

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: P959943

Luminaire Tested: **NAV-SB1B-827-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959943
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-SB1B-827-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA 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: 3831.4 lumens
Efficiency: N/A
Efficacy: 96.3 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): 39.8
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



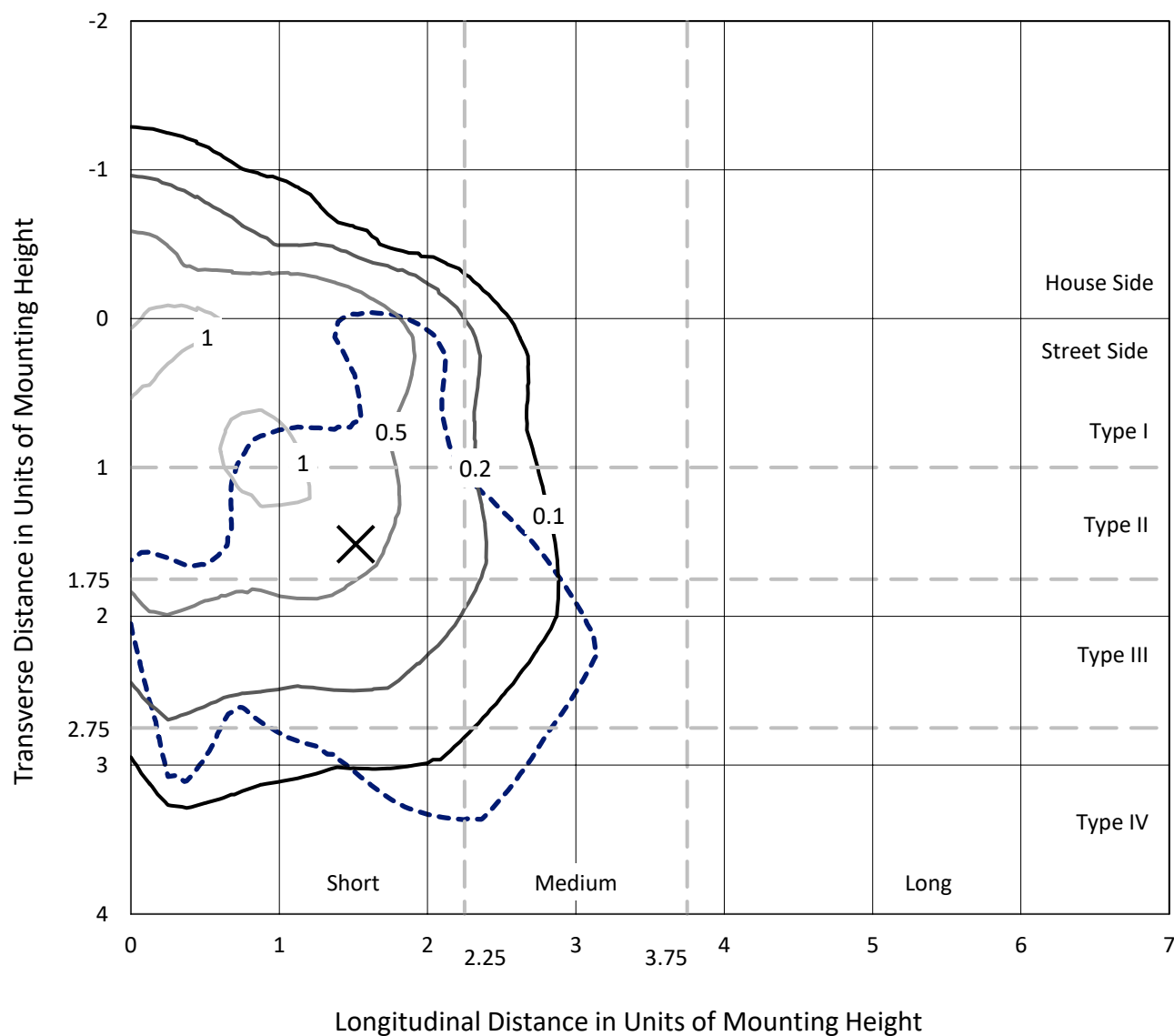
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

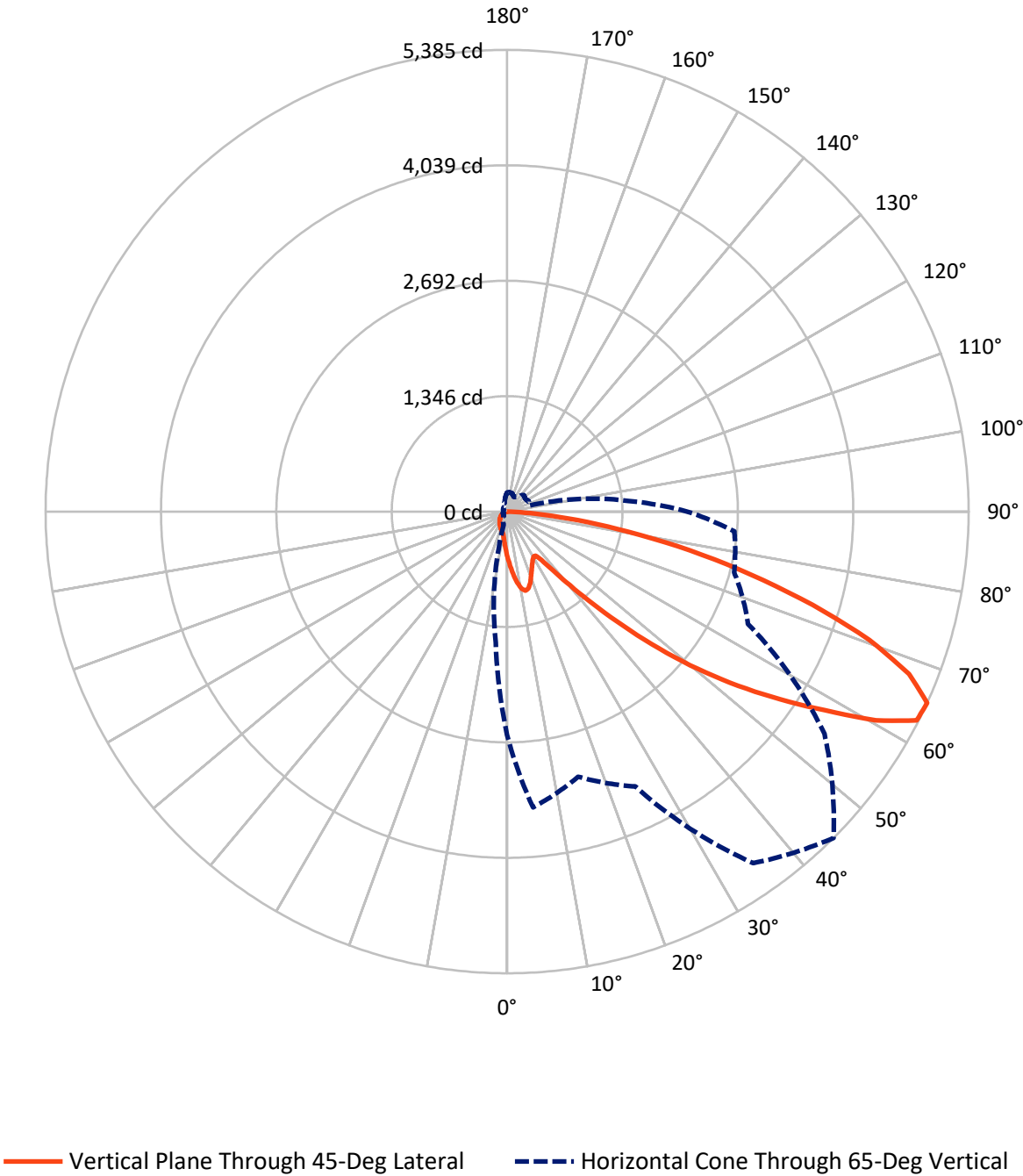


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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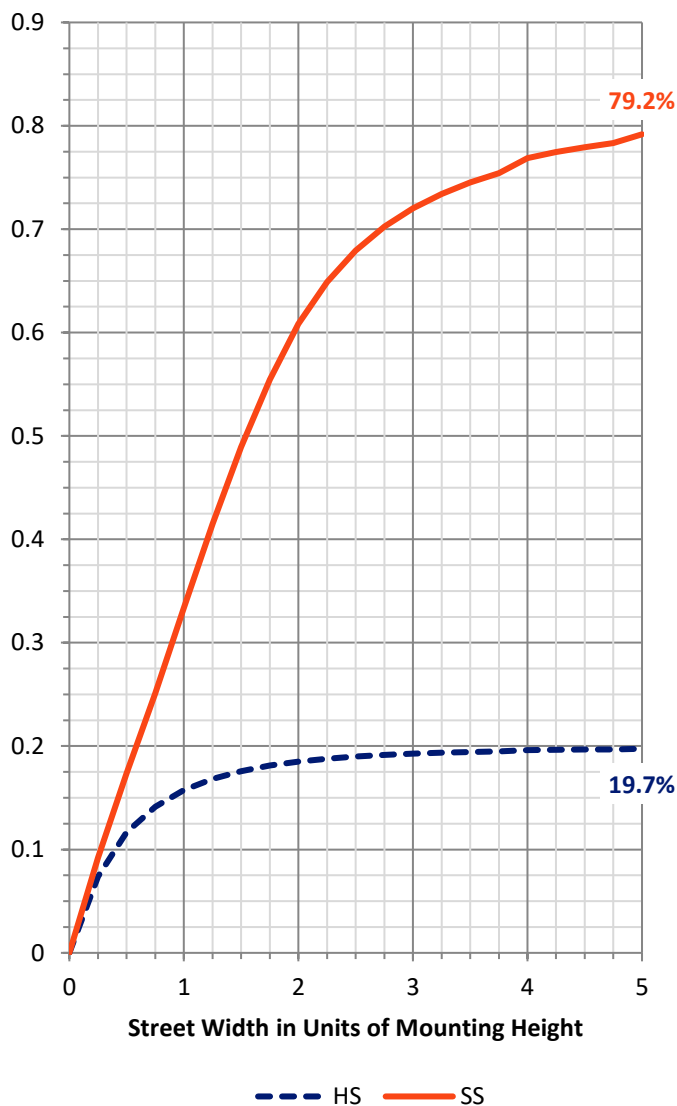
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	761.6	0.0	761.6
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	3069.9	0.0	3069.9
	% Fixture	80.1	0.0	80.1
Total	Lumens	3831.4	0.0	3831.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	1.4
10°-20°	156.6	4.1
20°-30°	230.7	6.0
30°-40°	296.4	7.7
40°-50°	479.3	12.5
50°-60°	840.5	21.9
60°-70°	1051.7	27.4
70°-80°	614.5	16.0
80°-90°	109.6	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°	3831.4	100.0
0°-180°	3831.4	100.0

Coefficient of Utilization



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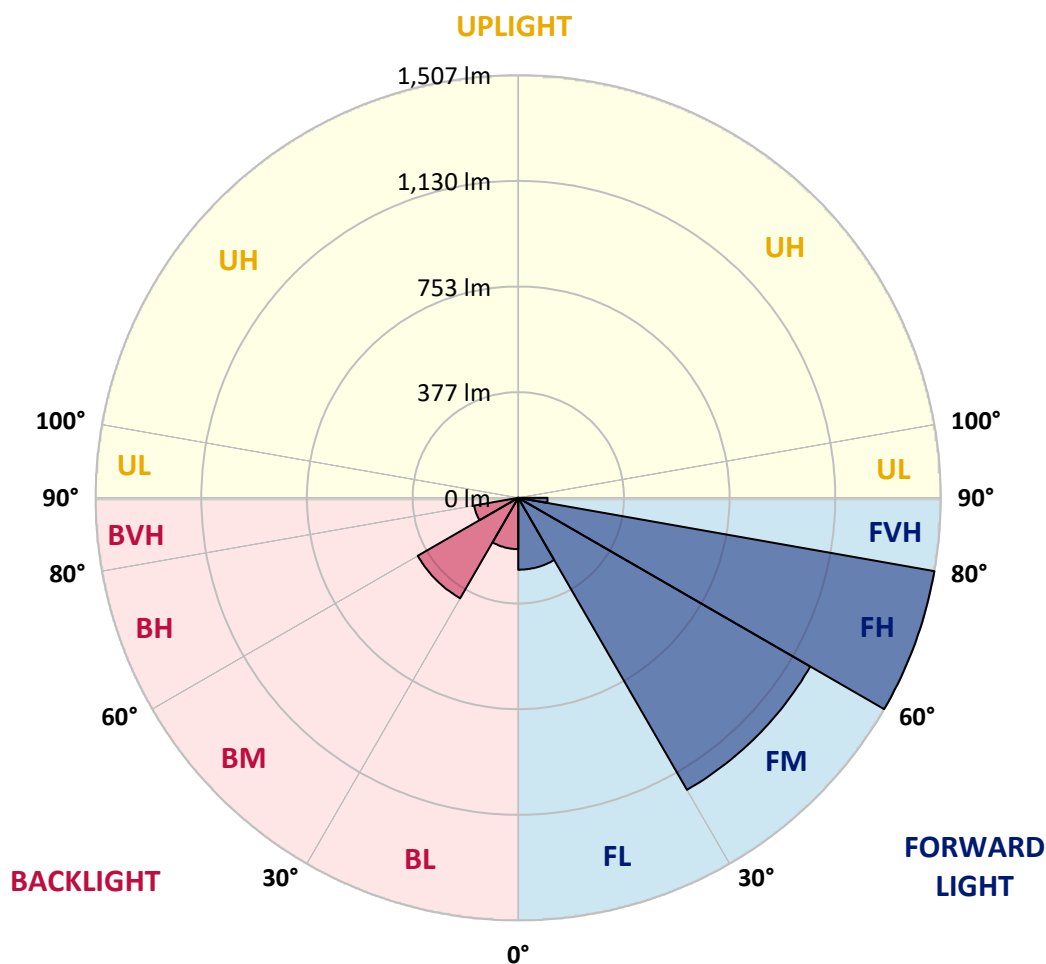
