

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: P959323

Luminaire Tested: **NAV-SB1A-740-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959323
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-SB1A-740-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA 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: 3713.6 lumens
Efficiency: N/A
Efficacy: 120.2 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): 30.9
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



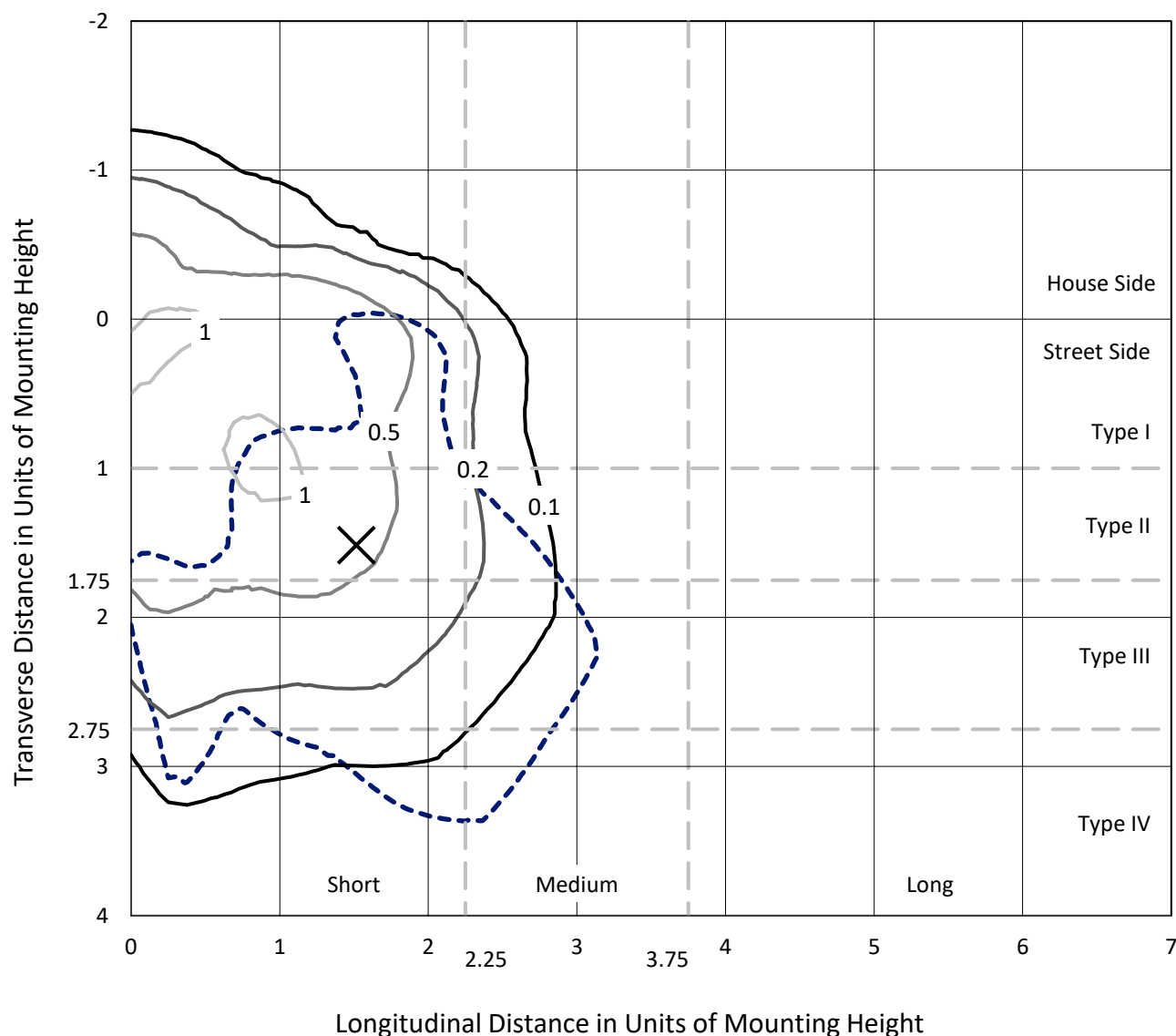
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

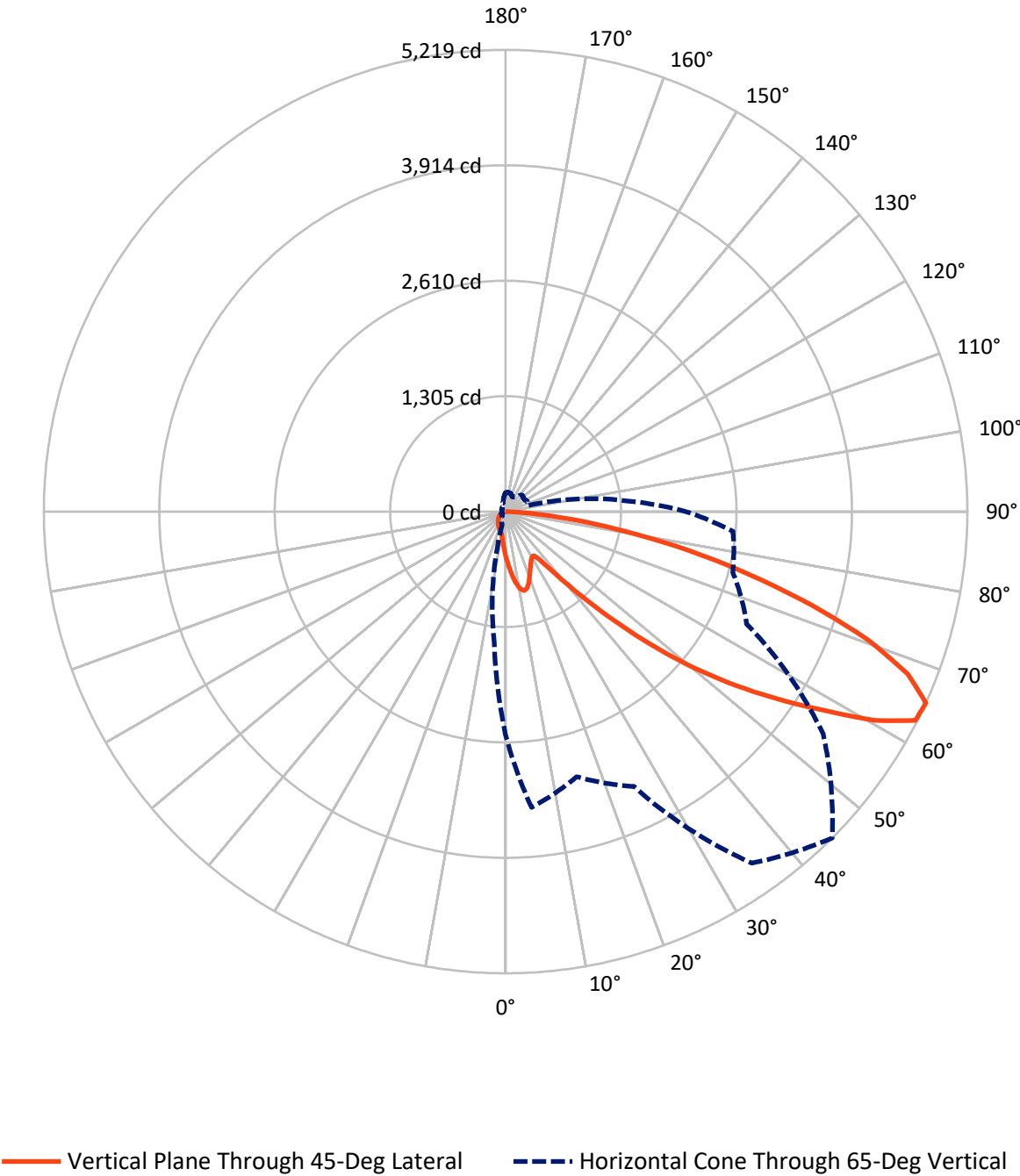


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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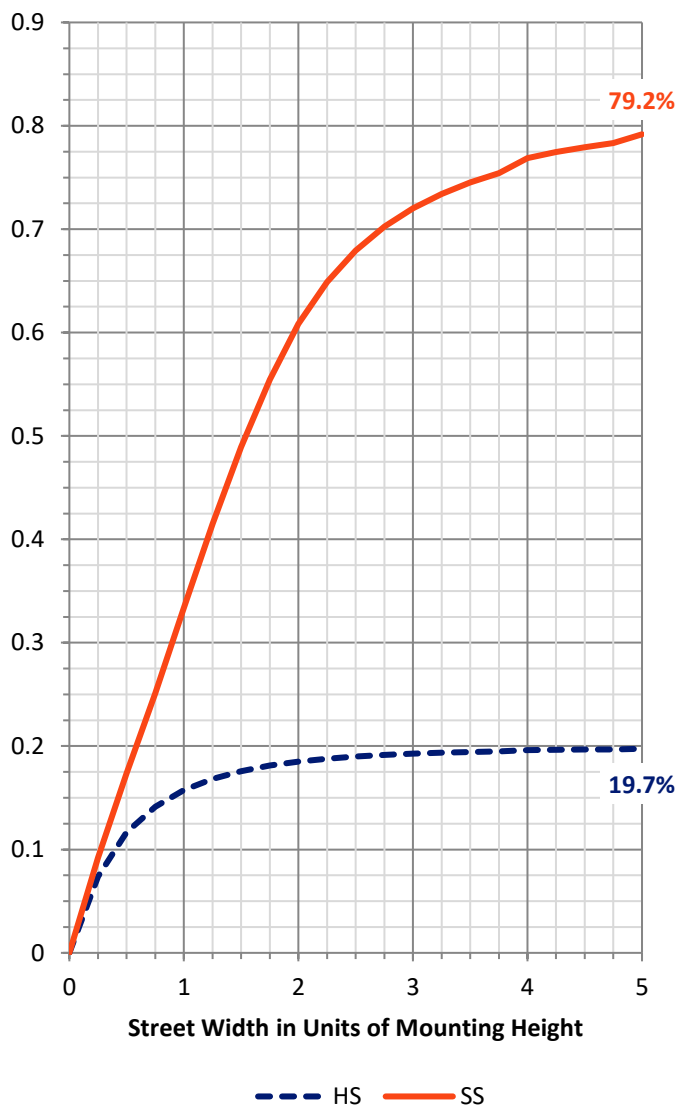
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	738.1	0.0	738.1
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	2975.4	0.0	2975.4
	% Fixture	80.1	0.0	80.1
Total	Lumens	3713.6	0.0	3713.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.4
10°-20°	151.8	4.1
20°-30°	223.6	6.0
30°-40°	287.2	7.7
40°-50°	464.5	12.5
50°-60°	814.6	21.9
60°-70°	1019.3	27.4
70°-80°	595.6	16.0
80°-90°	106.3	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°	3713.6	100.0
0°-180°	3713.6	100.0

Coefficient of Utilization



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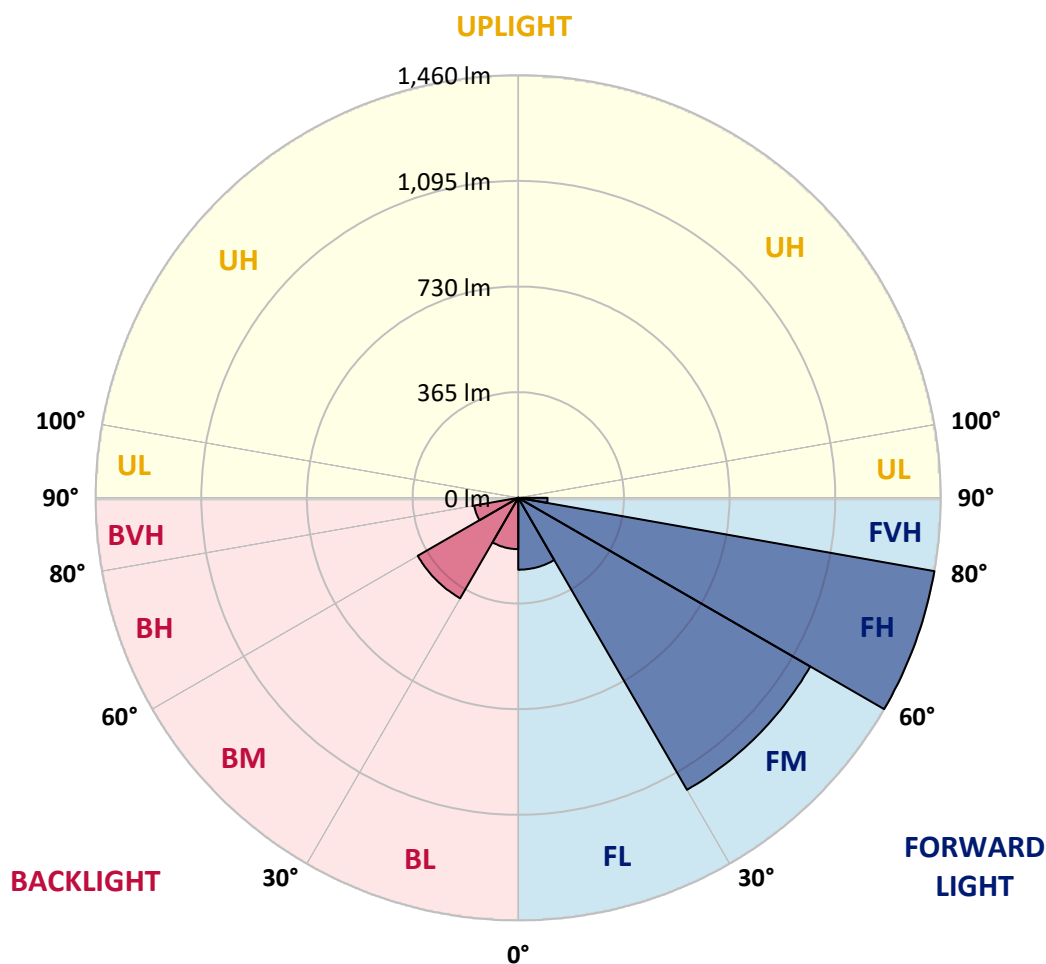
