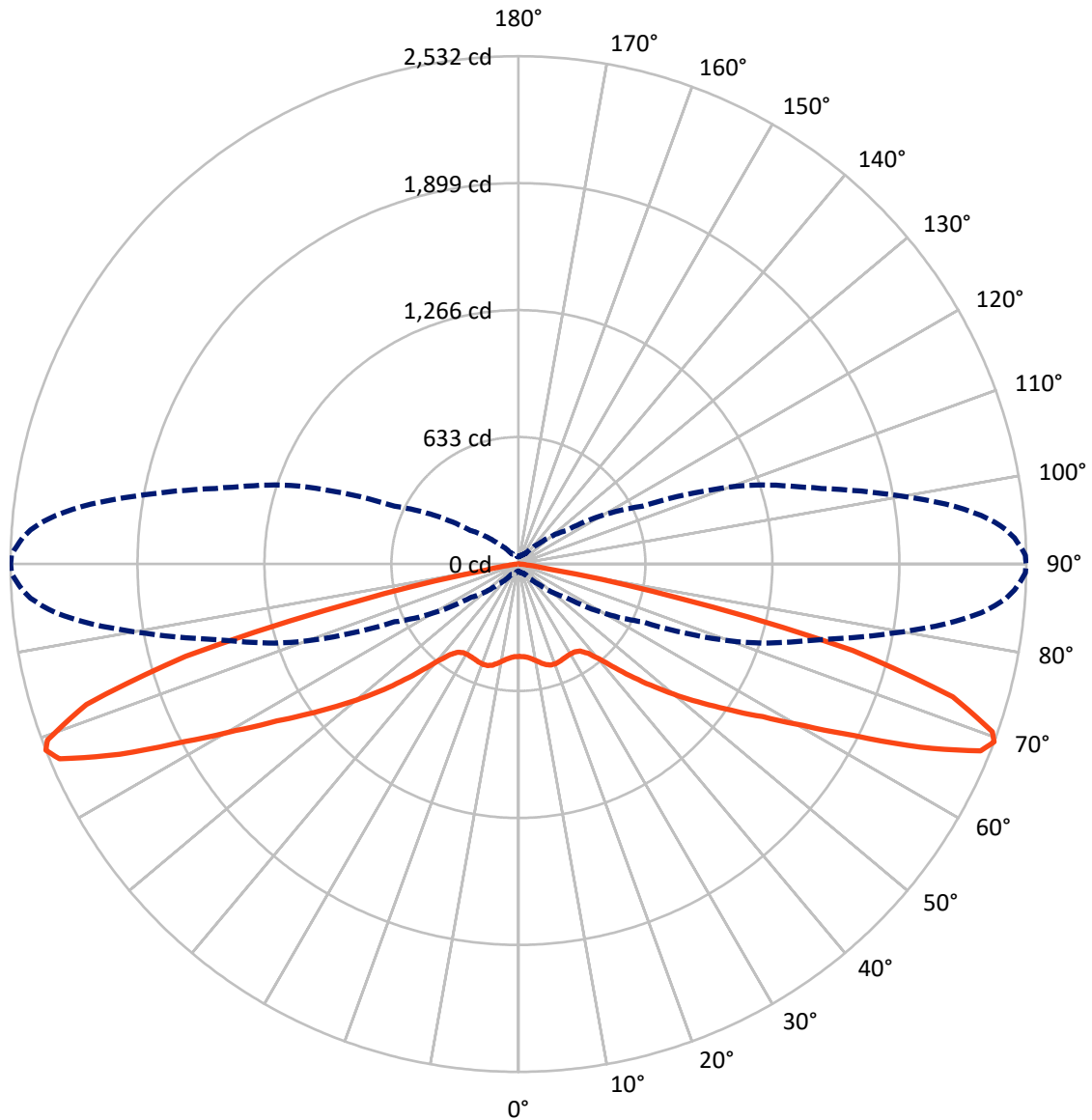
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc  
 Type I - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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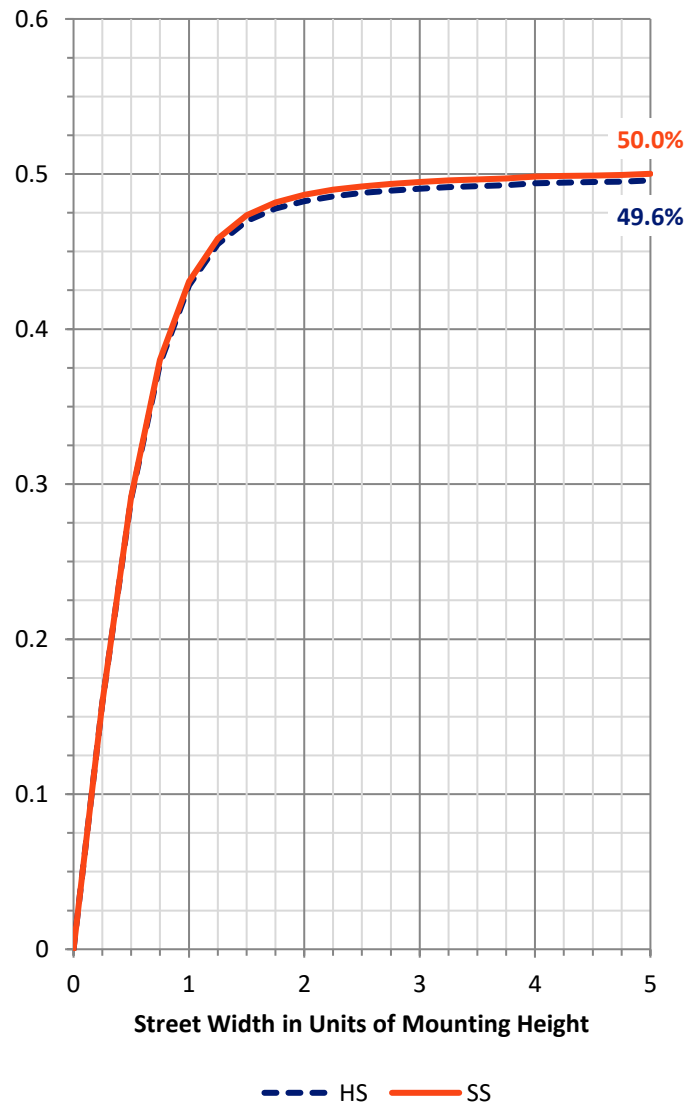
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1220.7	0.0	1220.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1220.7	0.0	1220.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	2441.3	0.0	2441.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	1.8
10°-20°	141.9	5.8
20°-30°	229.4	9.4
30°-40°	286.6	11.7
40°-50°	358.4	14.7
50°-60°	441.7	18.1
60°-70°	546.8	22.4
70°-80°	357.4	14.6
80°-90°	34.0	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°	2441.3	100.0
0°-180°	2441.3	100.0



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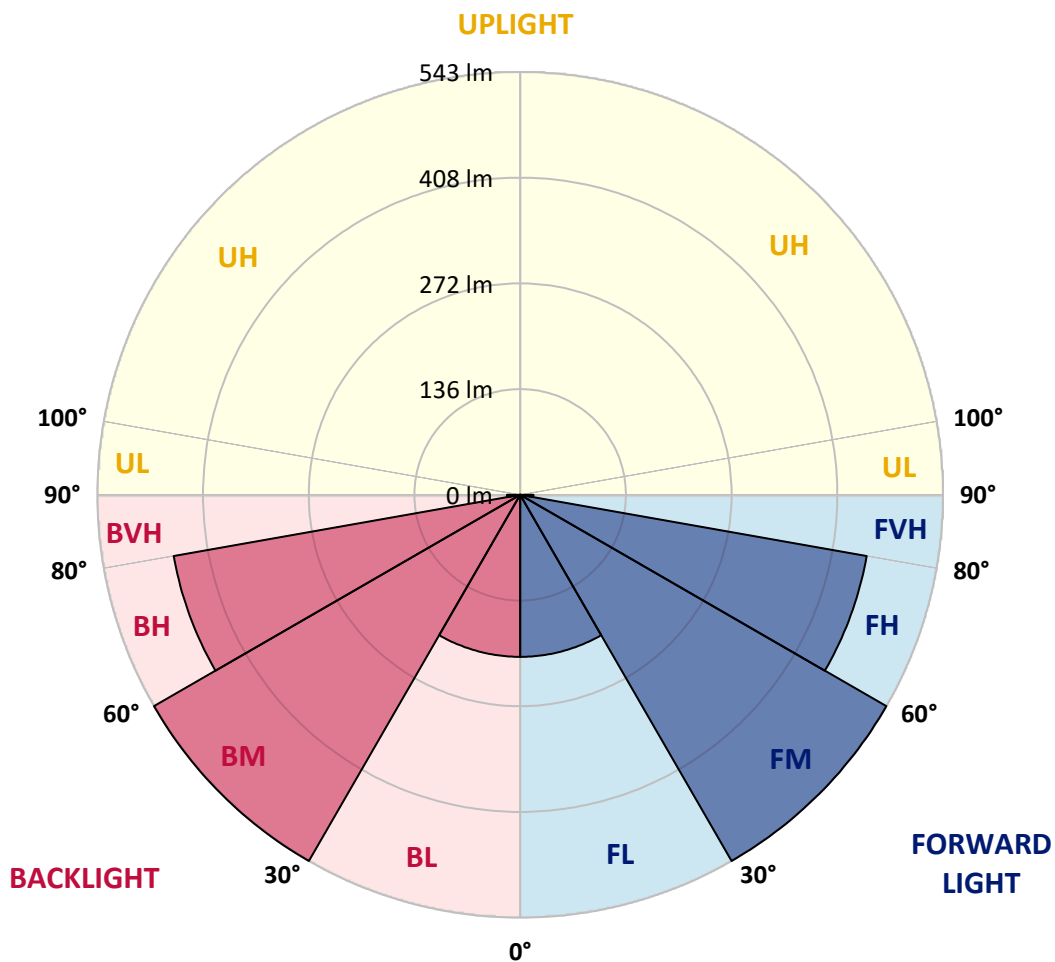
CATALOG NUMBER: ECM-F01-LED-E1-RW

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	208.2	8.5			
FM	(30°-60°)	543.4	22.3			
FH	(60°-80°)	452.1	18.5			G0/660
FVH	(80°-90°)	17.0	0.7			G1/100
BL	(0°-30°)	208.2	8.5	B1/500		
BM	(30°-60°)	543.4	22.3	B1/1000		
BH	(60°-80°)	452.1	18.5	B1/500		G1/500
BVH	(80°-90°)	17.0	0.7			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 I Short





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CATALOG NUMBER: ECM-F01-LED-E1-RW

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9
2.5°	464.0	464.2	463.4	463.6	463.9	463.6	463.2	463.2	463.1	463.0	462.9
5°	467.0	467.1	466.7	467.4	467.6	468.0	468.0	468.0	468.0	467.9	467.8
7.5°	471.2	471.8	471.4	472.4	473.3	474.7	475.4	477.0	477.0	477.0	476.9
