

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: P196723

Luminaire Tested: **NAV-AF-01-D-UNV-SLR-7030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196723  
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-7030-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1200mA 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: 5725.2 lumens  
Efficiency: N/A  
Efficacy: 85.5 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): 67  
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

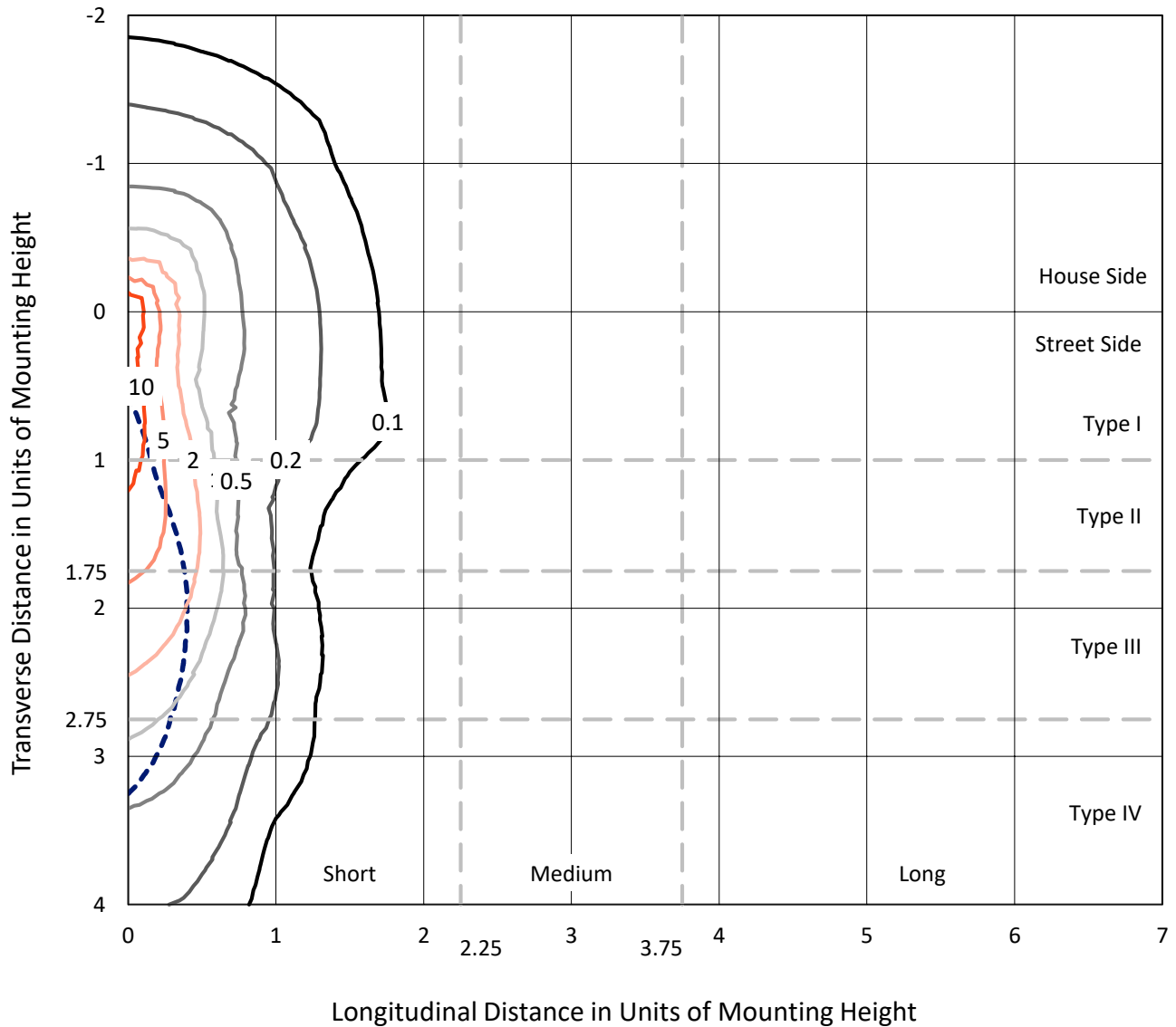


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### Iso-Footcandle Lines of Horizontal Illumination

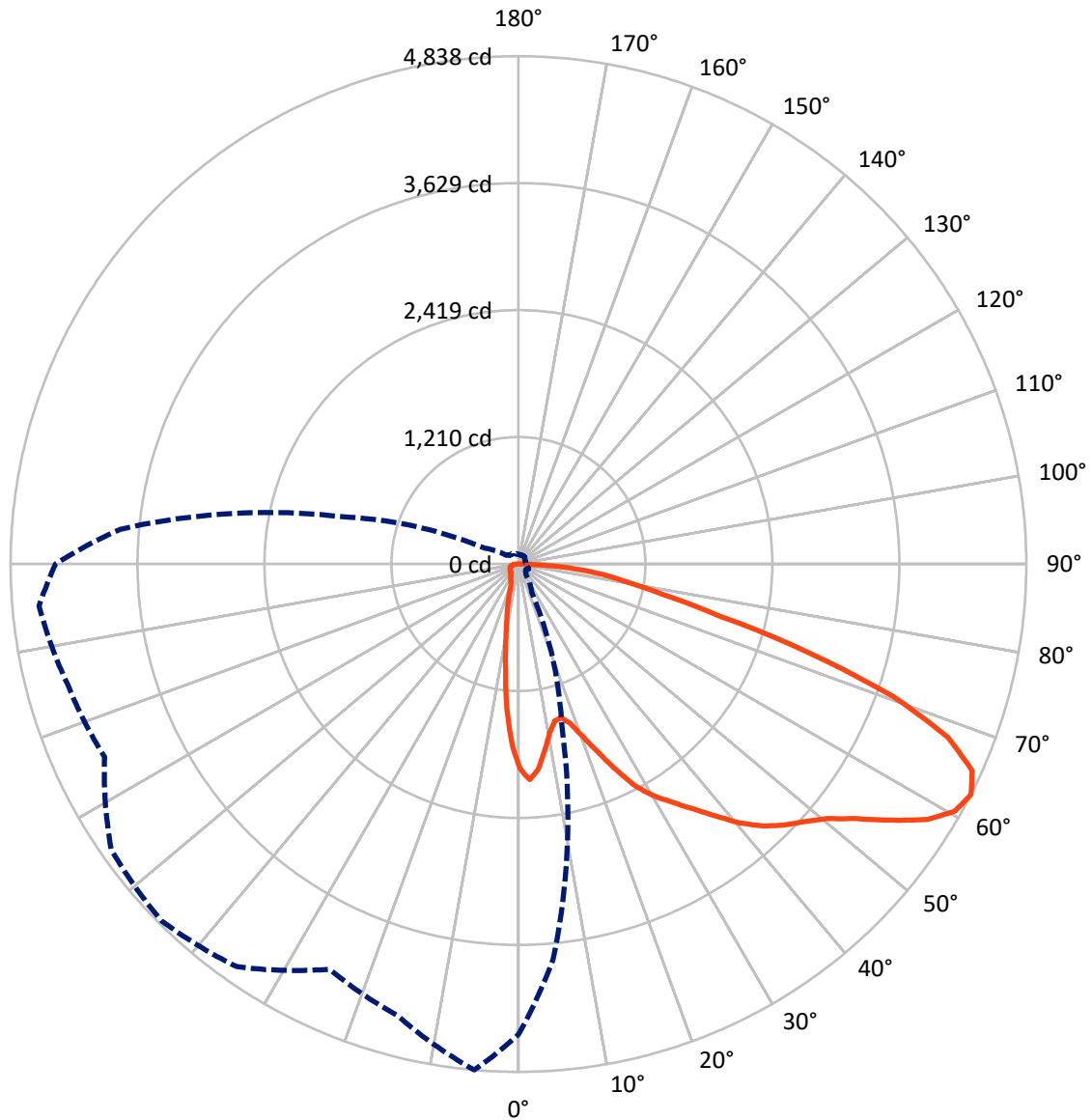
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 19.5 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	1014.2	0.0	1014.2
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	4711.0	0.0	4711.0
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	5725.2	0.0	5725.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.9	2.5
10°-20°	259.3	4.5
20°-30°	372.9	6.5
30°-40°	571.1	10.0
40°-50°	835.0	14.6
50°-60°	1214.9	21.2
60°-70°	1407.6	24.6
70°-80°	733.8	12.8
80°-90°	188.6	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°	5725.2	100.0
0°-180°	5725.2	100.0



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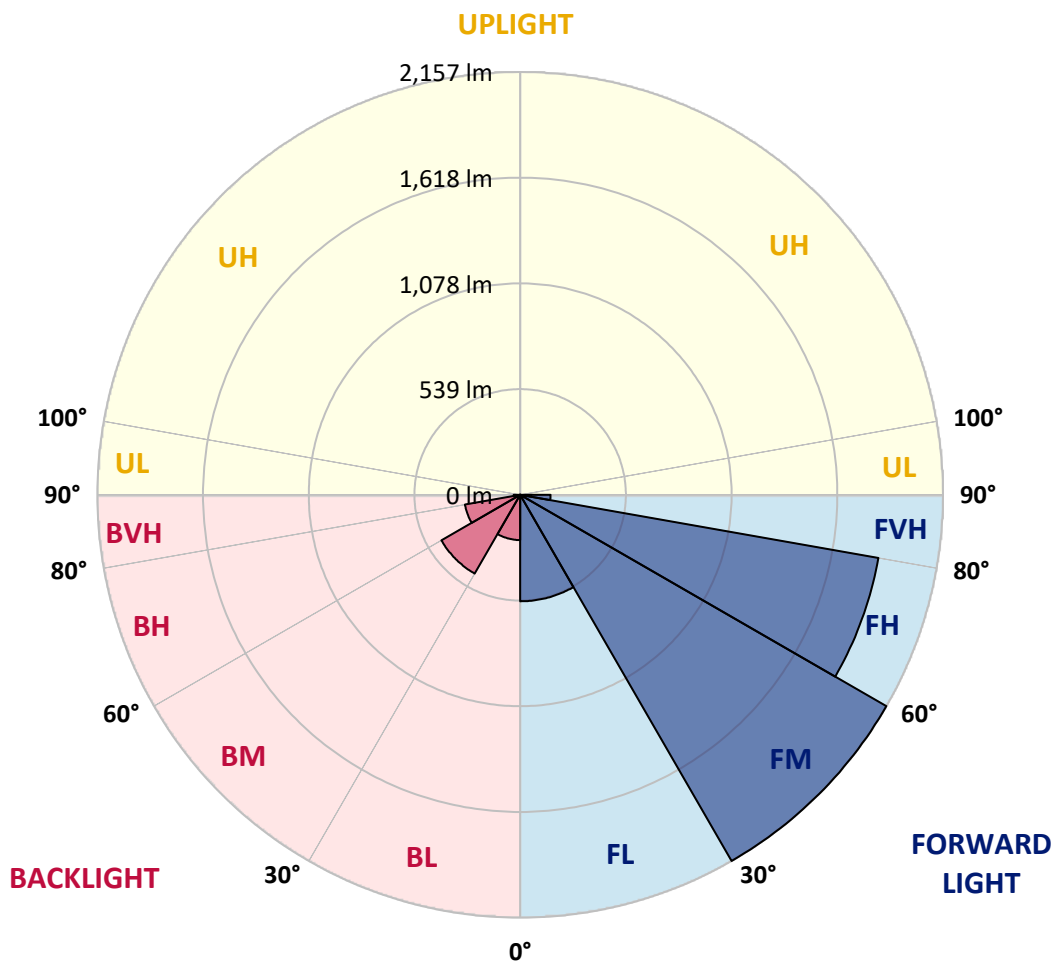
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.3	9.5			
FM	(30°-60°)	2157.0	37.7			
FH	(60°-80°)	1855.5	32.4			G2/5000
FVH	(80°-90°)	155.2	2.7			G2/225
BL	(0°-30°)	230.8	4.0	B1/500		
BM	(30°-60°)	464.0	8.1	B1/1000		
BH	(60°-80°)	286.0	5.0	B1/500		G1/500
