

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: P197203

Luminaire Tested: **NAV-AF-01-D-UNV-SLR-8030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197203  
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-8030-1200  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 80 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: 4831 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

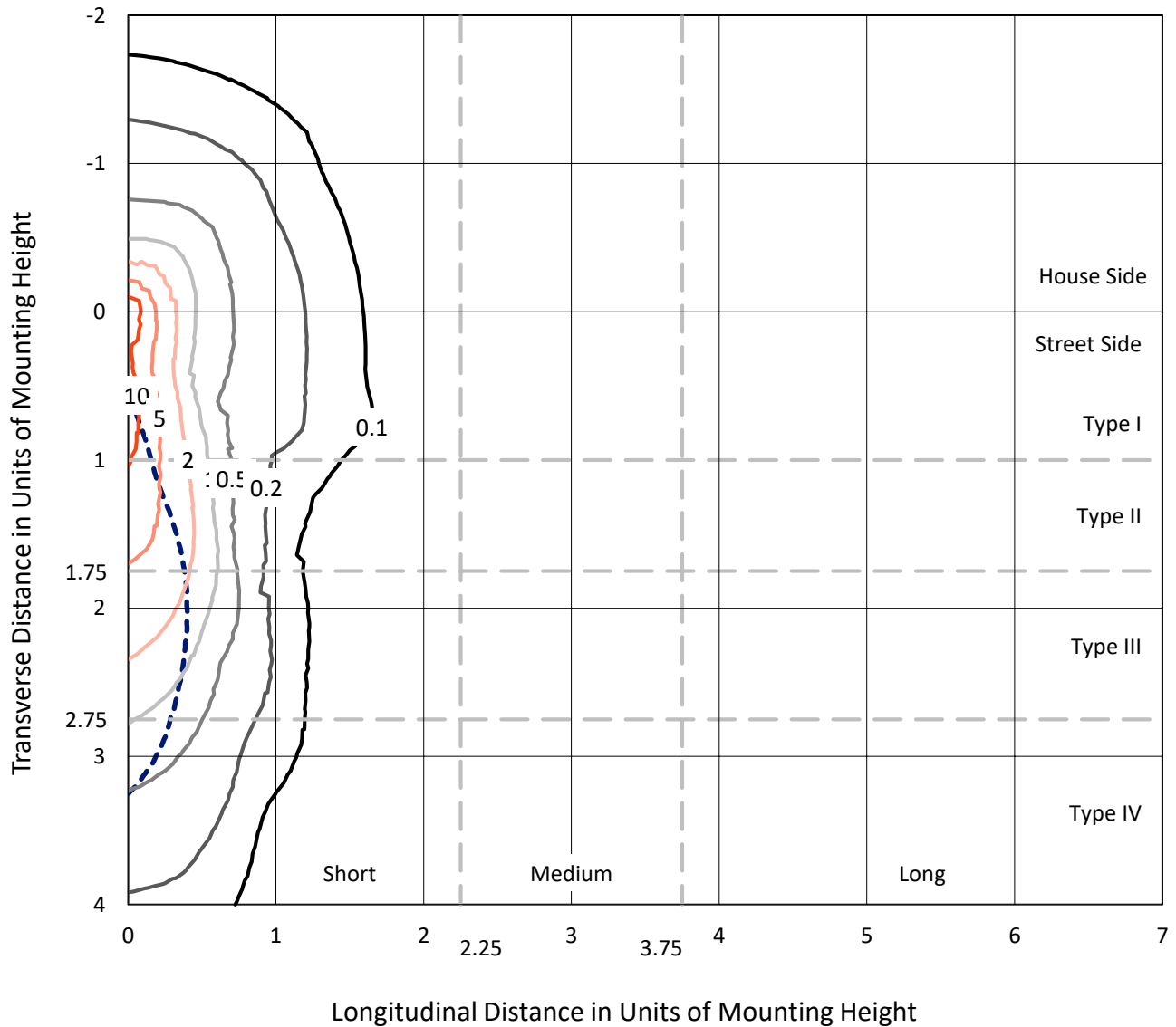


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### Iso-Footcandle Lines of Horizontal Illumination

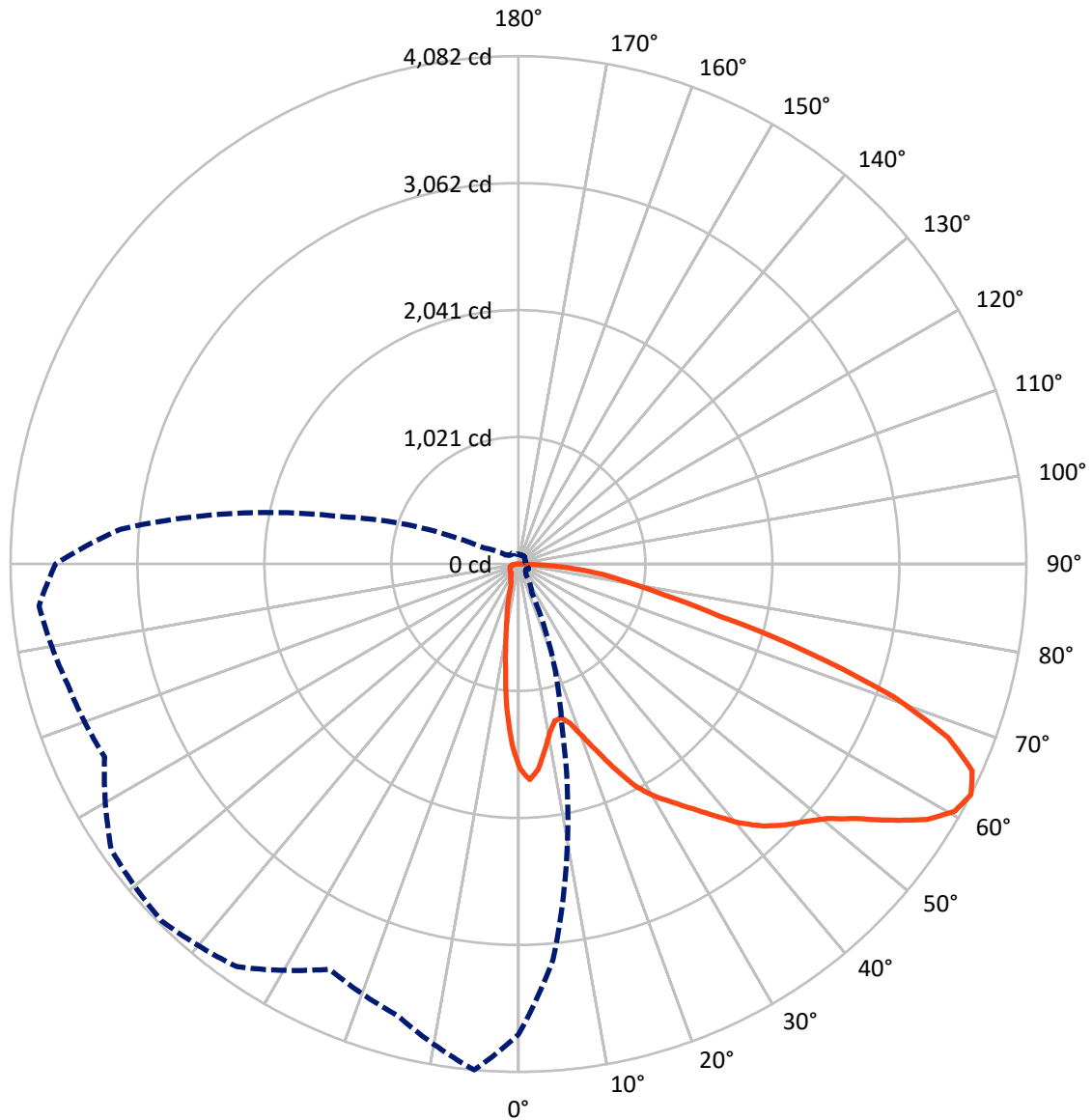
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.5 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	855.8	0.0	855.8
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	3975.2	0.0	3975.2
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	4831.0	0.0	4831.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.8	2.5
10°-20°	218.8	4.5
20°-30°	314.7	6.5
30°-40°	481.9	10.0
40°-50°	704.6	14.6
50°-60°	1025.2	21.2
60°-70°	1187.8	24.6
70°-80°	619.2	12.8
80°-90°	159.2	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°	4831.0	100.0
0°-180°	4831.0	100.0



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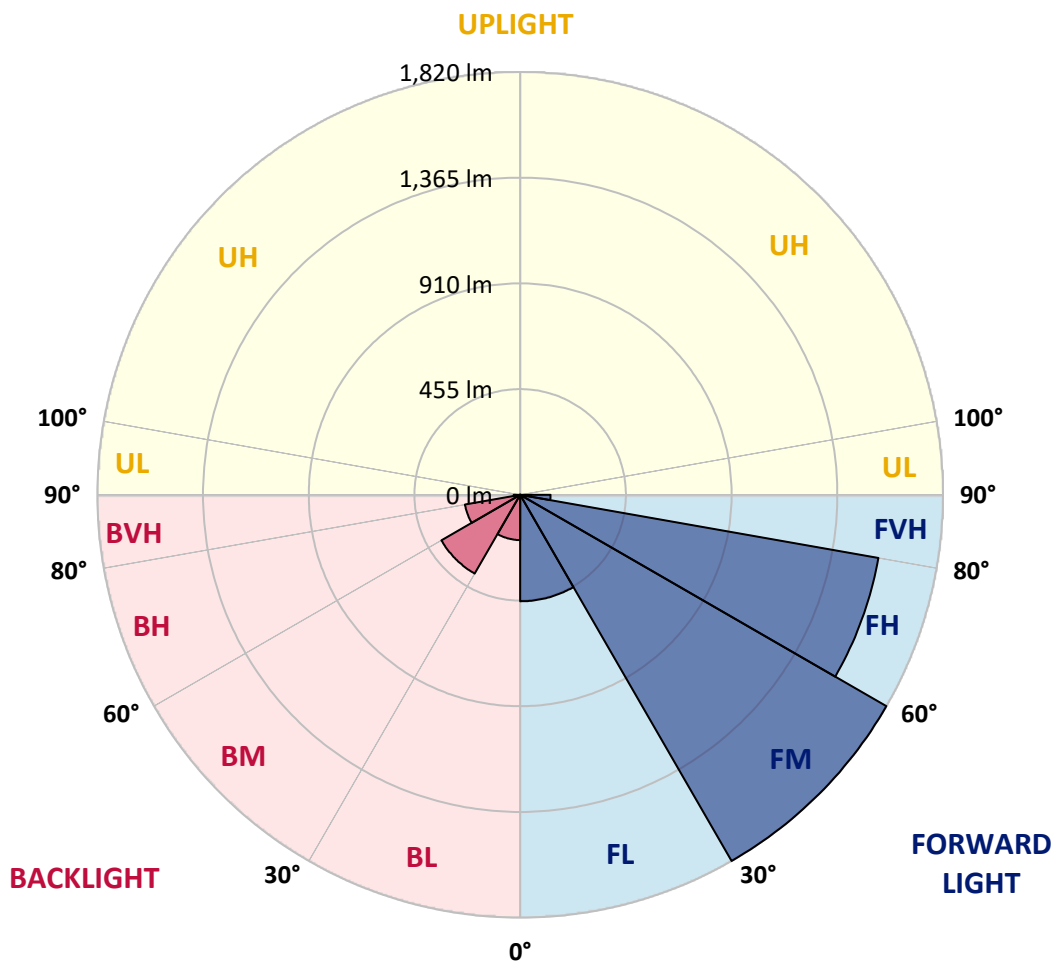
CATALOG NUMBER: NAV-AF-01-D-UNV-SLR-8030-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	458.5	9.5			
FM	(30°-60°)	1820.1	37.7			
FH	(60°-80°)	1565.7	32.4			G1/1800
FVH	(80°-90°)	130.9	2.7			G2/225
BL	(0°-30°)	194.7	4.0	B1/500		
BM	(30°-60°)	391.6	8.1	B1/1000		
BH	(60°-80°)	241.3	5.0	B1/500		G1/500
BVH	(80°-90°)	28.2	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°	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0