10°	475.2	475.8	475.8	478.0	480.3	483.0	485.7	488.3	488.5	488.6	488.8
12.5°	478.2	478.6	479.4	483.3	488.6	493.0	497.8	501.9	502.1	502.2	502.4
15°	477.0	478.0	481.1	487.5	496.7	504.0	509.9	514.8	515.2	515.5	515.8
17.5°	472.8	474.2	478.8	489.6	503.7	515.4	522.4	523.8	524.0	524.2	524.5
20°	463.6	465.7	472.9	488.2	509.0	524.9	532.0	529.4	529.2	529.0	528.8
22.5°	448.2	451.0	460.0	481.7	509.4	531.8	538.6	531.8	531.0	530.2	529.5
25°	427.5	429.8	440.0	465.8	503.2	533.0	543.0	533.3	532.1	530.8	529.6
27.5°	402.4	404.3	417.0	444.4	487.5	526.7	545.7	536.0	534.3	532.8	531.2
30°	374.2	375.9	389.8	419.0	465.5	512.8	545.4	541.8	539.9	538.0	536.1
32.5°	346.2	346.9	359.2	391.3	441.0	492.3	540.8	550.9	549.0	547.2	545.3
35°	315.4	317.5	330.8	365.7	413.3	469.7	534.8	563.6	562.5	561.5	560.4
37.5°	290.6	291.3	305.5	341.8	390.9	449.2	527.1	579.8	580.6	581.3	582.0
40°	265.8	265.8	279.8	317.6	368.5	430.8	520.6	599.8	603.5	607.3	611.1
42.5°	238.7	240.6	254.4	292.0	346.8	415.1	517.3	623.7	630.8	637.9	645.0
45°	213.4	214.6	228.7	265.4	319.6	397.2	516.4	650.4	661.2	672.0	682.7
47.5°	188.5	190.3	203.6	237.4	290.0	373.4	515.1	680.8	694.5	708.3	722.1
50°	165.4	166.4	181.4	212.0	260.9	342.6	507.0	714.8	731.6	748.4	765.3
52.5°	140.9	143.1	155.4	187.0	231.4	309.4	485.7	751.8	772.2	792.5	812.9
55°	115.3	114.8	129.5	159.2	205.7	277.6	446.4	783.8	808.4	833.0	857.5
57.5°	84.4	86.2	99.8	129.8	175.8	251.0	400.0	800.4	831.1	861.8	892.4
60°	60.6	63.0	74.7	98.5	146.2	224.8	352.6	788.9	829.5	870.1	910.8
62.5°	47.4	48.4	58.4	73.9	113.9	197.4	320.8	759.0	814.9	871.0	927.0
