

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: P959478

Luminaire Tested: **NAV-SB1A-835-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959478
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-835-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 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: 3255.4 lumens
Efficiency: N/A
Efficacy: 105.4 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



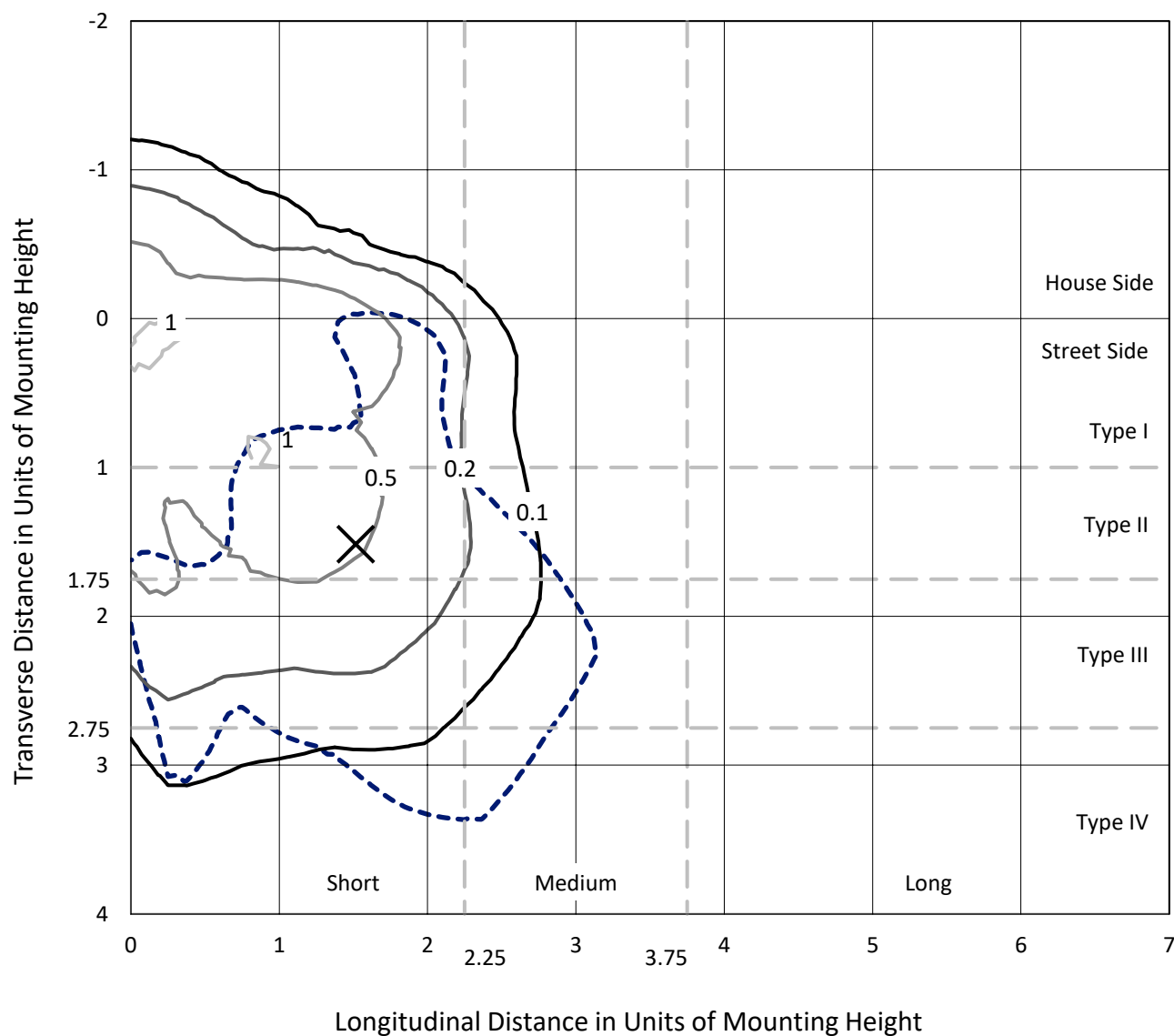
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

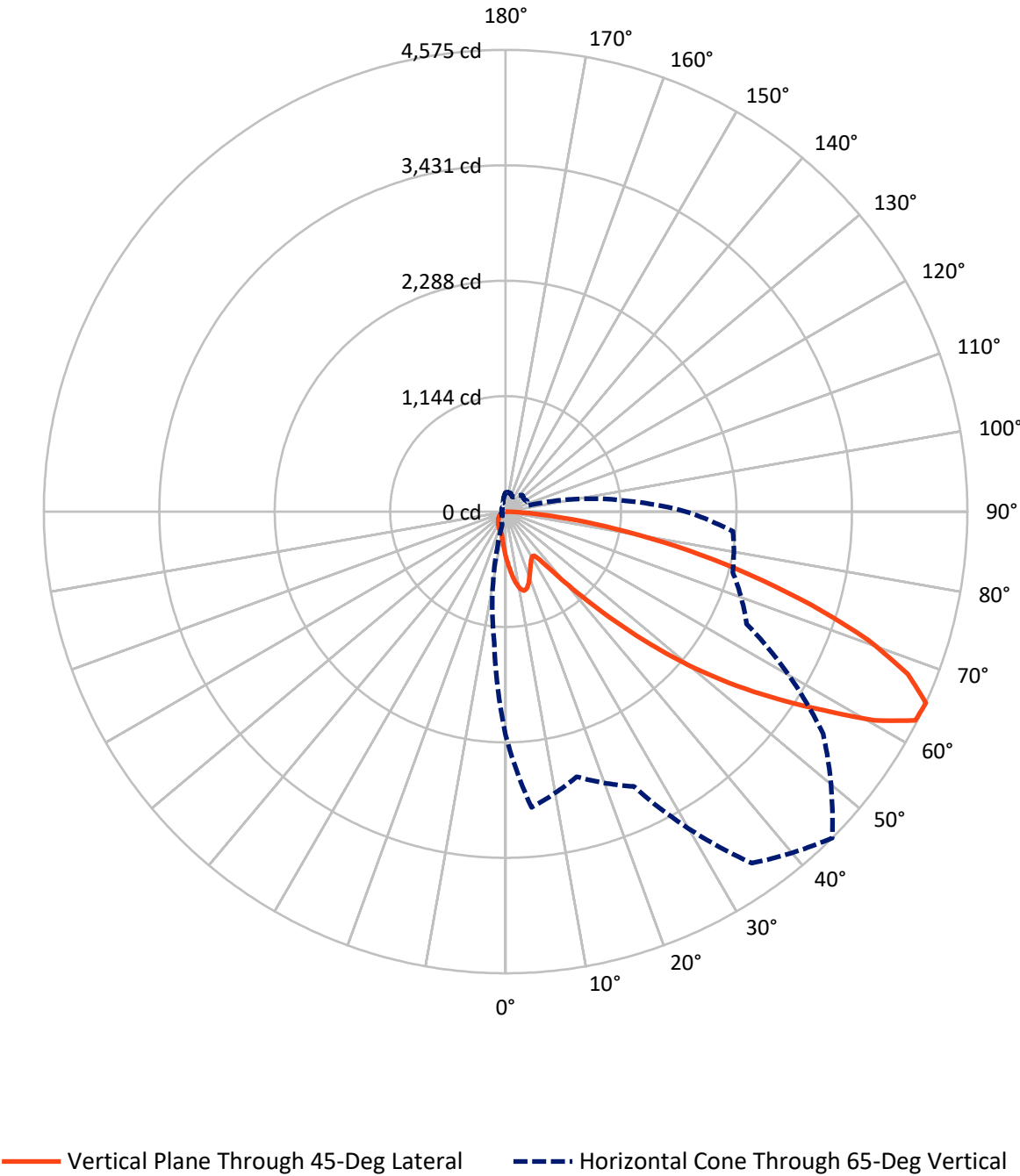


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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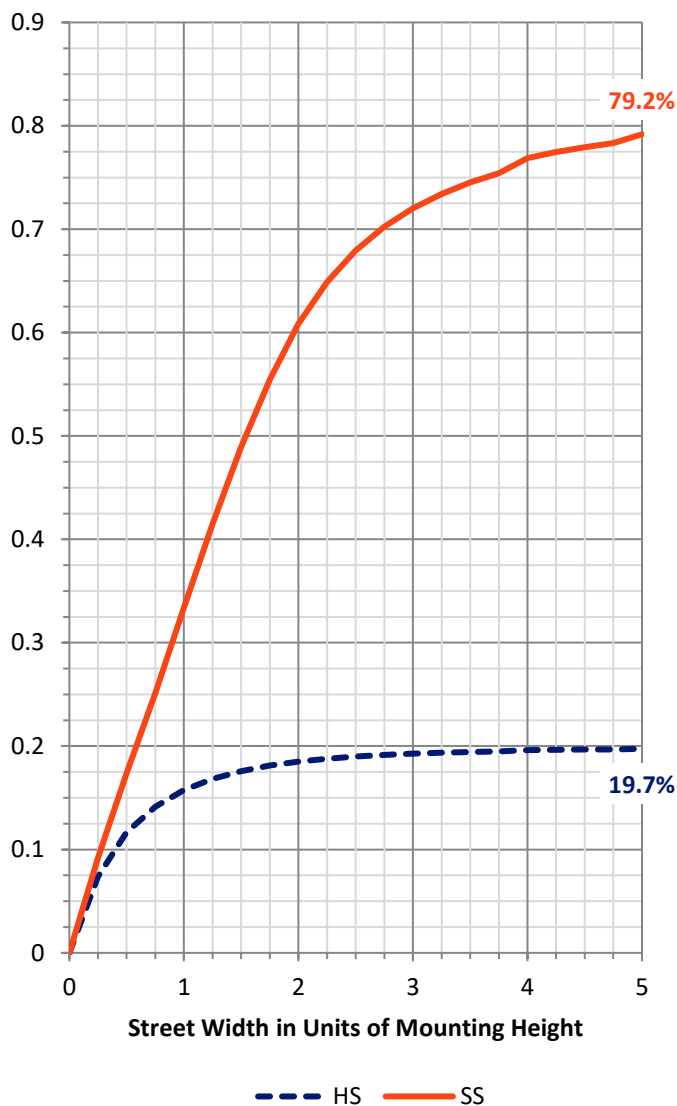
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	647.1	0.0	647.1
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	2608.3	0.0	2608.3
	% Fixture	80.1	0.0	80.1
Total	Lumens	3255.4	0.0	3255.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	1.4
10°-20°	133.0	4.1
20°-30°	196.0	6.0
30°-40°	251.8	7.7
40°-50°	407.2	12.5
50°-60°	714.1	21.9
60°-70°	893.5	27.4
70°-80°	522.2	16.0
80°-90°	93.2	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°	3255.4	100.0
0°-180°	3255.4	100.0

Coefficient of Utilization



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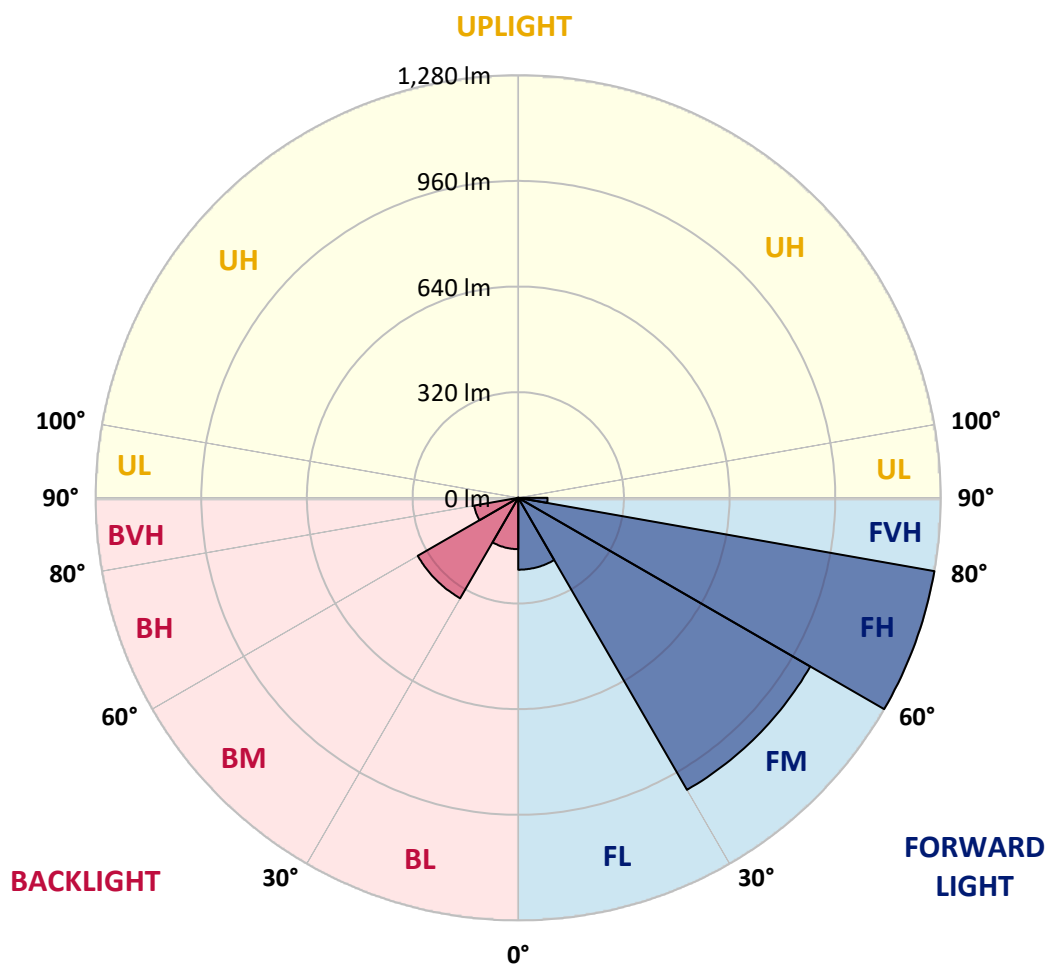
CATALOG NUMBER: NAV-SB1A-835-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	217.8	6.7			
