

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: P959199

Luminaire Tested: **NAV-SB1A-722-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959199
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-722-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 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: 2899.7 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

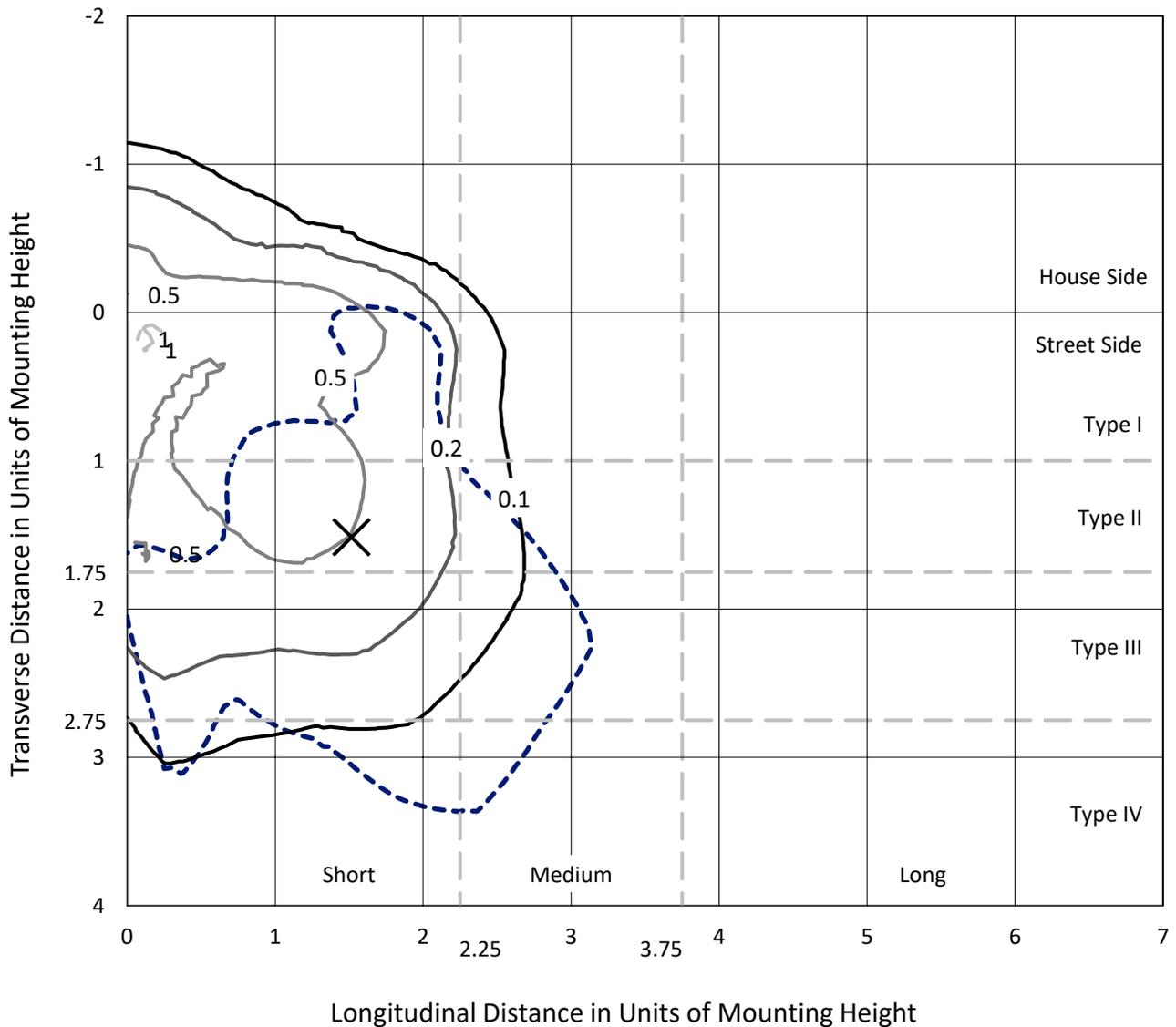
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

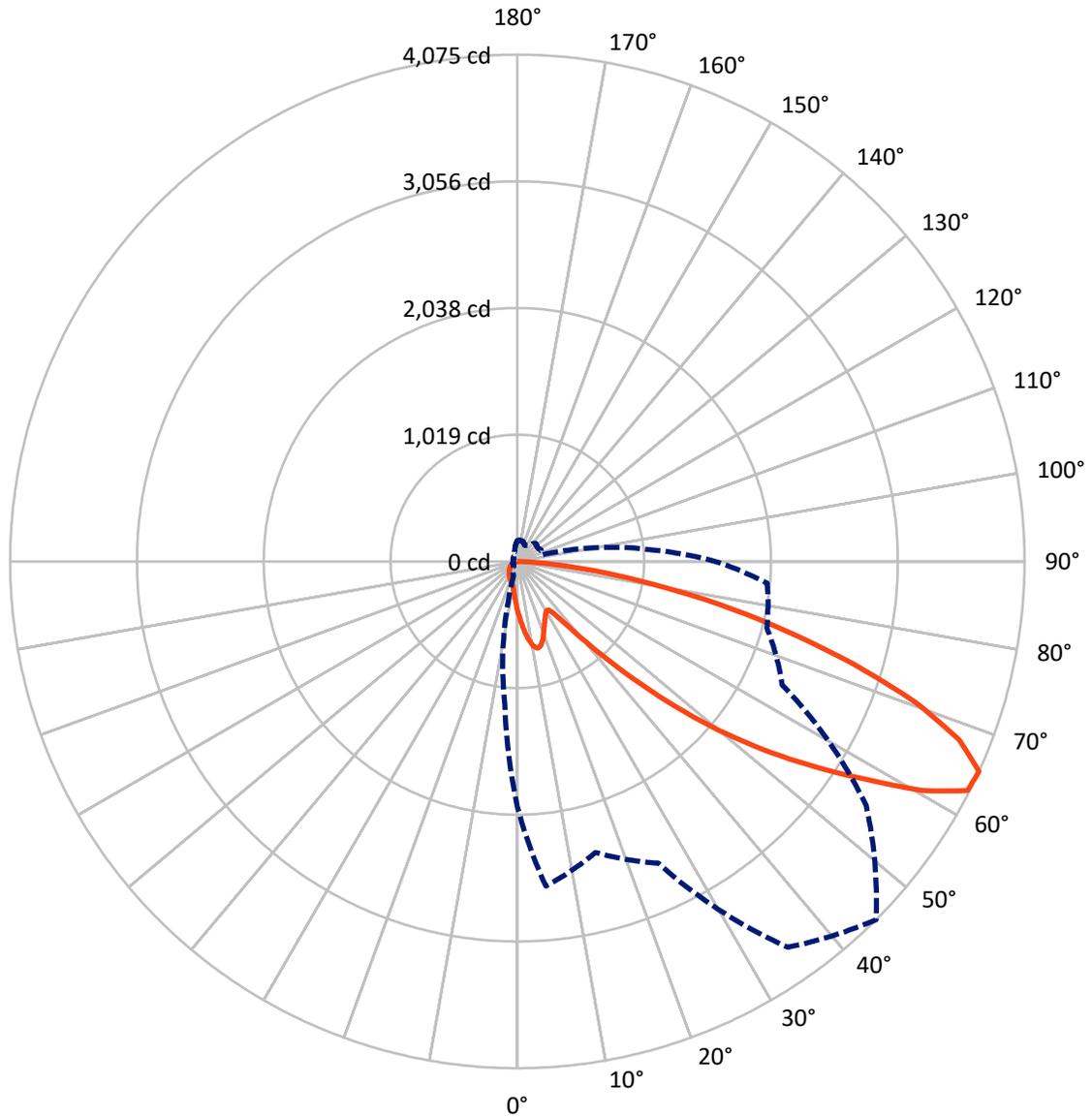
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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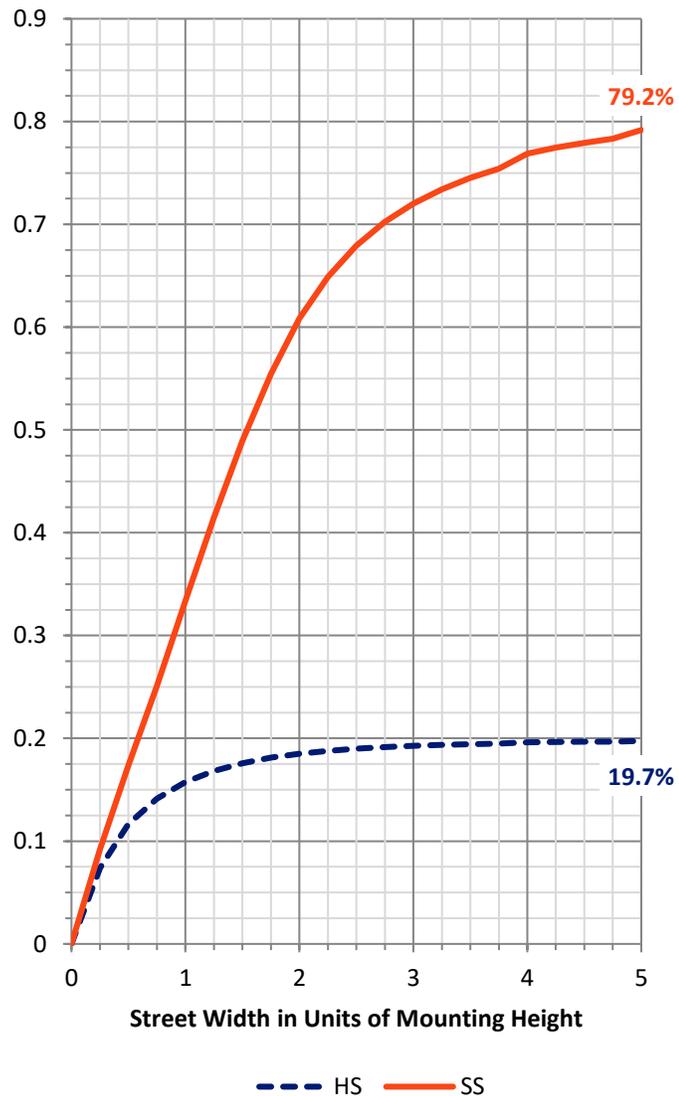
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	576.4	0.0	576.4
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	2323.3	0.0	2323.3
	% Fixture	80.1	0.0	80.1
Total	Lumens	2899.7	0.0	2899.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	1.4
10°-20°	118.5	4.1
20°-30°	174.6	6.0
30°-40°	224.3	7.7
40°-50°	362.7	12.5
50°-60°	636.1	21.9
60°-70°	795.9	27.4
70°-80°	465.1	16.0
80°-90°	83.0	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°	2899.7	100.0
0°-180°	2899.7	100.0

Coefficient of Utilization



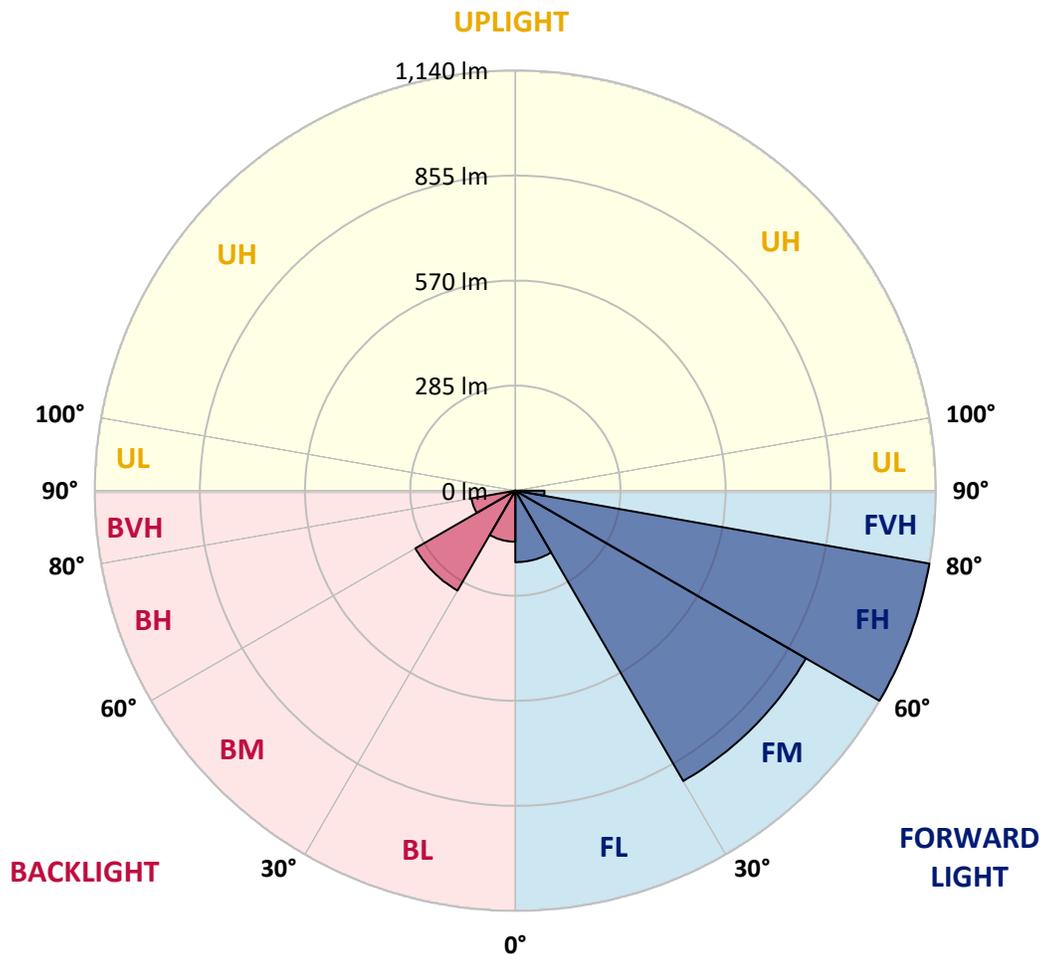
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	194.0	6.7			
FM (30°-60°)	910.0	31.4			
FH (60°-80°)	1140.3	39.3			G1/1800
FVH (80°-90°)	79.1	2.7			G1/100
BL (0°-30°)	138.6	4.8	B1/500		
BM (30°-60°)	313.1	10.8	B1/1000		
BH (60°-80°)	120.8	4.2	B1/500		G1/500
BVH (80°-90°)	3.9	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-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5
