

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: P959846

Luminaire Tested: **NAV-SB1B-740-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959846
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4919 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

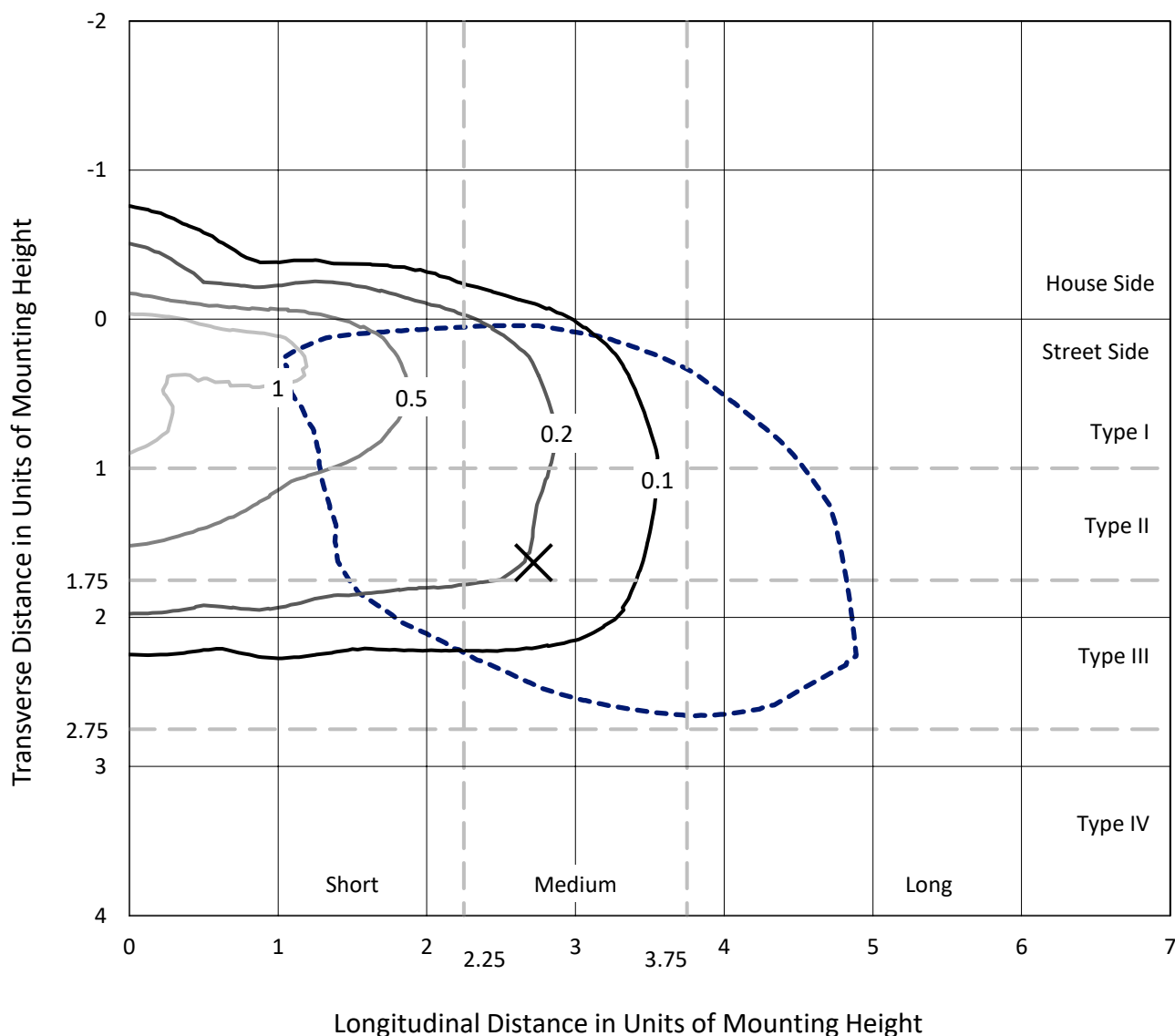
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

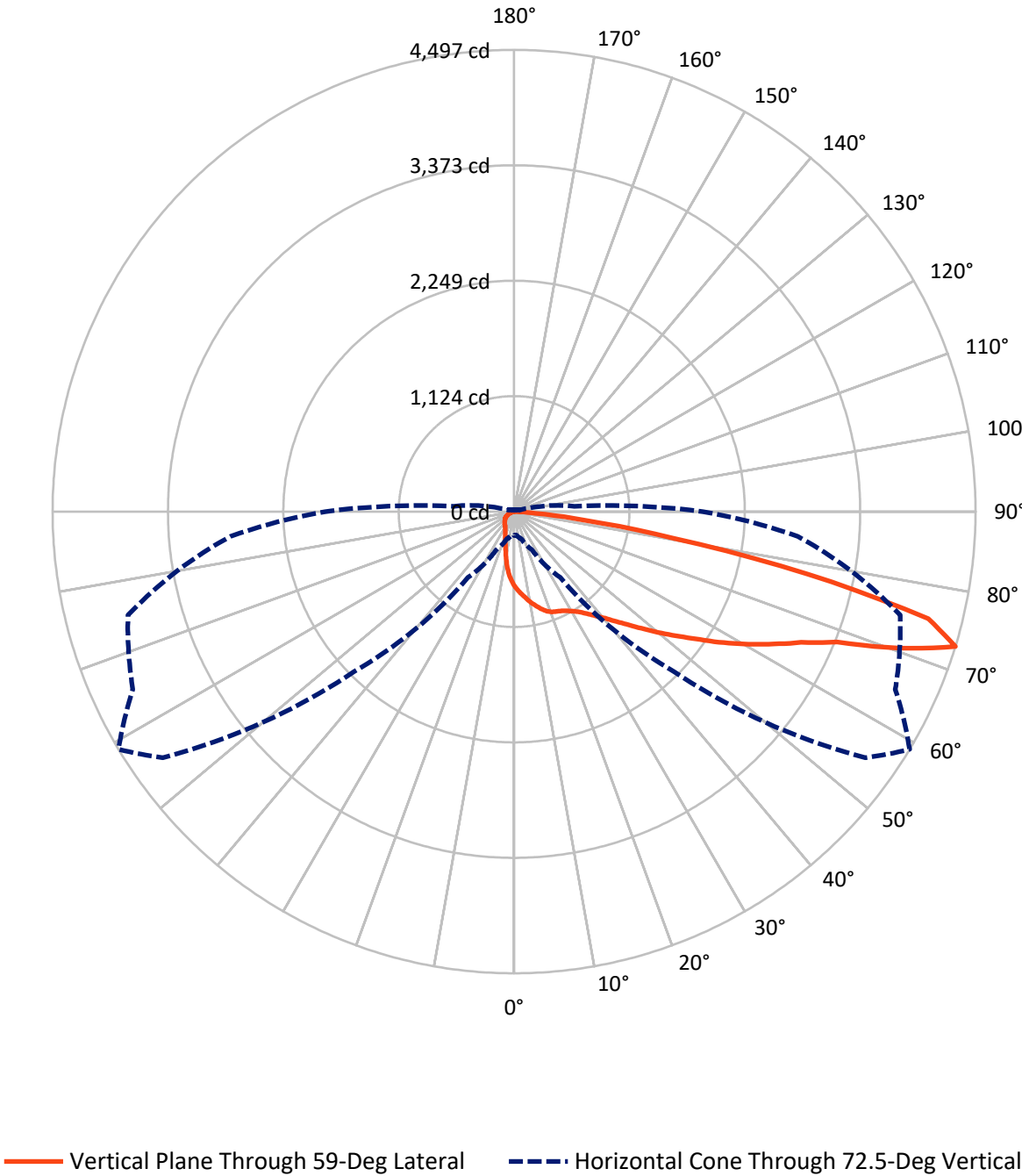
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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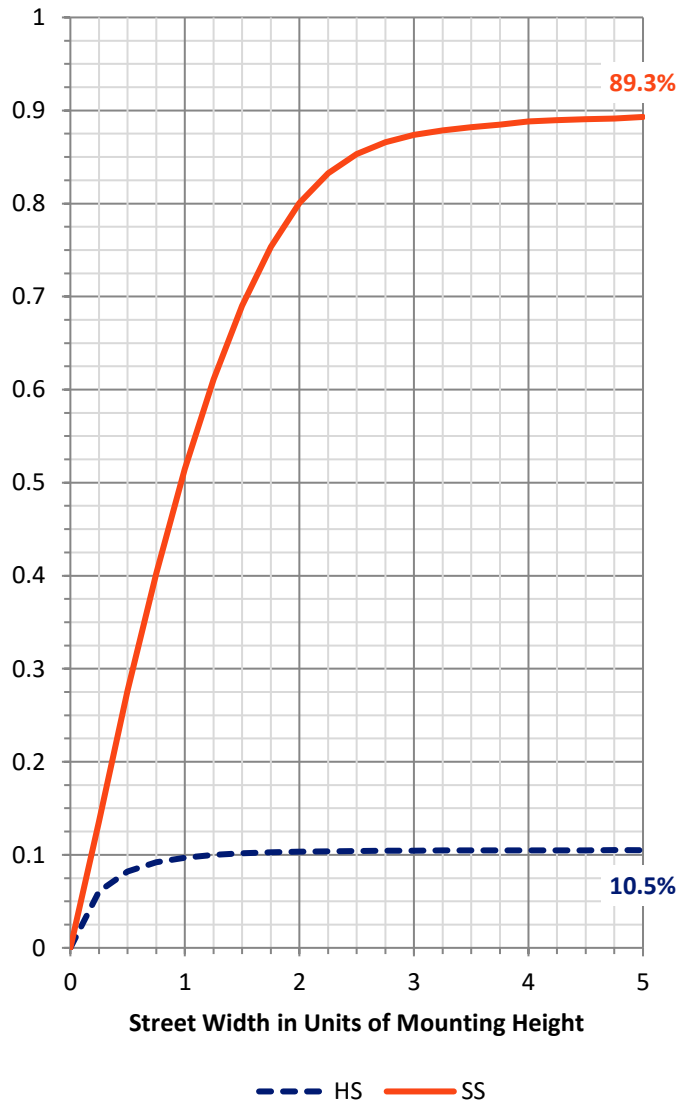
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	519.5	0.0	519.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4399.4	0.0	4399.4
	% Fixture	89.4	0.0	89.4
Total	Lumens	4919.0	0.0	4919.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	1.3
10°-20°	174.8	3.6
20°-30°	277.0	5.6
30°-40°	444.6	9.0
40°-50°	710.1	14.4
50°-60°	1028.1	20.9
60°-70°	1220.1	24.8
70°-80°	905.8	18.4
80°-90°	92.6	1.9
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°	4919.0	100.0
0°-180°	4919.0	100.0

Coefficient of Utilization



