

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: P960346

Luminaire Tested: **NAV-SB1C-735-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960346
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5859.9 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 54.4
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: 24 FT



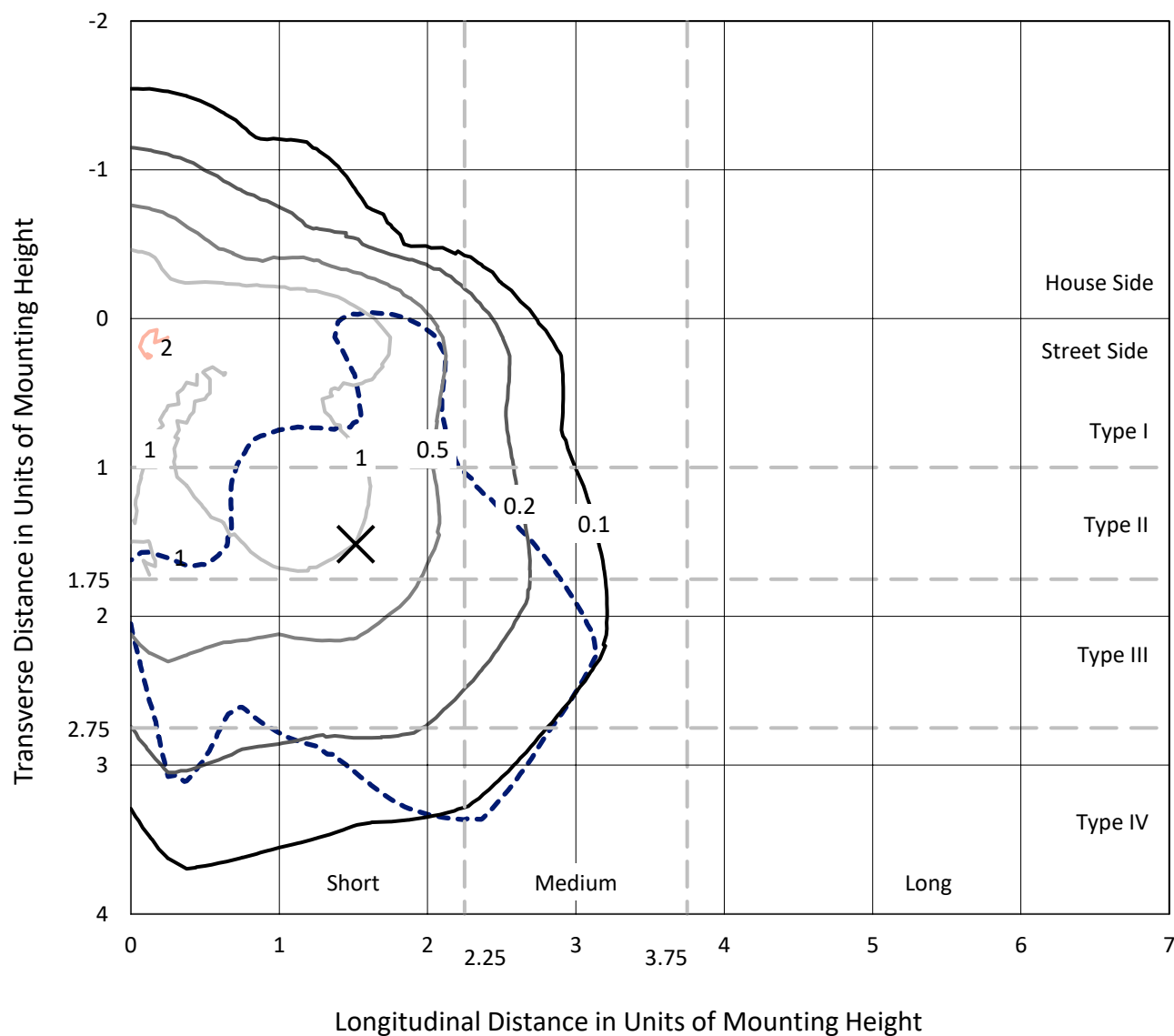
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

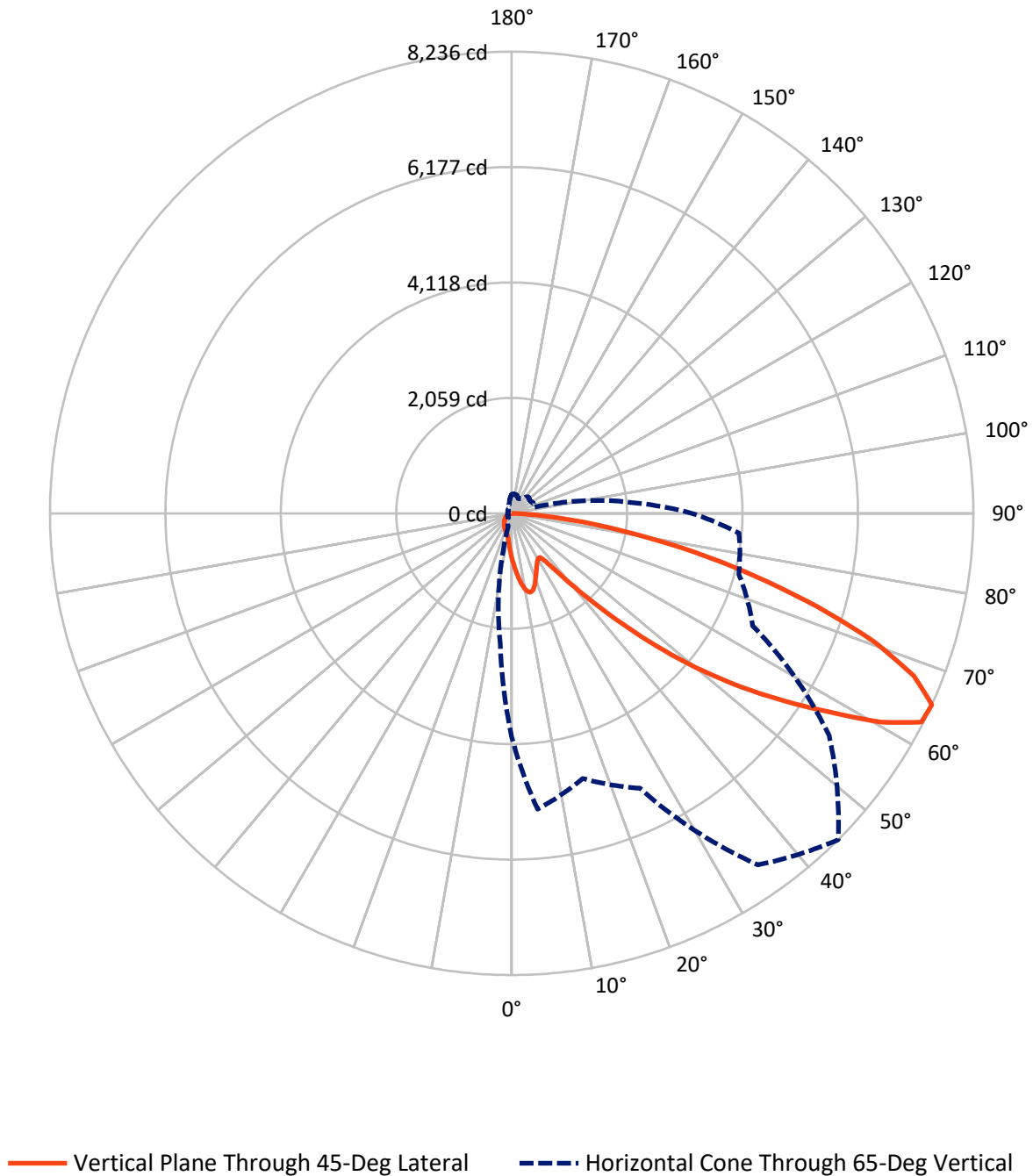


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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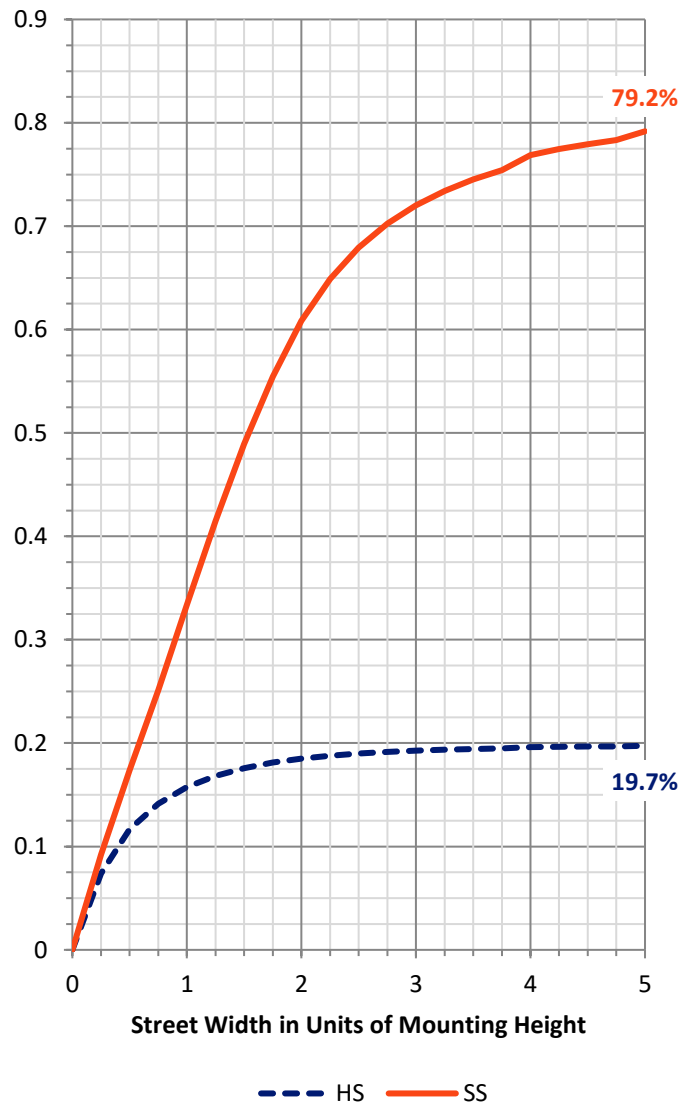
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1164.8	0.0	1164.8
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4695.2	0.0	4695.2
	% Fixture	80.1	0.0	80.1
Total	Lumens	5859.9	0.0	5859.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	1.4
10°-20°	239.5	4.1
20°-30°	352.8	6.0
30°-40°	453.2	7.7
40°-50°	733.0	12.5
50°-60°	1285.4	21.9
60°-70°	1608.4	27.4
70°-80°	939.9	16.0
80°-90°	167.7	2.9
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°	5859.9	100.0
0°-180°	5859.9	100.0

Coefficient of Utilization



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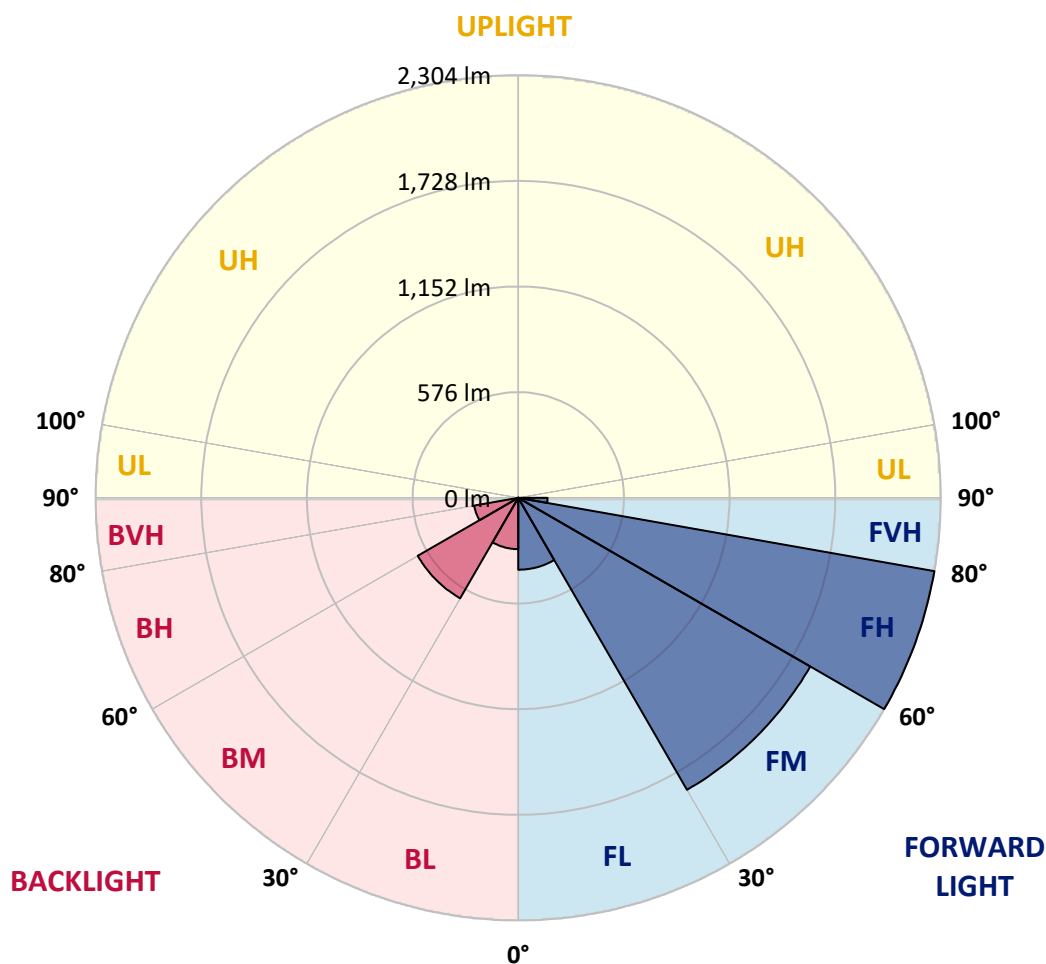
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	392.1	6.7			
FM	(30°-60°)	1838.9	31.4			
FH	(60°-80°)	2304.3	39.3			G2/5000
FVH	(80°-90°)	159.8	2.7			G2/225
