

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: LUMARK

Report Number: P144526

Luminaire Tested: **LDRL-RW-F01-E-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P144526
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33700)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-RW-F01-E-7050
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (7) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2544.4 lumens
Efficiency: N/A
Efficacy: 98.2 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

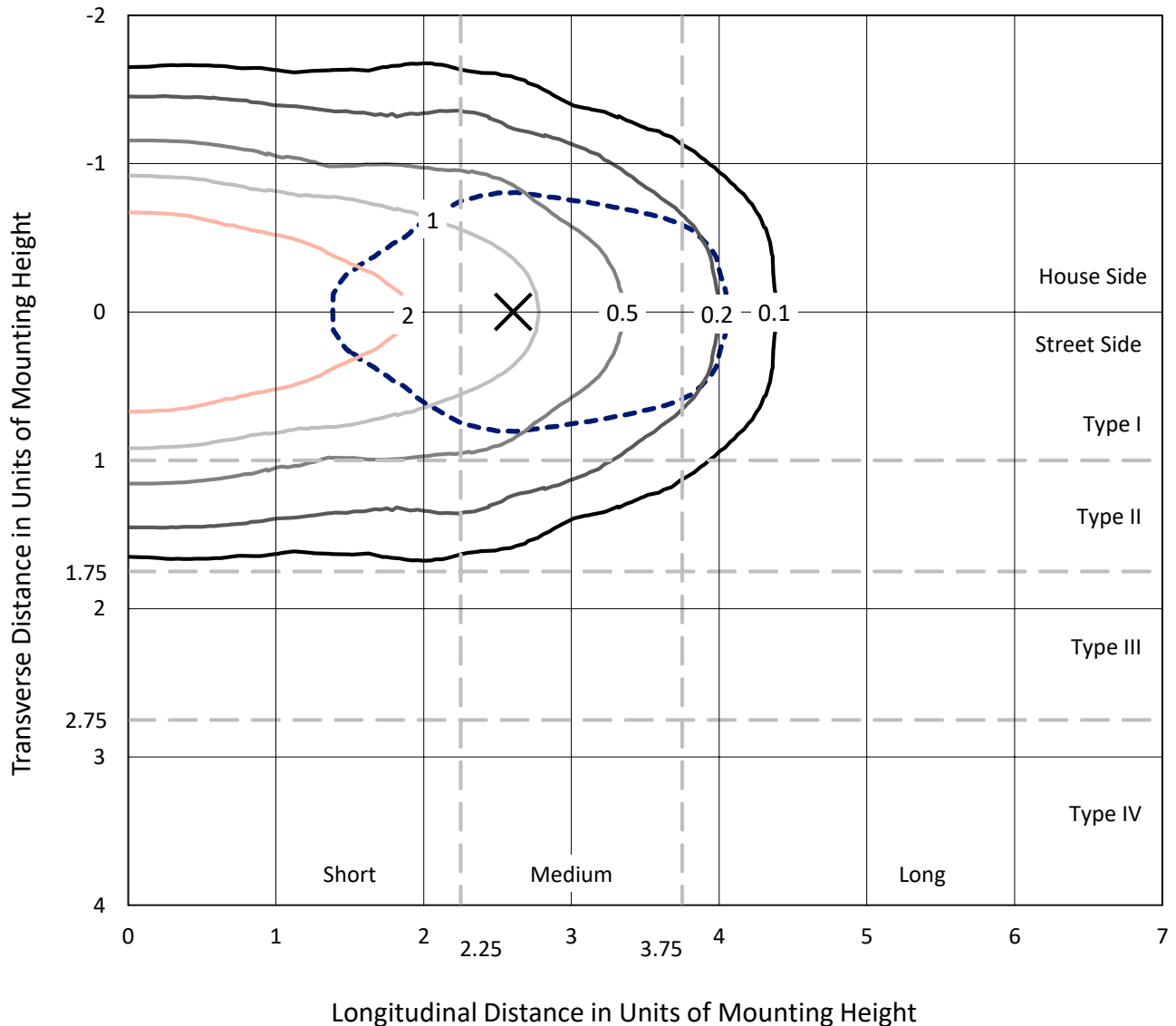
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

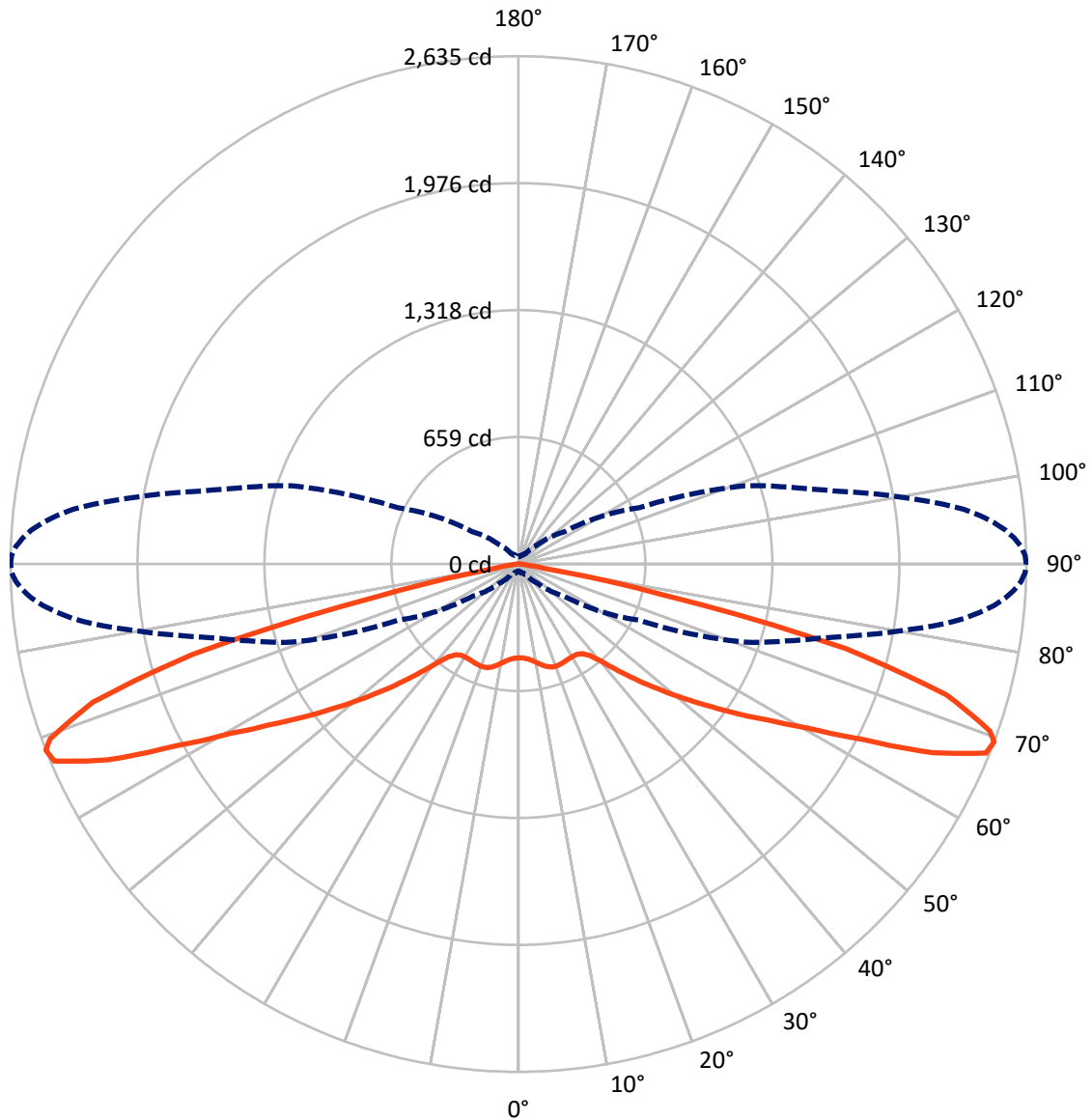
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 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
House Side	Lumens	1272.2	0.0	1272.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1272.2	0.0	1272.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	2544.4	0.0	2544.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	1.9
10°-20°	150.1	5.9
20°-30°	243.2	9.6
30°-40°	302.9	11.9
40°-50°	377.1	14.8
50°-60°	462.7	18.2
60°-70°	570.7	22.4
70°-80°	354.8	13.9
80°-90°	35.2	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°	2544.4	100.0
0°-180°	2544.4	100.0



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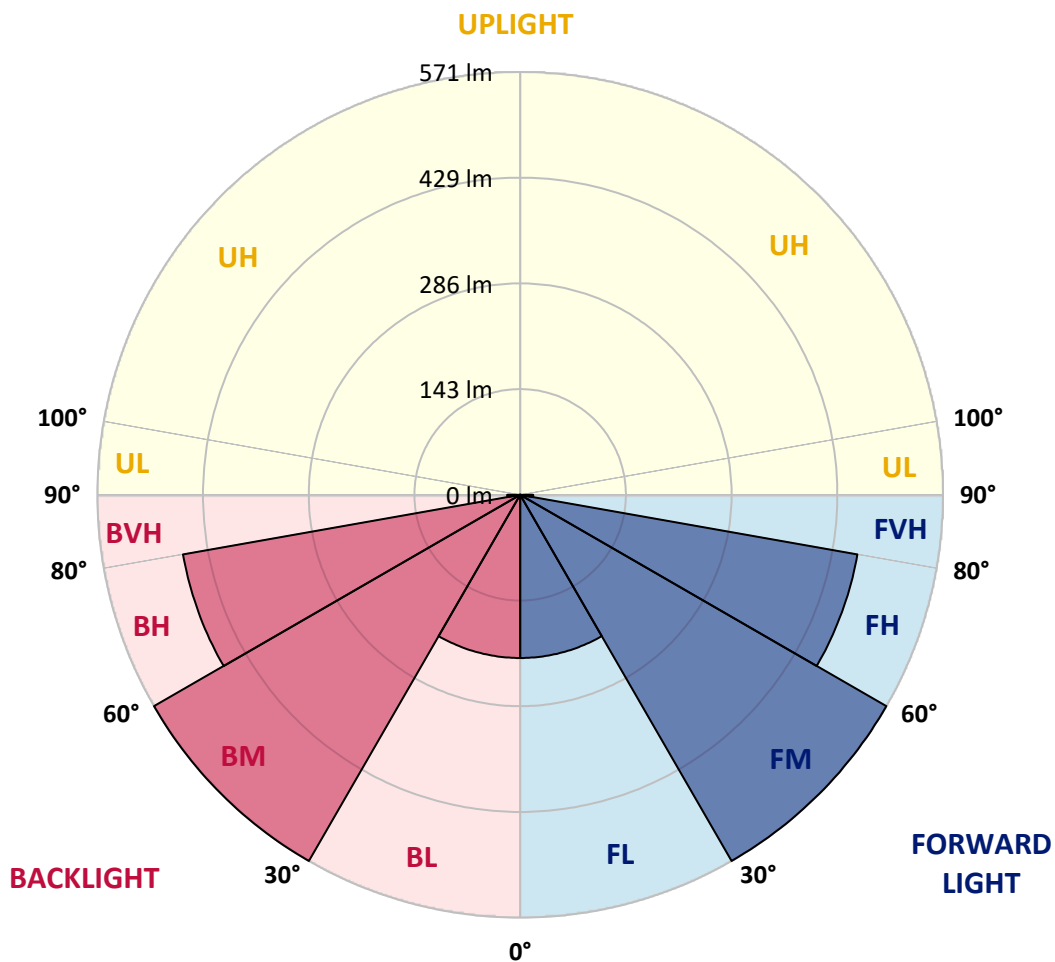
CATALOG NUMBER: LDRL-RW-F01-E-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	220.5	8.7			
FM (30°-60°)	571.4	22.5			
FH (60°-80°)	462.7	18.2			G0/660
FVH (80°-90°)	17.6	0.7			G1/100
BL (0°-30°)	220.5	8.7	B1/500		
BM (30°-60°)	571.4	22.5	B1/1000		
BH (60°-80°)	462.7	18.2	B1/500		G1/500