BVH	(80°-90°)	33.4	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°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	2015.0	1986.7	1921.6	1864.3	1792.8	1739.3	1674.1	1639.7	1614.3	1597.4	1583.6
5°	1882.1	1814.0	1689.4	1580.3	1462.4	1377.3	1277.7	1223.2	1189.8	1171.5	1163.2
7.5°	1684.9	1594.8	1433.8	1287.3	1139.9	1033.6	958.1	877.6	834.7	807.0	797.8
10°	1512.7	1411.0	1218.8	1054.0	940.1	864.7	799.9	726.0	671.2	623.6	605.7
12.5°	1412.6	1294.2	1075.1	926.1	830.6	749.6	681.2	601.5	543.8	494.0	474.8
15°	1391.4	1259.4	1014.9	844.8	727.6	630.1	547.9	461.2	404.7	363.7	350.4
17.5°	1455.4	1292.6	989.6	770.4	629.4	510.1	408.8	315.9	269.0	246.6	241.1
20°	1587.0	1365.7	977.6	703.6	533.8	392.7	282.7	214.5	191.3	184.7	184.3
22.5°	1760.0	1484.4	990.9	648.8	444.1	289.7	207.1	176.5	166.8	163.2	163.2
25°	1955.5	1645.1	1026.2	606.9	365.3	225.4	178.5	161.9	154.0	150.2	150.7
27.5°	2194.7	1840.6	1074.3	568.2	308.8	197.5	166.8	152.8	144.9	141.2	141.6
30°	2374.9	2008.7	1115.7	532.9	279.8	186.4	160.6	147.4	138.6	133.3	132.9
32.5°	2543.3	2156.9	1149.4	507.7	263.2	166.5	145.4	135.4	127.9	121.6	120.4
35°	2729.8	2296.4	1165.2	506.9	252.4	150.2	132.9	120.8	113.3	106.3	105.0
37.5°	2941.0	2467.0	1178.5	511.9	246.6	139.9	127.1	115.4	109.2	102.1	100.4
40°	3161.0	2633.8	1188.8	516.0	245.8	132.9	122.5	112.1	105.9	98.4	96.7
42.5°	3349.9	2781.6	1203.0	514.3	240.0	131.5	119.5	109.2	103.4	95.9	93.9
45°	3501.0	2899.0	1225.1	513.9	231.2	134.5	118.8	108.3	101.3	93.4	91.8
47.5°	3641.7	3031.5	1271.4	512.2	221.7	133.7	123.3	107.5	100.4	92.6	91.3
50°	3802.8	3209.6	1350.8	499.8	208.3	127.9	131.5	106.6	98.4	91.3	90.0
52.5°	4027.0	3470.3	1468.2	477.4	190.1	121.6	132.9	106.3	95.0	88.8	87.2