CATALOG NUMBER: NAV-SB1A-740-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	248.5	6.7			
FM	(30°-60°)	1165.4	31.4			
FH	(60°-80°)	1460.3	39.3			G1/1800
FVH	(80°-90°)	101.3	2.7			G2/225
BL	(0°-30°)	177.5	4.8	B1/500		
BM	(30°-60°)	401.0	10.8	B1/1000		
BH	(60°-80°)	154.7	4.2	B1/500		G1/500
BVH	(80°-90°)	5.0	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°	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2
2.5°	576.2	580.5	590.2	595.3	603.2	603.7	603.7	596.9	596.6	582.5	581.0
5°	643.9	654.2	677.2	701.0	706.1	707.4	704.8	691.0	680.8	653.3	647.5
7.5°	711.2	730.9	766.0	797.7	807.9	807.9	801.8	779.2	758.3	718.6	703.8
10°	767.0	791.8	839.4	874.9	886.7	884.2	871.6	843.2	814.3	766.2	746.7
12.5°	803.8	831.7	883.9	912.6	924.6	917.9	903.5	876.0	845.5	794.9	772.8
15°	822.3	851.4	896.7	911.7	908.5	901.5	899.7	886.4	863.5	816.1	792.0
17.5°	830.1	857.3	888.8	879.2	851.2	845.7	863.7	880.6	874.9	834.6	812.0
20°	837.5	860.4	869.8	827.9	778.7	773.9	808.1	856.3	880.8	851.7	831.0
22.5°	847.8	861.9	842.4	773.7	720.7	709.4	747.2	819.7	882.6	873.4	852.7
25°	861.9	865.7	812.2	722.2	669.0	657.7	693.0	779.0	879.6	897.0	879.2
27.5°	878.7	870.8	783.3	679.3	627.8	617.4	652.6	739.8	870.8	920.4	907.9
30°	900.8	877.5	754.7	646.0	598.4	590.7	624.7	706.1	860.1	950.4	943.5
32.5°	923.0	880.3	728.1	626.5	591.7	594.5	622.4	687.9	848.3	979.1	982.4
35°	947.1	889.3	715.0	645.8	647.3	671.8	683.3	704.8	846.5	1017.9	1030.9