65°	41.3	42.6	51.5	59.4	86.6	171.4	301.7	735.0	808.9	882.8	956.7
67.5°	37.6	39.0	46.8	52.2	71.0	149.2	297.2	715.4	802.2	888.9	975.6
69°	35.8	37.3	44.4	49.6	65.9	142.3	292.0	682.6	770.6	858.6	946.6
70°	35.0	36.2	43.1	47.9	64.2	138.1	280.1	645.0	730.1	815.1	900.2
72.5°	32.2	32.9	39.2	43.9	60.8	115.6	222.0	482.8	553.9	624.9	696.0
75°	28.5	29.6	35.4	40.2	48.8	74.0	145.6	291.8	344.5	397.1	449.7
77.5°	24.5	25.5	30.4	38.4	37.6	44.8	83.6	163.0	191.5	220.0	248.4
80°	21.2	22.2	26.6	35.7	30.6	33.2	56.4	106.4	117.2	128.0	138.8
82.5°	16.6	17.3	22.4	29.0	23.6	24.6	42.2	92.8	99.4	105.9	112.4
85°	10.6	11.0	16.4	19.8	16.5	14.6	26.6	68.1	73.2	78.4	83.6
87.5°	3.8	5.2	7.3	6.8	6.9	5.2	9.4	25.2	27.2	29.2	31.2
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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CATALOG NUMBER: ECM-F01-LED-E1-RW

**CANDELA DISTRIBUTION (continued):**

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9
2.5°	462.7	462.6	462.7	462.7	462.6	462.4	462.4	462.2	462.0	462.0	461.8
5°	467.7	467.6	468.0	467.8	467.9	467.8	467.8	467.6	467.8	467.2	467.1
7.5°	476.9	476.9	476.8	477.3	477.0	476.9	477.2	477.2	477.2	476.9	476.9
10°	489.0	489.2	489.4	489.6	489.6	489.7	490.2	489.8	490.6	489.8	490.2
12.5°	502.5	502.7	503.4	503.7	504.0	504.0	504.0	504.8	505.4	505.2	505.4
15°	516.2	516.5	516.7	517.0	517.0	517.2	517.8	518.7	518.4	519.0	519.0
17.5°	524.7	524.9	524.8	524.8	525.0	525.4	526.0	526.6	526.4	526.8	527.1
20°	528.5	528.3	528.0	527.7	527.6	527.8	527.8	527.9	528.2	528.2	528.2
22.5°	528.7	528.0	527.0	526.4	525.8	525.3	525.6	525.3	525.3	525.3	525.0
25°	528.3	527.1	525.6	524.5	523.4	522.7	522.0	521.8	521.2	521.2	521.2