CATALOG NUMBER: NAV-SB1B-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	256.4	6.7			
FM	(30°-60°)	1202.4	31.4			
FH	(60°-80°)	1506.6	39.3			G1/1800
FVH	(80°-90°)	104.5	2.7			G2/225
BL	(0°-30°)	183.1	4.8	B1/500		
BM	(30°-60°)	413.8	10.8	B1/1000		
BH	(60°-80°)	159.6	4.2	B1/500		G1/500
BVH	(80°-90°)	5.1	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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	594.4	598.9	609.0	614.2	622.4	622.9	622.9	615.8	615.5	601.0	599.4
5°	664.4	675.0	698.6	723.2	728.5	729.8	727.1	712.9	702.3	674.1	668.1
7.5°	733.8	754.1	790.3	823.0	833.5	833.5	827.2	804.0	782.4	741.4	726.1
10°	791.3	816.9	866.0	902.7	914.8	912.2	899.2	870.0	840.2	790.5	770.5
12.5°	829.3	858.1	911.9	941.5	953.9	947.0	932.2	903.7	872.4	820.1	797.3
15°	848.3	878.4	925.2	940.7	937.3	930.2	928.3	914.6	890.8	842.0	817.1
17.5°	856.5	884.5	917.0	907.2	878.1	872.6	891.1	908.5	902.7	861.0	837.7
20°	864.2	887.6	897.4	854.1	803.5	798.5	833.8	883.4	908.8	878.6	857.3
22.5°	874.7	889.2	869.2	798.2	743.5	732.0	771.0	845.7	910.6	901.1	879.8
25°	889.2	893.2	838.0	745.1	690.2	678.7	715.0	803.7	907.4	925.4	907.2
27.5°	906.6	898.5	808.2	700.8	647.7	636.9	673.3	763.3	898.5	949.7	936.7
30°	929.4	905.4	778.7	666.5	617.4	609.5	644.5	728.5	887.3	980.5	973.4
32.5°	952.3	908.3	751.2	646.4	610.5	613.5	642.2	709.7	875.2	1010.1	1013.5
35°	977.1	917.5	737.7	666.2	667.8	693.1	705.0	727.1	873.4	1050.2	1063.7