BL	(0°-30°)	280.1	4.8	B1/500		
BM	(30°-60°)	632.8	10.8	B1/1000		
BH	(60°-80°)	244.0	4.2	B1/500		G1/500
BVH	(80°-90°)	7.9	0.1			G0/10
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°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4
2.5°	909.1	915.9	931.3	939.4	951.9	952.7	952.7	941.8	941.4	919.2	916.8
5°	1016.1	1032.3	1068.6	1106.1	1114.2	1116.2	1112.1	1090.4	1074.2	1031.0	1021.7
7.5°	1122.3	1153.3	1208.7	1258.7	1274.9	1274.9	1265.2	1229.6	1196.5	1134.0	1110.6
10°	1210.2	1249.4	1324.5	1380.6	1399.2	1395.1	1375.3	1330.6	1284.9	1209.1	1178.3
12.5°	1268.4	1312.4	1394.7	1439.9	1458.9	1448.4	1425.8	1382.2	1334.1	1254.3	1219.5
15°	1297.4	1343.5	1414.9	1438.8	1433.5	1422.6	1419.7	1398.8	1362.4	1287.8	1249.8
17.5°	1309.9	1352.8	1402.4	1387.4	1343.1	1334.6	1362.8	1389.5	1380.6	1316.8	1281.4
20°	1321.6	1357.6	1372.6	1306.4	1228.9	1221.2	1275.2	1351.2	1389.9	1343.9	1311.2
22.5°	1337.8	1360.1	1329.3	1220.8	1137.2	1119.4	1179.2	1293.4	1392.8	1378.2	1345.5
25°	1360.1	1366.1	1281.7	1139.6	1055.6	1037.9	1093.6	1229.2	1387.8	1415.3	1387.4
27.5°	1386.6	1374.1	1236.0	1071.7	990.7	974.1	1029.8	1167.5	1374.1	1452.4	1432.6
30°	1421.4	1384.7	1190.8	1019.3	944.2	932.1	985.8	1114.2	1357.2	1499.7	1488.8
32.5°	1456.5	1389.1	1148.9	988.6	933.8	938.2	982.2	1085.5	1338.6	1544.9	1550.2
35°	1494.4	1403.2	1128.3	1019.0	1021.3	1060.1	1078.3	1112.1	1335.8	1606.3	1626.9
37.5°	1546.1	1434.7	1152.9	1169.5	1253.5	1333.8	1318.9	1242.5	1368.5	1697.9	1736.2
