

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: P960532

Luminaire Tested: **NAV-SB1C-835-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960532
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-835-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 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: 5435.6 lumens
Efficiency: N/A
Efficacy: 99.9 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

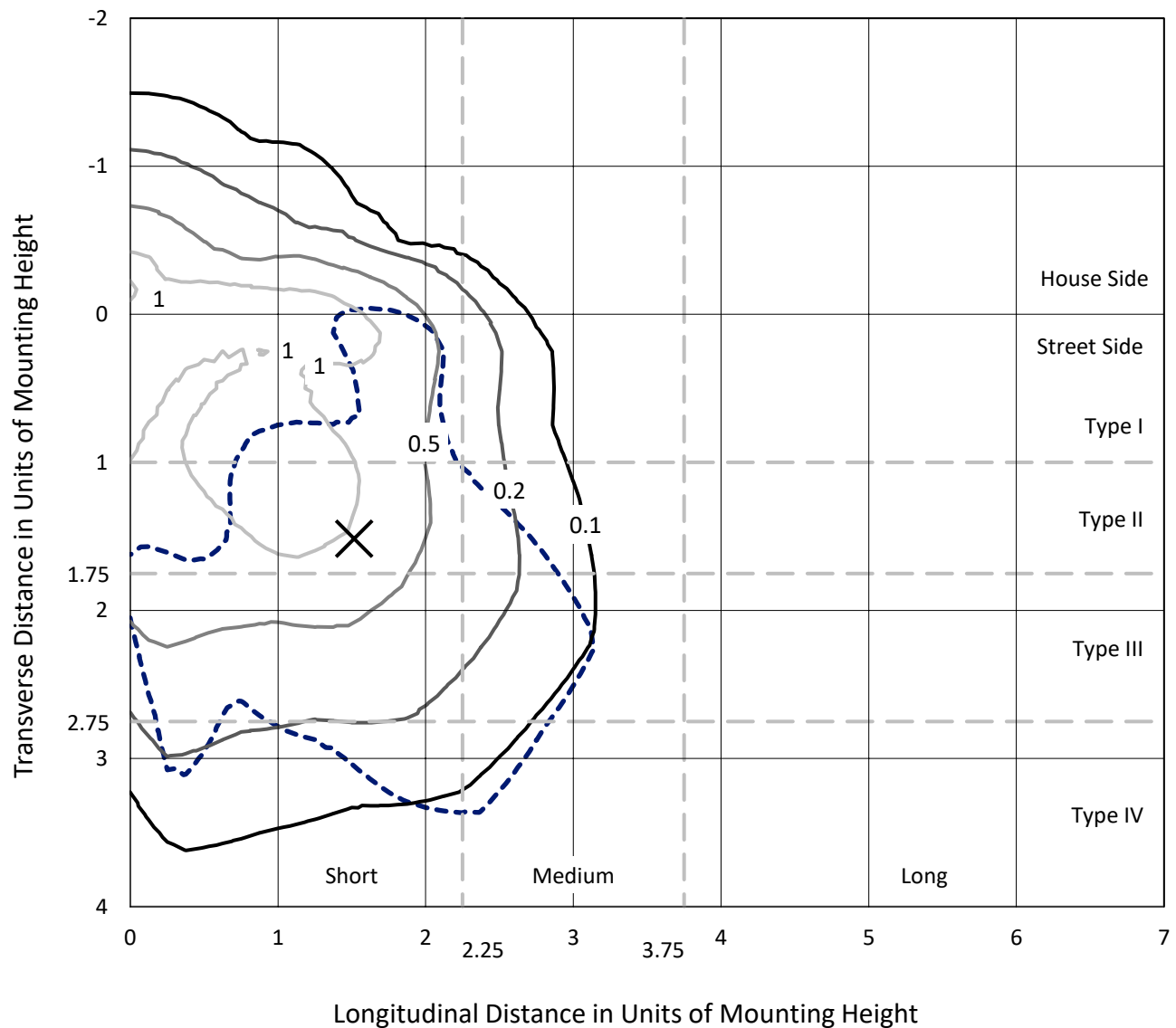


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Iso-Footcandle Lines of Horizontal Illumination

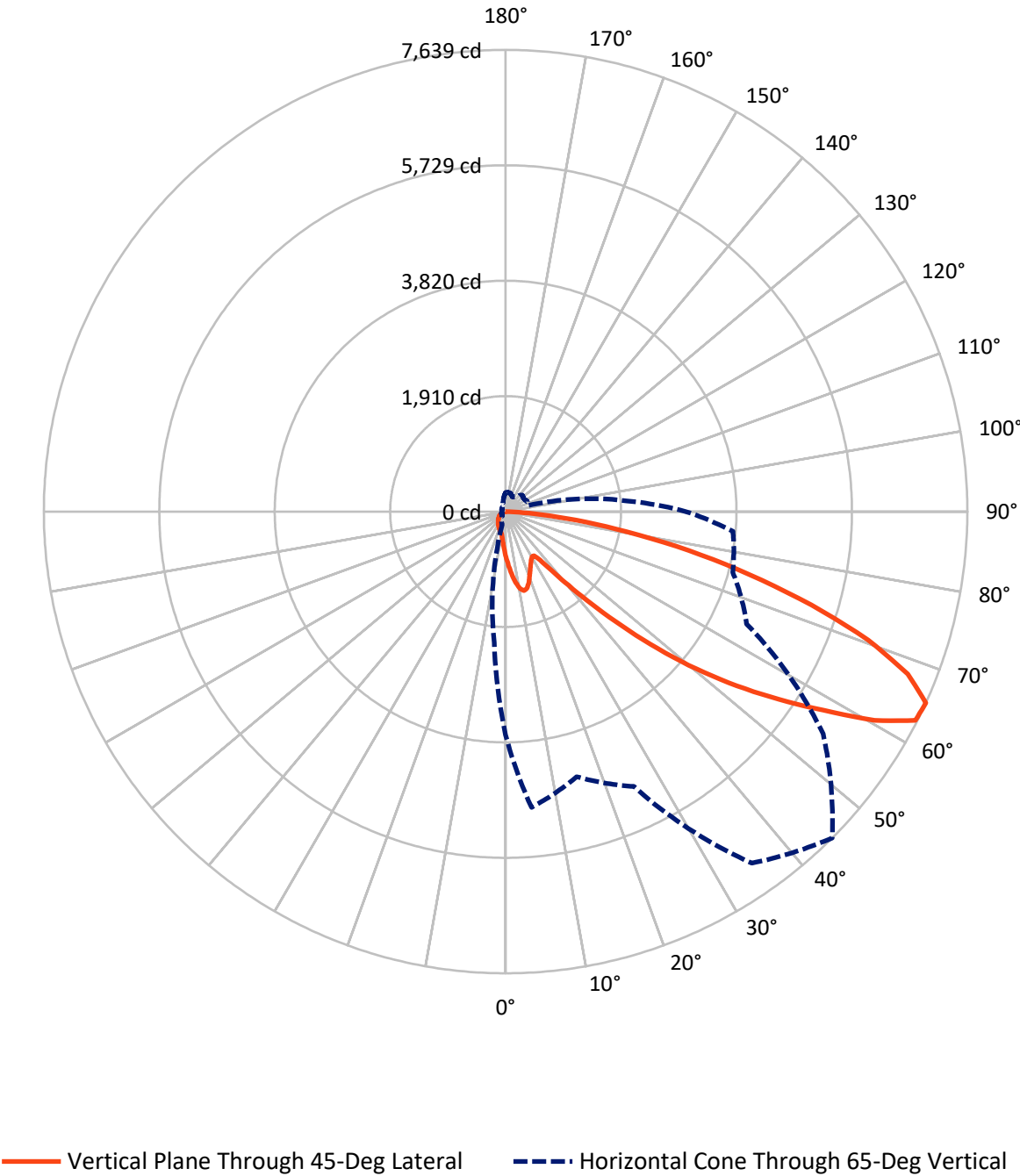
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	1080.4	0.0	1080.4
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	4355.2	0.0	4355.2
	% Fixture	80.1	0.0	80.1
Total	Lumens	5435.6	0.0	5435.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	1.4
10°-20°	222.1	4.1
20°-30°	327.2	6.0
30°-40°	420.4	7.7
40°-50°	679.9	12.5
50°-60°	1192.4	21.9
60°-70°	1492.0	27.4
70°-80°	871.8	16.0
80°-90°	155.5	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°	5435.6	100.0
0°-180°	5435.6	100.0

Coefficient of Utilization



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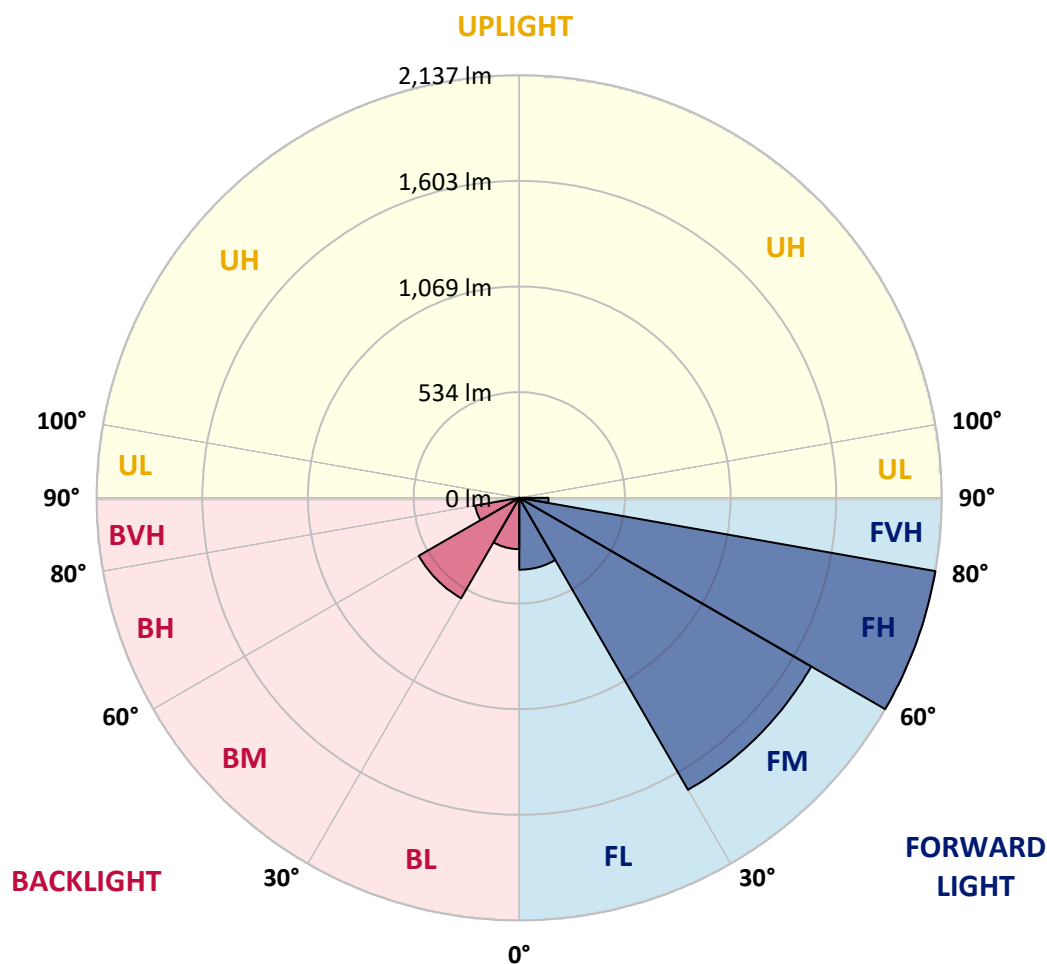
CATALOG NUMBER: NAV-SB1C-835-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	363.7	6.7			
FM	(30°-60°)	1705.8	31.4			
FH	(60°-80°)	2137.4	39.3			G2/5000
FVH	(80°-90°)	148.3	2.7			G2/225
BL	(0°-30°)	259.8	4.8	B1/500		
BM	(30°-60°)	587.0	10.8	B1/1000		
BH	(60°-80°)	226.4	4.2	B1/500		G1/500
BVH	(80°-90°)	7.3	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°	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7