37.5°	1011.0	938.1	753.8	764.6	819.6	872.1	862.3	812.4	894.8	1110.2	1135.2
40°	1059.4	974.3	824.0	932.2	1045.0	1130.3	1093.0	967.4	960.2	1196.5	1234.0
42.5°	1130.3	1031.8	948.6	1137.0	1328.2	1468.6	1368.8	1167.2	1074.8	1319.7	1367.6
45°	1234.7	1124.9	1099.3	1353.2	1677.4	1898.6	1691.1	1380.2	1235.2	1506.3	1543.9
47.5°	1379.6	1262.0	1240.6	1581.1	2101.8	2387.9	2048.5	1577.6	1417.9	1760.7	1769.5
50°	1572.0	1446.5	1374.4	1830.2	2567.1	2886.8	2405.6	1768.2	1627.2	2071.7	2061.7
52.5°	1825.9	1703.8	1530.3	2067.5	3045.7	3375.1	2764.3	1935.5	1886.9	2432.5	2411.9
55°	2172.3	2091.0	1743.6	2294.0	3524.0	3866.3	3109.0	2093.4	2230.1	2861.2	2736.6
57.5°	2602.0	2660.1	2051.1	2556.6	3953.9	4372.5	3455.4	2314.0	2675.7	3340.5	2925.0
60°	2879.1	3416.8	2640.0	2944.8	4442.5	4945.0	3930.0	2733.7	3143.9	3512.4	2889.2
62.5°	2812.1	3657.5	3345.3	3440.5	4891.7	5361.3	4395.0	3155.3	3232.0	3259.2	2612.5
65°	2606.5	3463.3	3201.4	3536.9	5005.5	5384.7	4519.3	3100.8	2741.6	2660.8	2099.9
67.5°	2323.6	3232.8	2859.6	3281.4	4799.9	5056.4	4287.8	2742.9	2118.7	1996.8	1523.5
70°	2018.1	2977.8	2635.3	2994.7	4407.9	4484.2	3894.3	2412.4	1558.3	1348.5	977.6
72.5°	1728.4	2712.4	2481.6	2701.0	3885.1	3727.2	3382.0	2120.3	1134.7	972.6	694.9
75°	1431.9	2320.6	2262.8	2352.1	3197.5	2935.9	2809.9	1755.5	890.5	703.7	479.6
77.5°	1104.8	1813.3	1946.4	1883.5	2250.7	2180.7	2178.1	1319.2	650.7	469.6	300.6
80°	756.2	1263.8	1520.6	1328.7	1460.7	1425.1	1640.4	885.0	471.9	282.7	167.4