40°	1620.4	1490.0	1260.3	1425.8	1598.2	1728.6	1671.7	1479.5	1468.6	1829.9	1887.2
42.5°	1728.6	1578.0	1450.9	1739.1	2031.3	2246.1	2093.6	1785.1	1643.8	2018.4	2091.5
45°	1888.5	1720.6	1681.4	2069.7	2565.5	2903.7	2586.4	2110.9	1889.3	2303.9	2361.2
47.5°	2110.1	1930.1	1897.4	2418.1	3214.6	3652.2	3133.0	2412.8	2168.6	2693.0	2706.3
50°	2404.3	2212.3	2102.0	2799.2	3926.3	4415.1	3679.2	2704.3	2488.7	3168.6	3153.2
52.5°	2792.7	2605.8	2340.6	3162.1	4658.1	5162.0	4227.8	2960.2	2886.0	3720.3	3688.9
55°	3322.3	3198.0	2666.7	3508.5	5389.7	5913.2	4755.1	3201.7	3410.8	4375.9	4185.4
57.5°	3979.6	4068.3	3137.0	3910.1	6047.2	6687.5	5284.7	3539.1	4092.2	5109.1	4473.7
60°	4403.4	5225.8	4037.7	4504.0	6794.4	7563.1	6010.5	4181.0	4808.3	5371.8	4418.8
62.5°	4300.9	5593.9	5116.3	5262.0	7481.6	8199.7	6721.8	4825.7	4943.2	4984.8	3995.7
65°	3986.4	5296.8	4896.3	5409.4	7655.5	8235.7	6912.0	4742.6	4193.1	4069.6	3211.7
67.5°	3553.7	4944.4	4373.6	5018.6	7341.0	7733.4	6558.0	4195.1	3240.4	3053.9	2330.1
70°	3086.6	4554.4	4030.4	4580.2	6741.6	6858.3	5956.0	3689.7	2383.3	2062.4	1495.3
72.5°	2643.4	4148.3	3795.5	4131.0	5941.9	5700.4	5172.5	3242.8	1735.4	1487.6	1062.9
75°	2190.0	3549.3	3460.8	3597.2	4890.3	4490.2	4297.6	2684.9	1362.0	1076.2	733.5
77.5°	1689.8	2773.3	2976.8	2880.8	3442.3	3335.2	3331.2	2017.6	995.1	718.1	459.8
80°	1156.6	1932.8	2325.6	2032.2	2234.0	2179.6	2508.9	1353.6	721.8	432.3	255.9
