

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: P197185

Luminaire Tested: **NAV-AF-01-D-UNV-SLR-8030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197185  
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-8030-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 615mA 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: 2901 lumens  
Efficiency: N/A  
Efficacy: 85.3 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 - G1

Input Watts (W): 34  
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

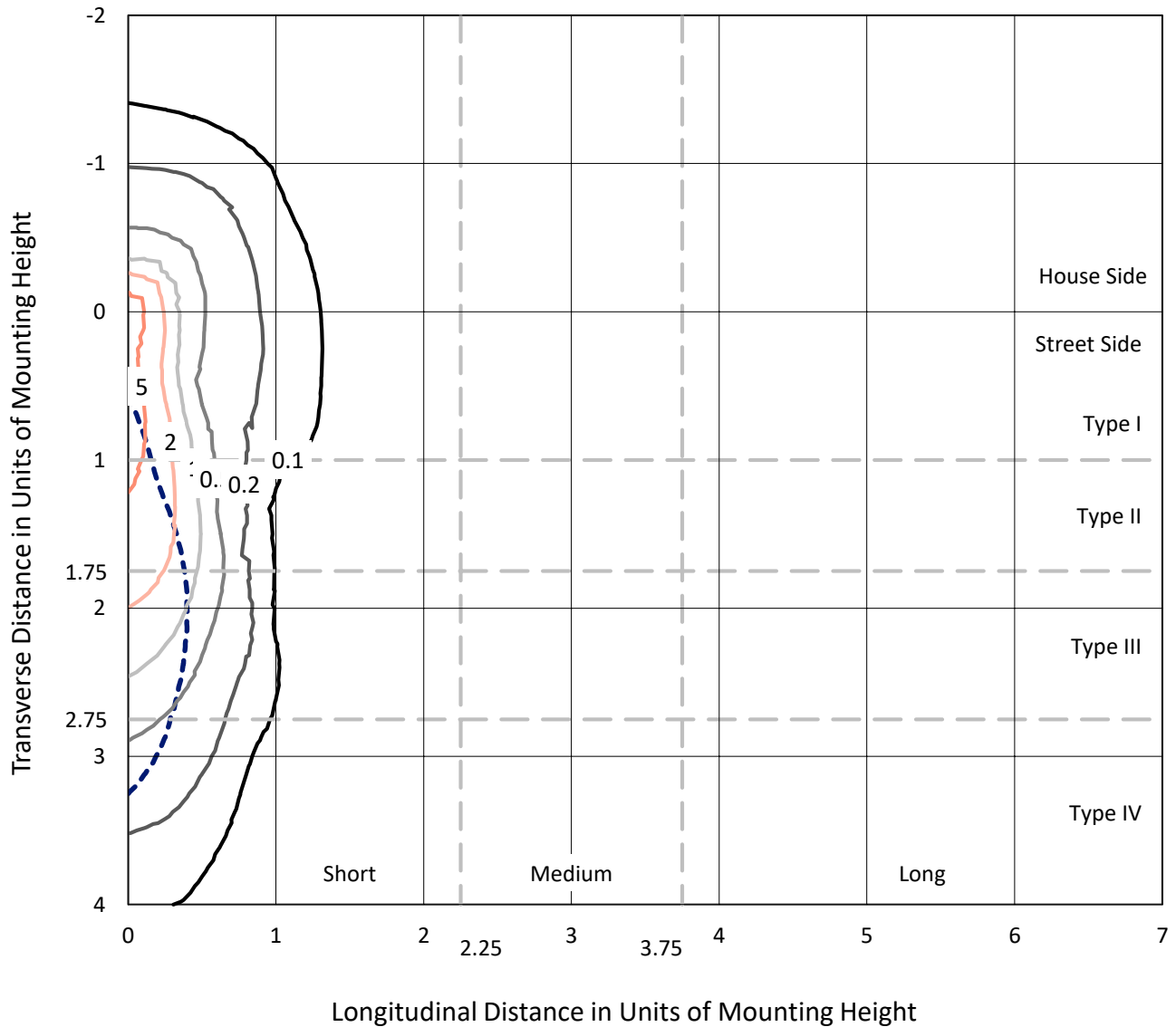


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### Iso-Footcandle Lines of Horizontal Illumination

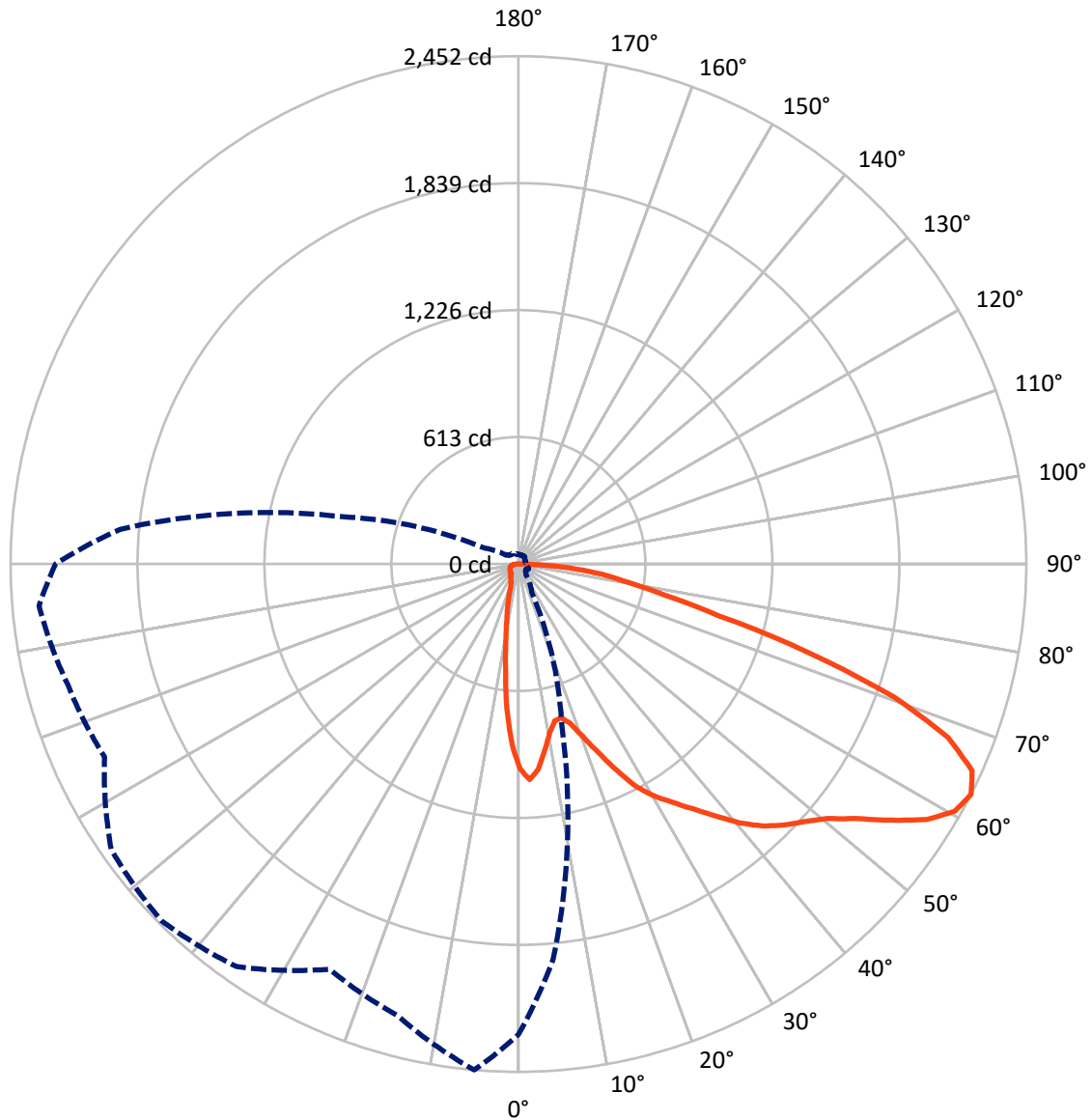
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.9 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	513.9	0.0	513.9
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	2387.1	0.0	2387.1
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	2901.0	0.0	2901.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.9	2.5
10°-20°	131.4	4.5
20°-30°	188.9	6.5
30°-40°	289.4	10.0
40°-50°	423.1	14.6
50°-60°	615.6	21.2
60°-70°	713.3	24.6
70°-80°	371.8	12.8
80°-90°	95.6	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°	2901.0	100.0
0°-180°	2901.0	100.0



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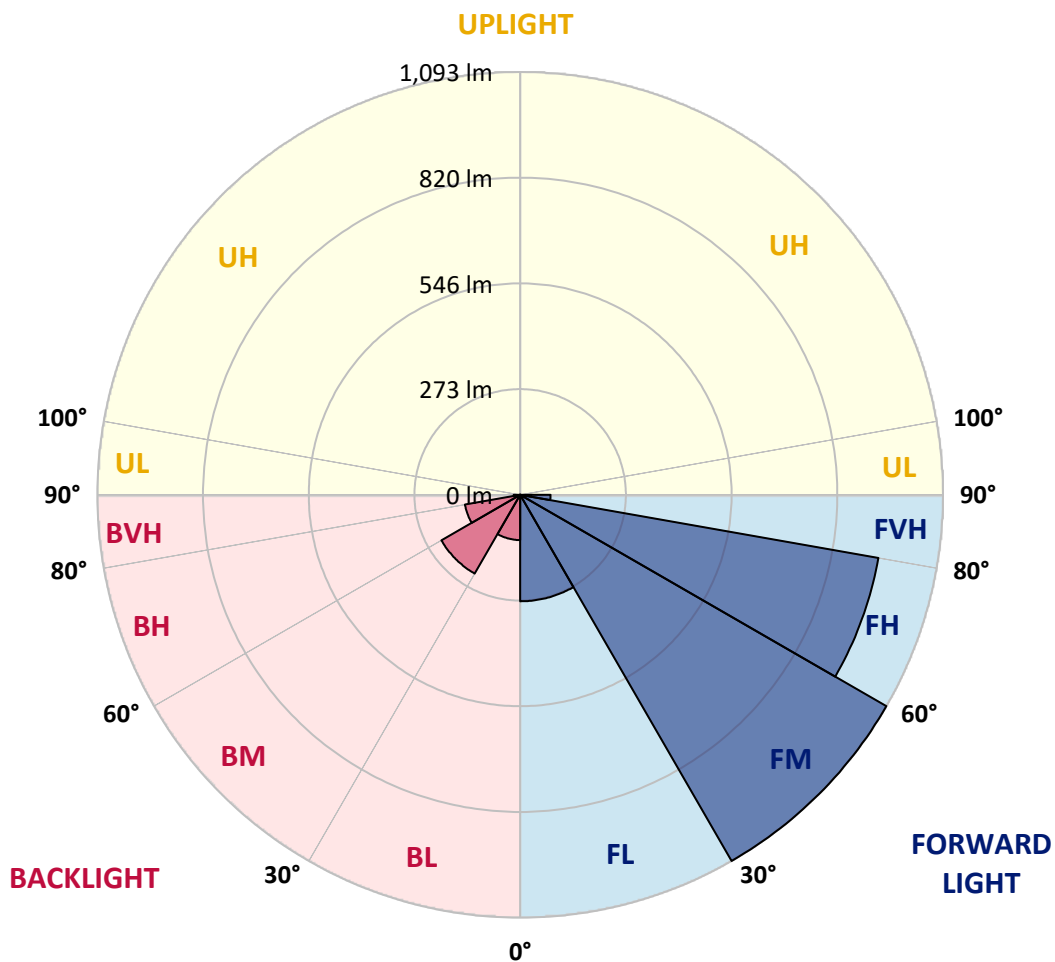
CATALOG NUMBER: NAV-AF-01-D-UNV-SLR-8030-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	275.3	9.5			
FM	(30°-60°)	1093.0	37.7			
FH	(60°-80°)	940.2	32.4			G1/1800
FVH	(80°-90°)	78.6	2.7			G1/100
BL	(0°-30°)	116.9	4.0	B1/500		