37.5°	979.8	909.2	730.6	741.2	794.4	845.2	835.8	787.4	867.3	1076.0	1100.3
40°	1026.8	944.2	798.7	903.5	1012.8	1095.4	1059.3	937.6	930.7	1159.7	1196.0
42.5°	1095.4	1000.0	919.4	1102.1	1287.3	1423.4	1326.8	1131.3	1041.7	1279.1	1325.4
45°	1196.8	1090.3	1065.5	1311.6	1625.8	1840.2	1639.1	1337.7	1197.3	1460.0	1496.3
47.5°	1337.2	1223.1	1202.4	1532.4	2037.2	2314.4	1985.4	1529.1	1374.3	1706.6	1715.0
50°	1523.7	1401.9	1332.1	1773.9	2488.2	2797.9	2331.6	1713.8	1577.2	2008.0	1998.2
52.5°	1769.8	1651.4	1483.3	2003.9	2952.0	3271.3	2679.2	1876.0	1828.9	2357.7	2337.7
55°	2105.5	2026.6	1690.0	2223.4	3415.5	3747.3	3013.4	2029.0	2161.5	2773.1	2652.4
57.5°	2521.9	2578.2	1988.0	2477.9	3832.3	4238.1	3349.0	2242.8	2593.4	3237.8	2835.0
60°	2790.6	3311.7	2558.8	2854.2	4305.8	4792.9	3809.0	2649.6	3047.1	3404.3	2800.3
62.5°	2725.6	3545.0	3242.4	3334.7	4741.2	5196.3	4259.8	3058.2	3132.6	3158.9	2532.2
65°	2526.3	3356.7	3102.9	3428.1	4851.5	5219.1	4380.2	3005.4	2657.3	2579.0	2035.3
67.5°	2252.0	3133.3	2771.6	3180.5	4652.2	4900.8	4155.9	2658.5	2053.5	1935.3	1476.6
70°	1956.0	2886.2	2554.2	2902.6	4272.3	4346.2	3774.5	2338.2	1510.4	1307.0	947.6
72.5°	1675.2	2628.9	2405.3	2617.8	3765.5	3612.5	3278.0	2055.0	1099.8	942.7	673.6
75°	1387.8	2249.3	2193.2	2279.7	3099.1	2845.6	2723.5	1701.5	863.2	682.0	464.8
77.5°	1070.9	1757.6	1886.5	1825.6	2181.4	2113.7	2111.1	1278.6	630.6	455.1	291.4
