

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: P196711

Luminaire Tested: **NAV-AF-01-D-UNV-SLR-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-SLR-7030-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4216.3 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 44  
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

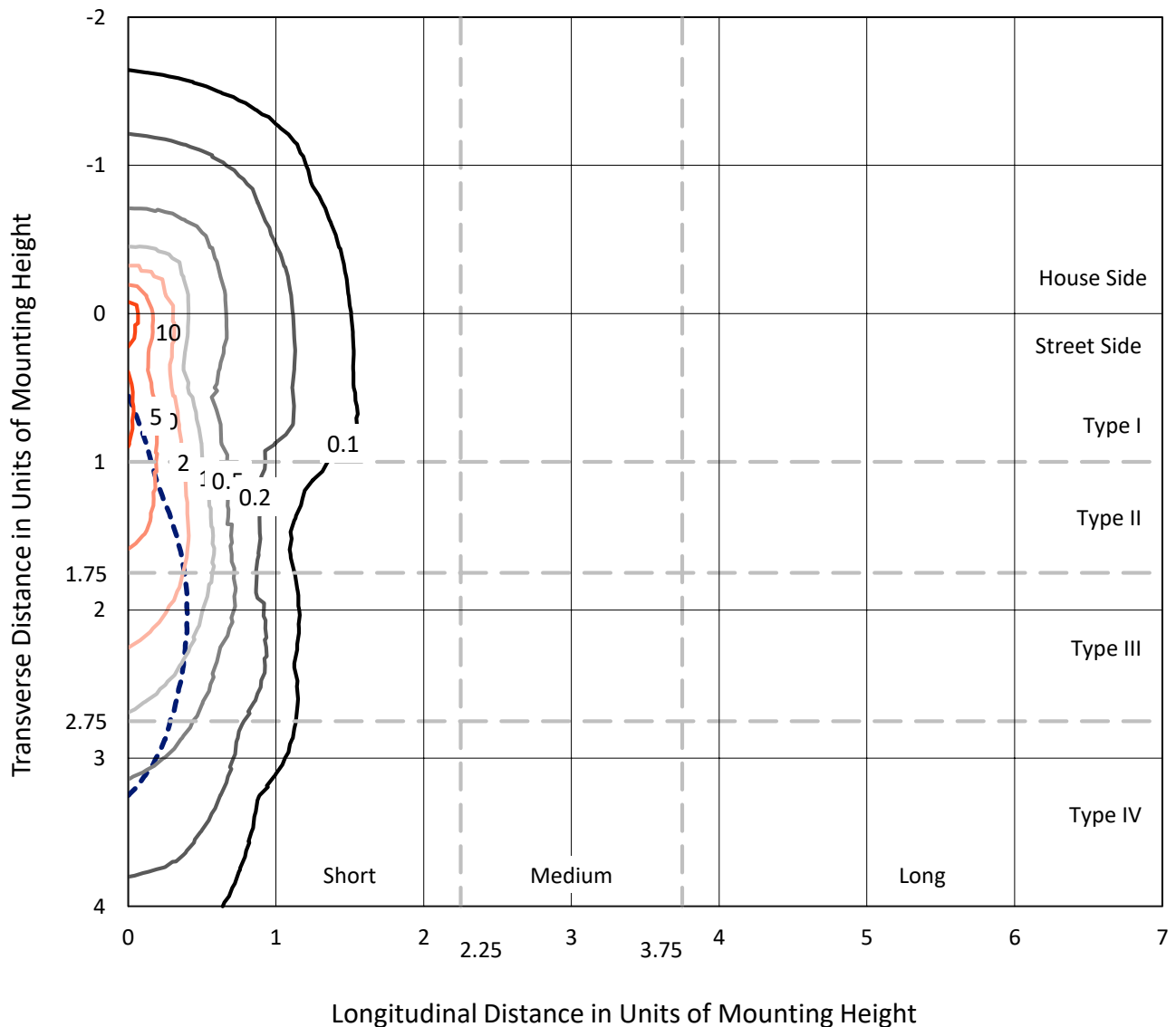


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### Iso-Footcandle Lines of Horizontal Illumination

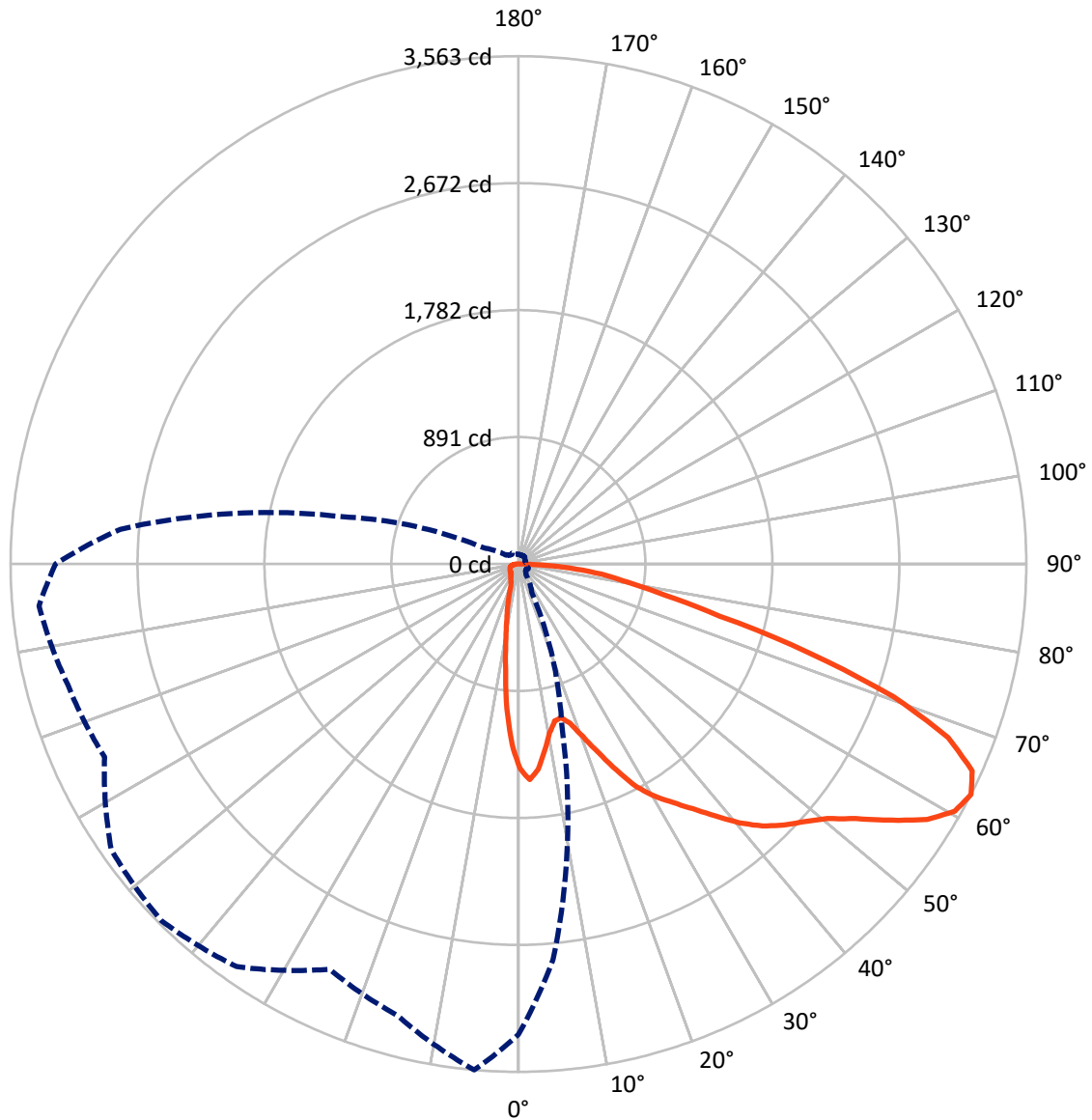
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.4 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	746.9	0.0	746.9
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	3469.4	0.0	3469.4
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	4216.3	0.0	4216.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.5	2.5
10°-20°	190.9	4.5
20°-30°	274.6	6.5
30°-40°	420.6	10.0
40°-50°	614.9	14.6
50°-60°	894.7	21.2
60°-70°	1036.7	24.6
70°-80°	540.4	12.8
80°-90°	138.9	3.3
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°	4216.3	100.0
0°-180°	4216.3	100.0



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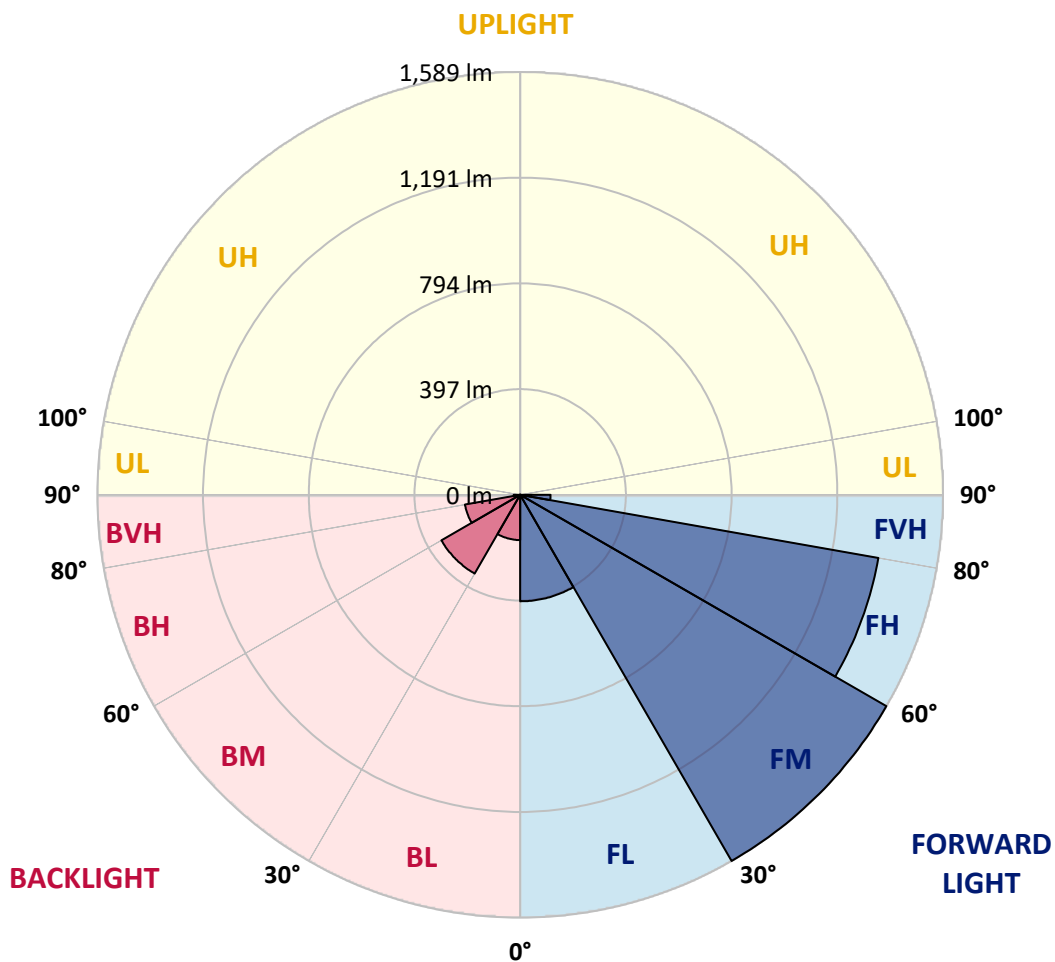
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	400.1	9.5			
FM	(30°-60°)	1588.5	37.7			
FH	(60°-80°)	1366.4	32.4			G1/1800
FVH	(80°-90°)	114.3	2.7			G2/225
BL	(0°-30°)	169.9	4.0	B1/500		
BM	(30°-60°)	341.7	8.1	B1/1000		
BH	(60°-80°)	210.6	5.0	B1/500		G1/500
BVH	(80°-90°)	24.6	0.6			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5
2.5°	1483.8	1463.1	1415.1	1373.0	1320.3	1280.9	1232.9	1207.6	1188.8	1176.4	1166.3