27.5°	529.6	528.0	526.4	524.4	522.8	522.0	521.0	520.0	519.6	519.0	519.0
30°	534.2	532.3	530.4	528.0	525.8	525.2	523.3	522.4	521.0	520.4	520.1
32.5°	543.5	541.6	539.0	536.3	534.6	532.6	531.1	529.0	527.5	526.6	525.3
35°	559.4	558.3	556.2	554.3	551.8	549.5	546.5	545.4	542.2	541.6	540.2
37.5°	582.8	583.6	583.1	581.7	580.0	578.0	576.8	574.4	573.2	572.0	570.6
40°	614.8	618.6	619.8	621.4	621.8	623.6	621.5	621.2	619.6	620.9	620.1
42.5°	652.1	659.2	663.0	667.6	672.6	677.1	680.6	686.7	686.0	690.7	694.0
45°	693.5	704.3	714.2	721.8	731.3	741.8	750.9	759.4	769.1	774.6	782.8
47.5°	735.9	749.7	763.8	777.9	791.4	804.8	821.4	836.4	851.0	860.9	873.4
50°	782.2	799.0	816.0	833.2	852.4	873.5	892.0	911.6	931.6	952.0	966.2
52.5°	833.2	853.6	872.2	890.4	914.0	936.4	960.4	984.9	1015.2	1037.4	1057.1
55°	882.1	906.7	927.1	948.8	973.6	998.5	1027.8	1058.4	1090.6	1122.6	1151.5
57.5°	923.1	953.8	978.0	999.6	1026.2	1054.8	1086.4	1124.4	1161.1	1200.8	1238.0
60°	951.4	992.0	1021.2	1047.2	1078.0	1109.9	1151.0	1195.9	1244.2	1293.5	1341.3
62.5°	983.0	1038.9	1078.8	1116.0	1152.4	1187.9	1234.3	1290.1	1355.6	1415.1	1478.5
65°	1030.6	1104.6	1163.4	1210.8	1262.5	1314.2	1368.3	1433.4	1507.8	1594.8	1668.6
67.5°	1062.3	1149.0	1223.8	1291.7	1352.0	1415.0	1483.2	1561.0	1650.9	1739.6	1831.6
69°	1034.6	1122.6	1201.6	1276.4	1342.6	1410.2	1479.6	1558.0	1649.8	1747.9	1844.9
70°	985.2	1070.3	1152.0	1230.7	1295.4	1366.1	1434.4	1509.1	1602.0	1700.2	1805.7
72.5°	767.1	838.2	922.1	998.1	1075.2	1139.8	1201.4	1276.4	1370.2	1463.6	1566.4
75°	502.4	555.0	631.8	694.2	761.0	821.6	866.3	940.7	997.6	1085.6	1181.0