55°	4290.5	3749.7	1594.8	445.0	166.1	110.8	126.2	104.6	91.8	85.1	82.6
57.5°	4494.4	3956.0	1683.2	398.5	142.4	104.6	112.5	100.8	87.6	81.0	78.8
60°	4551.6	3965.1	1699.0	342.8	130.3	100.4	96.7	110.1	84.2	77.2	75.2
62.5°	4483.1	3783.6	1596.1	303.8	126.2	96.2	88.0	105.0	81.0	73.9	71.8
65°	4280.1	3477.4	1365.7	298.1	130.3	92.6	83.5	83.8	77.6	70.6	68.5
67.5°	3806.1	3026.6	1075.9	301.8	135.4	88.8	80.1	76.4	73.9	67.6	65.1
70°	3095.5	2436.7	847.7	308.4	139.9	83.8	75.9	71.3	69.3	62.8	61.4
72.5°	2384.4	1950.2	668.7	303.8	144.4	78.8	70.2	66.4	63.9	57.7	56.5
75°	1693.2	1549.7	491.4	260.7	132.4	71.8	63.5	60.2	58.1	51.5	51.1
77.5°	1220.4	1160.7	342.1	195.9	104.6	63.1	56.0	53.1	51.9	44.5	44.5
80°	973.4	883.4	204.7	127.9	76.4	52.3	46.9	45.7	44.5	36.9	37.3
82.5°	699.5	612.7	130.8	79.6	56.0	39.9	36.5	36.2	34.1	27.5	27.5
85°	358.7	313.0	83.8	53.5	39.5	25.7	24.0	23.3	22.0	17.1	17.1
87.5°	69.7	95.9	46.6	26.1	19.1	9.2	9.2	7.8	9.2	6.2	6.7
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1609.8	1601.5	1595.6	1592.8	1634.7	1652.1	1672.0	1700.7	1720.2	1711.9	1738.5
5°	1202.2	1208.0	1221.2	1242.0	1300.5	1328.4	1346.2	1369.9	1386.8	1369.9	1398.1
7.5°	821.9	830.6	858.9	901.6	972.2	1003.3	1009.5	1010.0	1006.2	978.4	997.5
10°	605.2	587.9	594.1	624.8	687.8	715.6	718.6	711.1	709.8	698.6	720.2
12.5°	469.0	445.0	430.9	435.8	483.2	506.0	509.8	513.9	530.9	536.4	562.9
15°	349.9	337.5	327.1	322.6	353.7	371.5	373.5	383.6	401.4	406.3	429.2
17.5°	246.2	249.4	254.9	257.0	279.3	290.9	287.7	287.7	290.5	289.3	302.2
20°	188.0	194.7	205.1	215.0	235.4	242.0	233.7	223.3	216.7	213.4	216.3
22.5°	166.1	170.7	177.2	190.1	207.1	210.5	199.6	191.3	185.0	181.8	182.3
25°	154.0	158.5	164.0	174.4	188.9	190.5	180.6	175.2	170.2	166.8	166.1