82.5°	679.8	1176.7	1618.8	983.8	1235.3	1268.0	1494.0	658.5	424.7	99.7	55.8
85°	275.7	464.6	632.9	385.1	595.8	502.6	567.1	184.9	118.3	2.5	0.0
87.5°	69.4	148.5	104.1	43.2	69.0	63.3	50.0	22.7	4.8	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4
2.5°	901.1	891.7	868.7	845.7	827.2	802.2	785.6	765.8	746.8	729.9	726.6
5°	996.3	965.7	923.6	885.3	846.1	808.2	770.6	731.0	694.7	672.5	658.5
7.5°	1073.8	1019.7	964.0	915.1	868.0	823.5	773.9	725.8	668.9	638.7	611.2
10°	1131.5	1060.5	987.4	931.3	883.7	840.5	798.5	750.1	681.4	643.5	602.3
12.5°	1169.5	1085.1	999.6	935.3	882.0	848.6	829.9	811.0	742.8	698.3	638.7
15°	1195.8	1102.5	1008.0	926.1	860.7	836.0	854.6	876.4	832.8	781.6	703.7
17.5°	1224.4	1125.0	1011.7	901.1	819.1	808.6	856.6	907.1	905.1	854.2	777.9
20°	1254.7	1144.8	1009.2	860.7	768.6	777.9	839.3	897.8	922.4	894.9	827.2
22.5°	1285.8	1163.8	999.9	808.2	721.4	750.5	811.8	863.0	892.2	883.7	832.0
25°	1324.9	1190.4	986.3	751.6	682.2	722.6	779.9	821.5	841.7	841.3	805.8
27.5°	1371.8	1226.0	979.0	706.0	654.4	691.2	742.0	779.1	793.2	793.2	765.0
30°	1426.2	1268.0	970.9	676.2	638.3	658.5	698.0	734.3	748.5	748.5	724.6
32.5°	1486.8	1308.3	951.5	658.0	626.1	626.5	651.6	684.7	701.6	704.1	687.1
35°	1559.4	1351.6	909.1	643.5	612.0	595.4	607.5	635.0	655.2	660.4	650.0
37.5°	1654.8	1404.5	848.6	622.1	590.2	562.7	565.6	586.6	608.7	616.8	610.0
40°	1782.7	1466.6	785.6	591.4	559.5	526.8	525.6	540.9	562.7	571.6	568.0
