

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: P163231

Luminaire Tested: **LDRL-SL2-F01-E-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P163231  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-SL2-F01-E-7030-HSS  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (7) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1341 lumens  
Efficiency: N/A  
Efficacy: 51.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 1' x H: 0.1')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B0 - 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

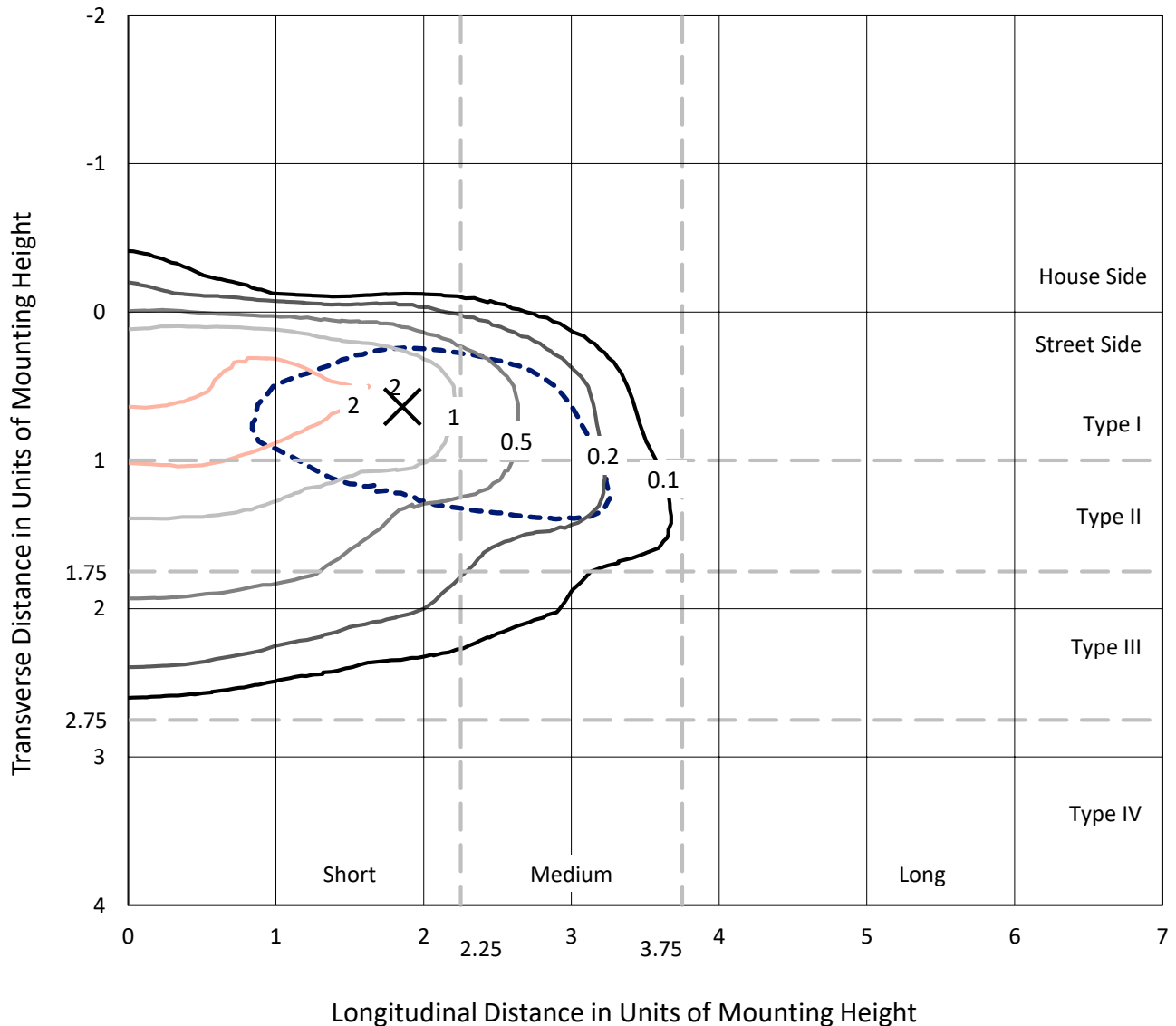


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### Iso-Footcandle Lines of Horizontal Illumination

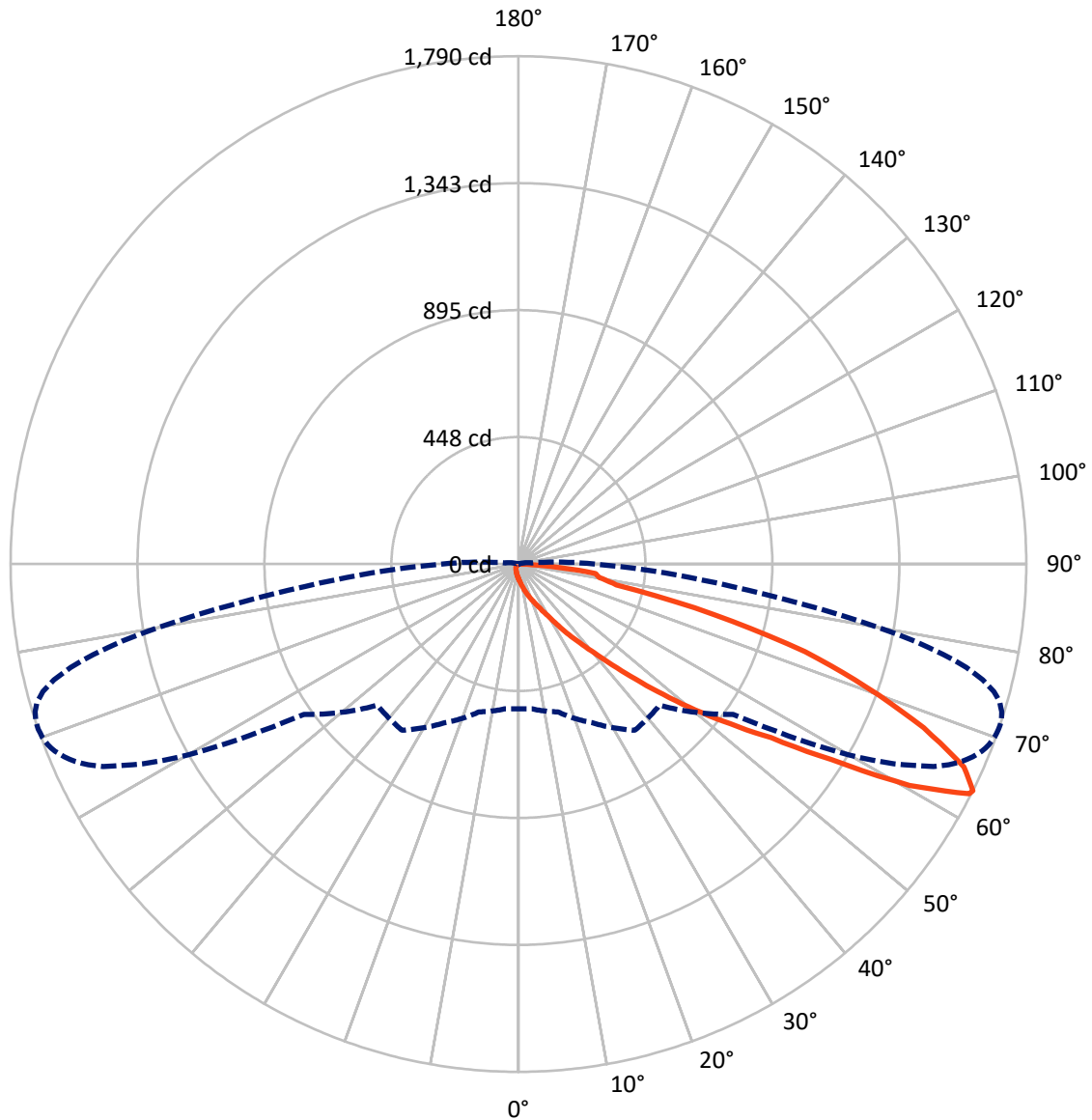
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.8 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	28.5	0.0	28.5
	% Fixture	2.1	0.0	2.1
<b>Street Side</b>	Lumens	1312.5	0.0	1312.5
	% Fixture	97.9	0.0	97.9
<b>Total</b>	Lumens	1341.0	0.0	1341.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.7	0.4
10°-20°	22.0	1.6
20°-30°	44.8	3.3
30°-40°	109.4	8.2
40°-50°	244.7	18.2
50°-60°	344.1	25.7
60°-70°	404.6	30.2
70°-80°	146.1	10.9
80°-90°	19.5	1.5
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°	1341.0	100.0
0°-180°	1341.0	100.0



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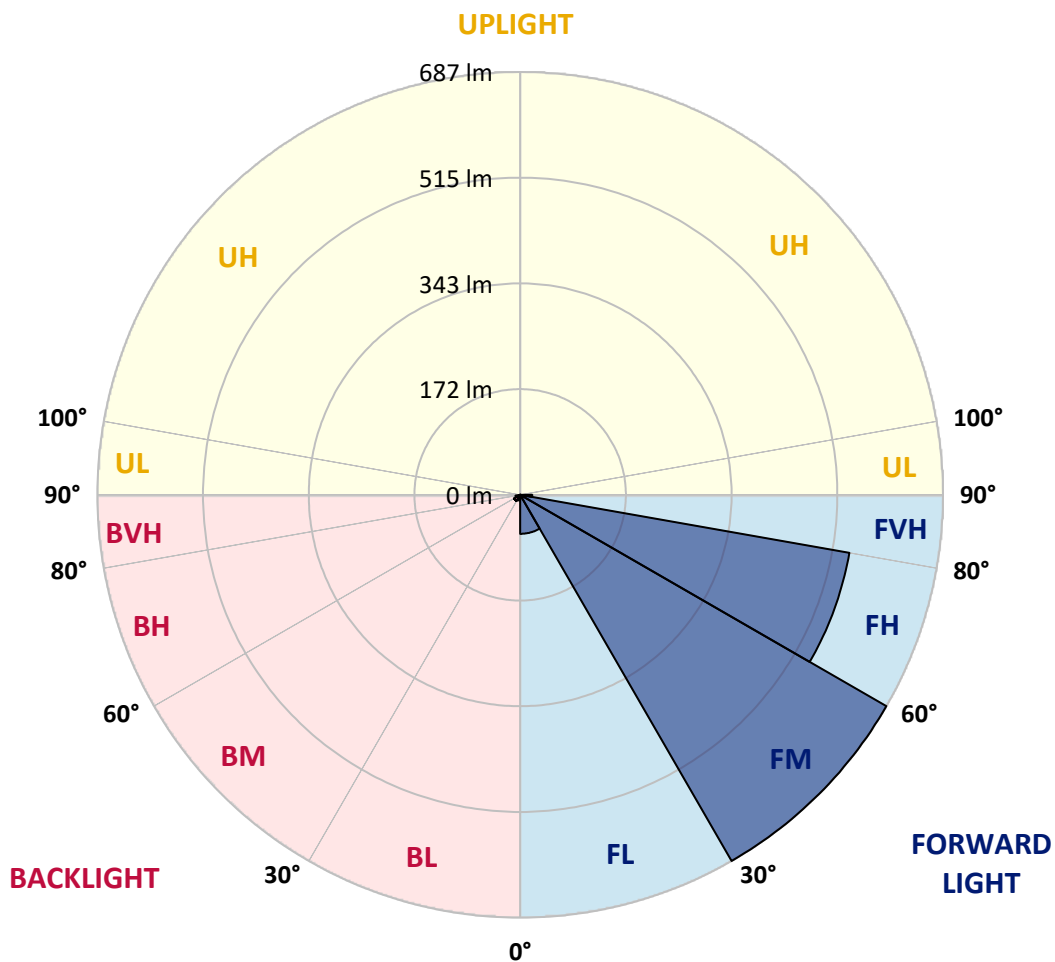
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	63.4	4.7			
FM	(30°-60°)	686.8	51.2			
FH	(60°-80°)	542.9	40.5			G0/660
FVH	(80°-90°)	19.5	1.5			G1/100
BL	(0°-30°)	9.2	0.7	B0/110		
BM	(30°-60°)	11.5	0.9	B0/220		