27.5°	143.6	146.5	149.9	156.5	171.4	172.3	165.6	162.4	159.0	156.5	155.7
30°	134.1	135.4	136.6	143.2	154.4	155.7	152.3	150.7	149.4	147.8	147.8
32.5°	121.6	123.3	125.3	131.2	141.9	143.6	141.6	140.3	138.2	137.4	136.1
35°	106.6	110.8	115.4	122.5	134.1	134.9	132.4	128.7	123.7	122.5	121.6
37.5°	100.4	101.3	107.1	115.4	127.4	128.3	125.0	118.8	114.9	115.4	116.3
40°	96.2	97.6	100.8	109.2	121.2	122.5	119.5	114.9	111.2	111.7	112.9
42.5°	93.0	94.6	96.7	102.1	114.1	116.7	115.9	111.7	107.9	108.7	110.5
45°	91.3	92.6	92.6	96.2	107.9	111.7	112.1	108.7	105.9	106.6	108.7
47.5°	90.4	90.4	89.3	92.1	103.8	107.5	108.3	106.6	105.0	105.9	107.9
50°	89.3	87.6	86.4	88.8	100.4	103.8	104.6	103.4	104.3	105.9	107.1
52.5°	85.5	83.8	83.8	85.5	97.1	100.4	100.8	100.1	101.7	103.8	105.9
55°	81.0	81.0	81.4	83.0	95.5	98.0	97.6	96.7	98.4	100.8	102.9
57.5°	76.8	76.4	78.4	80.6	93.4	95.0	94.2	94.2	95.5	97.6	99.7
60°	74.3	72.2	73.9	77.2	91.3	93.0	91.8	91.3	93.4	95.0	96.7
62.5°	71.8	69.7	71.0	74.3	88.4	89.7	88.8	88.8	90.9	92.1	93.9
65°	68.1	67.2	68.1	71.3	85.9	86.4	86.4	86.8	88.4	89.3	90.9
67.5°	64.8	64.8	65.1	68.5	83.8	83.0	83.0	85.1	85.5	86.4	88.0
70°	60.6	61.4	61.4	65.5	82.2	79.3	79.6	81.4	82.2	83.0	83.5
72.5°	56.0	56.5	57.3	62.8	79.6	75.5	75.9	77.2	77.6	78.8	79.3
75°	51.1	51.5	52.8	59.8	78.0	71.8	71.0	71.8	72.6	73.4	73.1
77.5°	45.3	46.1	47.3	58.1	72.6	71.0	64.8	65.5	66.4	66.4	66.0
80°	38.2	39.5	41.5	55.6	61.4	68.5	57.7	58.1	58.6	58.6	57.7
82.5°	28.6	31.1	34.1	46.1	48.2	58.6	49.8	50.7	49.3	48.6	48.2
85°	18.7	20.8	24.9	32.0	35.3	46.1	41.1	41.5	39.0	38.6	38.6
87.5°	7.4	7.8	11.3	16.2	21.2	28.6	29.5	30.3	28.2	28.2	29.1