2.5°	449.9	453.3	460.8	464.8	471.0	471.4	471.4	466.1	465.9	454.9	453.7
5°	502.8	510.8	528.8	547.3	551.3	552.4	550.3	539.6	531.6	510.1	505.6
7.5°	555.3	570.7	598.1	622.9	630.9	630.9	626.1	608.4	592.0	561.1	549.5
10°	598.9	618.3	655.4	683.2	692.4	690.3	680.6	658.5	635.8	598.3	583.1
12.5°	627.6	649.4	690.1	712.6	721.9	716.8	705.5	684.0	660.2	620.6	603.5
15°	642.1	664.8	700.2	712.0	709.3	704.0	702.5	692.2	674.1	637.2	618.5
17.5°	648.2	669.4	693.9	686.5	664.6	660.4	674.3	687.6	683.2	651.6	634.1
20°	654.1	671.8	679.2	646.5	608.0	604.2	631.1	668.6	687.8	665.0	648.8
22.5°	662.0	673.0	657.8	604.0	562.7	553.9	583.5	640.0	689.2	681.9	665.8
25°	673.0	676.0	634.3	564.0	522.3	513.6	541.2	608.2	686.7	700.4	686.5
27.5°	686.1	680.0	611.6	530.3	490.3	482.1	509.6	577.7	680.0	718.7	709.0
30°	703.4	685.2	589.3	504.4	467.2	461.2	487.8	551.3	671.6	742.1	736.7
32.5°	720.8	687.4	568.6	489.2	462.1	464.2	486.1	537.2	662.5	764.4	767.1
35°	739.5	694.3	558.3	504.2	505.4	524.6	533.5	550.3	661.0	794.9	805.0
37.5°	765.1	709.9	570.5	578.7	620.2	660.0	652.6	614.9	677.2	840.2	859.2
40°	801.9	737.3	623.6	705.5	790.9	855.4	827.2	732.2	726.7	905.5	933.9
42.5°	855.4	780.8	717.9	860.6	1005.2	1111.5	1036.0	883.3	813.4	998.8	1034.9
45°	934.5	851.4	832.0	1024.2	1269.5	1436.8	1279.9	1044.6	934.9	1140.0	1168.4
47.5°	1044.2	955.1	938.9	1196.6	1590.7	1807.3	1550.3	1193.9	1073.1	1332.6	1339.2
50°	1189.8	1094.7	1040.2	1385.2	1942.9	2184.8	1820.6	1338.2	1231.5	1567.9	1560.4
52.5°	1381.9	1289.4	1158.2	1564.8	2305.0	2554.3	2092.1	1464.8	1428.1	1841.0	1825.4