FM	(30°-60°)	1021.6	31.4			
FH	(60°-80°)	1280.1	39.3			G1/1800
FVH	(80°-90°)	88.8	2.7			G1/100
BL	(0°-30°)	155.6	4.8	B1/500		
BM	(30°-60°)	351.6	10.8	B1/1000		
BH	(60°-80°)	135.6	4.2	B1/500		G1/500
BVH	(80°-90°)	4.4	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°	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8
2.5°	505.0	508.8	517.4	521.8	528.8	529.3	529.3	523.2	523.0	510.7	509.3
5°	564.5	573.5	593.6	614.5	619.0	620.1	617.9	605.8	596.8	572.8	567.6
7.5°	623.4	640.7	671.5	699.3	708.2	708.2	702.8	683.1	664.7	630.0	616.9
10°	672.3	694.1	735.8	767.0	777.3	775.0	764.0	739.1	713.8	671.7	654.7
12.5°	704.6	729.1	774.8	799.9	810.5	804.6	792.1	767.8	741.2	696.8	677.5
15°	720.8	746.3	786.1	799.3	796.3	790.3	788.7	777.1	756.9	715.4	694.3
17.5°	727.7	751.5	779.1	770.8	746.1	741.4	757.1	771.9	767.0	731.5	711.8
20°	734.2	754.2	762.5	725.7	682.6	678.3	708.5	750.6	772.1	746.6	728.4
22.5°	743.2	755.5	738.5	678.1	631.7	621.9	655.1	718.5	773.7	765.7	747.4
25°	755.5	758.9	712.1	633.1	586.4	576.6	607.5	682.9	771.0	786.3	770.8
27.5°	770.4	763.4	686.6	595.4	550.3	541.1	572.1	648.5	763.4	806.9	795.9
30°	789.7	769.3	661.5	566.3	524.6	517.8	547.7	619.0	754.0	833.1	827.1
32.5°	809.1	771.7	638.3	549.2	518.8	521.2	545.6	603.0	743.6	858.2	861.2
35°	830.2	779.5	626.8	566.0	567.3	589.0	599.0	617.9	742.1	892.4	903.7
37.5°	859.0	797.0	640.5	649.6	696.4	741.0	732.7	690.2	760.2	943.2	964.5