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°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	1778.7	1820.3	1868.0	1916.5	1956.4	2007.8	2057.7	2110.8	2137.7	2153.6	2198.0
5°	1442.1	1498.9	1566.6	1642.6	1705.6	1813.6	1929.8	2059.3	2121.6	2183.0	2299.3
7.5°	1031.5	1087.1	1166.1	1264.4	1354.0	1496.5	1649.6	1824.8	1911.2	2010.8	2201.3
10°	765.9	824.8	896.3	979.6	1068.1	1216.3	1388.1	1585.0	1680.0	1792.4	2009.2
12.5°	621.0	689.9	763.8	838.6	914.5	1014.2	1194.3	1413.0	1515.1	1628.5	1845.6
15°	484.4	558.4	638.0	719.4	795.0	906.2	1090.1	1348.7	1465.2	1574.9	1752.6
17.5°	342.8	412.6	502.3	601.0	710.6	842.3	1067.7	1376.8	1518.4	1633.0	1752.2
20°	233.7	281.9	371.5	488.6	623.9	790.8	1075.9	1476.1	1653.0	1778.7	1824.0
22.5°	186.9	209.7	270.2	389.4	549.1	753.5	1110.0	1612.2	1845.9	1999.1	1954.7
25°	169.8	182.7	214.1	307.6	482.8	728.5	1176.4	1792.0	2062.3	2217.5	2112.1
27.5°	159.4	170.7	190.9	252.8	425.4	712.4	1260.7	2003.7	2305.9	2433.3	2276.0
30°	152.8	164.0	182.7	227.0	382.3	688.3	1334.6	2197.2	2500.6	2583.2	2364.5
32.5°	139.9	148.6	164.0	203.4	349.9	660.0	1398.5	2370.3	2684.5	2712.0	2470.7
35°	126.6	135.7	151.1	184.3	330.8	638.0	1432.2	2523.9	2866.8	2840.5	2576.2
37.5°	121.6	129.2	143.2	170.7	320.4	623.6	1445.0	2675.0	3062.2	2983.0	2649.6
40°	118.3	125.0	137.4	161.4	317.5	609.7	1442.1	2818.6	3252.0	3130.3	2707.3
42.5°	115.9	121.6	133.3	155.2	309.6	596.9	1432.5	2942.7	3403.9	3257.3	2762.5
45°	113.7	119.9	131.5	158.5	295.1	582.8	1426.7	3056.0	3520.6	3364.4	2836.4
47.5°	112.9	119.9	131.9	157.8	279.3	567.0	1447.4	3181.7	3622.2	3454.6	2934.8
50°	111.7	119.5	141.2	150.2	257.8	547.5	1517.6	3331.7	3728.9	3555.9	3062.2
52.5°	109.6	119.1	150.7	144.4	230.0	520.5	1631.4	3543.4	3913.2	3752.9	3250.7