55°	1644.0	1582.5	1319.6	1736.1	2667.0	2926.1	2353.0	1584.3	1687.8	2165.4	2071.1
57.5°	1969.2	2013.2	1552.4	1934.9	2992.4	3309.2	2615.1	1751.3	2025.0	2528.2	2213.8
60°	2178.9	2585.9	1998.0	2228.8	3362.2	3742.5	2974.2	2069.0	2379.3	2658.2	2186.6
62.5°	2128.2	2768.1	2531.8	2603.9	3702.2	4057.6	3326.2	2387.9	2446.1	2466.7	1977.2
65°	1972.6	2621.0	2422.9	2676.8	3788.3	4075.3	3420.3	2346.8	2074.9	2013.8	1589.3
67.5°	1758.5	2446.7	2164.2	2483.5	3632.6	3826.8	3245.1	2075.9	1603.5	1511.2	1153.0
70°	1527.4	2253.7	1994.4	2266.5	3336.0	3393.8	2947.3	1825.8	1179.4	1020.6	739.9
72.5°	1308.0	2052.8	1878.1	2044.2	2940.3	2820.8	2559.5	1604.6	858.7	736.2	525.9
75°	1083.7	1756.3	1712.6	1780.1	2419.9	2221.9	2126.7	1328.6	674.0	532.6	363.0
77.5°	836.2	1372.4	1473.0	1425.5	1703.3	1650.5	1648.4	998.5	492.4	355.4	227.6
80°	572.4	956.4	1150.9	1005.6	1105.5	1078.5	1241.5	669.8	357.2	213.9	126.7
82.5°	336.4	582.3	801.0	486.8	611.3	627.4	739.3	325.8	210.1	49.3	27.6
85°	136.4	229.9	313.2	190.5	294.9	248.7	280.6	91.5	58.5	1.2	0.0
87.5°	34.3	73.5	51.6	21.4	34.1	31.4	24.8	11.2	2.4	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°	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5
2.5°	445.9	441.3	429.9	418.5	409.3	396.9	388.8	378.9	369.5	361.2	359.6
5°	493.0	477.9	457.0	438.1	418.7	400.0	381.3	361.7	343.8	332.8	325.8
7.5°	531.4	504.6	477.0	452.8	429.5	407.5	382.9	359.2	331.0	316.0	302.5
10°	560.0	524.8	488.6	460.8	437.3	415.9	395.1	371.2	337.2	318.5	298.1
12.5°	578.7	537.0	494.6	462.9	436.4	419.9	410.7	401.3	367.6	345.6	316.0