BM	(30°-60°)	235.1	8.1	B1/1000		
BH	(60°-80°)	144.9	5.0	B1/500		G1/500
BVH	(80°-90°)	16.9	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-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0
2.5°	1021.0	1006.7	973.7	944.6	908.4	881.3	848.3	830.8	818.0	809.4	802.4
5°	953.7	919.2	856.1	800.8	741.0	697.9	647.4	619.9	602.8	593.6	589.4
7.5°	853.8	808.1	726.5	652.3	577.6	523.7	485.5	444.7	423.0	408.9	404.3
10°	766.5	714.9	617.6	534.0	476.4	438.1	405.3	367.9	340.1	315.9	306.9
12.5°	715.8	655.8	544.8	469.3	420.9	379.9	345.2	304.8	275.5	250.3	240.6
15°	705.1	638.2	514.3	428.0	368.7	319.3	277.6	233.7	205.1	184.3	177.5
17.5°	737.4	655.0	501.4	390.4	318.9	258.5	207.2	160.1	136.3	124.9	122.2
20°	804.1	692.0	495.3	356.5	270.5	199.0	143.2	108.7	97.0	93.6	93.4
22.5°	891.8	752.2	502.1	328.8	225.1	146.8	105.0	89.4	84.6	82.7	82.7
25°	990.9	833.6	520.0	307.5	185.1	114.2	90.4	82.0	78.0	76.1	76.4
27.5°	1112.1	932.6	544.4	288.0	156.5	100.1	84.6	77.4	73.4	71.5	71.7
30°	1203.3	1017.8	565.4	270.1	141.8	94.4	81.4	74.7	70.3	67.5	67.3
32.5°	1288.7	1092.9	582.4	257.2	133.4	84.3	73.6	68.6	64.8	61.6	61.0
35°	1383.2	1163.6	590.4	256.8	127.9	76.1	67.3	61.2	57.4	53.8	53.2
37.5°	1490.2	1250.0	597.1	259.3	124.9	70.9	64.4	58.5	55.3	51.7	50.9
40°	1601.7	1334.6	602.4	261.4	124.5	67.3	62.0	56.8	53.6	49.9	49.0
42.5°	1697.4	1409.5	609.6	260.6	121.6	66.7	60.6	55.3	52.4	48.6	47.5
45°	1774.0	1469.0	620.7	260.4	117.2	68.1	60.2	54.9	51.3	47.3	46.5
47.5°	1845.3	1536.1	644.3	259.6	112.3	67.7	62.5	54.5	50.9	46.9	46.3
50°	1926.9	1626.3	684.4	253.2	105.6	64.8	66.7	54.1	49.9	46.3	45.6