80°	733.0	1224.9	1473.8	1287.8	1415.7	1381.2	1590.0	857.8	457.5	274.0	162.2
82.5°	430.8	745.7	1025.8	623.4	782.8	803.6	946.8	417.3	269.2	63.1	35.3
85°	174.8	294.5	401.2	244.1	377.6	318.5	359.5	117.2	74.9	1.5	0.0
87.5°	44.0	94.1	66.0	27.4	43.8	40.2	31.7	14.3	3.1	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°	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2
2.5°	571.0	565.1	550.5	536.0	524.2	508.3	497.8	485.3	473.2	462.6	460.5
5°	631.4	611.9	585.4	561.0	536.2	512.2	488.4	463.3	440.2	426.2	417.3
7.5°	680.5	646.3	610.9	579.9	550.0	521.9	490.5	460.0	423.9	404.7	387.3
10°	717.1	672.1	625.8	590.2	560.0	532.6	506.0	475.3	431.8	407.7	381.7
12.5°	741.2	687.7	633.4	592.8	558.9	537.7	526.0	513.9	470.7	442.6	404.7
15°	757.8	698.6	638.8	586.9	545.4	529.8	541.6	555.4	527.8	495.3	445.9
17.5°	775.9	713.0	641.1	571.0	519.1	512.4	542.8	574.8	573.6	541.3	493.0
20°	795.1	725.5	639.6	545.4	487.1	493.0	531.9	569.0	584.6	567.1	524.2
22.5°	814.8	737.6	633.7	512.2	457.2	475.6	514.4	546.9	565.4	560.0	527.3
25°	839.6	754.4	624.9	476.3	432.3	458.0	494.3	520.6	533.4	533.1	510.7
27.5°	869.3	776.9	620.3	447.4	414.7	438.0	470.2	493.7	502.7	502.7	484.8
30°	903.8	803.6	615.3	428.6	404.5	417.3	442.3	465.4	474.3	474.3	459.2
32.5°	942.2	829.1	603.0	417.0	396.8	397.1	412.9	433.9	444.6	446.2	435.4
35°	988.3	856.5	576.2	407.7	387.9	377.3	385.0	402.4	415.2	418.5	411.8
37.5°	1048.7	890.0	537.7	394.2	374.0	356.6	358.4	371.7	385.8	390.9	386.5