40°	900.2	827.8	700.2	792.1	887.9	960.3	928.6	821.9	815.9	1016.6	1048.5
42.5°	960.3	876.7	806.0	966.2	1128.5	1247.8	1163.1	991.7	913.2	1121.4	1161.9
45°	1049.1	955.8	934.1	1149.8	1425.2	1613.1	1436.8	1172.7	1049.6	1279.9	1311.7
47.5°	1172.2	1072.3	1054.0	1343.4	1785.9	2028.9	1740.6	1340.4	1204.8	1496.1	1503.5
50°	1335.7	1229.0	1167.8	1555.0	2181.2	2452.7	2044.0	1502.3	1382.6	1760.2	1751.7
52.5°	1551.4	1447.6	1300.3	1756.6	2587.8	2867.6	2348.7	1644.5	1603.3	2066.8	2049.3
55°	1845.7	1776.6	1481.4	1949.0	2994.1	3285.0	2641.6	1778.6	1894.8	2431.0	2325.1
57.5°	2210.8	2260.1	1742.7	2172.2	3359.4	3715.1	2935.8	1966.2	2273.3	2838.2	2485.3
60°	2446.3	2903.1	2243.1	2502.1	3774.6	4201.6	3339.0	2322.6	2671.1	2984.3	2454.8
62.5°	2389.3	3107.6	2842.3	2923.3	4156.3	4555.2	3734.2	2680.9	2746.1	2769.2	2219.7
65°	2214.6	2942.6	2720.0	3005.1	4252.9	4575.2	3839.9	2634.7	2329.4	2260.8	1784.2
67.5°	1974.2	2746.8	2429.7	2788.0	4078.3	4296.2	3643.2	2330.5	1800.2	1696.6	1294.5
70°	1714.7	2530.1	2239.0	2544.5	3745.1	3810.0	3308.8	2049.8	1324.1	1145.7	830.7
72.5°	1468.5	2304.5	2108.5	2294.9	3300.9	3166.8	2873.5	1801.5	964.1	826.5	590.5
75°	1216.7	1971.7	1922.6	1998.4	2716.8	2494.4	2387.5	1491.6	756.7	597.9	407.4
77.5°	938.8	1540.7	1653.7	1600.3	1912.2	1852.9	1850.6	1120.8	552.8	398.9	255.4
80°	642.5	1073.8	1292.0	1128.9	1241.1	1210.8	1393.8	751.9	401.0	240.2	142.2
