

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: P961538

Luminaire Tested: **NAV-SB2A-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8001.1 lumens
Efficiency: N/A
Efficacy: 139.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

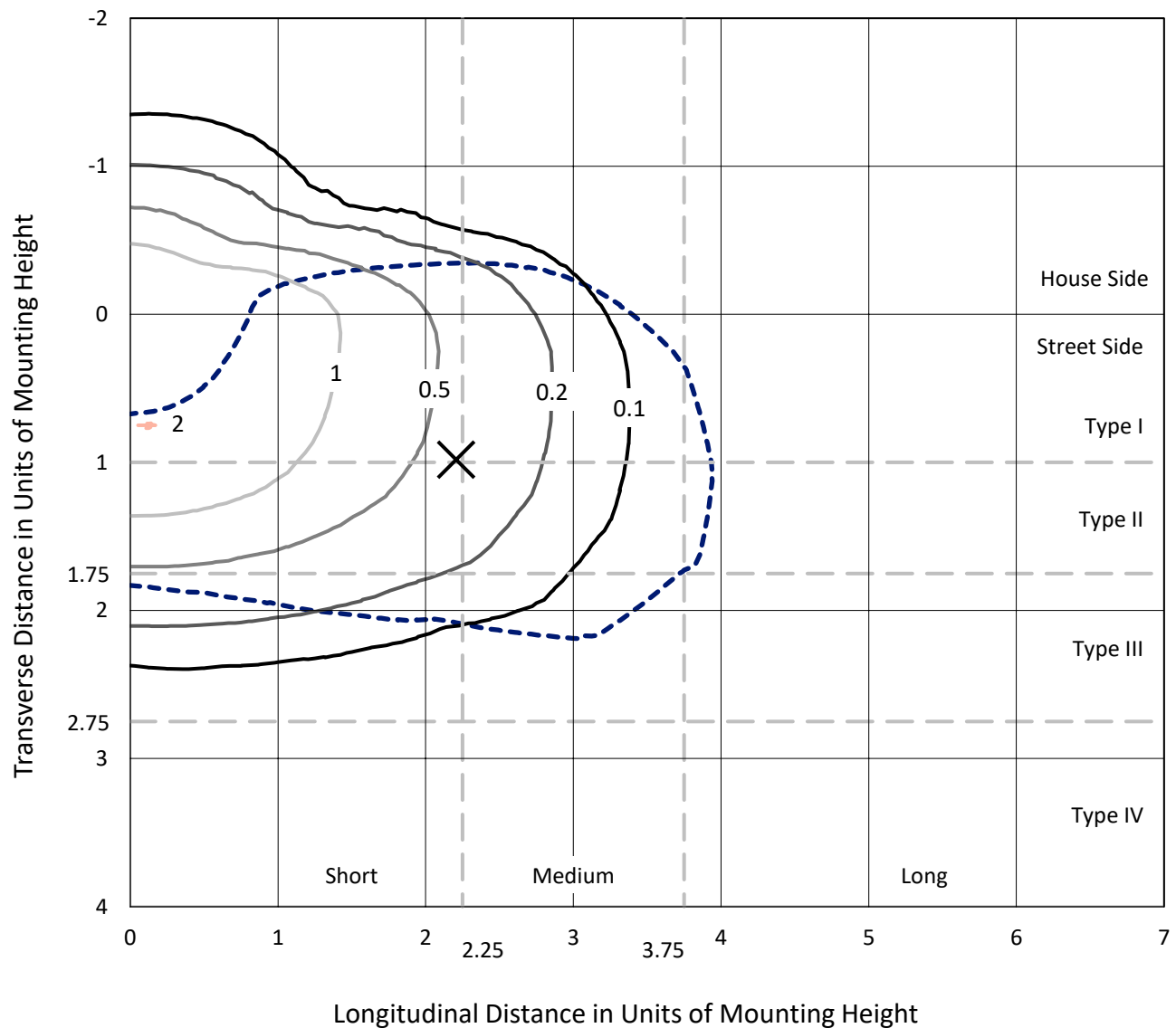
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

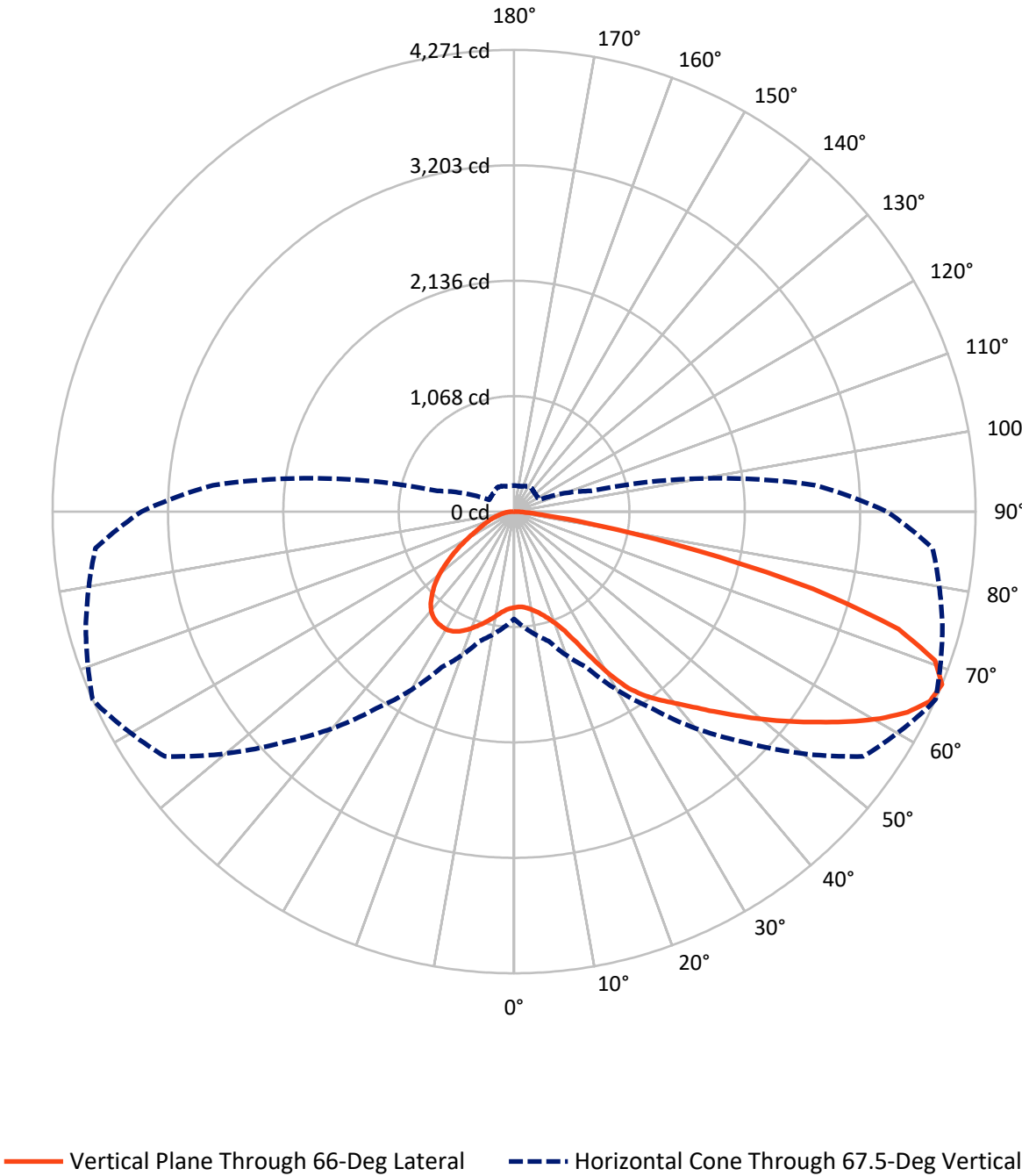
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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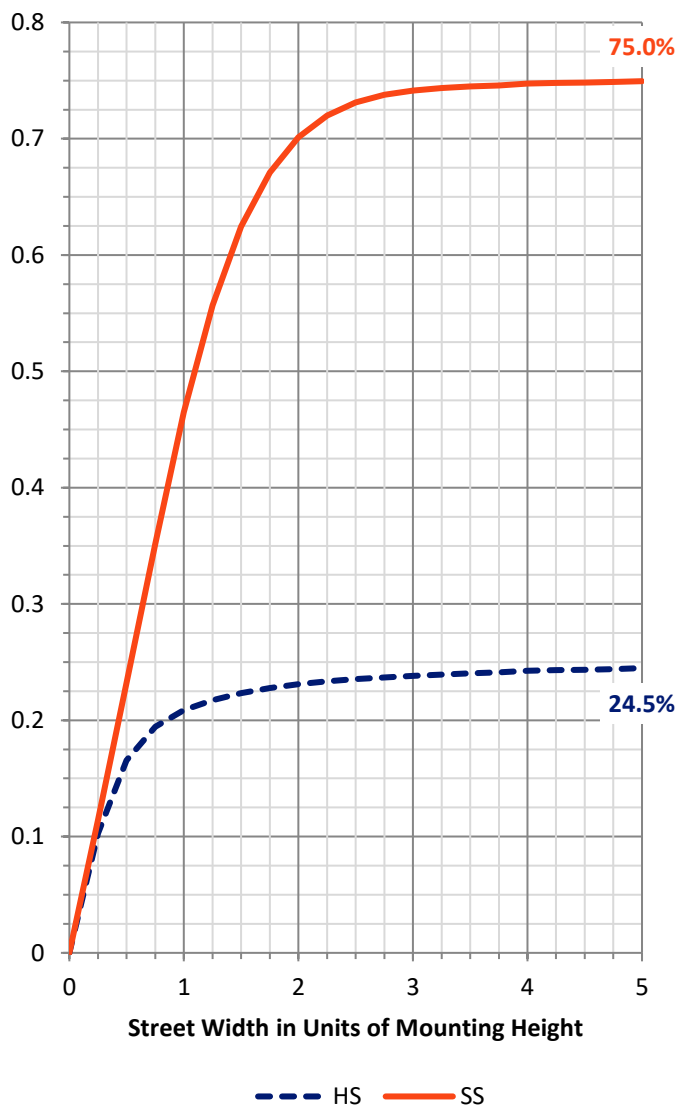
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1989.5	0.0	1989.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6011.7	0.0	6011.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	8001.1	0.0	8001.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	1.1
10°-20°	290.7	3.6
20°-30°	560.3	7.0
30°-40°	982.4	12.3
40°-50°	1460.5	18.3
50°-60°	1851.3	23.1
60°-70°	1811.5	22.6
70°-80°	864.1	10.8
80°-90°	92.3	1.2
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°	8001.1	100.0
0°-180°	8001.1	100.0

Coefficient of Utilization



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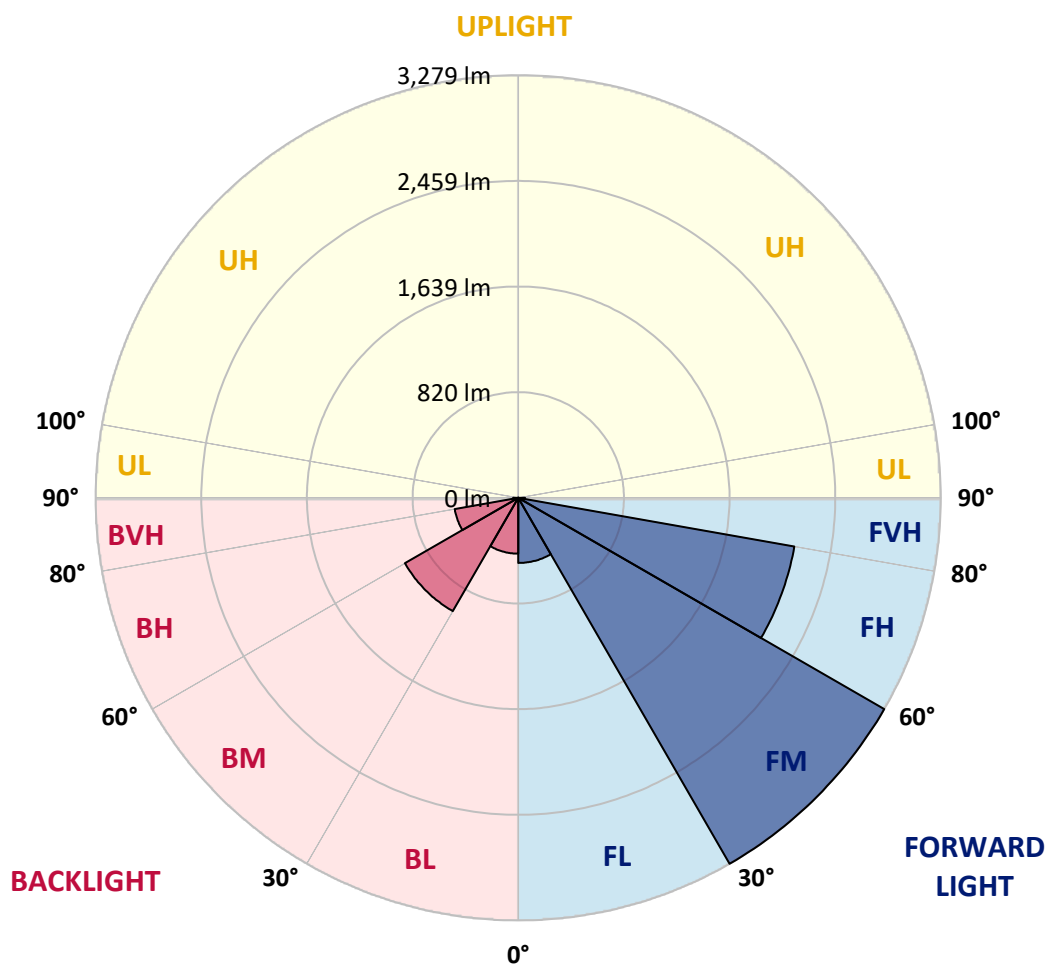