52.5°	2040.5	1758.4	744.0	241.9	96.3	61.6	67.3	53.8	48.2	45.0	44.2
55°	2174.1	1900.0	808.1	225.5	84.1	56.2	63.9	53.0	46.5	43.1	41.9
57.5°	2277.3	2004.5	852.9	201.9	72.1	53.0	57.0	51.1	44.4	41.0	40.0
60°	2306.4	2009.1	860.9	173.7	66.0	50.9	49.0	55.7	42.7	39.1	38.1
62.5°	2271.6	1917.2	808.7	154.0	63.9	48.8	44.6	53.2	41.0	37.4	36.4
65°	2168.8	1762.0	692.0	151.0	66.0	46.9	42.3	42.5	39.3	35.8	34.7
67.5°	1928.6	1533.6	545.2	152.9	68.6	45.0	40.6	38.7	37.4	34.3	33.0
70°	1568.5	1234.7	429.5	156.3	70.9	42.5	38.5	36.2	35.1	31.8	31.1
72.5°	1208.2	988.2	338.9	154.0	73.2	40.0	35.5	33.7	32.4	29.2	28.6
75°	858.0	785.2	249.0	132.1	67.1	36.4	32.2	30.5	29.4	26.1	25.9
77.5°	618.4	588.1	173.3	99.3	53.0	32.0	28.4	26.9	26.3	22.5	22.5
80°	493.2	447.6	103.7	64.8	38.7	26.5	23.8	23.1	22.5	18.7	18.9
82.5°	354.4	310.5	66.3	40.4	28.4	20.2	18.5	18.3	17.2	13.9	13.9
85°	181.7	158.6	42.5	27.1	20.0	13.0	12.2	11.8	11.1	8.6	8.6
87.5°	35.3	48.6	23.6	13.3	9.7	4.6	4.6	4.0	4.6	3.2	3.4
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°	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0
2.5°	815.7	811.5	808.5	807.1	828.3	837.1	847.2	861.8	871.6	867.4	880.9
5°	609.1	612.1	618.8	629.3	659.0	673.1	682.1	694.1	702.7	694.1	708.4
7.5°	416.5	420.9	435.2	456.9	492.6	508.4	511.5	511.8	509.9	495.8	505.4
10°	306.7	297.8	301.0	316.6	348.5	362.6	364.1	360.3	359.7	354.0	364.9
12.5°	237.7	225.5	218.3	220.9	244.8	256.4	258.3	260.4	269.0	271.8	285.2
15°	177.3	171.0	165.7	163.4	179.2	188.3	189.3	194.4	203.4	205.9	217.5
17.5°	124.7	126.4	129.1	130.2	141.6	147.4	145.8	145.8	147.2	146.6	153.1
20°	95.3	98.6	103.9	109.0	119.3	122.6	118.4	113.2	109.8	108.1	109.6