82.5°	377.6	653.7	899.3	546.5	686.2	704.4	830.0	365.8	236.0	55.4	31.0
85°	153.1	258.1	351.7	213.9	331.0	279.2	315.1	102.7	65.7	1.3	0.0
87.5°	38.5	82.5	57.8	24.0	38.3	35.3	27.8	12.6	2.7	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8
2.5°	500.5	495.4	482.6	469.9	459.5	445.6	436.4	425.5	414.9	405.5	403.6
5°	553.5	536.5	513.1	491.8	470.1	449.0	428.1	406.1	385.9	373.6	365.8
7.5°	596.6	566.5	535.6	508.4	482.2	457.5	429.9	403.2	371.6	354.8	339.6
10°	628.6	589.2	548.6	517.4	490.9	466.9	443.6	416.7	378.5	357.5	334.6
12.5°	649.6	602.8	555.2	519.6	490.1	471.4	461.0	450.6	412.7	388.0	354.8
15°	664.3	612.4	560.0	514.4	478.2	464.4	474.8	486.9	462.7	434.2	390.9
17.5°	680.2	625.0	562.0	500.5	455.0	449.2	475.9	503.9	502.8	474.6	432.1
20°	697.0	636.0	560.7	478.2	427.0	432.1	466.3	498.8	512.4	497.2	459.5
22.5°	714.3	646.6	555.6	449.0	400.8	416.9	451.0	479.5	495.6	490.9	462.2
25°	736.1	661.3	547.9	417.6	379.0	401.4	433.3	456.3	467.6	467.4	447.6
27.5°	762.1	681.1	543.9	392.3	363.6	384.0	412.2	432.9	440.6	440.6	425.0
30°	792.3	704.4	539.4	375.7	354.5	365.8	387.8	408.0	415.7	415.7	402.5
32.5°	825.9	726.8	528.6	365.5	347.8	348.1	361.9	380.4	389.8	391.1	381.7
35°	866.3	750.8	505.0	357.5	340.0	330.8	337.5	352.8	364.0	366.8	361.1
37.5°	919.2	780.2	471.4	345.6	327.9	312.6	314.2	325.8	338.1	342.7	338.9
40°	990.4	814.8	436.4	328.5	310.8	292.6	292.0	300.5	312.6	317.5	315.5