40°	1129.8	929.4	497.8	374.7	354.5	333.8	333.1	342.8	356.6	362.2	360.0
42.5°	1237.0	976.7	459.7	356.1	331.1	309.8	308.5	316.2	328.2	334.2	333.1
45°	1374.0	1034.8	427.0	341.5	308.0	287.0	286.5	292.9	303.4	309.5	308.3
47.5°	1564.7	1092.9	404.7	333.8	289.9	268.3	269.4	275.0	284.4	288.8	287.0
50°	1813.0	1110.6	393.5	333.8	280.1	251.7	256.9	261.5	268.7	271.2	268.9
52.5°	2051.4	1052.3	383.2	335.9	281.4	237.7	248.7	251.9	258.1	259.1	255.8
55°	2168.4	904.6	369.2	336.4	289.4	225.6	242.0	248.2	250.4	250.2	244.6
57.5°	2128.2	731.4	345.3	334.4	294.7	217.9	233.8	245.6	247.1	244.9	234.3
60°	1987.3	538.5	327.2	319.3	292.6	215.7	221.3	240.0	242.3	239.2	222.0
62.5°	1750.9	373.7	313.1	286.0	283.7	214.9	201.6	227.7	233.3	229.0	203.9
65°	1378.4	264.0	269.7	250.7	264.2	210.8	181.1	212.9	220.5	213.9	178.6
67.5°	932.7	190.5	218.4	227.1	232.8	201.6	166.3	196.0	206.2	197.5	149.1
70°	503.7	133.8	144.3	191.4	197.7	185.7	153.0	178.9	190.5	181.1	121.6
72.5°	297.6	96.1	101.1	153.8	164.7	163.5	138.2	158.9	173.2	162.0	98.7
75°	164.0	65.0	72.2	111.5	133.8	126.1	118.7	134.6	149.1	138.2	76.3
77.5°	73.4	38.8	50.1	73.2	105.2	86.5	91.8	104.9	118.5	106.9	50.9
80°	28.4	21.7	33.2	39.9	76.5	47.9	59.1	77.3	87.0	77.8	31.0
82.5°	3.6	9.7	14.3	15.6	44.5	25.3	34.2	48.6	47.9	41.4	15.6
85°	0.0	1.7	2.0	1.0	19.2	9.2	11.3	15.9	14.9	11.3	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2
2.5°	447.9	438.7	434.1	430.3	433.9	435.9	435.9	444.6	449.8	451.8	466.1