22.5°	84.1	86.4	89.8	96.3	105.0	106.6	101.2	97.0	93.8	92.1	92.3
25°	78.0	80.3	83.1	88.3	95.7	96.5	91.5	88.8	86.2	84.6	84.1
27.5°	72.8	74.2	75.9	79.3	86.9	87.3	83.9	82.2	80.6	79.3	78.9
30°	67.9	68.6	69.2	72.6	78.2	78.9	77.2	76.4	75.7	74.9	74.9
32.5°	61.6	62.5	63.5	66.5	71.9	72.8	71.7	71.1	70.0	69.6	69.0
35°	54.1	56.2	58.5	62.0	67.9	68.4	67.1	65.2	62.7	62.0	61.6
37.5°	50.9	51.3	54.3	58.5	64.6	65.0	63.3	60.2	58.3	58.5	58.9
40°	48.8	49.4	51.1	55.3	61.4	62.0	60.6	58.3	56.4	56.6	57.2
42.5°	47.1	48.0	49.0	51.7	57.8	59.1	58.7	56.6	54.7	55.1	55.9
45°	46.3	46.9	46.9	48.8	54.7	56.6	56.8	55.1	53.6	54.1	55.1
47.5°	45.9	45.9	45.2	46.7	52.6	54.5	54.9	54.1	53.2	53.6	54.7
50°	45.2	44.4	43.8	45.0	50.9	52.6	53.0	52.4	52.8	53.6	54.3
52.5°	43.3	42.5	42.5	43.3	49.2	50.9	51.1	50.7	51.5	52.6	53.6
55°	41.0	41.0	41.2	42.1	48.4	49.6	49.4	49.0	49.9	51.1	52.2
57.5°	38.9	38.7	39.8	40.8	47.3	48.2	47.7	47.7	48.4	49.4	50.5
60°	37.7	36.6	37.4	39.1	46.3	47.1	46.5	46.3	47.3	48.2	49.0
62.5°	36.4	35.3	36.0	37.7	44.8	45.4	45.0	45.0	46.1	46.7	47.5
65°	34.5	34.1	34.5	36.2	43.5	43.8	43.8	44.0	44.8	45.2	46.1
67.5°	32.8	32.8	33.0	34.7	42.5	42.1	42.1	43.1	43.3	43.8	44.6
70°	30.7	31.1	31.1	33.2	41.6	40.2	40.4	41.2	41.6	42.1	42.3
72.5°	28.4	28.6	29.0	31.8	40.4	38.3	38.5	39.1	39.3	40.0	40.2
75°	25.9	26.1	26.7	30.3	39.5	36.4	36.0	36.4	36.8	37.2	37.0
77.5°	22.9	23.3	24.0	29.4	36.8	36.0	32.8	33.2	33.7	33.7	33.4
80°	19.4	20.0	21.0	28.2	31.1	34.7	29.2	29.4	29.7	29.7	29.2
82.5°	14.5	15.8	17.2	23.3	24.4	29.7	25.2	25.7	25.0	24.6	24.4
85°	9.5	10.5	12.6	16.2	17.9	23.3	20.8	21.0	19.8	19.6	19.6
87.5°	3.8	4.0	5.7	8.2	10.7	14.5	14.9	15.4	14.3	14.3	14.7