2.5°	1700.2	1676.4	1621.4	1573.1	1512.8	1467.6	1412.7	1383.6	1362.2	1347.9	1336.3
5°	1588.1	1530.7	1425.6	1333.5	1234.0	1162.2	1078.1	1032.3	1003.9	988.5	981.5
7.5°	1421.8	1345.7	1209.8	1086.2	961.8	872.2	808.4	740.5	704.4	680.9	673.2
10°	1276.4	1190.6	1028.4	889.3	793.4	729.6	675.0	612.6	566.4	526.1	511.0
12.5°	1192.0	1092.2	907.2	781.5	700.9	632.6	574.8	507.5	458.9	416.8	400.7
15°	1174.1	1062.7	856.4	712.8	614.0	531.7	462.4	389.2	341.5	306.8	295.6
17.5°	1228.1	1090.8	835.1	650.1	531.0	430.5	345.0	266.6	227.0	208.1	203.5
20°	1339.1	1152.4	824.9	593.7	450.5	331.4	238.5	181.1	161.5	155.9	155.5
22.5°	1485.2	1252.6	836.1	547.5	374.8	244.5	174.8	148.9	140.8	137.7	137.7
25°	1650.1	1388.1	865.9	512.1	308.2	190.2	150.6	136.6	130.0	126.8	127.1
27.5°	1851.9	1553.1	906.5	479.5	260.6	166.7	140.8	128.9	122.2	119.1	119.4
30°	2003.9	1695.0	941.5	449.8	236.1	157.3	135.6	124.3	117.0	112.4	112.1
32.5°	2146.1	1820.0	969.9	428.4	222.1	140.5	122.6	114.2	107.9	102.6	101.6
35°	2303.4	1937.7	983.2	427.7	213.0	126.8	112.1	101.9	95.6	89.7	88.6
37.5°	2481.7	2081.7	994.4	431.9	208.1	118.0	107.2	97.4	92.1	86.2	84.8
40°	2667.3	2222.5	1003.2	435.4	207.4	112.1	103.3	94.6	89.3	83.0	81.6
42.5°	2826.7	2347.2	1015.1	434.0	202.5	111.0	100.9	92.1	87.2	80.9	79.2
45°	2954.2	2446.3	1033.7	433.6	195.1	113.5	100.2	91.4	85.5	78.8	77.4
47.5°	3072.9	2558.0	1072.9	432.2	187.0	112.8	104.0	90.7	84.8	78.1	77.1
50°	3208.9	2708.3	1139.8	421.7	175.8	107.9	111.0	90.0	83.0	77.1	76.0
52.5°	3398.0	2928.3	1238.9	402.8	160.4	102.6	112.1	89.7	80.2	75.0	73.6
55°	3620.4	3164.0	1345.7	375.5	140.1	93.5	106.5	88.3	77.4	71.8	69.7