2.5°	843.3	849.6	863.9	871.4	882.9	883.8	883.8	873.6	873.2	852.6	850.3
5°	942.5	957.5	991.2	1026.0	1033.5	1035.4	1031.7	1011.4	996.4	956.3	947.7
7.5°	1041.0	1069.8	1121.1	1167.6	1182.5	1182.5	1173.5	1140.6	1109.9	1051.9	1030.1
10°	1122.6	1159.0	1228.6	1280.6	1297.9	1294.2	1275.7	1234.2	1191.9	1121.5	1093.1
12.5°	1176.5	1217.4	1293.8	1335.7	1353.3	1343.6	1322.6	1282.2	1237.6	1163.5	1131.2
15°	1203.5	1246.2	1312.5	1334.6	1329.7	1319.6	1316.9	1297.4	1263.8	1194.5	1159.3
17.5°	1215.1	1254.8	1300.8	1287.0	1245.8	1238.0	1264.1	1288.8	1280.6	1221.5	1188.5
20°	1226.0	1259.3	1273.2	1211.8	1139.8	1132.7	1182.8	1253.3	1289.2	1246.6	1216.3
22.5°	1241.0	1261.6	1233.1	1132.3	1054.8	1038.3	1093.8	1199.8	1291.9	1278.4	1248.0
25°	1261.6	1267.1	1188.9	1057.1	979.2	962.7	1014.4	1140.2	1287.4	1312.8	1287.0
27.5°	1286.3	1274.7	1146.6	994.1	918.9	903.5	955.2	1082.9	1274.7	1347.3	1328.9
30°	1318.5	1284.4	1104.6	945.5	875.9	864.6	914.4	1033.5	1258.9	1391.1	1381.0
32.5°	1351.1	1288.5	1065.7	917.1	866.1	870.2	911.0	1006.9	1241.7	1433.1	1437.9
35°	1386.2	1301.6	1046.6	945.2	947.4	983.3	1000.2	1031.7	1239.0	1489.9	1509.0
37.5°	1434.2	1330.9	1069.5	1084.8	1162.7	1237.2	1223.3	1152.6	1269.4	1574.9	1610.5
40°	1503.1	1382.1	1169.0	1322.6	1482.5	1603.4	1550.6	1372.4	1362.2	1697.4	1750.6
42.5°	1603.4	1463.7	1345.8	1613.1	1884.3	2083.4	1942.0	1655.9	1524.8	1872.3	1940.0
45°	1751.7	1595.9	1559.6	1919.8	2379.6	2693.5	2399.1	1958.1	1752.4	2137.0	2190.2
47.5°	1957.2	1790.3	1759.9	2243.0	2981.8	3387.7	2906.2	2238.1	2011.6	2498.0	2510.3
50°	2230.3	2052.0	1949.8	2596.4	3641.9	4095.4	3412.7	2508.5	2308.5	2939.1	2924.8