82.5°	444.4	769.4	1058.4	643.2	807.7	829.0	976.8	430.5	277.7	65.2	36.4
85°	180.3	303.8	413.9	251.8	389.6	328.6	370.8	120.8	77.4	1.5	0.0
87.5°	45.4	97.2	68.1	28.3	45.1	41.4	32.7	14.8	3.2	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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	589.2	583.0	568.1	553.0	540.8	524.5	513.6	500.7	488.3	477.2	475.1
5°	651.4	631.4	603.9	578.8	553.2	528.4	503.9	478.0	454.3	439.7	430.5
7.5°	702.1	666.8	630.3	598.4	567.4	538.4	505.9	474.6	437.4	417.6	399.6
10°	739.8	693.4	645.6	609.0	577.8	549.5	522.1	490.5	445.6	420.8	393.8
12.5°	764.6	709.5	653.5	611.5	576.8	554.8	542.6	530.2	485.6	456.6	417.6
15°	781.8	720.9	659.1	605.5	562.7	546.6	558.7	573.1	544.5	511.0	460.0
17.5°	800.5	735.6	661.4	589.2	535.6	528.7	560.1	593.1	591.7	558.5	508.6
20°	820.3	748.6	659.9	562.7	502.6	508.6	548.8	587.0	603.1	585.2	540.8
22.5°	840.7	761.0	653.8	528.4	471.7	490.7	530.8	564.4	583.3	577.8	544.0
25°	866.2	778.4	644.8	491.5	446.1	472.4	509.9	537.1	550.3	550.0	526.8
27.5°	896.9	801.7	640.1	461.7	427.8	451.9	485.1	509.4	518.6	518.6	500.2
30°	932.5	829.0	634.8	442.1	417.3	430.5	456.3	480.1	489.3	489.3	473.8
32.5°	972.1	855.5	622.1	430.2	409.4	409.7	426.0	447.6	458.8	460.3	449.3
35°	1019.7	883.7	594.4	420.8	400.2	389.3	397.3	415.2	428.3	431.8	425.0
37.5°	1081.9	918.3	554.8	406.7	385.9	368.0	369.8	383.6	398.0	403.3	398.8
40°	1165.6	958.9	513.6	386.7	365.8	344.4	343.7	353.7	368.0	373.7	371.4