42.5°	1084.3	856.3	403.0	312.2	290.2	271.6	270.5	277.2	287.7	292.8	292.0
45°	1204.5	907.1	374.3	299.4	270.0	251.6	251.1	256.8	266.0	271.3	270.2
47.5°	1371.6	958.1	354.8	292.6	254.1	235.2	236.2	241.1	249.4	253.2	251.6
50°	1589.4	973.5	344.9	292.6	245.6	220.7	225.2	229.2	235.4	237.7	235.7
52.5°	1798.4	922.4	336.0	294.5	246.7	208.4	218.0	220.9	226.3	227.1	224.3
55°	1900.9	793.0	323.6	294.9	253.7	197.8	212.2	217.5	219.6	219.4	214.4
57.5°	1865.6	641.1	302.8	293.2	258.3	191.1	205.0	215.2	216.7	214.6	205.4
60°	1742.1	472.1	286.8	279.9	256.6	189.0	194.0	210.3	212.4	209.7	194.6
62.5°	1534.8	327.7	274.5	250.7	248.7	188.4	176.7	199.6	204.5	200.7	178.8
65°	1208.4	231.4	236.4	219.8	231.6	184.8	158.8	186.5	193.3	187.5	156.5
67.5°	817.6	167.1	191.5	199.2	204.1	176.7	145.8	171.8	180.7	173.1	130.8
70°	441.6	117.3	126.5	167.8	173.3	162.8	134.1	156.7	167.1	158.8	106.5
72.5°	260.9	84.4	88.6	134.8	144.4	143.3	121.1	139.3	151.8	142.0	86.6
75°	143.7	57.0	63.2	97.8	117.3	110.6	104.0	118.0	130.8	121.1	66.8
77.5°	64.4	34.1	44.0	64.2	92.1	75.8	80.5	91.9	103.8	93.8	44.6
80°	24.9	19.1	29.1	35.0	67.0	41.9	51.8	67.8	76.3	68.2	27.2
82.5°	3.2	8.5	12.6	13.6	39.1	22.2	30.0	42.6	41.9	36.3	13.6
85°	0.0	1.5	1.8	0.9	16.8	8.1	9.8	13.9	13.0	9.8	1.1
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°	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8
2.5°	392.7	384.6	380.6	377.2	380.4	382.1	382.1	389.8	394.2	396.1	408.6