BVH (80°-90°)	17.6	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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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2
2.5°	488.5	488.0	489.0	489.8	489.6	489.7	489.4	488.9	488.9	489.0	489.0
5°	492.3	491.8	492.7	493.4	493.7	494.3	494.4	494.2	494.3	494.4	494.5
7.5°	496.9	496.4	497.6	498.6	500.6	501.6	502.6	503.6	503.7	503.8	503.8
10°	501.2	501.0	502.7	505.0	508.1	510.4	513.3	516.2	516.4	516.6	516.8
12.5°	504.0	504.0	506.8	510.7	516.1	521.0	525.8	530.6	531.0	531.5	531.9
15°	503.8	504.2	508.3	515.6	525.0	533.5	539.5	544.7	545.1	545.5	546.0
17.5°	500.4	500.4	506.4	518.0	532.6	545.2	553.0	555.8	556.0	556.2	556.3
20°	490.6	491.3	499.6	516.6	538.5	556.0	563.4	562.2	562.0	561.7	561.4
22.5°	473.9	474.8	486.0	508.6	539.6	563.0	570.6	565.2	564.4	563.6	562.8
25°	450.8	452.2	464.3	493.2	532.1	565.0	575.2	566.7	565.4	564.2	562.9
27.5°	423.8	424.6	438.8	469.2	514.8	558.2	577.4	569.7	568.1	566.5	564.9
30°	392.8	394.6	409.5	441.2	490.3	542.4	576.5	575.4	573.6	571.8	570.1
32.5°	361.9	363.4	378.0	412.3	462.1	520.6	572.3	584.2	582.7	581.2	579.7
35°	330.7	332.5	347.6	384.4	434.0	495.6	565.6	596.6	596.0	595.3	594.7
37.5°	303.4	304.5	319.4	357.6	409.5	472.8	556.9	613.3	614.8	616.2	617.6
40°	275.4	276.6	292.2	331.3	386.8	453.4	548.8	634.3	638.3	642.3	646.2
42.5°	248.7	249.7	264.8	303.8	361.7	436.5	544.0	659.7	667.3	675.0	682.6
45°	221.2	221.9	236.0	274.0	333.0	416.8	542.7	688.2	699.3	710.3	721.3
47.5°	194.2	195.8	210.4	246.4	300.2	388.8	540.8	719.8	734.5	749.1	763.7
50°	168.4	170.2	185.0	219.3	268.6	355.3	531.4	755.7	773.5	791.3	809.2
52.5°	142.0	143.8	158.8	191.4	239.2	317.8	505.0	793.3	814.5	835.7	856.9