BH	(60°-80°)	7.8	0.6	B0/110		G0/110
BVH	(80°-90°)	0.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
2.5°	67.3	68.0	67.5	66.3	64.8	62.9	61.2	61.2	61.0	60.2	60.5
5°	88.2	88.5	87.5	84.6	81.9	77.8	73.1	72.7	72.2	71.4	71.2
7.5°	108.7	109.7	108.7	105.6	100.2	93.9	86.5	85.8	84.4	84.4	83.4
10°	129.7	129.7	128.7	125.1	120.2	111.2	101.9	100.7	99.0	98.5	97.0
12.5°	144.6	144.6	144.1	142.1	138.2	130.2	119.0	117.7	115.6	114.8	113.1
15°	150.4	150.4	150.7	152.4	152.6	149.0	137.3	136.3	134.1	132.1	131.4
17.5°	154.1	153.8	153.8	156.3	160.7	163.1	155.5	154.6	152.1	151.1	148.7
20°	162.1	161.6	160.2	160.2	164.3	172.8	172.8	172.6	169.9	169.2	168.0
22.5°	174.1	173.6	169.2	165.5	167.5	178.2	188.2	187.7	186.7	185.8	185.0
25°	193.6	191.9	184.3	173.6	171.9	183.3	199.9	201.1	201.9	201.9	202.3
27.5°	223.1	220.9	207.5	187.5	179.9	191.6	212.8	215.3	217.5	217.9	220.1
30°	264.0	260.1	240.9	211.6	194.3	203.8	231.8	234.5	237.7	238.7	242.1
32.5°	331.3	329.1	310.6	266.7	229.7	227.7	258.4	261.8	266.0	267.7	271.8
35°	433.7	434.2	419.1	379.6	328.4	301.6	306.0	308.9	310.3	315.5	317.7
37.5°	503.2	504.4	507.8	492.2	455.6	428.3	394.0	397.1	389.6	390.3	390.6
40°	541.2	545.1	565.1	580.2	577.3	561.4	533.9	535.6	521.5	518.3	502.9
42.5°	566.6	571.7	603.6	650.4	674.3	688.7	682.4	681.6	670.7	666.5	653.6
45°	582.4	587.0	627.3	696.3	751.4	793.3	810.6	812.5	803.3	799.1	788.4
47.5°	581.7	587.0	630.2	713.3	794.5	861.5	910.3	912.7	918.3	914.7	915.4
50°	549.5	554.6	598.0	684.3	781.8	892.8	982.0	989.8	998.8	1004.9	1007.8
52.5°	510.5	514.1	552.7	634.6	727.7	879.8	1024.4	1037.8	1051.2	1062.7	1070.7
55°	496.1	500.3	530.5	598.5	684.3	825.7	1044.1	1063.9	1082.9	1101.7	1117.0