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°	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0
2.5°	901.3	922.3	946.5	971.1	991.3	1017.4	1042.6	1069.6	1083.2	1091.2	1113.7
5°	730.7	759.5	793.8	832.3	864.3	919.0	977.9	1043.5	1075.0	1106.2	1165.1
7.5°	522.7	550.9	590.8	640.7	686.1	758.3	835.9	924.6	968.4	1018.9	1115.4
10°	388.1	417.9	454.1	496.4	541.2	616.3	703.4	803.1	851.2	908.2	1018.0
12.5°	314.7	349.6	387.0	424.9	463.4	513.9	605.1	716.0	767.7	825.2	935.2
15°	245.5	282.9	323.3	364.5	402.8	459.2	552.3	683.4	742.5	798.0	888.0
17.5°	173.7	209.1	254.5	304.6	360.1	426.8	541.0	697.7	769.4	827.5	887.8
20°	118.4	142.8	188.3	247.6	316.1	400.7	545.2	748.0	837.6	901.3	924.2
22.5°	94.7	106.2	136.9	197.3	278.3	381.8	562.4	817.0	935.4	1013.0	990.5
25°	86.0	92.5	108.5	155.9	244.6	369.1	596.1	908.0	1045.0	1123.6	1070.2
27.5°	80.8	86.4	96.8	128.1	215.6	360.9	638.8	1015.3	1168.4	1233.0	1153.3
30°	77.4	83.1	92.5	115.1	193.7	348.7	676.2	1113.3	1267.1	1308.9	1198.1
32.5°	70.9	75.3	83.1	103.1	177.3	334.4	708.6	1201.0	1360.3	1374.1	1251.9
35°	64.2	68.8	76.6	93.4	167.6	323.3	725.7	1278.9	1452.6	1439.3	1305.4
37.5°	61.6	65.4	72.6	86.4	162.4	315.9	732.2	1355.4	1551.7	1511.5	1342.6
40°	59.9	63.3	69.6	81.8	160.9	309.0	730.7	1428.2	1647.8	1586.2	1371.8
42.5°	58.7	61.6	67.5	78.7	156.9	302.5	725.9	1491.1	1724.8	1650.5	1399.8
45°	57.6	60.8	66.7	80.3	149.6	295.3	722.9	1548.5	1783.9	1704.8	1437.2
47.5°	57.2	60.8	66.9	79.9	141.6	287.3	733.4	1612.2	1835.4	1750.4	1487.1
50°	56.6	60.6	71.5	76.1	130.6	277.4	769.0	1688.2	1889.5	1801.8	1551.7
52.5°	55.5	60.4	76.4	73.2	116.5	263.8	826.6	1795.4	1982.9	1901.7	1647.2