5°	346.0	331.0	320.9	314.9	316.9	319.1	321.5	331.3	337.7	342.0	361.5
7.5°	309.2	286.4	272.2	264.9	266.0	267.5	269.6	279.0	285.5	291.1	312.8
10°	291.1	258.8	240.2	231.2	229.6	228.8	228.1	233.7	238.6	243.1	264.7
12.5°	292.0	246.9	224.3	213.3	208.6	203.2	199.0	199.8	203.0	208.6	222.2
15°	303.4	243.1	216.0	202.3	194.4	188.2	183.0	181.8	183.0	183.9	192.4
17.5°	318.9	242.6	208.8	191.8	183.7	178.6	173.8	172.2	172.5	173.5	175.8
20°	331.3	241.3	200.7	181.6	174.5	169.9	165.3	163.7	164.2	164.4	166.9
22.5°	337.7	239.3	191.8	171.6	165.5	161.0	156.7	156.5	156.5	157.8	159.7
25°	337.7	235.0	183.7	162.0	156.5	152.5	147.3	148.2	148.7	150.5	153.1
27.5°	329.6	226.9	177.1	153.6	148.0	144.0	139.3	140.4	141.0	143.1	146.5
30°	319.4	217.3	169.7	145.8	139.3	136.3	132.3	132.7	133.7	135.9	139.7
32.5°	308.3	205.9	163.7	138.0	131.4	129.1	124.6	125.4	126.3	128.7	132.9
35°	296.2	192.4	156.5	130.8	124.2	122.5	117.3	117.8	119.1	121.8	126.1
37.5°	283.5	181.4	149.3	123.8	117.1	115.3	109.9	110.3	111.9	115.0	119.1
40°	270.9	170.7	141.8	116.4	109.7	108.1	102.3	102.7	104.6	107.8	112.1
42.5°	257.3	162.4	131.9	108.8	101.6	100.0	94.6	95.3	97.4	100.7	105.0
45°	240.9	157.0	120.8	101.6	93.5	91.9	87.0	88.4	90.6	94.0	98.5
47.5°	224.1	154.8	111.7	94.0	85.2	83.8	79.8	82.1	84.6	87.2	92.1
50°	207.9	151.8	102.3	86.8	78.0	76.7	74.0	76.9	79.4	81.9	86.6
52.5°	189.5	145.5	93.8	80.5	72.0	71.5	70.2	72.9	75.1	77.4	81.4