57.5°	3792.4	3338.1	1420.4	336.3	120.1	88.3	94.9	85.1	73.9	68.3	66.6
60°	3840.7	3345.8	1433.7	289.3	110.0	84.8	81.6	92.8	71.1	65.2	63.4
62.5°	3782.9	3192.7	1346.8	256.4	106.5	81.3	74.3	88.6	68.3	62.3	60.6
65°	3611.7	2934.2	1152.4	251.5	110.0	78.1	70.4	70.8	65.5	59.5	57.8
67.5°	3211.7	2553.8	907.9	254.6	114.2	75.0	67.6	64.5	62.3	57.1	55.0
70°	2612.0	2056.1	715.3	260.3	118.0	70.8	64.1	60.2	58.5	52.9	51.8
72.5°	2012.0	1645.6	564.3	256.4	121.9	66.6	59.2	56.0	53.9	48.7	47.6
75°	1428.8	1307.6	414.7	220.0	111.7	60.6	53.6	50.8	49.0	43.4	43.1
77.5°	1029.8	979.4	288.6	165.3	88.3	53.2	47.3	44.8	43.8	37.5	37.5
80°	821.4	745.4	172.7	107.9	64.5	44.1	39.6	38.5	37.5	31.2	31.5
82.5°	590.2	517.0	110.3	67.3	47.3	33.6	30.8	30.5	28.7	23.1	23.1
85°	302.6	264.1	70.8	45.2	33.3	21.7	20.3	19.6	18.6	14.4	14.4
87.5°	58.8	80.9	39.2	22.1	16.1	7.7	7.7	6.7	7.7	5.3	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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0
2.5°	1358.4	1351.4	1346.4	1344.0	1379.4	1394.1	1410.9	1435.1	1451.5	1444.5	1466.9
5°	1014.4	1019.3	1030.5	1048.0	1097.4	1120.9	1135.9	1155.9	1170.3	1155.9	1179.7
7.5°	693.5	700.9	724.7	760.8	820.3	846.6	851.9	852.2	849.1	825.6	841.7
10°	510.7	496.0	501.2	527.2	580.4	603.9	606.3	600.0	599.0	589.5	607.7
12.5°	395.8	375.5	363.6	367.8	407.7	427.0	430.1	433.6	448.0	452.6	475.0
15°	295.3	284.8	276.0	272.2	298.4	313.5	315.2	323.7	338.7	342.9	362.2
17.5°	207.7	210.5	215.1	216.8	235.7	245.5	242.7	242.7	245.2	244.1	255.0
20°	158.7	164.3	173.0	181.4	198.6	204.2	197.2	188.4	182.8	180.0	182.5
22.5°	140.1	144.0	149.6	160.4	174.8	177.6	168.5	161.5	156.2	153.4	153.8
25°	130.0	133.8	138.4	147.1	159.4	160.8	152.4	147.8	143.6	140.8	140.1