5°	394.7	377.6	366.1	359.2	361.5	364.1	366.8	377.8	385.3	390.1	412.4
7.5°	352.8	326.7	310.6	302.2	303.4	305.2	307.5	318.3	325.6	332.1	356.9
10°	332.1	295.2	274.0	263.7	262.0	261.0	260.1	266.6	272.2	277.4	301.9
12.5°	333.1	281.7	255.8	243.3	237.9	231.8	226.9	228.0	231.5	237.9	253.5
15°	346.1	277.4	246.4	230.7	221.8	214.6	208.8	207.5	208.8	209.8	219.5
17.5°	363.8	276.9	238.2	218.7	209.5	203.7	198.2	196.5	196.7	198.0	200.6
20°	377.8	275.3	229.0	207.3	199.1	193.9	188.5	186.8	187.3	187.5	190.3
22.5°	385.3	273.0	218.7	195.7	188.8	183.7	178.9	178.6	178.6	180.1	182.1
25°	385.3	268.1	209.5	184.7	178.6	173.9	168.1	169.1	169.6	171.7	174.8
27.5°	376.1	258.9	202.1	175.3	168.8	164.2	158.9	160.1	160.9	163.2	167.1
30°	364.3	247.8	193.6	166.3	158.9	155.5	151.0	151.5	152.5	155.0	159.4
32.5°	351.8	234.8	186.8	157.3	150.0	147.4	142.3	143.0	144.0	146.9	151.7
35°	337.9	219.5	178.6	149.1	141.8	139.7	133.8	134.3	135.8	138.9	143.8
37.5°	323.4	206.9	170.4	141.2	133.6	131.5	125.4	125.9	127.6	131.2	135.8
40°	309.0	194.6	161.6	132.7	125.0	123.3	116.6	117.2	119.2	123.1	127.9
42.5°	293.5	185.2	150.5	124.0	115.9	114.1	107.9	108.8	111.0	114.9	119.7
45°	274.8	179.1	137.9	115.9	106.7	104.9	99.2	100.8	103.3	107.2	112.3
47.5°	255.5	176.5	127.4	107.2	97.2	95.6	91.1	93.6	96.5	99.5	105.2
50°	237.2	173.2	116.6	99.0	89.1	87.5	84.5	87.7	90.6	93.4	98.7
52.5°	216.2	166.0	106.9	91.8	82.1	81.6	80.1	83.1	85.7	88.3	92.9