55°	107.1	119.9	144.0	135.4	200.5	485.6	1745.1	3833.5	4212.1	4071.0	3521.3
57.5°	104.3	118.8	136.1	127.1	176.0	441.6	1831.4	4071.3	4458.7	4398.9	3853.8
60°	102.1	121.6	122.5	122.1	160.3	399.8	1839.7	4056.0	4529.7	4611.9	4179.2
62.5°	99.7	124.1	111.7	118.3	152.3	360.8	1737.2	3804.9	4409.7	4584.4	4444.5
65°	96.2	108.3	105.9	114.9	152.3	340.1	1498.5	3386.8	4078.0	4325.3	4588.6
67.5°	93.0	98.4	101.7	110.5	155.7	320.4	1204.2	2856.8	3555.0	3907.4	4426.6
70°	88.4	93.0	97.1	106.3	154.0	306.8	947.8	2289.7	2925.6	3329.1	3978.7
72.5°	84.2	87.6	91.8	100.1	154.0	300.6	761.3	1796.1	2233.7	2573.7	3296.0
75°	78.0	81.0	84.6	93.9	151.1	274.8	571.7	1439.2	1634.3	1847.2	2600.6
77.5°	71.8	73.9	76.8	85.9	136.1	229.6	404.3	1114.6	1210.8	1328.7	2027.5
80°	63.9	65.5	67.6	76.8	112.9	178.1	263.2	871.7	905.3	962.2	1333.7
82.5°	54.8	57.3	57.7	66.0	90.9	129.2	156.5	597.3	596.9	680.3	941.0
85°	44.8	46.1	46.9	51.9	67.2	85.9	102.9	326.2	290.9	407.6	817.4
87.5°	33.7	32.3	33.7	34.9	44.5	50.7	55.1	60.2	36.2	73.9	475.3
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°	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8	1951.8
2.5°	2221.7	2246.2	2231.6	2214.1	2170.6	2106.6	2057.7	2015.0
5°	2379.7	2425.0	2405.2	2340.4	2227.5	2099.2	1964.3	1882.1
7.5°	2359.9	2449.6	2441.6	2333.8	2171.8	1982.9	1793.3	1684.9
10°	2200.5	2326.2	2347.9	2237.4	2066.0	1854.6	1635.1	1512.7
12.5°	2027.0	2132.8	2176.8	2134.9	1973.4	1758.8	1535.1	1412.6
15°	1881.7	1935.2	1978.8	2005.8	1905.7	1724.7	1517.6	1391.4
17.5°	1774.2	1763.8	1800.3	1865.0	1869.2	1770.0	1596.5	1455.4
20°	1722.3	1641.0	1662.1	1752.9	1859.3	1885.0	1753.8	1587.0
22.5°	1719.4	1592.4	1596.5	1694.5	1887.9	2041.9	1950.2	1760.0