52.5°	2590.5	2417.1	2171.1	2933.1	4320.8	4788.2	3921.6	2745.9	2677.0	3451.0	3421.8
55°	3081.8	2966.5	2473.6	3254.4	4999.3	5485.0	4410.7	2969.8	3163.8	4059.1	3882.4
57.5°	3691.3	3773.7	2909.9	3627.0	5609.3	6203.2	4902.0	3282.9	3795.9	4739.1	4149.7
60°	4084.5	4847.3	3745.2	4177.8	6302.4	7015.4	5575.3	3878.2	4460.1	4982.8	4098.8
62.5°	3989.4	5188.9	4745.9	4881.0	6939.8	7605.9	6235.1	4476.3	4585.2	4623.8	3706.4
65°	3697.7	4913.2	4541.8	5017.7	7101.2	7639.2	6411.4	4399.1	3889.5	3774.9	2979.2
67.5°	3296.3	4586.4	4056.8	4655.2	6809.5	7173.5	6083.0	3891.3	3005.7	2832.8	2161.3
70°	2863.0	4224.6	3738.6	4248.5	6253.4	6361.6	5524.7	3422.5	2210.8	1913.1	1387.0
72.5°	2451.9	3847.8	3520.7	3831.8	5511.6	5287.7	4797.9	3008.0	1609.8	1379.9	985.9
75°	2031.4	3292.2	3210.2	3336.8	4536.1	4165.1	3986.4	2490.5	1263.4	998.2	680.4
77.5°	1567.4	2572.5	2761.2	2672.1	3193.0	3093.8	3090.0	1871.5	923.0	666.1	426.5
80°	1072.8	1792.9	2157.2	1885.0	2072.2	2021.7	2327.3	1255.5	669.5	401.1	237.4
82.5°	630.6	1091.5	1501.5	912.6	1145.8	1176.2	1385.9	610.7	393.9	92.5	51.7
85°	255.7	431.0	587.1	357.2	552.7	466.2	526.1	171.5	109.7	2.3	0.0
87.5°	64.4	137.8	96.7	40.1	64.1	58.8	46.4	21.0	4.5	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°	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7
2.5°	835.8	827.2	805.9	784.4	767.2	744.0	728.7	710.3	692.7	677.0	674.0
5°	924.1	895.6	856.8	821.1	784.8	749.7	714.8	678.1	644.4	623.8	610.7
7.5°	996.1	945.9	894.2	848.9	805.0	763.9	717.8	673.2	620.4	592.3	566.9
10°	1049.6	983.7	915.9	863.9	819.7	779.6	740.7	695.8	632.1	596.9	558.7
12.5°	1084.8	1006.6	927.1	867.6	818.2	787.1	769.9	752.2	689.0	647.8	592.3