42.5°	1951.8	1541.3	725.4	561.9	522.3	488.8	486.9	499.0	517.9	527.3	525.6
45°	2168.2	1632.9	673.7	538.9	486.1	452.9	452.1	462.2	478.8	488.4	486.5
47.5°	2468.9	1724.6	638.7	526.8	457.4	423.4	425.1	434.0	449.0	455.7	452.9
50°	2861.0	1752.4	620.8	526.8	442.1	397.2	405.3	412.6	423.8	427.9	424.2
52.5°	3237.2	1660.4	604.8	530.0	444.0	375.0	392.4	397.6	407.3	409.0	403.6
55°	3421.7	1427.4	582.5	530.8	456.5	356.1	381.9	391.5	395.2	394.8	385.9
57.5°	3358.3	1154.1	545.0	527.7	465.0	344.0	369.0	387.6	390.0	386.3	369.8
60°	3135.9	849.7	516.3	503.8	461.9	340.3	349.2	378.6	382.3	377.4	350.4
62.5°	2762.9	589.8	494.2	451.3	447.7	339.1	318.1	359.3	368.2	361.3	321.7
65°	2175.0	416.6	425.5	395.6	417.0	332.6	285.8	335.9	348.0	337.5	281.8
67.5°	1471.8	300.7	344.7	358.4	367.4	318.1	262.4	309.2	325.3	311.6	235.3
70°	794.9	211.2	227.7	302.0	312.0	293.0	241.4	282.2	300.7	285.8	191.8
72.5°	469.4	151.8	159.5	242.6	259.9	258.0	218.0	250.7	273.3	255.5	155.8
75°	258.8	102.5	113.9	176.0	211.2	199.1	187.3	212.4	235.3	218.0	120.3
77.5°	115.8	61.4	79.1	115.4	165.9	136.4	144.9	165.5	186.9	168.7	80.4
80°	44.8	34.3	52.5	62.9	120.7	75.4	93.3	121.9	137.2	122.7	48.9
82.5°	5.6	15.4	22.7	24.6	70.2	40.0	54.1	76.7	75.4	65.4	24.6
85°	0.0	2.9	3.3	1.6	30.2	14.6	17.7	25.0	23.4	17.7	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4
2.5°	706.8	692.3	685.0	679.0	684.7	687.9	687.9	701.6	709.7	712.9	735.5
5°	622.9	595.8	577.7	566.8	570.4	574.4	578.9	596.2	607.9	615.6	650.8