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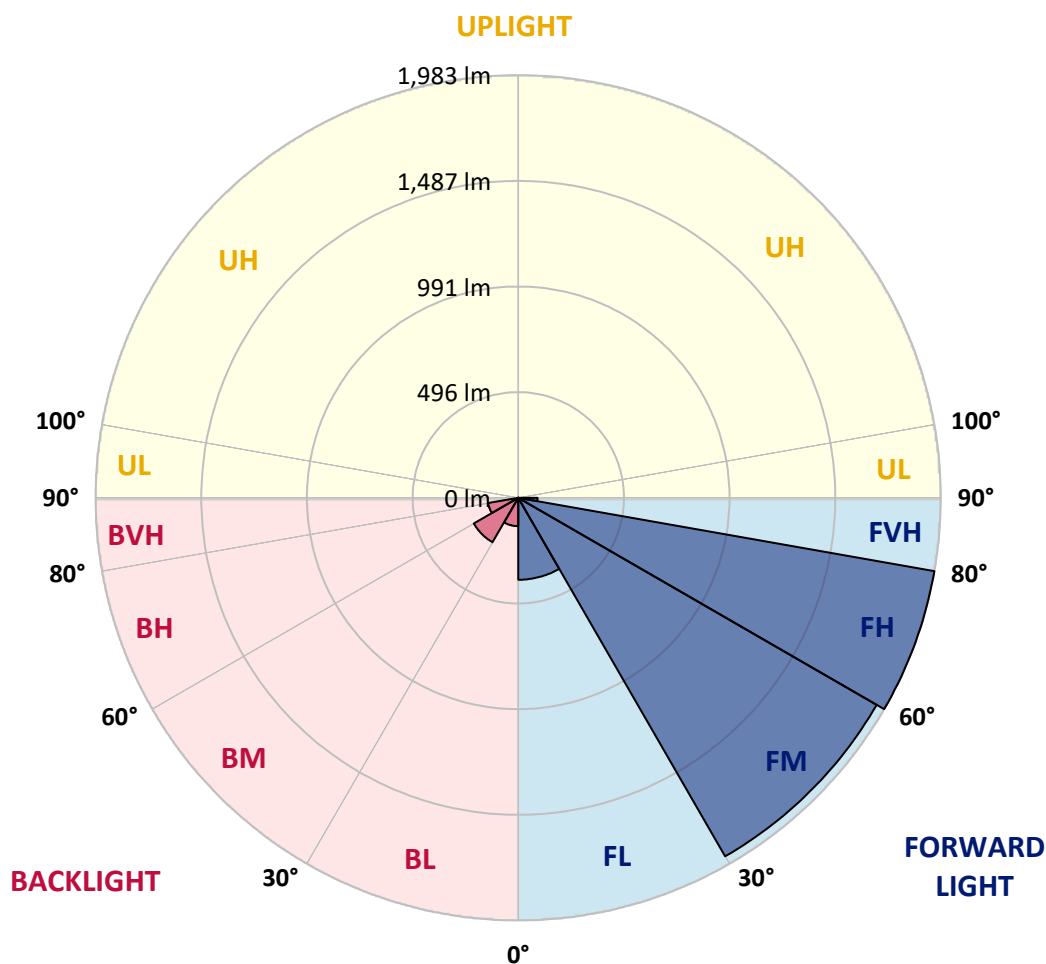
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.6	7.8			
FM	(30°-60°)	1941.9	39.5			
FH	(60°-80°)	1982.6	40.3			G2/5000
FVH	(80°-90°)	90.3	1.8			G1/100
BL	(0°-30°)	133.1	2.7	B1/500		
BM	(30°-60°)	240.9	4.9	B1/1000		
BH	(60°-80°)	143.3	2.9	B1/500		G1/500
BVH	(80°-90°)	2.3	0.0			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4
2.5°	807.1	802.6	803.2	795.5	790.1	784.2	773.0	771.4	763.3	749.3	734.8
5°	877.4	874.5	871.9	863.3	852.0	837.8	819.0	812.2	797.4	773.0	744.8
7.5°	928.8	925.3	926.5	917.9	908.9	893.1	867.0	854.5	835.0	797.8	755.0
10°	938.7	936.7	945.2	948.3	948.3	938.4	913.1	900.5	871.9	824.4	765.6
12.5°	882.8	883.1	904.0	929.1	961.9	971.2	954.2	940.6	912.4	852.7	779.1
15°	817.6	817.9	838.2	870.3	923.9	977.5	991.1	982.4	953.1	883.1	794.9
17.5°	778.5	776.8	790.4	816.7	872.9	948.3	1013.5	1019.4	995.6	916.9	812.2
20°	773.0	770.1	777.2	790.4	830.5	911.7	1016.1	1043.4	1039.2	955.1	832.1
22.5°	806.4	801.9	798.1	798.7	815.7	881.2	1009.7	1056.9	1084.2	1001.0	859.4