55°	194.4	154.6	98.5	85.5	76.3	76.8	76.0	78.5	80.6	82.9	87.0
57.5°	175.5	139.9	91.8	78.5	71.1	72.7	71.6	72.9	74.2	77.0	80.4
60°	156.3	122.6	84.5	70.3	66.0	67.8	65.0	64.7	65.2	66.0	72.2
62.5°	130.5	104.3	75.2	63.1	60.4	61.2	55.8	51.7	51.7	52.5	61.7
65°	104.9	87.5	65.0	55.0	52.7	52.2	44.5	38.8	38.3	40.7	48.6
67.5°	86.2	72.7	54.7	45.8	44.3	44.8	39.2	33.5	33.0	35.6	41.4
70°	71.3	58.6	43.8	35.3	36.8	39.2	33.5	28.2	27.4	29.7	35.3
72.5°	56.8	45.8	33.5	26.1	30.4	33.2	27.4	22.2	21.7	23.8	29.2
75°	41.7	32.7	22.8	19.0	23.6	26.1	20.0	15.9	15.1	16.9	22.2
77.5°	25.8	18.4	14.3	11.3	16.1	17.4	10.5	9.2	8.9	10.2	14.0
80°	12.0	7.9	6.9	3.8	5.8	6.9	4.3	4.8	5.1	6.1	8.7
82.5°	3.3	1.2	0.2	0.0	0.0	2.0	1.0	2.0	2.6	3.8	5.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	2.3	4.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
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°	514.2	514.2	514.2	514.2	514.2	514.2	514.2	514.2
2.5°	476.8	487.1	503.5	520.4	537.0	553.9	570.2	576.2
5°	432.7	456.1	488.6	523.5	559.2	595.5	628.8	643.9
7.5°	383.2	417.0	465.9	520.4	577.4	634.5	686.9	711.2
10°	330.6	373.2	429.1	502.7	584.6	663.4	735.5	767.0
12.5°	280.3	325.1	386.8	475.1	578.9	680.0	766.7	803.8
15°	238.4	278.1	344.6	442.3	560.8	681.0	781.6	822.3
17.5°	206.9	232.8	301.7	406.0	537.0	671.6	786.7	830.1
20°	191.4	198.5	245.9	359.5	514.8	662.6	791.8	837.5
22.5°	182.1	184.0	201.1	299.3	488.1	659.8	800.7	847.8
