

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: P959983

Luminaire Tested: **NAV-SB1B-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5257.2 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

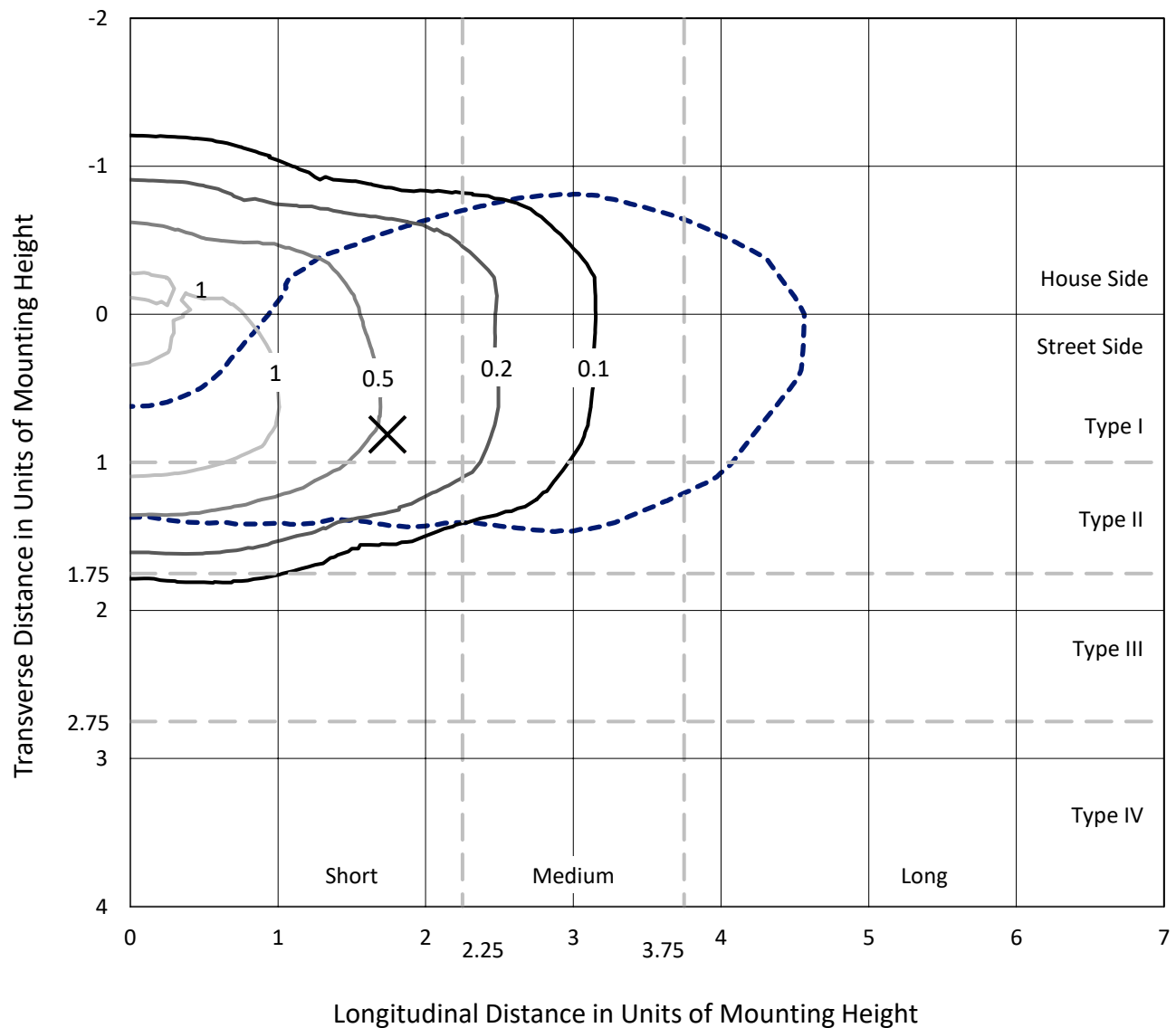
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

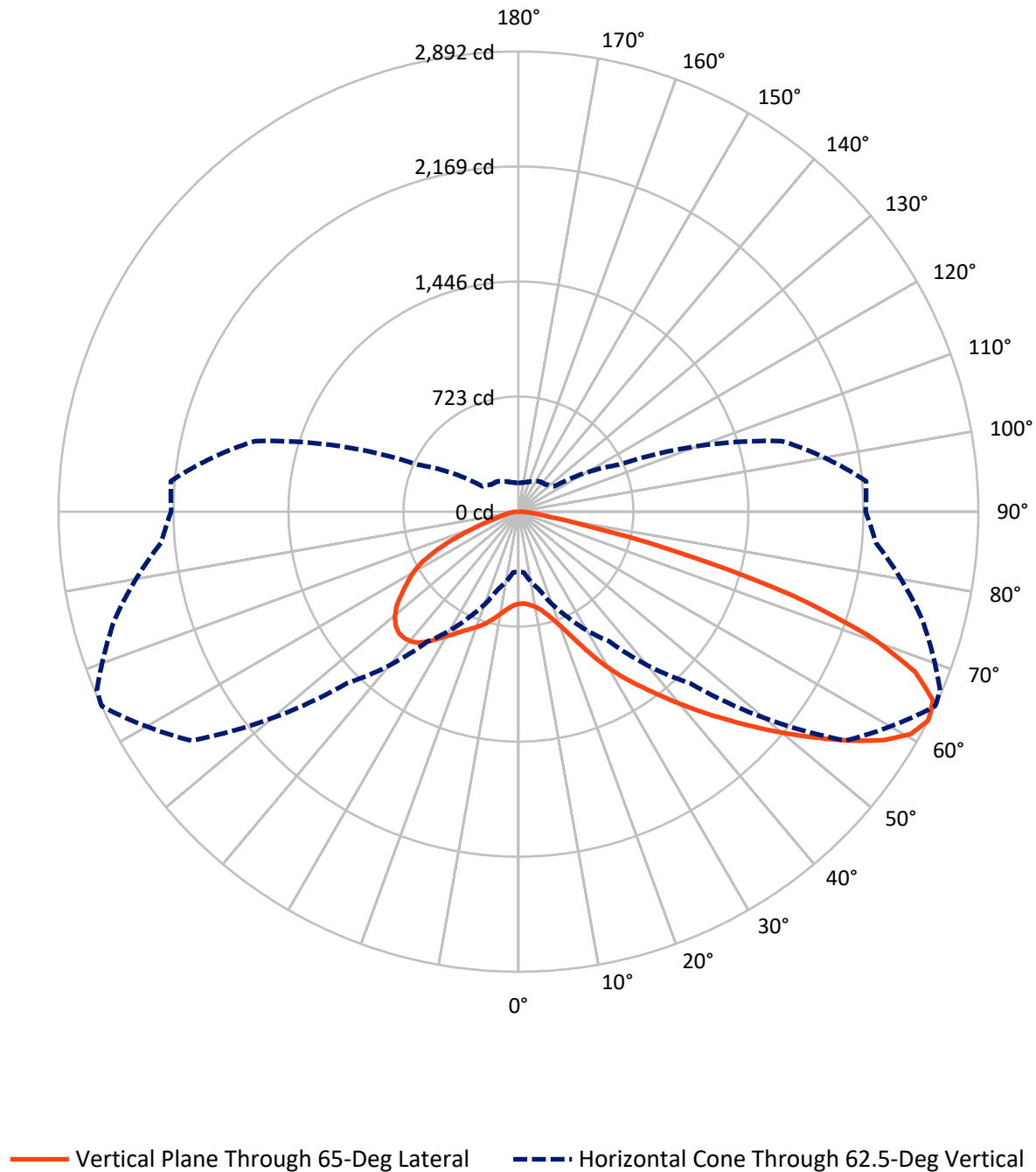
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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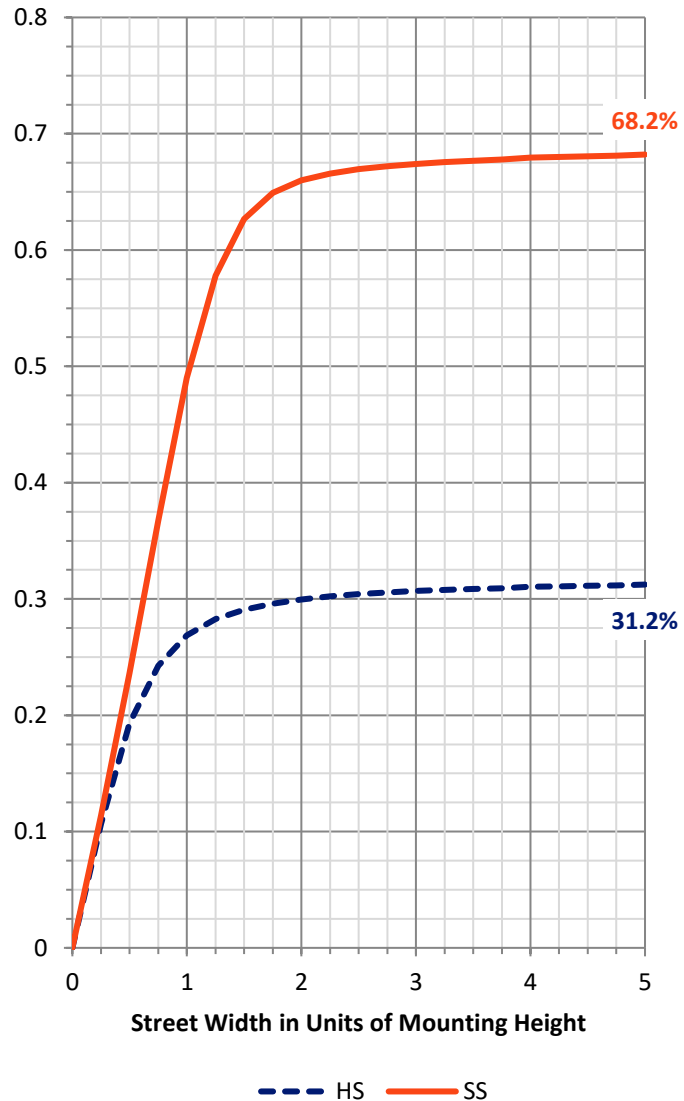
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1659.0	0.0	1659.0
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	3598.3	0.0	3598.3
	% Fixture	68.4	0.0	68.4