25°	872.6	865.5	853.0	836.9	833.4	874.8	1005.2	1071.6	1126.0	1059.7	895.3
27.5°	953.5	943.5	919.4	895.3	874.8	892.8	1014.5	1095.1	1173.1	1128.2	937.2
30°	1042.4	1030.2	1006.1	960.5	927.8	933.0	1036.7	1126.0	1233.5	1205.6	989.4
32.5°	1173.1	1144.9	1102.8	1033.1	989.7	976.3	1070.1	1165.1	1308.3	1308.7	1065.3
35°	1285.2	1269.5	1227.1	1140.4	1051.4	1033.8	1114.1	1220.4	1412.0	1445.1	1171.3
37.5°	1358.7	1337.2	1300.0	1234.8	1147.2	1092.9	1172.8	1288.1	1521.9	1600.6	1302.0
40°	1440.9	1419.8	1370.3	1309.0	1258.3	1194.3	1247.0	1366.1	1642.4	1760.2	1451.3
42.5°	1540.3	1512.6	1454.2	1388.0	1335.0	1328.0	1344.0	1463.5	1766.0	1933.7	1606.7
45°	1656.8	1630.8	1563.6	1480.2	1433.6	1421.1	1466.1	1576.9	1903.7	2123.8	1763.7
47.5°	1766.0	1735.8	1663.6	1587.4	1535.8	1496.2	1595.8	1710.7	2059.8	2322.5	1912.1
50°	1858.8	1828.0	1761.8	1680.6	1645.5	1593.9	1723.2	1860.1	2214.6	2524.6	2047.6
52.5°	1922.4	1895.1	1817.3	1762.2	1738.4	1712.4	1872.6	2018.4	2368.8	2709.5	2181.5
55°	1907.9	1883.5	1815.2	1811.3	1809.6	1837.0	2051.1	2197.9	2525.8	2884.6	2314.9
57.5°	1862.0	1834.4	1749.0	1807.7	1864.6	1948.1	2244.5	2410.2	2698.0	3049.6	2443.3