55°	114.0	114.6	130.0	162.8	209.8	286.2	462.8	827.8	853.4	879.1	904.8
57.5°	82.8	85.1	100.3	130.8	179.8	258.4	409.3	845.4	877.4	909.4	941.5
60°	59.8	61.3	74.6	98.6	145.8	231.0	361.8	832.5	875.3	918.0	960.8
62.5°	47.2	49.0	59.2	74.3	112.8	200.9	330.8	797.2	857.2	917.2	977.1
65°	41.8	43.3	52.8	60.4	86.2	170.0	311.3	762.2	843.2	924.1	1005.1
67.5°	38.2	39.8	48.1	53.2	71.2	150.1	302.0	735.8	829.3	922.8	1016.3
69°	36.5	38.0	45.6	50.3	67.2	143.4	292.2	691.0	783.8	876.5	969.2
70°	35.6	36.8	43.8	48.6	65.6	137.8	277.5	637.8	727.3	816.8	906.2
72.5°	33.0	33.8	39.7	44.0	60.0	110.0	209.4	450.0	525.9	601.7	677.5
75°	29.2	30.2	35.4	39.5	45.8	66.1	131.0	261.2	313.2	365.2	417.1
77.5°	25.1	26.2	30.5	36.9	36.8	43.0	79.6	150.0	175.2	200.5	225.8
80°	21.5	22.5	26.4	36.5	30.8	34.0	59.3	111.9	122.1	132.2	142.4
82.5°	16.8	17.7	22.1	30.2	24.7	25.9	45.2	101.9	108.8	115.7	122.6
85°	10.6	10.9	16.1	20.8	17.6	15.7	29.1	78.4	83.4	88.4	93.5
87.5°	4.2	5.2	7.8	7.5	7.5	6.2	9.4	28.3	30.9	33.5	36.0
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2
2.5°	489.1	489.1	489.0	488.7	489.0	488.6	488.8	489.0	488.9	489.0	488.8
5°	494.6	494.8	494.8	494.3	494.5	494.6	494.6	494.5	494.6	494.8	494.4
7.5°	503.9	504.0	504.2	504.6	504.4	504.4	504.6	504.4	504.2	504.8	504.4
10°	517.0	517.2	517.2	518.0	517.6	517.9	518.7	518.6	518.2	518.8	518.7
12.5°	532.4	532.8	532.8	532.6	533.0	533.2	534.0	534.2	534.4	535.4	535.0
15°	546.4	546.8	547.1	547.3	547.9	548.0	548.6	549.0	549.2	549.5	549.7
17.5°	556.4	556.6	557.1	556.8	557.7	557.6	558.2	558.4	558.7	559.1	559.4
20°	561.2	561.0	561.0	560.8	560.8	561.0	561.0	561.4	561.2	561.6	562.0