77.5°	276.9	305.4	345.2	396.1	424.9	459.0	503.7	530.8	571.3	632.8	661.4
80°	149.6	160.4	177.2	187.8	196.4	188.0	183.4	191.5	188.0	187.1	177.9
82.5°	119.0	125.5	134.2	140.4	136.4	118.3	99.2	85.3	76.4	64.2	55.0
85°	88.7	93.9	97.1	101.2	100.6	90.9	72.8	56.2	44.2	35.2	30.7
87.5°	33.2	35.2	36.2	44.0	40.4	38.3	29.8	21.8	16.6	12.1	9.8
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):**

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9	460.9
2.5°	462.2	462.0	462.0	462.0	462.2	461.9	461.6	461.8	461.8	461.7	461.7
5°	467.6	467.5	467.6	467.6	467.6	467.6	467.5	467.0	467.2	467.4	467.5
7.5°	477.2	477.0	477.0	477.7	477.6	477.4	477.3	477.6	477.2	477.2	477.4
10°	490.2	490.8	490.6	491.0	490.9	490.6	490.4	490.6	491.0	491.2	490.6
12.5°	506.2	506.3	506.0	506.8	506.3	507.3	506.2	506.8	507.3	506.4	506.9
15°	519.2	519.1	519.6	519.8	519.7	520.0	520.8	520.4	520.0	520.6	520.9
17.5°	527.0	527.4	527.5	527.6	528.0	528.2	528.4	528.2	528.4	528.6	529.2
20°	528.8	528.6	528.9	529.0	529.4	529.4	529.7	529.6	530.0	530.1	530.3
22.5°	525.6	525.8	525.8	526.2	526.2	526.4	526.6	527.0	526.8	527.1	527.2
25°	521.4	521.6	521.7	521.6	521.6	521.8	521.8	521.8	522.3	522.6	522.6
27.5°	518.6	518.6	519.0	518.8	518.6	518.8	518.7	518.7	518.7	518.8	519.3
30°	519.6	519.3	519.0	519.0	518.8	518.6	518.3	517.9	517.9	518.0	517.9
32.5°	525.6	524.8	524.4	523.9	523.7	523.0	522.2	521.9	521.2	521.2	520.9
35°	540.7	539.8	539.8	538.2	537.4	537.0	536.3	534.2	534.4	533.6	533.3
37.5°	570.8	569.2	568.6	569.9	567.2	568.4	566.0	565.0	565.7	564.1	564.9
40°	621.5	624.1	623.0	624.5	625.2	625.4	625.5	623.2	625.5	621.8	623.0