Total	Lumens	5257.2	0.0	5257.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	1.1
10°-20°	195.9	3.7
20°-30°	397.1	7.6
30°-40°	687.2	13.1
40°-50°	1040.0	19.8
50°-60°	1219.3	23.2
60°-70°	1022.3	19.4
70°-80°	564.4	10.7
80°-90°	73.3	1.4
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°	5257.2	100.0
0°-180°	5257.2	100.0

Coefficient of Utilization



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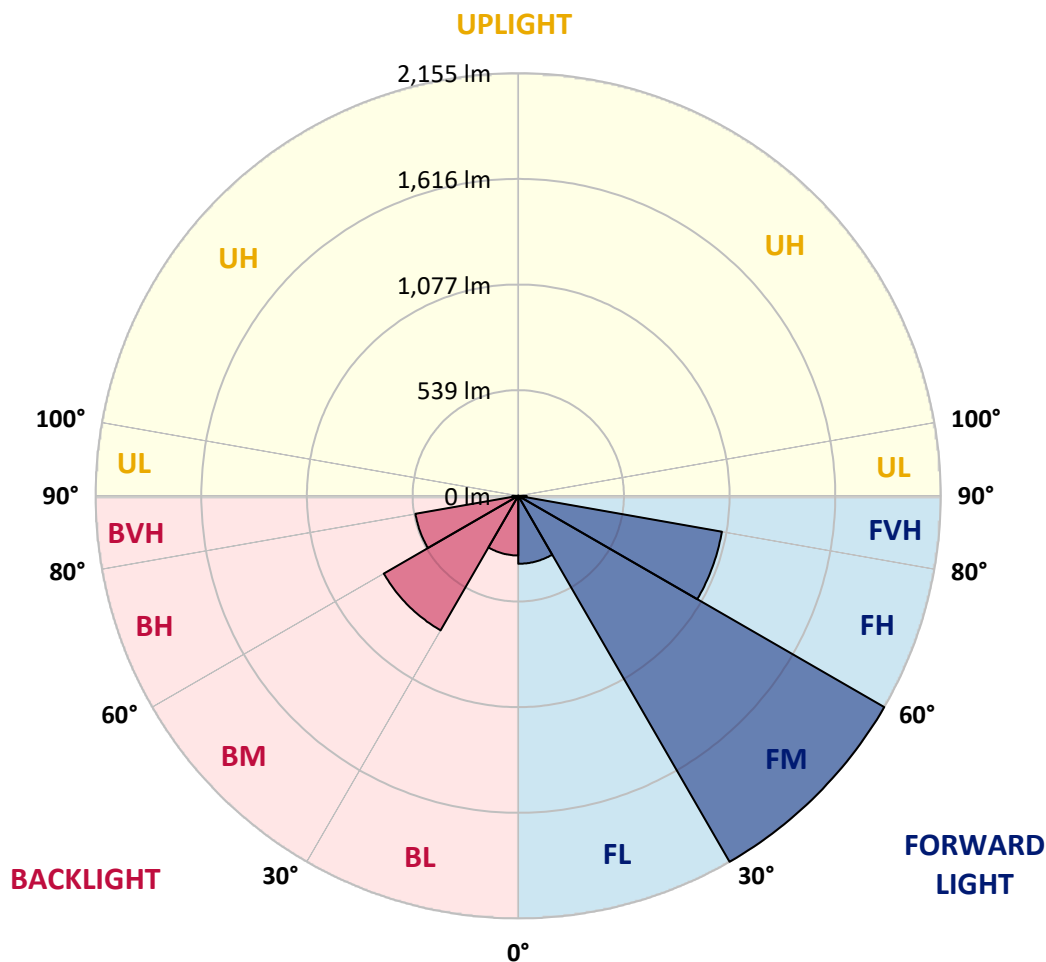
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	346.5	6.6			
FM	(30°-60°)	2154.6	41.0			
FH	(60°-80°)	1054.4	20.1			G1/1800
FVH	(80°-90°)	42.7	0.8			G1/100
BL	(0°-30°)	304.2	5.8	B1/500		