15°	1109.2	1022.6	935.0	859.0	798.4	775.5	792.7	812.9	772.5	725.0	652.7
17.5°	1135.7	1043.7	938.4	835.8	759.7	750.0	794.6	841.4	839.6	792.3	721.6
20°	1163.8	1062.0	936.1	798.4	713.0	721.6	778.5	832.8	855.7	830.1	767.2
22.5°	1192.6	1079.5	927.5	749.7	669.1	696.1	753.1	800.6	827.6	819.7	771.7
25°	1229.0	1104.2	914.8	697.2	632.8	670.2	723.4	762.0	780.7	780.3	747.4
27.5°	1272.4	1137.2	908.0	654.9	607.0	641.0	688.3	722.7	735.8	735.8	709.6
30°	1323.0	1176.2	900.6	627.2	592.0	610.7	647.4	681.1	694.2	694.2	672.2
32.5°	1379.1	1213.6	882.6	610.4	580.8	581.2	604.3	635.1	650.8	653.0	637.3
35°	1446.5	1253.7	843.3	596.9	567.6	552.3	563.5	589.1	607.7	612.6	602.9
37.5°	1534.9	1302.8	787.1	577.1	547.5	522.0	524.6	544.1	564.7	572.2	565.8
40°	1653.6	1360.4	728.7	548.6	519.0	488.6	487.5	501.7	522.0	530.2	526.8
42.5°	1810.5	1429.7	672.9	521.2	484.5	453.5	451.6	462.8	480.4	489.0	487.5
45°	2011.2	1514.6	624.9	499.9	450.8	420.1	419.4	428.8	444.1	453.0	451.2
47.5°	2290.2	1599.7	592.3	488.6	424.2	392.8	394.3	402.5	416.4	422.7	420.1
50°	2653.7	1625.5	575.9	488.6	410.0	368.5	376.0	382.7	393.2	396.9	393.6
52.5°	3002.7	1540.2	561.0	491.7	411.9	347.9	364.0	368.8	377.8	379.4	374.4
55°	3173.9	1324.1	540.4	492.4	423.5	330.3	354.2	363.3	366.5	366.2	357.9
57.5°	3115.1	1070.6	505.5	489.4	431.4	319.1	342.2	359.5	361.7	358.3	343.0
60°	2908.7	788.2	478.9	467.3	428.3	315.7	323.9	351.3	354.6	350.1	325.0
62.5°	2562.8	547.0	458.4	418.6	415.2	314.6	295.1	333.2	341.5	335.2	298.5
65°	2017.6	386.4	394.6	367.0	386.8	308.5	265.1	311.5	322.8	313.0	261.4
67.5°	1365.3	279.0	319.8	332.5	340.7	295.1	243.4	286.8	301.8	289.0	218.3
70°	737.3	195.9	211.2	280.1	289.5	271.8	224.0	261.8	279.0	265.1	177.8