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	505.6	6.3			
FM	(30°-60°)	3278.8	41.0			
FH	(60°-80°)	2174.9	27.2			G2/5000
FVH	(80°-90°)	52.4	0.7			G1/100
BL	(0°-30°)	433.4	5.4	B1/500		
BM	(30°-60°)	1015.4	12.7	B2/2500		
BH	(60°-80°)	500.7	6.3	B2/1000		G2/1000
BVH	(80°-90°)	40.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4
2.5°	878.2	883.2	882.0	879.9	879.4	880.3	881.5	882.8	882.4	884.5	887.9
5°	875.7	880.7	880.3	880.3	882.0	885.3	887.4	889.5	887.4	889.9	894.6
7.5°	877.3	881.1	882.8	884.5	888.7	895.0	900.1	904.7	902.1	905.1	911.0
10°	898.8	901.7	903.4	903.4	906.3	913.5	918.5	926.9	924.9	929.5	937.1
12.5°	937.9	940.8	940.8	939.1	941.3	945.9	947.5	956.8	953.0	960.6	968.1
15°	985.8	991.7	987.1	984.1	984.9	989.6	989.1	996.3	992.5	998.9	1005.5
17.5°	1038.7	1046.3	1038.7	1038.3	1036.7	1041.7	1042.1	1048.5	1041.7	1046.3	1050.9
20°	1101.4	1111.9	1105.6	1107.7	1103.9	1106.1	1108.1	1117.4	1106.9	1110.3	1108.9
22.5°	1189.7	1202.3	1195.6	1203.6	1201.0	1199.4	1198.9	1215.3	1198.9	1200.2	1188.0
25°	1318.4	1333.4	1321.7	1332.6	1332.6	1338.1	1344.4	1365.4	1338.1	1330.1	1298.6
27.5°	1508.4	1523.5	1500.4	1507.1	1505.0	1518.4	1511.7	1563.8	1534.4	1521.4	1457.9