27.5°	121.2	123.6	126.4	132.1	144.7	145.4	139.8	137.0	134.2	132.1	131.4
30°	113.1	114.2	115.2	120.8	130.3	131.4	128.6	127.1	126.1	124.7	124.7
32.5°	102.6	104.0	105.8	110.7	119.8	121.2	119.4	118.4	116.6	115.9	114.9
35°	90.0	93.5	97.4	103.3	113.1	113.8	111.7	108.6	104.4	103.3	102.6
37.5°	84.8	85.5	90.4	97.4	107.5	108.2	105.4	100.2	97.0	97.4	98.1
40°	81.3	82.3	85.1	92.1	102.3	103.3	100.9	97.0	93.9	94.2	95.3
42.5°	78.5	79.9	81.6	86.2	96.3	98.4	97.7	94.2	91.1	91.8	93.2
45°	77.1	78.1	78.1	81.3	91.1	94.2	94.6	91.8	89.3	90.0	91.8
47.5°	76.4	76.4	75.3	77.8	87.6	90.7	91.4	90.0	88.6	89.3	91.1
50°	75.3	73.9	72.9	75.0	84.8	87.6	88.3	87.2	87.9	89.3	90.4
52.5°	72.2	70.8	70.8	72.2	82.0	84.8	85.1	84.4	85.8	87.6	89.3
55°	68.3	68.3	68.7	70.1	80.6	82.7	82.3	81.6	83.0	85.1	86.9
57.5°	64.8	64.5	66.2	68.0	78.8	80.2	79.5	79.5	80.6	82.3	84.1
60°	62.7	60.9	62.3	65.2	77.1	78.5	77.4	77.1	78.8	80.2	81.6
62.5°	60.6	58.8	59.9	62.7	74.6	75.7	75.0	75.0	76.7	77.8	79.2
65°	57.4	56.7	57.4	60.2	72.5	72.9	72.9	73.2	74.6	75.3	76.7
67.5°	54.6	54.6	55.0	57.8	70.8	70.1	70.1	71.8	72.2	72.9	74.3
70°	51.1	51.8	51.8	55.3	69.4	66.9	67.3	68.7	69.4	70.1	70.4
72.5°	47.3	47.6	48.3	52.9	67.3	63.7	64.1	65.2	65.5	66.6	66.9
75°	43.1	43.4	44.5	50.4	65.9	60.6	59.9	60.6	61.3	62.0	61.6
77.5°	38.2	38.9	39.9	49.0	61.3	59.9	54.6	55.3	56.0	56.0	55.7
80°	32.2	33.3	35.0	46.9	51.8	57.8	48.7	49.0	49.4	49.4	48.7
82.5°	24.2	26.3	28.7	38.9	40.6	49.4	42.0	42.7	41.7	41.0	40.6
85°	15.8	17.5	21.0	27.0	29.8	38.9	34.7	35.0	32.9	32.6	32.6
87.5°	6.3	6.7	9.5	13.7	17.9	24.2	24.9	25.6	23.8	23.8	24.5
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°	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0