55°	54.3	60.8	73.0	68.6	101.6	246.1	884.3	1942.5	2134.3	2062.8	1784.3
57.5°	52.8	60.2	69.0	64.4	89.2	223.8	928.0	2063.0	2259.2	2229.0	1952.8
60°	51.7	61.6	62.0	61.8	81.2	202.6	932.2	2055.2	2295.2	2336.9	2117.7
62.5°	50.5	62.9	56.6	59.9	77.2	182.8	880.3	1928.0	2234.4	2323.0	2252.1
65°	48.8	54.9	53.6	58.3	77.2	172.3	759.3	1716.1	2066.4	2191.7	2325.1
67.5°	47.1	49.9	51.5	55.9	78.9	162.4	610.2	1447.5	1801.3	1979.9	2243.0
70°	44.8	47.1	49.2	53.8	78.0	155.4	480.2	1160.2	1482.5	1686.9	2016.1
72.5°	42.7	44.4	46.5	50.7	78.0	152.3	385.8	910.1	1131.8	1304.1	1670.1
75°	39.5	41.0	42.9	47.5	76.6	139.2	289.6	729.2	828.1	936.0	1317.8
77.5°	36.4	37.4	38.9	43.5	69.0	116.3	204.9	564.8	613.6	673.3	1027.3
80°	32.4	33.2	34.3	38.9	57.2	90.2	133.4	441.7	458.7	487.6	675.8
82.5°	27.8	29.0	29.2	33.4	46.1	65.4	79.3	302.7	302.5	344.7	476.8
85°	22.7	23.3	23.8	26.3	34.1	43.5	52.2	165.3	147.4	206.6	414.2
87.5°	17.0	16.4	17.0	17.7	22.5	25.7	28.0	30.5	18.3	37.4	240.8
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	989.0	989.0	989.0	989.0	989.0	989.0	989.0	989.0
2.5°	1125.7	1138.1	1130.8	1121.9	1099.9	1067.5	1042.6	1021.0
5°	1205.9	1228.8	1218.7	1185.9	1128.7	1063.7	995.3	953.7
7.5°	1195.8	1241.2	1237.2	1182.5	1100.5	1004.8	908.7	853.8
10°	1115.0	1178.7	1189.7	1133.7	1046.9	939.8	828.5	766.5
12.5°	1027.1	1080.7	1103.0	1081.8	999.9	891.2	777.8	715.8
15°	953.5	980.6	1002.7	1016.4	965.7	874.0	769.0	705.1
17.5°	899.0	893.7	912.2	945.0	947.2	896.9	809.0	737.4
20°	872.7	831.5	842.2	888.3	942.1	955.1	888.7	804.1
22.5°	871.2	806.9	809.0	858.6	956.6	1034.7	988.2	891.8