42.5°	694.6	701.4	703.9	704.8	709.0	707.9	706.6	706.5	706.3	708.2	707.2
45°	786.4	787.4	799.1	801.3	803.7	806.3	805.6	808.6	810.8	807.8	808.2
47.5°	880.4	890.2	898.7	903.4	908.5	905.9	908.0	909.2	917.0	916.2	915.5
50°	983.9	1000.3	1004.8	1009.9	1013.8	1021.8	1021.2	1026.0	1025.2	1031.6	1032.5
52.5°	1082.0	1100.0	1118.3	1126.2	1132.4	1141.6	1145.2	1150.4	1148.4	1147.9	1152.7
55°	1179.6	1209.6	1230.6	1251.1	1262.6	1274.8	1280.0	1287.4	1290.7	1292.2	1286.2
57.5°	1276.2	1312.4	1347.8	1373.1	1390.7	1409.2	1419.0	1427.1	1436.6	1439.7	1436.7
60°	1389.4	1442.4	1488.7	1522.6	1555.0	1575.1	1596.2	1611.6	1614.4	1627.5	1635.9
62.5°	1540.0	1604.6	1663.3	1712.6	1762.9	1800.4	1838.4	1853.6	1868.6	1878.8	1884.9
65°	1745.4	1830.4	1911.6	1981.7	2043.4	2105.9	2150.2	2173.4	2203.3	2209.2	2202.8
67.5°	1925.5	2025.8	2126.7	2215.9	2282.6	2347.4	2400.0	2438.5	2466.4	2480.2	2485.9
69°	1945.4	2047.3	2150.4	2239.2	2320.0	2384.7	2438.4	2476.8	2504.5	2528.3	2532.4
70°	1904.8	2019.2	2119.4	2209.1	2292.4	2358.2	2406.4	2450.2	2481.8	2500.1	2506.6
72.5°	1672.1	1775.0	1876.2	1979.4	2050.9	2130.0	2169.6	2204.7	2246.8	2270.8	2265.5
75°	1267.2	1356.2	1444.4	1521.7	1576.8	1605.9	1652.3	1686.2	1680.1	1720.4	1721.5
77.5°	714.8	726.3	786.2	778.2	804.7	805.3	812.2	824.2	801.2	848.4	814.5
80°	173.4	171.0	183.4	168.8	167.6	166.4	162.2	170.4	171.4	163.0	164.6
82.5°	50.9	48.7	47.8	46.5	48.6	47.8	48.3	48.6	50.0	48.2	50.1
85°	28.0	26.2	26.2	25.5	25.3	23.8	23.6	23.6	22.7	23.0	22.8
87.5°	10.8	10.0	9.5	9.0	9.0	8.6	8.2	7.4	6.6	5.9	5.5
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)