57.5°	503.7	507.6	529.3	581.4	658.5	768.7	1049.8	1080.5	1111.7	1142.1	1172.4
60°	531.5	535.6	554.1	597.3	651.6	735.7	1027.8	1078.8	1130.7	1183.8	1233.8
62.5°	520.5	522.2	549.5	625.1	700.4	707.7	948.1	1019.3	1098.5	1180.4	1261.1
63°	510.0	512.0	539.8	617.5	715.3	703.6	923.5	998.6	1082.2	1170.4	1258.2
65°	462.5	462.7	483.9	545.3	698.7	710.9	813.8	885.4	981.5	1087.3	1198.2
67.5°	345.2	343.5	364.0	410.8	548.5	711.1	698.5	738.7	805.5	899.3	998.8
70°	122.4	119.7	152.8	217.7	341.8	581.7	600.2	602.9	621.4	672.1	734.5
72.5°	39.7	40.5	48.8	79.7	157.5	391.5	543.4	535.1	530.2	530.0	538.3
75°	15.8	16.1	19.5	35.3	70.7	188.7	475.9	480.5	482.2	484.7	487.3
77.5°	7.6	8.3	11.0	19.7	35.1	93.4	340.6	379.8	402.3	419.6	430.0
80°	2.7	3.2	6.1	12.2	16.3	42.9	179.4	216.5	249.4	291.8	328.4
82.5°	0.0	0.0	1.2	8.5	9.0	17.3	73.6	86.3	98.7	128.0	164.3
85°	0.0	0.0	0.0	2.4	2.7	2.9	24.9	30.0	33.6	39.3	45.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1.5	3.6	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



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**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
2.5°	60.0	59.7	59.7	59.2	59.0	58.5	58.3	57.5	57.3	57.3	57.3
5°	70.9	70.0	69.5	68.3	67.5	67.3	66.1	65.6	64.8	65.1	63.9
7.5°	83.1	81.4	80.7	79.0	78.5	76.8	76.3	75.1	74.4	72.9	72.4
10°	96.5	94.3	93.1	90.4	89.7	88.5	87.0	85.6	84.4	82.9	82.2
12.5°	111.9	109.9	109.0	105.3	103.6	101.9	99.9	98.0	96.1	94.8	93.1
15°	129.9	126.8	125.8	122.4	119.5	117.3	114.6	112.1	110.7	108.2	106.5
17.5°	147.7	144.6	143.8	138.7	135.6	134.1	131.2	128.0	125.3	122.9	120.2
20°	165.5	163.3	161.4	156.5	153.1	150.7	146.8	143.6	141.4	138.0	134.6