25°	893.9	804.1	806.0	855.4	982.3	1114.8	1103.2	990.9
27.5°	932.6	815.9	814.6	869.3	1016.6	1181.7	1219.3	1112.1
30°	974.5	832.9	829.8	891.6	1050.2	1222.9	1301.8	1203.3
32.5°	1026.7	863.2	852.3	924.2	1083.5	1262.4	1372.2	1288.7
35°	1076.3	907.6	891.8	970.9	1119.0	1306.4	1451.1	1383.2
37.5°	1127.0	973.9	965.0	1038.2	1169.3	1354.2	1541.4	1490.2
40°	1192.0	1068.1	1063.9	1136.0	1236.4	1406.3	1642.5	1601.7
42.5°	1262.0	1168.2	1164.6	1248.4	1319.7	1458.7	1729.2	1697.4
45°	1333.3	1289.6	1290.4	1368.2	1407.4	1508.1	1797.3	1774.0
47.5°	1417.5	1422.3	1452.4	1492.6	1492.8	1563.2	1857.7	1845.3
50°	1524.3	1582.6	1638.1	1644.4	1579.0	1636.0	1931.5	1926.9
52.5°	1645.3	1767.5	1832.0	1812.1	1663.1	1726.2	2040.7	2040.5
55°	1788.9	1960.8	2021.6	1987.5	1763.9	1843.8	2183.3	2174.1
57.5°	1937.8	2146.7	2195.7	2151.3	1889.9	1980.8	2326.3	2277.3
60°	2098.8	2306.8	2356.6	2289.9	2031.2	2117.3	2421.0	2306.4
62.5°	2204.1	2400.4	2436.1	2372.2	2157.9	2256.3	2451.5	2271.6
65°	2209.6	2338.1	2347.6	2324.9	2211.7	2377.0	2407.3	2168.8
67.5°	2059.4	2067.0	2079.4	2103.8	2096.6	2323.2	2236.9	1928.6
70°	1738.2	1637.3	1678.1	1701.6	1754.6	2066.4	1922.1	1568.5
72.5°	1329.1	1181.7	1228.0	1220.0	1330.2	1694.9	1470.5	1208.2
75°	956.6	805.8	809.4	809.8	955.8	1352.9	1002.7	858.0
77.5°	650.2	570.2	582.0	574.6	639.6	1059.9	721.9	618.4
80°	444.7	442.6	445.1	427.8	426.6	685.1	534.5	493.2
82.5°	329.8	304.8	301.2	282.9	326.9	523.7	405.7	354.4
85°	260.2	168.7	146.6	176.9	283.1	481.9	247.4	181.7
87.5°	110.2	66.3	40.2	79.5	157.3	353.2	68.6	35.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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