22.5°	562.0	561.2	560.7	560.0	559.8	559.4	559.3	559.5	558.9	559.4	559.8
25°	561.6	560.3	559.4	558.4	557.5	556.6	556.1	556.0	555.5	555.6	556.0
27.5°	563.3	561.7	560.4	558.6	557.5	556.3	555.2	554.3	553.5	553.3	553.3
30°	568.3	566.5	565.0	562.9	561.0	559.5	558.0	556.8	555.2	554.4	553.8
32.5°	578.2	576.7	574.6	572.7	570.5	568.6	566.6	564.8	562.9	561.2	560.5
35°	594.0	593.4	592.2	590.9	588.8	586.4	584.8	582.5	580.4	578.0	577.2
37.5°	619.1	620.6	619.9	619.0	618.4	617.6	615.3	613.9	612.4	610.4	610.0
40°	650.2	654.2	658.2	660.8	659.8	663.0	663.5	663.8	662.5	664.2	664.5
42.5°	690.3	697.9	705.1	710.3	716.4	721.1	727.0	729.5	734.3	739.3	742.2
45°	732.4	743.4	753.7	764.5	775.0	786.7	798.0	805.9	817.5	826.2	831.6
47.5°	778.3	793.0	805.4	821.4	836.8	850.4	870.2	886.0	900.2	913.6	927.8
50°	827.0	844.8	860.0	879.7	898.3	919.8	943.0	963.2	985.4	1006.8	1025.8
52.5°	878.1	899.2	919.8	940.0	962.6	986.0	1011.1	1040.2	1066.8	1099.1	1122.2
55°	930.4	956.1	978.0	999.1	1023.1	1049.0	1078.8	1113.3	1147.1	1182.4	1217.5
57.5°	973.6	1005.6	1029.6	1054.2	1080.0	1105.7	1142.7	1178.0	1220.8	1264.2	1308.1
60°	1003.5	1046.3	1075.4	1106.6	1136.4	1167.6	1207.5	1252.2	1305.8	1358.3	1417.9
62.5°	1037.1	1097.1	1137.9	1179.5	1215.8	1253.2	1306.6	1358.1	1426.9	1487.4	1562.4
65°	1086.1	1167.0	1227.0	1283.0	1331.9	1382.9	1446.2	1510.4	1589.2	1672.8	1766.9
67.5°	1109.8	1203.3	1281.8	1351.0	1413.4	1478.3	1543.6	1619.7	1708.4	1809.1	1912.5
69°	1061.9	1154.6	1244.8	1314.8	1380.5	1449.8	1519.8	1596.5	1683.9	1788.3	1897.9
70°	995.6	1085.1	1181.0	1251.2	1317.4	1389.4	1460.6	1538.1	1621.8	1729.3	1840.1
72.5°	753.4	829.2	922.4	996.5	1066.2	1138.8	1212.2	1279.4	1364.2	1467.8	1569.8