55°	170.5	135.5	86.3	74.9	66.8	67.2	66.6	68.9	70.6	72.7	76.3
57.5°	153.9	122.7	80.5	68.9	62.3	63.7	62.8	64.0	65.1	67.5	70.4
60°	137.0	107.4	74.0	61.7	57.8	59.4	57.0	56.8	57.2	57.8	63.2
62.5°	114.4	91.5	65.9	55.4	52.9	53.6	48.9	45.3	45.3	46.0	54.0
65°	91.9	76.7	57.0	48.2	46.2	45.7	39.1	34.1	33.6	35.7	42.6
67.5°	75.5	63.7	48.0	40.2	38.8	39.3	34.3	29.4	28.9	31.2	36.3
70°	62.5	51.4	38.3	31.0	32.3	34.3	29.4	24.7	24.0	26.0	31.0
72.5°	49.8	40.2	29.4	22.9	26.6	29.1	24.0	19.5	19.1	20.8	25.5
75°	36.6	28.7	20.0	16.6	20.6	22.9	17.5	13.9	13.2	14.8	19.5
77.5°	22.7	16.2	12.6	9.8	14.1	15.3	9.2	8.1	7.9	9.0	12.3
80°	10.6	7.0	6.0	3.4	5.1	6.0	3.8	4.3	4.5	5.4	7.6
82.5°	2.9	1.1	0.2	0.0	0.0	1.8	0.9	1.8	2.3	3.4	4.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	2.0	3.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
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°	450.8	450.8	450.8	450.8	450.8	450.8	450.8	450.8
2.5°	418.0	427.0	441.4	456.1	470.7	485.5	499.9	505.0
5°	379.2	399.9	428.3	458.9	490.3	522.1	551.2	564.5
7.5°	336.0	365.5	408.4	456.1	506.1	556.2	602.2	623.4
10°	289.8	327.2	376.1	440.6	512.4	581.5	644.7	672.3
12.5°	245.8	285.1	339.1	416.5	507.5	596.1	672.1	704.6
15°	209.0	243.7	302.1	387.8	491.6	597.0	685.1	720.8
17.5°	181.4	204.1	264.4	355.9	470.7	588.7	689.6	727.7
20°	167.8	174.0	215.6	315.1	451.2	580.9	694.1	734.2
22.5°	159.7	161.2	176.3	262.4	427.9	578.4	701.9	743.2