22.5°	183.3	181.1	179.7	174.5	171.4	168.0	164.6	161.1	158.0	153.8	149.9
25°	201.6	200.2	199.4	194.8	191.9	188.7	185.3	181.4	177.5	172.8	168.7
27.5°	220.6	221.1	219.7	218.7	215.5	213.3	208.0	205.3	202.3	196.7	191.6
30°	244.8	246.2	245.7	246.5	244.5	243.1	238.9	235.5	232.1	226.7	220.9
32.5°	275.2	277.2	278.2	280.8	279.9	279.4	278.2	273.3	270.8	261.6	259.1
35°	322.3	321.3	325.5	327.7	326.7	326.2	324.7	322.0	319.1	312.5	306.4
37.5°	383.5	384.5	385.9	381.5	378.6	378.4	374.0	371.3	367.1	359.8	352.5
40°	495.6	489.5	482.7	464.2	456.1	451.5	438.6	434.9	427.8	417.8	410.3
42.5°	641.4	635.3	614.8	583.9	567.3	544.4	533.9	521.0	511.0	494.6	485.9
45°	786.2	768.7	766.2	730.2	709.7	679.4	660.7	639.0	616.3	594.8	579.2
47.5°	908.4	904.5	892.5	870.6	851.6	826.2	802.1	768.7	745.3	714.8	686.8
50°	1006.1	1005.9	1001.5	988.8	973.0	952.5	931.3	903.0	876.4	839.1	809.1
52.5°	1079.3	1083.2	1084.6	1080.7	1074.6	1056.6	1045.8	1022.2	999.8	968.1	935.7
55°	1132.9	1147.3	1154.6	1162.9	1161.2	1154.8	1154.3	1139.0	1128.7	1103.6	1080.7
57.5°	1199.2	1222.8	1245.5	1285.7	1287.2	1301.3	1308.7	1316.0	1317.9	1307.9	1300.4
60°	1283.6	1331.8	1374.7	1458.8	1480.8	1515.4	1537.8	1562.2	1582.9	1584.6	1584.1
62.5°	1343.0	1417.4	1486.6	1611.4	1654.1	1694.1	1724.1	1747.7	1762.1	1776.7	1783.6
63°	1344.7	1426.2	1499.8	1628.5	1673.4	1711.4	1739.9	1761.9	1777.0	1785.8	1790.1
65°	1303.5	1402.3	1490.0	1618.3	1660.4	1698.7	1713.6	1728.0	1735.3	1738.7	1725.8
67.5°	1104.9	1201.4	1303.8	1447.1	1483.2	1529.0	1541.2	1548.6	1552.0	1551.2	1540.3
70°	826.2	907.1	1021.0	1184.8	1232.6	1277.4	1305.2	1317.2	1321.1	1319.9	1303.5