5°	1386.1	1335.9	1244.3	1163.8	1077.0	1014.4	940.9	901.0	876.1	862.7	856.6
7.5°	1240.8	1174.5	1055.9	948.1	839.4	761.2	705.6	646.3	614.8	594.3	587.6
10°	1114.0	1039.0	897.6	776.2	692.3	636.8	589.1	534.8	494.3	459.2	446.0
12.5°	1040.3	953.2	791.8	682.0	611.8	552.1	501.6	442.9	400.4	363.9	349.7
15°	1024.8	927.5	747.5	622.1	535.9	464.1	403.5	339.7	298.1	267.8	258.0
17.5°	1071.9	951.9	728.8	567.4	463.5	375.8	301.1	232.6	198.1	181.6	177.6
20°	1168.7	1005.7	719.9	518.2	393.2	289.2	208.1	158.1	141.0	136.0	135.7
22.5°	1296.2	1093.2	729.8	477.8	327.1	213.4	152.5	129.9	122.9	120.1	120.1
25°	1440.1	1211.4	755.7	447.0	269.0	166.0	131.4	119.2	113.4	110.7	111.0
27.5°	1616.3	1355.5	791.1	418.5	227.5	145.6	122.9	112.5	106.6	103.9	104.3
30°	1748.9	1479.3	821.7	392.6	206.1	137.2	118.3	108.5	102.1	98.2	97.8
32.5°	1873.0	1588.4	846.5	373.8	193.8	122.6	107.0	99.7	94.2	89.6	88.6
35°	2010.4	1691.2	858.1	373.2	185.8	110.7	97.8	88.9	83.5	78.2	77.3
37.5°	2165.9	1816.8	867.8	377.0	181.6	103.0	93.5	85.0	80.5	75.2	74.0
40°	2328.0	1939.7	875.5	380.0	181.0	97.8	90.1	82.5	77.9	72.4	71.2
42.5°	2467.1	2048.5	886.0	378.8	176.7	96.9	88.1	80.5	76.2	70.6	69.1
45°	2578.3	2135.0	902.2	378.5	170.2	99.1	87.4	79.8	74.7	68.9	67.5
47.5°	2682.0	2232.6	936.4	377.3	163.3	98.5	90.8	79.2	74.0	68.2	67.3
50°	2800.6	2363.8	994.8	368.1	153.5	94.2	96.9	78.5	72.4	67.3	66.3
52.5°	2965.7	2555.7	1081.2	351.6	140.0	89.6	97.8	78.2	70.0	65.4	64.3
55°	3159.8	2761.4	1174.5	327.7	122.3	81.6	93.0	77.0	67.5	62.8	60.8
57.5°	3309.9	2913.4	1239.6	293.5	104.9	77.0	82.8	74.3	64.5	59.6	58.1