30°	1737.1	1763.9	1720.3	1718.5	1716.5	1737.9	1747.5	1782.0	1752.1	1739.1	1662.7
32.5°	1984.2	2012.4	1960.2	1945.1	1937.1	1950.2	1942.2	1969.9	1949.3	1929.2	1834.5
35°	2245.7	2273.4	2223.8	2194.4	2162.4	2135.2	2106.6	2113.7	2094.4	2063.6	1965.7
37.5°	2492.9	2543.7	2491.2	2459.7	2400.9	2347.5	2267.6	2234.4	2216.3	2188.1	2089.4
40°	2744.7	2773.8	2733.8	2706.8	2643.0	2559.3	2431.5	2361.3	2336.9	2309.6	2225.9
42.5°	2930.1	2957.8	2936.4	2917.9	2867.8	2770.8	2605.5	2517.7	2482.3	2451.7	2380.7
45°	3077.3	3097.9	3084.3	3091.1	3069.7	2975.5	2785.8	2685.4	2648.8	2611.4	2555.5
47.5°	3136.5	3158.3	3179.8	3219.7	3256.3	3186.9	2979.7	2867.0	2828.4	2790.0	2735.0
50°	3129.7	3152.1	3214.3	3299.2	3412.7	3389.6	3184.0	3060.4	3024.7	2980.9	2930.1
52.5°	3075.9	3101.1	3181.1	3322.3	3503.0	3541.4	3392.1	3260.1	3226.5	3174.3	3123.5
55°	2934.7	2949.8	3069.7	3269.7	3524.5	3647.3	3596.0	3472.8	3439.2	3366.4	3311.0
57.5°	2672.8	2694.6	2869.2	3128.1	3470.6	3719.1	3775.1	3696.5	3664.1	3559.4	3501.4
60°	2331.1	2365.9	2565.6	2890.2	3333.6	3718.7	3937.7	3916.3	3889.4	3749.4	3688.9
62.5°	1944.3	1984.6	2176.8	2553.9	3094.1	3613.2	4039.5	4100.4	4086.6	3924.7	3847.3