72.5°	576.8	624.3	718.2	900.6	965.7	1023.2	1057.6	1075.3	1079.0	1071.7	1056.6
75°	484.4	486.9	508.1	607.8	668.7	730.2	768.9	780.1	772.8	750.6	712.1
77.5°	432.5	437.8	437.8	452.7	464.7	481.7	485.4	458.1	426.4	385.4	352.3
80°	362.8	381.5	394.7	405.7	406.9	403.5	394.4	379.1	354.7	323.5	288.9
82.5°	220.4	257.4	272.6	329.1	356.9	375.7	374.2	353.7	335.2	302.8	273.3
85°	55.6	60.0	65.1	84.6	94.8	115.8	129.0	135.1	137.3	126.0	114.1
87.5°	5.4	3.6	6.1	4.6	6.6	4.9	6.6	6.1	7.6	8.0	8.8
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):**

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
2.5°	56.8	56.6	56.3	56.1	55.8	55.6	55.1	55.1	54.6	54.4	54.1
5°	63.1	62.7	62.4	61.9	61.2	60.7	60.0	59.0	58.3	58.0	57.5
7.5°	71.2	70.0	69.5	68.7	67.8	66.3	65.3	64.6	63.4	62.7	61.2
10°	80.2	79.0	77.5	76.1	74.6	72.9	71.7	70.7	68.7	67.8	66.1
12.5°	91.7	89.5	87.8	85.8	83.9	81.9	80.5	77.5	75.8	73.6	72.2
15°	103.4	101.4	99.5	97.0	94.1	90.9	89.5	86.8	84.6	81.2	79.2
17.5°	117.5	113.9	110.9	108.0	105.3	102.4	99.5	95.3	92.2	89.2	85.3
20°	131.4	127.0	123.9	119.9	116.0	111.4	108.0	105.1	100.7	96.8	92.6
22.5°	146.3	141.9	136.8	132.9	127.5	123.9	119.2	114.3	109.9	104.8	99.7
25°	164.3	159.7	153.8	148.7	142.6	137.5	131.9	126.3	120.9	115.1	108.5
27.5°	186.5	181.6	175.3	169.2	161.1	154.8	149.4	141.9	135.1	127.7	120.2
30°	214.5	209.2	201.4	192.6	184.5	177.5	169.9	159.9	152.4	143.6	133.8
32.5°	251.1	244.8	234.3	226.0	216.0	206.7	196.2	186.3	175.5	164.1	152.8
35°	297.2	291.3	279.1	266.9	256.0	245.0	231.8	220.4	205.3	191.4	177.0
37.5°	345.0	334.5	323.3	310.1	296.4	283.3	267.2	251.4	234.0	218.9	200.9
40°	399.6	386.9	377.6	363.5	344.2	325.5	310.6	290.8	269.1	248.9	227.7