15°	591.7	545.5	498.8	458.3	425.9	413.7	422.9	433.7	412.2	386.7	348.2
17.5°	605.9	556.8	500.6	445.9	405.3	400.2	423.9	448.8	447.8	422.7	385.0
20°	620.8	566.5	499.4	425.9	380.4	385.0	415.3	444.2	456.4	442.9	409.3
22.5°	636.2	575.9	494.8	400.0	357.0	371.4	401.7	427.1	441.5	437.3	411.7
25°	655.6	589.1	488.0	372.0	337.6	357.6	385.9	406.5	416.5	416.3	398.7
27.5°	678.8	606.7	484.4	349.4	323.8	341.9	367.2	385.5	392.6	392.6	378.5
30°	705.7	627.4	480.4	334.6	315.8	325.8	345.4	363.4	370.3	370.3	358.5
32.5°	735.7	647.4	470.9	325.6	309.9	310.1	322.5	338.8	347.2	348.4	340.0
35°	771.7	668.8	449.9	318.5	302.9	294.7	300.6	314.3	324.2	326.8	321.6
37.5°	818.8	694.9	419.9	307.8	292.0	278.5	279.8	290.3	301.2	305.2	301.9
40°	882.1	725.7	388.8	292.6	276.9	260.7	260.0	267.7	278.5	282.9	281.1
42.5°	965.9	762.7	359.0	278.1	258.5	241.9	240.9	246.9	256.2	260.9	260.0
45°	1072.9	808.0	333.4	266.7	240.5	224.2	223.8	228.7	236.9	241.7	240.7
47.5°	1221.7	853.4	316.0	260.7	226.3	209.5	210.3	214.7	222.1	225.5	224.2
50°	1415.7	867.2	307.2	260.7	218.7	196.6	200.6	204.2	209.7	211.8	209.9
52.5°	1601.9	821.6	299.2	262.3	219.8	185.6	194.1	196.8	201.5	202.3	199.8
55°	1693.2	706.3	288.2	262.7	225.9	176.2	189.0	193.7	195.6	195.4	191.0
57.5°	1661.8	571.1	269.7	261.1	230.1	170.1	182.6	191.8	193.0	191.2	183.0
60°	1551.7	420.5	255.5	249.3	228.6	168.4	172.8	187.4	189.2	186.8	173.4
62.5°	1367.1	291.8	244.5	223.3	221.5	167.8	157.4	177.8	182.1	178.8	159.2
65°	1076.4	206.1	210.5	195.8	206.3	164.6	141.4	166.2	172.2	167.0	139.4
67.5°	728.4	148.8	170.6	177.4	181.7	157.4	129.9	153.0	161.0	154.3	116.4