75°	469.1	521.0	604.8	679.2	735.2	797.6	866.4	930.1	1015.2	1088.6	1186.8
77.5°	251.0	276.2	325.1	378.5	409.6	440.0	484.8	519.4	555.2	597.7	638.3
80°	152.6	162.8	179.4	191.0	186.6	174.2	170.1	157.8	162.2	154.6	149.0
82.5°	129.5	136.4	146.6	153.4	148.4	128.5	106.0	89.2	77.4	66.0	56.0
85°	98.5	103.5	108.8	111.9	111.6	101.8	80.8	62.6	48.8	37.8	31.4
87.5°	38.6	41.2	45.0	44.4	46.4	46.7	36.5	28.2	20.1	13.6	11.9
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°	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2	487.2
2.5°	488.4	488.4	488.4	488.6	488.7	488.8	488.7	488.8	488.5	488.3	488.4
5°	494.4	494.2	494.4	494.6	494.6	494.4	494.8	494.9	494.7	494.4	494.5
7.5°	504.8	504.8	504.6	505.4	504.7	504.8	505.2	505.2	505.0	505.1	505.2
10°	519.2	519.1	519.3	519.8	519.0	519.6	520.1	520.2	519.8	519.8	519.9
12.5°	535.1	535.8	535.8	536.2	536.2	536.6	536.7	536.8	537.1	537.2	536.7
15°	550.4	550.8	551.2	551.6	551.1	551.7	552.4	552.4	552.3	552.6	552.1
17.5°	559.8	560.2	560.8	560.6	560.8	561.2	561.7	561.8	562.0	562.0	562.1
20°	562.7	563.0	563.3	563.6	563.8	564.3	564.6	564.9	565.0	564.9	565.0
22.5°	560.3	560.7	561.4	561.6	561.7	562.4	562.8	563.0	563.2	563.4	563.1
25°	556.2	556.6	557.3	557.6	557.7	558.4	558.8	559.4	559.6	559.7	559.7
27.5°	553.4	553.7	554.2	554.5	554.6	555.4	556.0	556.4	556.4	556.5	556.5
30°	553.6	553.6	554.2	554.2	554.2	554.8	555.2	555.4	555.6	555.6	555.7
32.5°	559.4	559.1	559.6	558.8	558.9	558.8	558.8	559.0	558.8	558.9	558.6
35°	576.0	575.0	574.2	574.6	573.4	571.7	572.7	572.2	571.3	571.4	571.6
37.5°	607.6	606.7	607.5	606.8	607.0	604.7	605.2	603.1	602.5	603.3	601.1