42.5°	1276.2	1007.8	474.3	367.5	341.5	319.6	318.4	326.3	338.7	344.7	343.7
45°	1417.7	1067.6	440.5	352.4	317.8	296.1	295.6	302.2	313.0	319.4	318.1
47.5°	1614.3	1127.6	417.6	344.4	299.1	276.9	278.0	283.7	293.6	298.0	296.1
50°	1870.6	1145.7	405.9	344.4	289.0	259.7	265.0	269.8	277.2	279.8	277.4
52.5°	2116.6	1085.6	395.3	346.6	290.4	245.2	256.6	259.9	266.3	267.4	263.9
55°	2237.2	933.4	380.9	347.1	298.5	232.8	249.7	256.0	258.4	258.1	252.4
57.5°	2195.8	754.6	356.3	345.0	304.1	224.9	241.3	253.4	255.0	252.6	241.8
60°	2050.3	555.7	337.6	329.4	302.0	222.5	228.3	247.5	250.0	246.8	229.1
62.5°	1806.5	385.6	323.1	295.1	292.7	221.7	208.0	234.9	240.7	236.3	210.3
65°	1422.2	272.3	278.2	258.7	272.6	217.5	186.9	219.6	227.6	220.7	184.2
67.5°	962.4	196.6	225.4	234.4	240.2	208.0	171.6	202.2	212.8	203.8	153.9
70°	519.7	138.1	148.8	197.4	204.1	191.7	157.8	184.5	196.6	186.9	125.4
72.5°	307.0	99.2	104.2	158.7	169.9	168.6	142.6	163.9	178.7	167.1	101.9
75°	169.2	67.0	74.4	115.1	138.1	130.2	122.5	138.8	153.9	142.6	78.6
77.5°	75.7	40.1	51.8	75.4	108.4	89.2	94.7	108.2	122.2	110.3	52.5
80°	29.3	22.4	34.3	41.2	78.9	49.4	61.0	79.7	89.8	80.3	32.0
82.5°	3.7	10.0	14.8	16.1	45.9	26.1	35.4	50.1	49.4	42.7	16.1
85°	0.0	1.8	2.2	1.0	19.8	9.5	11.6	16.4	15.3	11.6	1.3
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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	462.2	452.6	447.9	443.9	447.6	449.8	449.8	458.8	464.0	466.2	480.9