70°	393.3	104.4	112.6	149.4	154.4	145.0	119.4	139.6	148.8	141.4	94.9
72.5°	232.4	75.1	78.9	120.0	128.6	127.6	107.8	124.0	135.2	126.5	77.1
75°	128.0	50.7	56.4	87.1	104.4	98.5	92.7	105.1	116.4	107.8	59.6
77.5°	57.3	30.3	39.2	57.1	82.1	67.5	71.8	81.9	92.5	83.5	39.8
80°	22.1	17.0	25.9	31.2	59.8	37.3	46.1	60.4	68.0	60.7	24.2
82.5°	2.8	7.6	11.2	12.2	34.7	19.8	26.8	37.9	37.3	32.4	12.2
85°	0.0	1.4	1.6	0.8	15.0	7.2	8.8	12.4	11.6	8.8	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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°	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5
2.5°	349.7	342.6	339.0	336.0	338.8	340.4	340.4	347.2	351.2	352.8	364.0
5°	308.2	294.9	285.9	280.4	282.3	284.2	286.5	295.1	300.8	304.6	322.1
7.5°	275.5	255.1	242.5	236.0	236.9	238.3	240.2	248.5	254.3	259.3	278.7
10°	259.3	230.5	213.9	205.9	204.6	203.8	203.2	208.2	212.6	216.6	235.7
12.5°	260.0	220.0	199.8	189.9	185.7	181.0	177.2	177.9	180.8	185.7	197.9
15°	270.3	216.6	192.4	180.2	173.2	167.6	163.0	162.1	163.0	163.8	171.4
17.5°	284.0	216.2	185.9	170.8	163.6	159.0	154.8	153.4	153.6	154.6	156.6
20°	295.1	214.9	178.8	161.8	155.4	151.4	147.2	145.9	146.3	146.5	148.6
22.5°	300.8	213.1	170.8	152.8	147.4	143.4	139.6	139.4	139.4	140.6	142.3
25°	300.8	209.3	163.6	144.2	139.4	135.8	131.2	132.0	132.4	134.1	136.4
27.5°	293.7	202.1	157.8	136.8	131.8	128.2	124.0	125.0	125.7	127.4	130.5
30°	284.4	193.5	151.2	129.9	124.0	121.5	117.9	118.3	119.1	121.1	124.4
32.5°	274.7	183.4	145.9	122.9	117.1	115.1	111.1	111.6	112.4	114.7	118.5
35°	263.8	171.4	139.4	116.4	110.7	109.1	104.4	104.9	106.1	108.4	112.2