65°	1493.2	1521.0	1712.3	2118.8	2721.2	3386.6	4051.2	4226.2	4228.6	4058.0	3930.2
67.5°	994.2	1074.1	1240.1	1589.9	2221.7	3016.3	3947.8	4246.8	4271.1	4103.8	3888.5
70°	485.1	590.2	752.9	1033.3	1589.9	2448.3	3677.5	4077.8	4132.0	3970.1	3640.5
72.5°	201.4	235.4	324.1	509.9	912.7	1652.1	3134.3	3619.5	3720.0	3517.8	3060.9
75°	135.8	147.1	185.4	261.5	415.7	814.7	2260.4	2698.8	2860.7	2656.8	2171.7
77.5°	104.7	111.8	135.0	182.9	247.2	308.1	1209.9	1626.5	1710.1	1583.2	1130.0
80°	82.4	87.8	100.9	133.2	175.3	164.8	412.4	737.0	785.3	658.8	363.3
82.5°	71.4	73.6	72.3	90.4	116.4	96.2	135.4	272.0	300.1	217.7	118.6
85°	51.7	57.6	60.1	55.9	61.8	48.8	55.5	96.2	106.0	94.6	66.8
87.5°	21.0	31.1	38.2	36.2	22.7	13.8	17.2	28.2	32.4	35.4	21.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4	887.4
2.5°	888.3	891.2	893.3	895.8	897.5	900.1	905.1	908.0	908.5	910.5	910.1
5°	896.3	900.5	905.1	911.8	919.4	925.7	935.3	942.1	944.6	946.7	946.3
7.5°	913.5	919.4	927.8	939.5	950.5	958.9	970.7	978.7	986.7	989.6	990.0
10°	939.1	947.5	959.7	975.7	987.5	998.5	1010.6	1017.3	1025.3	1028.7	1030.3
12.5°	971.1	979.9	995.9	1018.1	1029.1	1036.7	1040.9	1039.1	1040.9	1043.9	1044.7