60°	1726.8	1717.2	1665.1	1801.0	1887.7	2057.0	2465.4	2623.5	2884.2	3194.8	2557.3
62.5°	1440.6	1449.0	1448.7	1815.2	1929.5	2180.9	2666.1	2839.2	3066.3	3334.4	2658.7
65°	1078.7	1107.6	1144.6	1688.0	1985.3	2402.2	2906.1	3073.4	3251.3	3497.0	2761.9
67.5°	724.9	747.9	773.0	1384.8	1819.0	2634.7	3304.6	3394.2	3472.9	3677.2	2877.8
70°	414.9	422.3	457.4	864.9	1402.1	2570.5	3953.6	3986.1	3803.4	3899.1	2962.2
72.5°	232.5	229.9	276.2	410.4	783.6	2201.2	4181.0	4497.4	4099.1	3895.5	2773.8
75°	155.4	155.8	190.1	258.8	305.4	1540.9	3603.0	4170.1	3921.9	3454.2	2266.4
77.5°	106.0	109.5	139.7	200.1	141.3	751.8	2383.5	2921.1	3175.1	2667.5	1564.7
80°	45.9	46.2	92.1	143.6	95.4	239.2	1235.7	1565.0	1991.5	1497.8	619.8
82.5°	23.8	27.0	58.7	92.8	60.1	83.8	583.8	683.7	835.6	439.6	127.2
85°	8.3	9.9	36.3	45.6	30.2	29.8	203.3	207.2	176.9	66.1	35.1
87.5°	0.0	1.6	14.1	11.3	3.9	3.5	24.1	20.2	16.1	9.3	11.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4
2.5°	728.1	719.3	705.2	687.9	667.7	656.7	641.0	631.4	622.7	623.0	630.1
5°	729.0	714.5	678.6	640.3	598.0	566.8	532.2	507.8	489.1	484.6	491.4