7.5°	556.7	515.5	490.1	476.7	478.8	481.6	485.2	502.1	513.9	524.0	563.1
10°	524.0	465.9	432.3	416.3	413.4	411.7	410.5	420.7	429.5	437.6	476.3
12.5°	525.6	444.4	403.6	383.9	375.5	365.7	358.0	359.7	365.3	375.5	400.1
15°	546.2	437.6	388.8	364.1	350.0	338.7	329.4	327.4	329.4	331.1	346.3
17.5°	574.0	436.8	375.9	345.1	330.7	321.3	312.8	310.1	310.5	312.4	316.5
20°	596.2	434.4	361.3	327.0	314.1	306.0	297.6	294.7	295.5	295.9	300.3
22.5°	607.9	430.7	345.1	308.8	298.0	289.9	282.2	281.8	281.8	284.2	287.4
25°	607.9	423.0	330.7	291.5	281.8	274.5	265.3	266.8	267.6	270.9	275.7
27.5°	593.4	408.6	318.9	276.5	266.4	259.1	250.7	252.7	253.9	257.6	263.6
30°	574.8	391.1	305.6	262.4	250.7	245.5	238.2	239.0	240.6	244.7	251.5
32.5°	555.0	370.5	294.7	248.3	236.6	232.6	224.5	225.7	227.2	231.8	239.3
35°	533.3	346.3	281.8	235.3	223.7	220.4	211.2	212.0	214.3	219.2	226.8
37.5°	510.2	326.6	268.9	222.8	210.7	207.5	197.8	198.6	201.4	207.0	214.3
40°	487.7	307.2	255.1	209.5	197.4	194.5	184.1	184.9	188.1	194.1	201.8
42.5°	463.0	292.2	237.4	195.8	182.9	180.1	170.4	171.6	175.2	181.2	188.9
45°	433.6	282.6	217.6	182.9	168.3	165.5	156.6	159.1	163.1	169.1	177.2
47.5°	403.2	278.6	201.0	169.1	153.4	151.0	143.7	147.7	152.2	157.0	165.9
50°	374.2	273.3	184.1	156.2	140.5	138.1	133.2	138.5	142.9	147.4	155.8
52.5°	341.1	262.0	168.7	144.9	129.6	128.7	126.4	131.2	135.2	139.3	146.6
55°	306.8	243.8	155.4	134.8	120.3	121.2	119.9	123.9	127.2	130.8	137.2