15°	1007.7	1017.3	1035.5	1059.3	1066.9	1060.3	1050.9	1042.5	1041.3	1042.1	1045.1
17.5°	1050.9	1058.1	1079.1	1099.3	1093.9	1066.1	1045.9	1032.5	1025.7	1023.7	1026.5
20°	1111.5	1111.5	1128.7	1141.3	1104.7	1057.7	1026.1	1004.3	990.5	984.5	983.3
22.5°	1185.1	1178.3	1189.3	1180.5	1102.7	1034.1	990.5	952.6	931.6	923.1	921.9
25°	1278.4	1270.4	1267.4	1212.8	1087.5	996.7	925.7	879.9	861.4	856.7	857.6
27.5°	1419.2	1399.0	1360.8	1230.5	1059.7	937.9	850.0	807.6	797.0	797.4	798.8
30°	1606.7	1566.4	1472.6	1233.4	1014.3	854.6	772.6	742.4	737.4	739.4	746.6
32.5°	1780.3	1742.1	1586.9	1220.0	944.6	773.1	703.4	683.2	675.6	678.0	681.4
35°	1916.5	1906.0	1692.9	1201.0	858.8	696.6	641.1	623.8	609.2	605.8	608.3
37.5°	2045.2	2041.0	1772.3	1174.5	774.0	642.4	591.0	568.4	546.9	535.2	535.6
40°	2186.4	2182.2	1824.5	1133.8	698.6	595.2	546.1	516.2	489.7	468.3	470.4
42.5°	2345.3	2320.5	1849.3	1075.3	634.8	555.3	509.5	469.1	434.3	414.5	415.7
45°	2518.9	2463.1	1848.9	1000.9	581.0	518.8	470.4	413.3	380.9	362.3	361.5
47.5°	2703.0	2599.2	1826.1	918.5	528.8	478.4	409.9	366.1	344.7	333.3	330.9
50°	2893.1	2726.6	1787.5	824.0	475.5	432.6	372.1	342.1	325.8	315.3	311.5