40°	663.8	663.4	665.0	664.4	664.8	665.4	666.1	664.0	660.6	663.7	663.8
42.5°	741.8	745.6	747.1	749.2	751.5	750.6	752.6	753.2	749.4	752.2	752.9
45°	839.5	843.6	848.4	849.8	853.5	854.0	855.6	856.0	852.6	852.9	853.7
47.5°	942.0	949.4	955.0	958.9	962.8	963.6	964.4	962.8	963.0	963.8	963.8
50°	1042.6	1058.5	1068.4	1076.2	1082.8	1079.4	1082.3	1082.6	1083.6	1081.4	1082.7
52.5°	1148.4	1169.5	1186.1	1199.1	1203.1	1215.4	1210.4	1214.3	1216.9	1213.1	1215.6
55°	1251.8	1281.8	1308.4	1327.2	1340.5	1353.1	1355.0	1365.0	1363.9	1367.7	1366.0
57.5°	1350.0	1392.0	1430.2	1457.9	1477.0	1496.1	1509.1	1520.1	1521.2	1532.1	1525.9
60°	1468.8	1527.4	1576.4	1617.9	1646.0	1674.4	1696.8	1714.9	1719.0	1737.8	1731.6
62.5°	1629.2	1700.6	1763.2	1812.0	1874.4	1904.4	1948.2	1975.5	1992.5	1997.2	2005.9
65°	1854.6	1947.6	2030.3	2108.2	2178.4	2227.2	2277.7	2318.4	2351.0	2348.2	2361.6
67.5°	2022.0	2128.1	2227.6	2321.0	2396.6	2459.3	2517.4	2561.4	2590.5	2609.1	2617.0
69°	2004.6	2118.4	2228.2	2328.0	2406.0	2476.0	2532.6	2575.8	2609.2	2629.4	2635.3
70°	1946.6	2063.6	2178.0	2275.9	2355.4	2432.2	2489.9	2538.1	2569.9	2591.9	2595.3
72.5°	1683.8	1810.4	1911.7	2018.5	2095.0	2172.9	2209.1	2268.8	2310.2	2323.6	2323.4
75°	1270.0	1375.6	1464.6	1543.5	1612.0	1664.8	1681.8	1724.4	1758.8	1758.4	1755.1
77.5°	683.8	708.8	742.0	753.2	774.3	774.0	752.8	759.5	778.9	741.2	753.4
80°	146.8	144.5	142.6	141.6	141.0	141.2	142.0	137.2	141.9	139.8	130.8
82.5°	51.1	49.9	48.7	49.6	48.9	49.4	49.3	49.9	49.8	49.6	48.5
85°	28.8	27.7	27.1	27.6	26.6	25.8	25.2	24.9	24.8	24.2	23.9
87.5°	11.0	10.9	10.8	10.4	9.3	8.6	8.0	7.0	6.6	6.0	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

(END OF REPORT)