60°	3352.1	2920.1	1251.2	252.5	96.0	74.0	71.2	81.0	62.1	56.9	55.2
62.5°	3301.6	2786.5	1175.4	223.8	93.0	70.9	64.8	77.3	59.6	54.4	52.9
65°	3152.1	2560.9	1005.7	219.5	96.0	68.2	61.4	61.7	57.2	52.0	50.5
67.5°	2803.0	2228.9	792.3	222.3	99.7	65.4	59.0	56.3	54.4	49.8	48.0
70°	2279.7	1794.5	624.2	227.2	103.0	61.7	55.9	52.6	51.1	46.1	45.3
72.5°	1756.1	1436.2	492.5	223.8	106.4	58.1	51.7	48.9	47.1	42.5	41.6
75°	1246.9	1141.2	361.9	192.0	97.6	52.9	46.8	44.4	42.8	37.9	37.5
77.5°	898.7	854.7	252.0	144.3	77.0	46.4	41.3	39.2	38.2	32.7	32.7
80°	716.8	650.5	150.7	94.2	56.3	38.6	34.5	33.7	32.7	27.2	27.6
82.5°	515.1	451.2	96.2	58.7	41.3	29.4	26.9	26.6	25.0	20.2	20.2
85°	264.1	230.5	61.7	39.5	29.1	18.9	17.7	17.2	16.2	12.6	12.6
87.5°	51.4	70.6	34.2	19.2	14.1	6.8	6.8	5.8	6.8	4.6	4.9
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5
2.5°	1185.6	1179.5	1175.1	1173.0	1203.8	1216.7	1231.4	1252.4	1266.9	1260.8	1280.3
5°	885.3	889.6	899.4	914.7	957.7	978.3	991.4	1008.8	1021.3	1008.8	1029.7
7.5°	605.3	611.8	632.5	664.0	715.9	738.9	743.5	743.7	741.0	720.6	734.7
10°	445.7	432.8	437.5	460.1	506.5	527.0	529.2	523.7	522.8	514.5	530.4
12.5°	345.5	327.7	317.3	321.0	355.8	372.7	375.5	378.5	391.0	395.0	414.5
15°	257.8	248.6	240.9	237.5	260.5	273.5	275.2	282.4	295.6	299.3	316.1
17.5°	181.3	183.8	187.7	189.2	205.7	214.2	211.9	211.9	214.0	213.0	222.6
20°	138.4	143.3	151.0	158.3	173.2	178.2	172.1	164.4	159.6	157.2	159.3
22.5°	122.3	125.6	130.6	140.0	152.5	155.0	147.1	141.0	136.3	134.0	134.2
25°	113.4	116.8	120.7	128.4	139.1	140.3	133.0	129.0	125.3	122.9	122.3
27.5°	105.8	107.9	110.4	115.3	126.3	126.8	122.0	119.5	117.1	115.3	114.6