72.5°	435.5	140.8	147.9	225.1	241.2	239.2	202.2	232.6	253.5	237.0	144.5
75°	240.1	95.1	105.6	163.3	195.9	184.6	173.7	197.0	218.3	202.2	111.6
77.5°	107.4	56.9	73.4	107.1	153.9	126.6	134.5	153.5	173.3	156.5	74.5
80°	41.6	31.9	48.7	58.4	111.9	70.0	86.5	113.1	127.3	113.9	45.3
82.5°	5.2	14.2	21.0	22.9	65.2	37.1	50.2	71.1	70.0	60.7	22.9
85°	0.0	2.7	3.0	1.5	28.1	13.5	16.5	23.2	21.7	16.5	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	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°	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7
2.5°	655.7	642.2	635.5	629.9	635.1	638.1	638.1	650.8	658.3	661.3	682.2
5°	577.8	552.7	535.9	525.7	529.1	532.9	537.0	553.1	564.0	571.0	603.6
7.5°	516.4	478.2	454.6	442.2	444.1	446.7	450.1	465.9	476.7	486.1	522.3
10°	486.1	432.1	401.1	386.0	383.5	381.9	380.8	390.2	398.4	405.9	441.9
12.5°	487.5	412.3	374.4	356.1	348.2	339.3	332.1	333.6	338.9	348.2	371.0
15°	506.7	405.9	360.6	337.7	324.6	314.2	305.6	303.7	305.6	307.1	321.2
17.5°	532.5	405.2	348.6	320.1	306.7	298.1	290.2	287.6	287.9	289.9	293.6
20°	553.1	402.9	335.2	303.3	291.3	283.8	275.9	273.4	274.1	274.5	278.6
22.5°	564.0	399.5	320.1	286.5	276.3	268.9	261.8	261.4	261.4	263.6	266.6
25°	564.0	392.5	306.7	270.4	261.4	254.6	246.0	247.5	248.3	251.2	255.7
27.5°	550.4	378.9	295.8	256.5	247.1	240.4	232.6	234.4	235.5	238.9	244.6
30°	533.2	362.8	283.4	243.4	232.6	227.7	220.9	221.7	223.1	226.9	233.3
32.5°	514.9	343.8	273.4	230.3	219.5	215.7	208.2	209.3	210.8	214.9	222.0
35°	494.7	321.2	261.4	218.3	207.5	204.5	195.9	196.6	198.8	203.4	210.4
37.5°	473.3	302.9	249.4	206.7	195.5	192.5	183.5	184.2	186.9	192.1	198.8
40°	452.3	285.0	236.7	194.3	183.1	180.5	170.8	171.5	174.5	180.1	187.3