2.5°	1500.9	1535.9	1576.2	1617.2	1650.8	1694.3	1736.3	1781.1	1803.9	1817.2	1854.7
5°	1216.8	1264.8	1321.9	1386.0	1439.3	1530.3	1628.4	1737.7	1790.2	1842.1	1940.2
7.5°	870.4	917.4	983.9	1066.9	1142.6	1262.7	1392.0	1539.8	1612.7	1696.7	1857.5
10°	646.3	696.0	756.2	826.6	901.3	1026.3	1171.3	1337.3	1417.6	1512.5	1695.3
12.5°	524.0	582.2	644.5	707.6	771.7	855.7	1007.7	1192.3	1278.5	1374.1	1557.3
15°	408.8	471.1	538.4	607.0	670.8	764.6	919.8	1138.0	1236.5	1328.9	1478.9
17.5°	289.3	348.2	423.8	507.2	599.7	710.7	900.9	1161.9	1281.3	1378.0	1478.5
20°	197.2	237.8	313.5	412.3	526.5	667.3	907.9	1245.6	1394.8	1500.9	1539.1
22.5°	157.6	176.9	228.0	328.6	463.4	635.7	936.6	1360.5	1557.7	1686.9	1649.4
25°	143.3	154.1	180.7	259.6	407.4	614.7	992.7	1512.1	1740.2	1871.2	1782.2
27.5°	134.5	144.0	161.1	213.3	359.0	601.1	1063.8	1690.8	1945.8	2053.3	1920.5
30°	128.9	138.4	154.1	191.6	322.6	580.8	1126.1	1854.0	2110.0	2179.7	1995.2
32.5°	118.0	125.4	138.4	171.6	295.3	556.9	1180.1	2000.1	2265.2	2288.3	2084.8
35°	106.8	114.5	127.5	155.5	279.2	538.4	1208.4	2129.7	2419.0	2396.9	2173.8
37.5°	102.6	108.9	120.8	144.0	270.4	526.1	1219.3	2257.2	2584.0	2517.1	2235.8
40°	99.8	105.4	115.9	136.3	268.0	514.6	1216.8	2378.4	2744.0	2641.4	2284.5
42.5°	97.7	102.6	112.4	131.0	261.3	503.7	1208.8	2483.1	2872.2	2748.6	2331.1
45°	96.0	101.2	111.0	133.8	249.0	491.8	1203.9	2578.7	2970.7	2839.0	2393.4
47.5°	95.3	101.2	111.4	133.1	235.7	478.5	1221.4	2684.8	3056.5	2915.0	2476.4
50°	94.2	100.9	119.1	126.8	217.5	462.0	1280.6	2811.3	3146.5	3000.4	2584.0
52.5°	92.5	100.5	127.1	121.9	194.1	439.2	1376.6	2989.9	3302.0	3166.8	2743.0