30°	98.8	99.7	100.6	105.4	113.7	114.6	112.2	111.0	110.1	108.8	108.8
32.5°	89.6	90.8	92.4	96.5	104.6	105.8	104.3	103.4	101.8	101.2	100.3
35°	78.5	81.6	85.0	90.1	98.8	99.3	97.6	94.7	91.1	90.1	89.6
37.5°	74.0	74.7	78.8	85.0	93.9	94.5	92.0	87.4	84.6	85.0	85.5
40°	70.9	71.9	74.3	80.5	89.3	90.1	88.1	84.6	82.0	82.3	83.1
42.5°	68.5	69.7	71.2	75.2	84.0	85.9	85.3	82.3	79.4	80.1	81.3
45°	67.3	68.2	68.2	70.9	79.4	82.3	82.5	80.1	77.9	78.5	80.1
47.5°	66.6	66.6	65.8	67.8	76.4	79.2	79.8	78.5	77.3	77.9	79.4
50°	65.8	64.5	63.6	65.4	74.0	76.4	77.0	76.2	76.7	77.9	78.8
52.5°	63.0	61.7	61.7	63.0	71.6	74.0	74.3	73.6	75.0	76.4	77.9
55°	59.6	59.6	59.9	61.1	70.4	72.1	71.9	71.2	72.4	74.3	75.8
57.5°	56.6	56.3	57.8	59.3	68.9	70.0	69.4	69.4	70.4	71.9	73.4
60°	54.7	53.2	54.4	56.9	67.3	68.5	67.5	67.3	68.9	70.0	71.2
62.5°	52.9	51.4	52.2	54.7	65.1	66.0	65.4	65.4	66.9	67.8	69.1
65°	50.1	49.5	50.1	52.6	63.3	63.6	63.6	63.9	65.1	65.8	66.9
67.5°	47.6	47.6	48.0	50.5	61.7	61.1	61.1	62.8	63.0	63.6	64.8
70°	44.7	45.3	45.3	48.3	60.5	58.4	58.7	59.9	60.5	61.1	61.4
72.5°	41.3	41.6	42.2	46.1	58.7	55.6	55.9	56.9	57.2	58.1	58.4
75°	37.5	37.9	38.8	44.0	57.5	52.9	52.2	52.9	53.5	54.1	53.7
77.5°	33.4	34.0	34.9	42.8	53.5	52.2	47.6	48.3	48.9	48.9	48.6
80°	28.1	29.1	30.6	41.0	45.3	50.5	42.5	42.8	43.1	43.1	42.5
82.5°	21.1	23.0	25.0	34.0	35.5	43.1	36.7	37.2	36.4	35.7	35.5
85°	13.7	15.3	18.3	23.5	26.0	34.0	30.3	30.6	28.7	28.4	28.4
87.5°	5.5	5.8	8.3	11.9	15.7	21.1	21.8	22.3	20.8	20.8	21.5
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5
2.5°	1309.9	1340.5	1375.7	1411.4	1440.8	1478.8	1515.4	1554.5	1574.4	1586.0	1618.6