25°	153.1	153.6	157.6	207.9	392.3	576.8	714.0	755.5
27.5°	146.7	146.7	148.9	167.5	343.8	570.1	729.8	770.4
30°	140.1	140.1	141.8	148.2	287.1	556.9	748.6	789.7
32.5°	133.5	133.5	134.8	139.5	229.2	540.3	765.9	809.1
35°	126.7	126.3	128.0	132.9	182.3	519.2	783.1	830.2
37.5°	119.5	119.3	121.1	126.7	157.4	494.8	796.1	859.0
40°	111.9	111.9	113.9	120.0	150.3	464.0	816.7	900.2
42.5°	105.0	104.6	106.7	114.2	144.8	434.6	853.7	960.3
45°	98.2	97.4	99.3	108.5	135.5	424.4	922.8	1049.1
47.5°	91.9	89.7	91.5	101.8	126.9	462.9	1035.9	1172.2
50°	86.8	82.5	84.0	95.1	120.4	546.5	1182.5	1335.7
52.5°	81.4	75.8	76.7	86.8	114.6	626.2	1341.5	1551.4
55°	75.8	69.5	70.0	78.5	106.3	638.1	1496.7	1845.7
57.5°	69.5	63.7	63.7	70.8	100.2	553.0	1616.0	2210.8
60°	62.5	58.7	57.6	64.8	105.7	390.2	1630.0	2446.3
62.5°	54.9	52.9	51.4	58.9	109.7	231.2	1518.0	2389.3
65°	46.2	45.7	44.6	64.8	92.4	136.5	1303.2	2214.6
67.5°	38.8	38.1	38.1	68.0	70.2	85.9	1018.1	1974.2
70°	33.4	31.0	31.0	51.4	42.6	59.4	710.9	1714.7
72.5°	28.0	25.3	23.6	41.0	31.9	43.5	444.2	1468.5
75°	22.4	20.4	18.1	27.2	23.8	33.0	258.1	1216.7
77.5°	16.2	15.3	12.8	20.0	17.2	23.8	153.6	938.8
80°	8.3	8.5	8.1	11.5	11.7	16.2	87.4	642.5
82.5°	4.9	3.8	4.3	5.6	6.8	9.2	33.0	377.6
85°	3.2	2.0	2.0	2.7	3.4	3.6	10.0	153.1
87.5°	1.5	0.7	0.9	1.3	1.1	0.9	0.4	38.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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