42.5°	474.4	460.3	443.7	422.2	408.3	386.4	367.1	343.7	315.2	292.5	266.9
45°	561.0	541.7	525.6	504.9	488.1	460.8	438.3	407.1	378.6	348.9	317.7
47.5°	659.7	635.8	612.4	591.9	565.1	538.3	509.8	476.6	440.0	407.4	370.3
50°	773.1	739.2	706.7	680.4	643.6	612.6	581.7	544.4	503.9	466.4	424.2
52.5°	899.1	859.8	816.9	776.5	733.8	694.1	656.8	613.9	568.8	522.9	475.9
55°	1051.2	1021.7	971.2	919.8	862.8	809.6	761.6	708.5	653.6	593.4	543.9
57.5°	1289.4	1275.0	1232.8	1181.4	1107.0	1042.4	961.0	895.9	816.5	733.6	669.7
60°	1612.2	1594.4	1570.7	1529.0	1470.0	1382.3	1292.6	1191.4	1070.5	955.7	846.7
62.5°	1784.3	1777.9	1758.7	1729.9	1674.8	1605.6	1515.1	1404.0	1267.5	1128.0	989.0
63°	1789.4	1781.4	1764.8	1735.5	1687.0	1620.0	1531.2	1423.2	1289.6	1147.5	1005.6
65°	1720.2	1717.0	1700.2	1668.2	1635.1	1583.9	1515.1	1422.3	1310.1	1175.8	1034.6
67.5°	1525.6	1516.1	1490.3	1480.5	1457.4	1421.8	1369.4	1305.5	1225.3	1119.7	997.8
70°	1290.4	1276.2	1243.8	1226.5	1198.2	1175.8	1143.9	1098.3	1048.8	975.2	884.2
72.5°	1041.0	1011.7	982.0	936.9	897.4	857.4	822.0	789.9	735.5	705.8	636.8
75°	676.0	622.9	571.9	503.7	442.2	387.9	335.0	308.1	252.3	229.7	197.2
77.5°	320.8	291.1	251.1	220.1	180.6	147.5	120.4	90.4	70.9	55.6	42.4
80°	258.9	233.8	209.7	181.6	151.9	121.2	92.9	69.5	49.3	34.1	24.1
82.5°	230.9	203.6	173.8	154.6	134.3	109.9	90.2	73.6	54.4	39.7	27.1
85°	89.7	75.6	58.3	47.5	37.1	30.5	27.6	19.0	14.9	11.7	9.0
87.5°	7.8	6.3	5.1	3.4	3.6	1.9	2.2	1.5	1.2	1.2	1.0
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):**

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
2.5°	53.9	53.6	53.4	52.9	52.9	52.4	52.2	51.9	50.7	48.0	45.8