52.5°	3071.7	2842.2	1740.9	716.8	421.3	388.1	355.3	332.1	314.9	303.1	298.1
55°	3237.8	2941.9	1674.8	607.0	377.1	358.1	347.3	327.9	308.1	294.3	288.8
57.5°	3385.4	3006.6	1560.9	504.0	345.5	337.5	338.9	320.7	298.1	286.3	278.7
60°	3508.2	3054.1	1392.4	408.6	319.9	317.3	325.8	307.3	280.8	267.3	261.5
62.5°	3581.7	3053.3	1185.5	334.7	298.1	298.9	308.5	290.5	263.6	250.9	247.2
65°	3575.4	2978.4	958.5	286.3	277.1	277.9	290.5	272.0	249.3	241.7	241.3
67.5°	3448.8	2796.0	735.2	254.7	253.9	257.7	272.4	259.4	240.5	239.6	240.9
70°	3106.3	2417.3	529.7	229.5	229.9	235.4	254.7	251.4	235.9	237.5	237.1
72.5°	2490.8	1843.0	355.7	203.1	203.5	212.3	237.9	245.1	231.2	253.5	256.9
75°	1658.9	1149.3	228.7	174.9	175.3	186.7	223.2	232.9	218.6	252.7	254.7
77.5°	797.0	516.7	165.6	147.1	147.1	157.6	193.0	208.5	186.2	196.3	179.9
80°	275.3	194.2	130.3	118.6	116.0	123.2	162.7	180.8	160.6	148.0	138.7
82.5°	108.4	100.9	104.7	92.0	83.6	88.3	126.5	149.2	118.1	106.8	106.4
85°	62.2	65.6	74.0	61.0	48.4	54.2	92.9	107.2	89.1	78.6	80.3
87.5°	16.8	23.2	34.0	31.6	21.8	23.2	44.2	59.2	51.2	39.6	40.8
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)