7.5°	731.8	707.5	648.7	585.2	514.4	462.2	414.3	384.1	367.1	362.5	367.1
10°	735.7	699.8	615.0	517.7	430.0	367.1	327.3	308.0	300.2	294.5	298.1
12.5°	738.9	691.8	572.6	448.0	354.9	305.8	275.5	259.5	252.8	248.6	250.8
15°	744.5	681.1	526.6	383.1	304.1	263.9	235.4	223.6	221.6	222.2	223.2
17.5°	749.9	670.9	475.3	332.4	266.9	227.3	210.0	208.1	210.6	213.2	214.2
20°	755.9	656.1	423.2	294.2	232.5	202.0	197.5	198.7	200.1	204.6	205.8
22.5°	765.0	637.4	377.7	261.8	204.0	189.8	187.6	188.5	189.5	193.9	195.3
25°	777.8	617.6	340.7	231.9	185.9	179.9	177.6	177.6	178.9	183.1	184.7
27.5°	791.3	589.3	310.9	204.3	175.4	168.9	165.0	165.0	166.7	171.5	173.4
30°	806.4	563.6	287.4	183.7	166.4	158.1	152.8	151.6	153.5	159.6	161.2
32.5°	833.7	546.9	270.7	174.0	158.4	148.0	140.9	137.5	139.4	146.5	148.4
35°	875.1	543.0	259.1	169.2	150.6	139.1	129.1	123.6	125.3	132.6	134.9
37.5°	923.6	551.0	247.9	162.9	143.2	130.4	117.3	110.2	112.7	119.5	121.4
40°	993.3	584.5	239.2	158.1	135.8	120.1	105.4	98.3	102.4	108.2	109.2
42.5°	1077.5	643.9	237.0	153.5	126.9	109.2	94.4	89.3	92.5	98.0	98.9