5°	407.2	389.6	377.7	370.5	373.0	375.6	378.5	389.8	397.5	402.5	425.5
7.5°	364.0	337.0	320.4	311.7	313.0	314.9	317.2	328.3	336.0	342.6	368.2
10°	342.6	304.6	282.7	272.1	270.3	269.3	268.4	275.0	280.8	286.1	311.5
12.5°	343.7	290.6	263.9	251.0	245.5	239.1	234.1	235.1	238.8	245.5	261.6
15°	357.1	286.1	254.2	238.1	228.9	221.5	215.4	214.0	215.4	216.5	226.4
17.5°	375.4	285.6	245.7	225.7	216.2	210.1	204.6	202.7	203.0	204.3	206.9
20°	389.8	284.0	236.3	213.8	205.3	200.1	194.5	192.7	193.2	193.5	196.4
22.5°	397.5	281.7	225.7	201.9	194.7	189.5	184.5	184.2	184.2	185.8	187.9
25°	397.5	276.6	216.2	190.5	184.2	179.5	173.4	174.5	175.0	177.1	180.3
27.5°	388.0	267.1	208.5	180.8	174.2	169.4	163.9	165.2	166.0	168.4	172.4
30°	375.9	255.7	199.8	171.6	163.9	160.5	155.7	156.2	157.3	160.0	164.4
32.5°	363.0	242.3	192.7	162.4	154.7	152.0	146.8	147.5	148.6	151.5	156.5
35°	348.7	226.4	184.2	153.9	146.3	144.1	138.1	138.6	140.1	143.3	148.3
37.5°	333.6	213.5	175.8	145.7	137.8	135.7	129.4	129.9	131.7	135.4	140.1
40°	318.9	200.9	166.8	136.9	129.0	127.2	120.3	120.8	123.0	127.0	132.0
42.5°	302.8	191.1	155.2	128.0	119.6	117.7	111.4	112.1	114.6	118.5	123.5
45°	283.5	184.8	142.3	119.6	110.1	108.2	102.4	104.0	106.6	110.6	115.8
47.5°	263.7	182.1	131.4	110.6	100.3	98.7	94.0	96.6	99.5	102.7	108.4
50°	244.7	178.7	120.3	102.2	91.8	90.3	87.1	90.5	93.5	96.4	101.9
52.5°	223.0	171.3	110.3	94.7	84.8	84.2	82.6	85.8	88.5	91.0	95.8