55°	90.4	101.2	121.5	114.2	169.2	409.8	1472.5	3234.8	3554.2	3435.1	2971.4
57.5°	87.9	100.2	114.9	107.2	148.5	372.7	1545.4	3435.5	3762.3	3711.8	3251.9
60°	86.2	102.6	103.3	103.0	135.2	337.3	1552.4	3422.5	3822.2	3891.5	3526.5
62.5°	84.1	104.7	94.2	99.8	128.6	304.4	1465.9	3210.6	3721.0	3868.4	3750.4
65°	81.3	91.4	89.3	97.0	128.6	286.9	1264.5	2857.9	3441.1	3649.8	3871.9
67.5°	78.5	83.0	85.8	93.2	131.4	270.4	1016.1	2410.6	2999.7	3297.1	3735.3
70°	74.6	78.5	82.0	89.7	130.0	258.9	799.7	1932.1	2468.7	2809.2	3357.4
72.5°	71.1	73.9	77.4	84.4	130.0	253.6	642.4	1515.6	1884.8	2171.7	2781.2
75°	65.9	68.3	71.5	79.2	127.5	231.9	482.3	1214.4	1379.0	1558.7	2194.5
77.5°	60.6	62.3	64.8	72.5	114.9	193.7	341.2	940.5	1021.7	1121.2	1710.7
80°	53.9	55.3	57.1	64.8	95.3	150.3	222.1	735.6	763.9	811.9	1125.4
82.5°	46.2	48.3	48.7	55.7	76.7	108.9	132.1	504.0	503.7	574.1	794.1
85°	37.8	38.9	39.6	43.8	56.7	72.5	86.9	275.3	245.5	344.0	689.7
87.5°	28.4	27.3	28.4	29.4	37.5	42.7	46.6	50.8	30.5	62.3	401.1
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):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0	1647.0
2.5°	1874.7	1895.3	1883.1	1868.4	1831.6	1777.6	1736.3	1700.2
5°	2008.1	2046.3	2029.5	1974.8	1879.6	1771.3	1657.5	1588.1
7.5°	1991.3	2067.0	2060.3	1969.2	1832.6	1673.3	1513.2	1421.8
10°	1856.8	1962.9	1981.1	1888.0	1743.3	1565.0	1379.7	1276.4
12.5°	1710.4	1799.7	1836.8	1801.5	1665.2	1484.1	1295.3	1192.0
15°	1587.8	1633.0	1669.8	1692.5	1608.1	1455.4	1280.6	1174.1
17.5°	1497.1	1488.3	1519.1	1573.8	1577.3	1493.6	1347.2	1228.1
20°	1453.3	1384.6	1402.5	1479.2	1568.9	1590.6	1479.9	1339.1
22.5°	1450.8	1343.6	1347.2	1429.8	1593.0	1723.0	1645.6	1485.2