37.5°	252.5	161.6	133.0	110.3	104.2	102.7	97.9	98.3	99.6	102.5	106.1
40°	241.3	152.0	126.3	103.6	97.7	96.2	91.1	91.5	93.1	96.0	99.8
42.5°	229.1	144.6	117.5	96.9	90.5	89.1	84.3	84.9	86.7	89.7	93.5
45°	214.5	139.8	107.6	90.5	83.3	81.9	77.5	78.7	80.7	83.7	87.7
47.5°	199.6	137.9	99.5	83.7	76.0	74.7	71.1	73.1	75.3	77.7	82.1
50°	185.2	135.2	91.1	77.3	69.5	68.4	65.9	68.5	70.7	72.9	77.1
52.5°	168.8	129.7	83.5	71.8	64.2	63.8	62.5	64.9	66.9	68.9	72.5
55°	151.8	120.6	76.9	66.7	59.6	60.0	59.3	61.3	62.9	64.7	68.0
57.5°	137.0	109.3	71.8	61.3	55.6	56.7	56.0	56.9	57.9	60.2	62.7
60°	122.1	95.7	65.9	54.9	51.6	52.9	50.7	50.5	50.9	51.6	56.4
62.5°	101.9	81.5	58.7	49.3	47.2	47.8	43.6	40.4	40.4	41.0	48.2
65°	81.9	68.4	50.7	42.9	41.1	40.8	34.7	30.3	29.9	31.8	37.9
67.5°	67.3	56.7	42.7	35.8	34.5	35.0	30.5	26.1	25.7	27.8	32.4
70°	55.8	45.7	34.1	27.6	28.8	30.5	26.1	21.9	21.4	23.2	27.6
72.5°	44.4	35.8	26.1	20.4	23.8	25.9	21.4	17.4	17.0	18.6	22.8
75°	32.6	25.5	17.7	14.8	18.3	20.4	15.6	12.4	11.8	13.2	17.4
77.5°	20.2	14.3	11.2	8.8	12.6	13.6	8.2	7.2	7.0	8.0	11.0
80°	9.4	6.1	5.4	3.0	4.6	5.4	3.4	3.8	4.0	4.8	6.8
82.5°	2.6	1.0	0.2	0.0	0.0	1.6	0.8	1.6	1.9	3.0	4.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	1.8	3.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	401.5	401.5	401.5	401.5	401.5	401.5	401.5	401.5
2.5°	372.4	380.4	393.1	406.3	419.3	432.4	445.3	449.9
5°	337.8	356.2	381.5	408.7	436.6	465.0	491.0	502.8
7.5°	299.2	325.6	363.8	406.3	450.9	495.4	536.4	555.3
10°	258.1	291.4	335.0	392.6	456.4	517.9	574.3	598.9
12.5°	218.9	253.9	302.1	370.9	452.0	530.9	598.7	627.6