57.5°	277.0	220.8	144.9	123.9	112.2	114.7	113.1	115.0	117.1	121.5	126.8
60°	246.6	193.4	133.2	111.0	104.1	107.0	102.5	102.1	102.9	104.1	113.9
62.5°	205.9	164.7	118.7	99.7	95.2	96.5	88.0	81.6	81.6	82.7	97.3
65°	165.5	138.1	102.5	86.8	83.1	82.3	70.2	61.4	60.6	64.2	76.7
67.5°	136.0	114.7	86.4	72.3	69.8	70.6	61.8	52.9	52.1	56.1	65.4
70°	112.6	92.5	69.0	55.8	58.1	61.8	52.9	44.4	43.2	46.8	55.8
72.5°	89.6	72.3	52.9	41.2	48.1	52.5	43.2	35.2	34.3	37.5	46.0
75°	65.8	51.7	36.0	29.8	37.1	41.2	31.5	25.0	23.8	26.6	35.2
77.5°	40.8	29.1	22.7	17.7	25.4	27.5	16.5	14.6	14.1	16.2	22.2
80°	19.0	12.5	10.9	6.0	9.3	10.9	6.9	7.7	8.1	9.7	13.7
82.5°	5.2	2.0	0.4	0.0	0.0	3.3	1.6	3.3	4.0	6.0	8.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.0	3.6	6.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.3
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°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4
2.5°	752.5	768.6	794.5	821.1	847.4	874.0	899.8	909.1
5°	682.6	719.8	771.0	825.9	882.4	939.8	992.3	1016.1
7.5°	604.8	658.0	735.1	821.1	911.1	1001.1	1083.9	1122.3
10°	521.5	589.0	677.0	793.2	922.4	1046.7	1160.6	1210.2
12.5°	442.5	513.1	610.4	749.7	913.6	1073.0	1209.8	1268.4
15°	376.3	438.8	543.8	698.0	884.9	1074.6	1233.3	1297.4
17.5°	326.6	367.4	475.9	640.6	847.4	1059.6	1241.4	1309.9
20°	302.0	313.2	388.0	567.1	812.2	1045.5	1249.4	1321.6
22.5°	287.4	290.3	317.3	472.3	770.2	1041.1	1263.5	1337.8
25°	275.7	276.5	283.8	374.2	706.0	1038.3	1285.4	1360.1