25°	1488.7	1339.1	1342.2	1424.6	1635.8	1856.4	1837.2	1650.1
27.5°	1553.1	1358.7	1356.6	1447.7	1692.9	1967.8	2030.5	1851.9
30°	1622.8	1387.1	1381.8	1484.8	1748.9	2036.5	2167.8	2003.9
32.5°	1709.7	1437.5	1419.3	1539.1	1804.3	2102.3	2285.2	2146.1
35°	1792.3	1511.4	1485.2	1616.9	1863.5	2175.5	2416.5	2303.4
37.5°	1876.8	1621.8	1607.1	1728.9	1947.2	2255.1	2566.8	2481.7
40°	1985.0	1778.7	1771.7	1891.8	2058.9	2341.9	2735.3	2667.3
42.5°	2101.6	1945.4	1939.5	2078.9	2197.6	2429.1	2879.6	2826.7
45°	2220.4	2147.5	2148.9	2278.5	2343.7	2511.5	2993.1	2954.2
47.5°	2360.5	2368.5	2418.6	2485.5	2485.9	2603.2	3093.6	3072.9
50°	2538.4	2635.5	2727.9	2738.4	2629.5	2724.4	3216.6	3208.9
52.5°	2739.8	2943.3	3050.9	3017.6	2769.6	2874.7	3398.3	3398.0
55°	2979.1	3265.2	3366.5	3309.7	2937.4	3070.5	3635.8	3620.4
57.5°	3227.1	3574.9	3656.5	3582.6	3147.2	3298.5	3874.0	3792.4
60°	3495.0	3841.4	3924.5	3813.4	3382.6	3525.8	4031.6	3840.7
62.5°	3670.5	3997.3	4056.9	3950.4	3593.5	3757.4	4082.4	3782.9
65°	3679.6	3893.6	3909.4	3871.6	3683.1	3958.4	4008.9	3611.7
67.5°	3429.5	3442.1	3462.8	3503.4	3491.5	3868.8	3725.2	3211.7
70°	2894.7	2726.5	2794.5	2833.7	2922.0	3441.1	3200.8	2612.0
72.5°	2213.4	1967.8	2044.9	2031.6	2215.1	2822.5	2448.8	2012.0
75°	1593.0	1341.9	1347.9	1348.6	1591.6	2253.0	1669.8	1428.8
77.5°	1082.7	949.6	969.2	956.9	1065.2	1765.0	1202.1	1029.8
80°	740.5	737.0	741.2	712.5	710.4	1140.8	890.0	821.4
82.5°	549.2	507.5	501.6	471.1	544.3	872.2	675.7	590.2
85°	433.3	280.9	244.1	294.6	471.5	802.5	411.9	302.6
87.5°	183.5	110.3	66.9	132.4	262.0	588.1	114.2	58.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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