15°	186.1	217.1	269.1	345.4	437.9	531.8	610.3	642.1
17.5°	161.6	181.7	235.5	317.0	419.3	524.4	614.3	648.2
20°	149.4	155.0	192.0	280.6	401.9	517.4	618.3	654.1
22.5°	142.3	143.6	157.0	233.7	381.1	515.2	625.2	662.0
25°	136.4	136.8	140.4	185.2	349.4	513.8	636.0	673.0
27.5°	130.7	130.7	132.6	149.2	306.3	507.8	650.1	686.1
30°	124.8	124.8	126.3	132.0	255.7	496.0	666.8	703.4
32.5°	118.9	118.9	120.0	124.2	204.2	481.2	682.1	720.8
35°	112.9	112.4	114.1	118.5	162.4	462.5	697.6	739.5
37.5°	106.5	106.3	107.8	112.9	140.2	440.6	709.2	765.1
40°	99.6	99.6	101.5	106.9	133.9	413.3	727.5	801.9
42.5°	93.5	93.1	95.1	101.7	129.0	387.1	760.4	855.4
45°	87.5	86.7	88.5	96.7	120.6	377.9	822.0	934.5
47.5°	81.9	79.9	81.5	90.7	113.1	412.3	922.7	1044.2
50°	77.3	73.5	74.9	84.7	107.3	486.8	1053.3	1189.8
52.5°	72.5	67.5	68.4	77.3	102.1	557.7	1194.9	1381.9
55°	67.5	61.9	62.3	69.9	94.7	568.4	1333.2	1644.0
57.5°	61.9	56.7	56.7	63.1	89.3	492.6	1439.5	1969.2
60°	55.8	52.4	51.4	57.7	94.1	347.6	1451.8	2178.9
62.5°	48.9	47.2	45.7	52.6	97.7	205.9	1352.2	2128.2
65°	41.1	40.8	39.8	57.7	82.3	121.7	1160.8	1972.6
67.5°	34.5	33.9	33.9	60.6	62.5	76.5	906.9	1758.5
70°	29.7	27.6	27.6	45.7	37.9	52.9	633.2	1527.4
72.5°	25.0	22.5	21.0	36.6	28.4	38.7	395.8	1308.0
75°	20.0	18.1	16.2	24.2	21.2	29.3	229.9	1083.7
77.5°	14.3	13.6	11.4	17.7	15.4	21.2	136.8	836.2
80°	7.4	7.6	7.2	10.1	10.4	14.3	77.9	572.4
82.5°	4.4	3.4	3.8	5.0	5.9	8.2	29.3	336.4
85°	2.8	1.8	1.8	2.4	3.0	3.2	9.0	136.4
87.5°	1.4	0.6	0.8	1.2	1.0	0.8	0.4	34.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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