45°	1181.8	719.7	247.3	147.7	116.8	98.6	85.8	82.8	83.8	89.3	91.8
47.5°	1293.9	797.4	275.5	142.6	108.2	89.9	79.0	76.5	75.7	81.0	84.2
50°	1407.2	866.4	308.9	138.8	102.1	82.8	73.9	70.6	69.1	72.3	73.5
52.5°	1519.4	921.4	330.8	132.3	96.0	75.7	69.4	64.6	61.7	63.2	64.6
55°	1633.0	969.5	332.1	122.7	90.2	71.3	64.9	59.4	55.9	55.9	56.5
57.5°	1739.3	1012.0	313.1	109.9	82.2	67.1	58.7	54.3	50.4	49.1	49.5
60°	1833.4	1043.4	281.7	95.4	75.1	61.7	52.7	49.1	44.3	41.7	41.1
62.5°	1917.3	1058.8	238.6	80.6	66.5	55.2	46.8	43.0	36.6	33.4	33.1
65°	1988.2	1043.0	193.6	66.8	59.0	48.2	40.2	36.3	29.2	25.4	25.4
67.5°	2058.5	971.2	146.5	56.2	51.4	40.5	33.1	29.5	24.4	21.2	21.2
70°	2067.5	819.9	102.4	47.3	42.7	31.2	26.6	24.4	19.9	17.0	16.7
72.5°	1840.5	590.0	62.3	38.5	33.4	22.1	21.2	19.3	14.8	12.8	12.5
75°	1471.2	361.6	36.6	28.9	22.1	15.8	15.8	13.8	9.9	8.3	8.3
77.5°	1016.8	189.1	21.5	18.7	13.1	9.3	10.2	8.3	4.8	3.9	3.9
80°	407.2	72.0	11.6	8.7	6.1	4.2	3.5	1.9	0.9	0.6	0.9
82.5°	81.3	19.0	3.9	2.3	2.3	0.9	0.0	0.0	0.0	0.0	0.0
85°	20.9	4.2	0.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

(END OF REPORT)