5°	1062.0	1103.9	1153.8	1209.7	1256.2	1335.5	1421.3	1516.6	1562.4	1607.7	1693.3
7.5°	759.7	800.7	858.8	931.2	997.2	1102.1	1214.9	1343.9	1407.5	1480.8	1621.2
10°	564.0	607.5	660.0	721.4	786.5	895.7	1022.2	1167.2	1237.2	1320.1	1479.6
12.5°	457.4	508.0	562.4	617.6	673.5	746.8	879.5	1040.5	1115.9	1199.2	1359.1
15°	356.7	411.2	469.9	529.8	585.4	667.3	802.7	993.2	1079.2	1159.9	1290.7
17.5°	252.5	303.8	370.0	442.6	523.4	620.3	786.2	1014.0	1118.3	1202.6	1290.4
20°	172.1	207.6	273.5	359.8	459.4	582.4	792.3	1087.1	1217.3	1309.9	1343.3
22.5°	137.5	154.4	199.0	286.8	404.5	554.8	817.5	1187.3	1359.5	1472.3	1439.6
25°	125.0	134.5	157.8	226.5	355.5	536.5	866.3	1319.8	1518.7	1633.1	1555.5
27.5°	117.4	125.6	140.6	186.2	313.3	524.6	928.3	1475.6	1698.2	1792.1	1676.1
30°	112.5	120.7	134.5	167.1	281.6	506.9	982.9	1618.1	1841.6	1902.4	1741.3
32.5°	103.0	109.5	120.7	149.8	257.8	486.1	1029.9	1745.5	1977.0	1997.2	1819.6
35°	93.2	100.0	111.2	135.7	243.6	469.9	1054.7	1858.7	2111.2	2092.0	1897.2
37.5°	89.6	95.0	105.4	125.6	236.0	459.2	1064.1	1970.0	2255.2	2196.7	1951.4
40°	87.1	92.0	101.2	118.9	233.9	449.0	1062.0	2075.7	2394.9	2305.4	1993.8
42.5°	85.3	89.6	98.2	114.2	228.1	439.6	1055.0	2167.1	2506.7	2398.9	2034.5
45°	83.8	88.4	96.9	116.8	217.3	429.2	1050.7	2250.6	2592.7	2477.8	2088.9
47.5°	83.1	88.4	97.2	116.2	205.7	417.6	1066.1	2343.3	2667.6	2544.1	2161.3
50°	82.3	88.1	103.9	110.7	189.9	403.2	1117.6	2453.6	2746.1	2618.6	2255.2
52.5°	80.8	87.7	111.0	106.4	169.4	383.4	1201.5	2609.5	2881.9	2763.9	2394.0
55°	78.8	88.4	106.1	99.7	147.6	357.8	1285.2	2823.2	3102.0	2998.1	2593.3