42.5°	429.5	271.1	220.2	181.6	169.6	167.0	158.1	159.2	162.5	168.1	175.3
45°	402.2	262.1	201.8	169.6	156.1	153.5	145.2	147.5	151.3	156.9	164.4
47.5°	374.1	258.4	186.4	156.9	142.3	140.0	133.4	137.0	141.1	145.7	153.9
50°	347.2	253.5	170.8	144.9	130.3	128.0	123.6	128.4	132.5	136.6	144.5
52.5°	316.4	243.0	156.5	134.5	120.2	119.4	117.2	121.7	125.5	129.1	135.9
55°	284.5	226.2	144.1	125.0	111.6	112.3	111.2	115.0	118.0	121.4	127.3
57.5°	256.9	204.8	134.5	115.0	104.1	106.4	104.9	106.7	108.5	112.7	117.6
60°	228.8	179.4	123.6	103.0	96.7	99.2	95.1	94.7	95.5	96.7	105.6
62.5°	191.0	152.8	110.1	92.5	88.4	89.5	81.6	75.6	75.6	76.8	90.2
65°	153.5	128.0	95.1	80.5	77.2	76.4	65.2	56.9	56.2	59.6	71.1
67.5°	126.2	106.4	80.2	67.0	64.8	65.5	57.3	49.1	48.3	52.1	60.7
70°	104.4	85.8	64.1	51.7	53.9	57.3	49.1	41.2	40.1	43.5	51.7
72.5°	83.1	67.0	49.1	38.2	44.6	48.7	40.1	32.6	31.9	34.8	42.6
75°	61.0	48.0	33.3	27.7	34.4	38.2	29.2	23.2	22.1	24.7	32.6
77.5°	37.8	27.0	21.0	16.5	23.6	25.4	15.4	13.5	13.1	15.0	20.6
80°	17.6	11.6	10.1	5.6	8.6	10.1	6.4	7.1	7.5	9.0	12.7
82.5°	4.8	1.8	0.4	0.0	0.0	3.0	1.5	3.0	3.8	5.6	8.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.8	3.4	5.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.0
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°	752.7	752.7	752.7	752.7	752.7	752.7	752.7	752.7
2.5°	698.0	713.0	737.0	761.7	786.0	810.7	834.7	843.3
5°	633.2	667.7	715.2	766.1	818.6	871.8	920.4	942.5
7.5°	561.0	610.4	681.9	761.7	845.1	928.6	1005.4	1041.0
10°	483.8	546.3	627.9	735.8	855.7	971.0	1076.6	1122.6
12.5°	410.4	475.9	566.2	695.4	847.4	995.3	1122.3	1176.5