25°	174.8	175.3	179.9	237.2	447.4	657.9	814.6	861.9
27.5°	167.3	167.3	169.8	191.1	392.2	650.3	832.5	878.7
30°	159.9	159.9	161.6	169.1	327.5	635.2	853.9	900.8
32.5°	152.2	152.2	153.8	159.1	261.5	616.3	873.6	923.0
35°	144.5	144.0	146.1	151.7	208.0	592.2	893.4	947.1
37.5°	136.3	136.1	138.2	144.5	179.6	564.4	908.2	979.8
40°	127.6	127.6	130.0	136.8	171.4	529.3	931.7	1026.8
42.5°	119.7	119.2	121.8	130.2	165.2	495.8	974.0	1095.4
45°	112.0	111.0	113.4	123.8	154.6	484.0	1052.7	1196.8
47.5°	104.9	102.3	104.3	116.1	144.8	528.0	1181.6	1337.2
50°	99.0	94.1	95.9	108.4	137.4	623.4	1349.0	1523.7
52.5°	92.9	86.5	87.5	99.0	130.7	714.2	1530.3	1769.8
55°	86.5	79.3	79.8	89.6	121.3	727.9	1707.3	2105.5
57.5°	79.3	72.7	72.7	80.9	114.4	630.9	1843.5	2521.9
60°	71.3	67.0	65.7	73.9	120.5	445.2	1859.4	2790.6
62.5°	62.6	60.4	58.6	67.2	125.0	263.7	1731.7	2725.6
65°	52.7	52.2	50.9	73.9	105.4	155.8	1486.6	2526.3
67.5°	44.3	43.5	43.5	77.5	80.1	98.0	1161.4	2252.0
70°	38.1	35.3	35.3	58.6	48.6	67.8	811.0	1956.0
72.5°	32.0	28.9	26.9	46.8	36.3	49.6	506.8	1675.2
75°	25.6	23.3	20.7	31.0	27.2	37.6	294.5	1387.8
77.5°	18.4	17.4	14.6	22.8	19.7	27.2	175.3	1070.9
80°	9.4	9.7	9.2	13.0	13.3	18.4	99.7	733.0
82.5°	5.6	4.3	4.8	6.4	7.7	10.5	37.6	430.8
85°	3.6	2.3	2.3	3.1	3.8	4.1	11.5	174.8
87.5°	1.7	0.7	1.0	1.5	1.2	1.0	0.5	44.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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