27.5°	264.0	264.0	268.0	301.6	618.9	1026.1	1313.6	1386.6
30°	252.4	252.4	255.1	266.8	516.7	1002.3	1347.5	1421.4
32.5°	240.2	240.2	242.6	251.1	412.6	972.5	1378.6	1456.5
35°	228.1	227.2	230.5	239.3	328.2	934.5	1409.7	1494.4
37.5°	215.1	214.7	218.0	228.1	283.4	890.5	1433.1	1546.1
40°	201.4	201.4	205.1	216.0	270.5	835.3	1470.3	1620.4
42.5°	188.9	188.1	192.2	205.5	260.8	782.4	1536.9	1728.6
45°	176.8	175.2	178.9	195.4	243.8	763.7	1661.2	1888.5
47.5°	165.5	161.4	164.7	183.3	228.5	833.2	1864.7	2110.1
50°	156.2	148.5	151.4	171.2	216.8	983.8	2128.6	2404.3
52.5°	146.6	136.4	138.1	156.2	206.3	1127.1	2414.9	2792.7
55°	136.4	125.2	126.0	141.2	191.4	1148.5	2694.2	3322.3
57.5°	125.2	114.7	114.7	127.6	180.4	995.5	2909.0	3979.6
60°	112.6	105.8	103.7	116.6	190.1	702.4	2934.0	4403.4
62.5°	98.9	95.2	92.5	106.2	197.4	416.3	2732.5	4300.9
65°	83.1	82.3	80.4	116.6	166.4	245.8	2345.8	3986.4
67.5°	69.8	68.7	68.7	122.3	126.4	154.6	1832.7	3553.7
70°	60.2	55.8	55.8	92.5	76.7	107.0	1279.7	3086.6
72.5°	50.4	45.6	42.4	73.9	57.3	78.3	799.7	2643.4
75°	40.4	36.7	32.7	48.9	42.7	59.3	464.6	2190.0
77.5°	29.1	27.5	23.0	36.0	31.1	42.7	276.5	1689.8
80°	15.0	15.4	14.6	20.6	21.0	29.1	157.4	1156.6
82.5°	8.9	6.9	7.7	10.0	12.1	16.5	59.3	679.8
85°	5.6	3.6	3.6	4.8	6.0	6.5	18.1	275.7
87.5°	2.9	1.2	1.6	2.5	2.0	1.6	0.8	69.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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