15°	349.0	407.0	504.4	647.4	820.8	996.8	1144.0	1203.5
17.5°	302.9	340.7	441.5	594.3	786.0	983.0	1151.5	1215.1
20°	280.1	290.6	359.9	526.1	753.4	969.9	1159.0	1226.0
22.5°	266.6	269.3	294.3	438.1	714.4	965.8	1172.1	1241.0
25°	255.7	256.5	263.2	347.2	654.9	963.1	1192.3	1261.6
27.5°	244.9	244.9	248.7	279.7	574.0	951.8	1218.5	1286.3
30°	234.0	234.0	236.7	247.5	479.3	929.8	1249.9	1318.5
32.5°	222.8	222.8	225.1	232.9	382.7	902.1	1278.8	1351.1
35°	211.6	210.8	213.8	222.0	304.4	866.8	1307.6	1386.2
37.5°	199.6	199.3	202.2	211.6	262.9	826.0	1329.3	1434.2
40°	186.9	186.9	190.2	200.3	250.9	774.7	1363.8	1503.1
42.5°	175.3	174.5	178.2	190.5	241.9	725.7	1425.6	1603.4
45°	164.0	162.5	165.8	181.2	226.2	708.5	1540.9	1751.7
47.5°	153.5	149.8	152.8	170.0	212.0	772.8	1729.6	1957.2
50°	144.9	137.8	140.4	158.8	201.1	912.6	1974.5	2230.3
52.5°	135.9	126.6	128.0	144.9	191.4	1045.5	2240.0	2590.5
55°	126.6	116.0	116.8	131.1	177.5	1065.3	2499.2	3081.8
57.5°	116.0	106.4	106.4	118.3	167.4	923.4	2698.3	3691.3
60°	104.4	98.1	96.2	108.2	176.4	651.6	2721.6	4084.5
62.5°	91.7	88.4	85.8	98.5	183.1	386.0	2534.7	3989.4
65°	77.2	76.4	74.5	108.2	154.3	228.1	2176.0	3697.7
67.5°	64.8	63.7	63.7	113.5	117.2	143.4	1700.1	3296.3
70°	55.8	51.7	51.7	85.8	71.1	99.2	1187.1	2863.0
72.5°	46.8	42.3	39.4	68.6	53.2	72.7	741.8	2451.9
75°	37.4	34.0	30.3	45.3	39.7	55.0	431.0	2031.4
77.5°	27.0	25.4	21.3	33.3	28.8	39.7	256.5	1567.4
80°	13.8	14.2	13.5	19.1	19.5	27.0	146.1	1072.8
82.5°	8.2	6.4	7.1	9.3	11.3	15.4	55.0	630.6
85°	5.2	3.4	3.4	4.5	5.6	5.9	16.8	255.7
87.5°	2.7	1.1	1.5	2.3	1.8	1.5	0.7	64.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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