55°	200.6	159.4	101.6	88.1	78.6	79.2	78.4	81.1	83.1	85.5	89.8
57.5°	181.1	144.4	94.7	81.1	73.4	74.9	73.9	75.2	76.6	79.4	82.9
60°	161.2	126.4	87.1	72.6	68.1	69.9	67.0	66.7	67.3	68.1	74.4
62.5°	134.6	107.7	77.6	65.2	62.3	63.0	57.5	53.3	53.3	54.1	63.7
65°	108.2	90.3	67.0	56.8	54.3	53.8	45.9	40.1	39.6	41.9	50.1
67.5°	89.0	74.9	56.5	47.3	45.6	46.2	40.4	34.5	34.0	36.7	42.7
70°	73.6	60.5	45.1	36.4	38.0	40.4	34.5	29.0	28.3	30.6	36.4
72.5°	58.6	47.3	34.5	27.0	31.4	34.3	28.3	23.0	22.4	24.5	30.1
75°	43.0	33.8	23.5	19.6	24.3	27.0	20.6	16.4	15.6	17.4	23.0
77.5°	26.6	19.0	14.8	11.6	16.6	17.9	10.9	9.5	9.2	10.6	14.6
80°	12.4	8.2	7.2	4.0	6.0	7.2	4.5	5.0	5.3	6.4	9.0
82.5°	3.4	1.3	0.3	0.0	0.0	2.2	1.0	2.2	2.7	4.0	5.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.3	2.4	4.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.2
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°	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
2.5°	492.0	502.6	519.5	536.9	554.0	571.4	588.3	594.4
5°	446.3	470.6	504.1	540.1	577.0	614.5	648.8	664.4
7.5°	395.3	430.2	480.6	536.9	595.7	654.6	708.7	733.8
10°	341.0	385.1	442.6	518.6	603.1	684.4	758.8	791.3
12.5°	289.3	335.5	399.1	490.2	597.3	701.6	791.1	829.3
15°	246.0	286.9	355.6	456.3	578.6	702.6	806.4	848.3
17.5°	213.5	240.2	311.2	418.9	554.0	692.9	811.6	856.5
20°	197.4	204.8	253.7	370.8	531.1	683.6	816.9	864.2
22.5°	187.9	189.7	207.5	308.8	503.6	680.7	826.2	874.7