5°	56.6	56.1	55.6	54.8	54.4	53.6	53.1	52.4	49.7	44.6	40.2
7.5°	60.5	59.5	58.8	57.3	56.6	55.6	54.8	53.6	49.3	41.4	35.3
10°	65.1	63.4	62.2	60.5	59.0	57.8	56.6	54.8	48.8	38.0	31.0
12.5°	70.7	68.7	66.3	64.4	62.4	60.7	59.0	56.8	48.0	35.1	27.6
15°	76.3	73.4	71.7	69.0	66.3	63.9	61.4	59.5	48.3	31.9	24.6
17.5°	82.6	79.7	76.1	73.1	70.2	67.0	64.1	60.2	47.0	29.5	22.4
20°	88.7	84.6	81.2	77.5	73.4	69.5	65.8	62.4	46.1	27.1	20.5
22.5°	95.3	90.4	86.1	81.4	76.3	71.9	67.5	63.1	44.4	24.9	18.8
25°	103.4	97.8	91.4	85.8	80.5	75.1	69.5	64.1	42.7	22.9	17.6
27.5°	113.1	105.8	99.5	92.4	84.8	78.0	71.9	66.1	41.0	21.5	16.3
30°	125.6	117.0	108.0	99.0	90.9	83.1	74.6	67.3	39.3	20.0	15.1
32.5°	142.1	131.4	120.4	109.9	99.2	89.2	80.2	70.7	38.3	18.8	13.9
35°	164.1	150.2	136.8	123.6	110.7	98.5	86.8	76.1	38.3	17.3	12.4
37.5°	184.8	168.7	151.6	135.3	119.9	105.8	91.9	79.0	36.3	16.1	11.2
40°	207.2	188.0	168.0	148.7	130.2	112.6	96.8	81.9	34.6	14.6	10.0
42.5°	241.6	217.2	191.1	168.7	146.5	124.8	105.1	87.5	32.4	13.2	8.8
45°	286.7	255.7	225.0	197.7	169.4	142.9	119.5	97.8	31.9	11.9	7.6
47.5°	335.0	298.4	262.3	227.4	194.3	163.3	135.3	109.2	31.9	10.7	6.6
50°	383.0	337.2	298.6	258.2	220.9	184.3	150.9	121.2	32.2	9.8	5.4
52.5°	426.4	377.4	334.2	287.4	246.2	203.8	167.5	132.9	31.7	8.5	4.4
55°	486.6	429.1	379.1	327.4	279.1	231.4	190.2	150.4	31.9	7.6	3.6
57.5°	597.5	530.0	469.8	402.0	346.4	284.7	234.8	186.5	34.9	6.3	2.7
60°	756.7	669.0	584.4	501.7	431.0	357.6	292.8	236.0	41.0	5.1	1.9
62.5°	863.7	748.9	648.0	556.8	474.7	397.9	327.2	262.6	45.1	4.1	1.2
63°	874.7	756.0	654.6	560.5	476.6	399.8	328.6	264.5	45.3	3.9	1.2