57.5°	76.7	87.4	100.3	93.5	129.6	325.3	1348.8	2998.4	3283.6	3239.5	2838.1
60°	75.2	89.6	90.1	89.9	118.0	294.4	1355.0	2987.0	3335.9	3396.5	3077.9
62.5°	73.4	91.4	82.3	87.1	112.2	265.6	1279.4	2802.1	3247.5	3376.2	3273.2
65°	70.9	79.8	77.9	84.6	112.2	250.4	1103.6	2494.3	3003.2	3185.5	3379.3
67.5°	68.5	72.4	75.0	81.3	114.6	236.0	886.8	2103.9	2618.1	2877.6	3260.1
70°	65.1	68.5	71.6	78.2	113.4	225.9	697.9	1686.3	2154.6	2451.8	2930.3
72.5°	62.1	64.5	67.5	73.6	113.4	221.4	560.6	1322.8	1645.0	1895.3	2427.3
75°	57.5	59.6	62.4	69.1	111.2	202.3	420.9	1060.0	1203.6	1360.4	1915.2
77.5°	52.9	54.4	56.6	63.3	100.3	169.1	297.7	820.9	891.8	978.5	1493.0
80°	47.1	48.3	49.8	56.6	83.1	131.1	193.8	642.0	666.7	708.6	982.2
82.5°	40.3	42.2	42.5	48.6	66.9	95.0	115.3	439.9	439.6	501.1	693.0
85°	33.0	34.0	34.5	38.2	49.5	63.3	75.8	240.3	214.2	300.3	601.9
87.5°	24.8	23.8	24.8	25.6	32.7	37.2	40.7	44.4	26.6	54.4	350.0
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5	1437.5
2.5°	1636.1	1654.1	1643.5	1630.5	1598.6	1551.5	1515.4	1483.8
5°	1752.6	1786.0	1771.2	1723.6	1640.4	1545.9	1446.6	1386.1
7.5°	1738.0	1804.0	1798.2	1718.6	1599.4	1460.4	1320.6	1240.8
10°	1620.6	1713.1	1729.0	1647.7	1521.6	1365.8	1204.1	1114.0
12.5°	1492.8	1570.7	1603.2	1572.2	1453.3	1295.3	1130.5	1040.3
15°	1385.7	1425.2	1457.3	1477.1	1403.6	1270.2	1117.6	1024.8
17.5°	1306.6	1299.0	1325.9	1373.5	1376.5	1303.6	1175.7	1071.9
20°	1268.4	1208.4	1224.0	1291.0	1369.2	1388.2	1291.6	1168.7
22.5°	1266.2	1172.7	1175.7	1247.8	1390.4	1503.7	1436.2	1296.2
25°	1299.2	1168.7	1171.5	1243.3	1427.7	1620.2	1603.4	1440.1