25°	180.3	180.8	185.5	244.7	461.7	678.9	840.4	889.2
27.5°	172.6	172.6	175.3	197.2	404.7	671.0	858.8	906.6
30°	164.9	164.9	166.8	174.5	337.8	655.4	881.1	929.4
32.5°	157.0	157.0	158.7	164.2	269.8	635.8	901.4	952.3
35°	149.1	148.6	150.7	156.5	214.6	611.0	921.7	977.1
37.5°	140.7	140.4	142.6	149.1	185.3	582.3	937.1	1011.0
40°	131.7	131.7	134.1	141.2	176.8	546.1	961.2	1059.4
42.5°	123.5	123.0	125.7	134.4	170.6	511.6	1004.8	1130.3
45°	115.6	114.6	117.0	127.7	159.4	499.4	1086.2	1234.7
47.5°	108.2	105.6	107.7	119.8	149.4	544.8	1219.1	1379.6
50°	102.2	97.2	99.0	111.9	141.8	643.2	1391.7	1572.0
52.5°	95.8	89.2	90.3	102.2	134.9	737.0	1578.9	1825.9
55°	89.2	81.8	82.3	92.4	125.2	750.9	1761.6	2172.3
57.5°	81.8	74.9	74.9	83.4	118.0	650.9	1902.0	2602.0
60°	73.6	69.2	67.9	76.3	124.3	459.3	1918.4	2879.1
62.5°	64.7	62.3	60.5	69.4	129.0	272.1	1786.7	2812.1
65°	54.3	53.8	52.5	76.3	108.8	160.7	1533.8	2606.5
67.5°	45.6	44.9	44.9	79.9	82.6	101.1	1198.3	2323.6
70°	39.4	36.4	36.4	60.5	50.1	69.9	836.7	2018.1
72.5°	33.0	29.8	27.7	48.3	37.5	51.2	522.9	1728.4
75°	26.4	24.0	21.4	32.0	28.0	38.8	303.8	1431.9
77.5°	19.0	17.9	15.1	23.5	20.3	28.0	180.8	1104.8
80°	9.7	10.0	9.5	13.4	13.7	19.0	102.9	756.2
82.5°	5.8	4.5	5.0	6.6	7.9	10.9	38.8	444.4
85°	3.7	2.4	2.4	3.2	4.0	4.2	11.9	180.3
87.5°	1.8	0.8	1.0	1.5	1.3	1.0	0.5	45.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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