25°	1764.2	1587.0	1590.7	1688.3	1938.6	2200.1	2177.2	1955.5
27.5°	1840.6	1610.2	1607.7	1715.6	2006.2	2332.0	2406.3	2194.7
30°	1923.2	1643.8	1637.6	1759.6	2072.6	2413.4	2569.1	2374.9
32.5°	2026.1	1703.6	1682.0	1824.0	2138.2	2491.4	2708.1	2543.3
35°	2124.1	1791.2	1760.0	1916.1	2208.3	2578.2	2863.8	2729.8
37.5°	2224.2	1922.0	1904.5	2048.9	2307.5	2672.5	3041.9	2941.0
40°	2352.5	2107.9	2099.6	2242.0	2440.0	2775.4	3241.6	3161.0
42.5°	2490.7	2305.5	2298.5	2463.7	2604.4	2878.8	3412.6	3349.9
45°	2631.4	2544.9	2546.8	2700.3	2777.5	2976.3	3547.1	3501.0
47.5°	2797.4	2807.0	2866.3	2945.6	2945.9	3085.1	3666.2	3641.7
50°	3008.2	3123.2	3232.9	3245.3	3116.2	3228.7	3811.9	3802.8
52.5°	3246.9	3488.1	3615.6	3576.2	3282.2	3406.8	4027.4	4027.0
55°	3530.5	3869.6	3989.6	3922.3	3481.1	3638.8	4308.8	4290.5
57.5°	3824.4	4236.5	4333.3	4245.7	3729.8	3909.1	4591.1	4494.4
60°	4141.9	4552.5	4650.8	4519.3	4008.7	4178.5	4777.9	4551.6
62.5°	4349.9	4737.2	4807.7	4681.5	4258.6	4452.9	4838.1	4483.1
65°	4360.6	4614.3	4633.0	4588.2	4364.8	4691.1	4750.9	4280.1
67.5°	4064.3	4079.3	4103.8	4151.9	4137.7	4584.8	4414.6	3806.1
70°	3430.4	3231.3	3311.7	3358.2	3462.9	4078.0	3793.3	3095.5
72.5°	2623.1	2332.0	2423.4	2407.6	2625.2	3345.0	2902.0	2384.4
75°	1887.9	1590.3	1597.4	1598.1	1886.3	2670.0	1978.8	1693.2
77.5°	1283.1	1125.4	1148.7	1134.1	1262.4	2091.8	1424.6	1220.4
80°	877.6	873.4	878.3	844.3	841.9	1352.0	1054.8	973.4
82.5°	650.8	601.5	594.5	558.4	645.0	1033.6	800.8	699.5
85°	513.5	332.9	289.3	349.1	558.8	951.0	488.2	358.7
87.5°	217.5	130.8	79.3	156.9	310.6	697.0	135.4	69.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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