65°	895.4	768.2	658.2	561.2	474.7	397.1	327.7	264.3	45.8	3.2	1.0
67.5°	871.8	749.4	637.0	540.2	457.6	381.3	315.5	254.5	45.6	2.2	0.7
70°	779.6	678.2	579.5	489.3	414.2	345.2	287.2	232.1	41.9	1.5	0.5
72.5°	572.4	503.4	426.9	361.8	312.0	259.1	221.1	174.3	32.4	1.0	0.2
75°	169.7	154.6	129.9	114.6	101.2	83.6	74.4	58.0	16.6	0.5	0.0
77.5°	33.9	30.7	27.6	25.1	23.6	20.2	19.3	15.8	6.8	0.2	0.0
80°	17.8	14.6	12.4	11.0	9.5	7.8	6.6	5.4	1.2	0.0	0.0
82.5°	17.1	11.5	8.3	6.8	5.9	4.6	3.6	2.7	0.7	0.0	0.0
85°	6.3	4.9	3.6	2.9	2.4	2.2	1.7	1.5	0.0	0.0	0.0
87.5°	1.0	0.7	0.7	0.5	0.5	0.2	0.2	0.2	0.0	0.0	0.0
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):**

	125°	135°	145°	155°	165°	175°	180°
0°	51.4	51.4	51.4	51.4	51.4	51.4	51.4
2.5°	43.6	41.7	40.7	39.5	39.5	39.3	39.7
5°	36.3	33.6	31.7	30.2	30.5	29.7	30.0
7.5°	30.7	28.0	26.3	25.3	25.1	24.9	24.9
10°	26.6	24.1	22.7	21.9	21.7	21.7	21.7
12.5°	23.6	21.2	20.0	19.5	19.5	19.3	19.3
15°	21.2	19.3	18.0	17.6	17.6	17.3	17.6
17.5°	19.3	17.3	16.3	15.8	15.8	15.6	15.6
20°	17.6	15.8	14.9	14.1	14.1	13.9	14.1
22.5°	16.1	14.4	13.2	12.7	12.4	12.2	12.4
25°	14.6	12.9	11.7	11.0	10.7	10.7	10.5
27.5°	13.4	11.7	10.2	9.5	9.3	9.3	9.0
30°	12.2	10.2	8.8	8.0	7.8	7.8	7.8
32.5°	11.0	8.8	7.6	6.8	6.6	6.6	6.6
35°	9.8	7.6	6.3	5.6	5.4	5.4	5.4
37.5°	8.3	6.3	4.9	4.4	4.1	3.9	3.9
40°	7.1	4.9	3.6	3.2	2.7	2.7	2.7
42.5°	5.9	3.9	2.7	1.9	1.7	1.5	1.7
45°	4.9	2.9	1.7	1.0	0.7	0.7	0.7
47.5°	3.9	1.9	0.7	0.2	0.2	0.2	0.2
50°	2.9	1.2	0.2	0.0	0.0	0.2	0.2
52.5°	2.2	0.7	0.0	0.0	0.0	0.0	0.0
55°	1.2	0.2	0.0	0.0	0.0	0.0	0.0
57.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.5	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)