27.5°	1355.5	1185.8	1184.1	1263.5	1477.5	1717.4	1772.1	1616.3
30°	1416.3	1210.6	1206.0	1296.0	1526.4	1777.3	1892.1	1748.9
32.5°	1492.2	1254.7	1238.7	1343.3	1574.7	1834.8	1994.4	1873.0
35°	1564.3	1319.1	1296.2	1411.1	1626.4	1898.7	2109.0	2010.4
37.5°	1638.1	1415.5	1402.6	1509.0	1699.4	1968.1	2240.3	2165.9
40°	1732.5	1552.3	1546.2	1651.1	1797.0	2043.9	2387.2	2328.0
42.5°	1834.3	1697.9	1692.7	1814.4	1918.0	2120.0	2513.2	2467.1
45°	1937.8	1874.3	1875.6	1988.6	2045.5	2192.0	2612.3	2578.3
47.5°	2060.2	2067.1	2110.9	2169.3	2169.6	2272.0	2700.1	2682.0
50°	2215.4	2300.1	2380.9	2390.0	2294.9	2377.8	2807.3	2800.6
52.5°	2391.2	2568.8	2662.6	2633.7	2417.3	2508.9	2966.0	2965.7
55°	2600.1	2849.8	2938.1	2888.6	2563.7	2679.8	3173.2	3159.8
57.5°	2816.4	3120.0	3191.3	3126.8	2746.8	2878.9	3381.1	3309.9
60°	3050.3	3352.6	3425.2	3328.2	2952.1	3077.2	3518.7	3352.1
62.5°	3203.5	3488.7	3540.6	3447.7	3136.2	3279.3	3563.0	3301.6
65°	3211.4	3398.2	3411.9	3379.0	3214.5	3454.8	3498.8	3152.1
67.5°	2993.1	3004.2	3022.2	3057.6	3047.2	3376.5	3251.2	2803.0
70°	2526.4	2379.5	2438.8	2473.2	2550.2	3003.2	2793.5	2279.7
72.5°	1931.7	1717.4	1784.7	1773.1	1933.3	2463.4	2137.2	1756.1
75°	1390.4	1171.1	1176.4	1176.9	1389.1	1966.3	1457.3	1246.9
77.5°	945.0	828.7	845.8	835.2	929.7	1540.4	1049.2	898.7
80°	646.3	643.2	647.0	621.8	619.9	995.7	776.9	716.8
82.5°	479.3	442.9	437.8	411.2	475.1	761.2	589.7	515.1
85°	378.1	245.2	213.0	257.1	411.5	700.4	359.5	264.1
87.5°	160.2	96.2	58.4	115.6	228.7	513.3	99.7	51.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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