BM	(30°-60°)	792.0	15.1	B1/1000		
BH	(60°-80°)	532.2	10.1	B2/1000		G2/1000
BVH	(80°-90°)	30.6	0.6			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3
2.5°	575.5	573.9	575.2	575.2	575.7	575.5	577.4	578.0	578.8	580.5	580.5
5°	569.8	569.5	571.9	574.1	576.4	578.2	580.7	584.2	584.8	586.7	589.2
7.5°	567.8	566.2	570.0	572.8	578.0	582.6	589.2	595.1	597.6	598.4	603.0
10°	582.6	579.8	583.4	585.1	589.4	594.1	601.7	611.2	614.0	617.3	622.4
12.5°	607.7	604.6	609.9	612.3	616.4	620.5	625.7	635.0	636.3	642.4	647.3
15°	642.1	638.5	641.8	644.8	651.6	655.4	660.6	669.6	669.6	674.2	677.8
17.5°	688.7	684.1	686.5	687.6	692.0	697.7	706.4	714.3	718.4	716.8	711.9
20°	758.3	752.6	752.6	747.0	745.4	750.1	761.5	772.4	776.7	768.3	756.3
22.5°	862.7	854.5	849.9	831.4	824.0	824.5	836.0	849.3	852.9	837.9	810.9
25°	995.6	982.8	976.4	949.1	932.5	918.1	927.1	944.2	949.1	930.6	887.0
27.5°	1128.4	1129.1	1123.2	1090.5	1062.9	1036.5	1031.9	1049.8	1055.0	1034.0	980.0
30°	1314.7	1295.3	1283.8	1244.6	1205.3	1168.2	1149.1	1156.5	1157.8	1132.7	1070.0
32.5°	1475.3	1470.4	1445.9	1411.5	1361.0	1303.0	1271.0	1259.3	1257.1	1221.4	1146.9
35°	1658.3	1655.6	1629.6	1588.7	1534.2	1453.4	1395.9	1362.4	1359.7	1309.4	1223.0
37.5°	1844.4	1844.4	1819.0	1774.3	1717.8	1616.8	1529.3	1476.1	1467.4	1401.9	1300.5
40°	1992.7	1983.7	1988.4	1969.5	1904.9	1797.7	1677.4	1600.2	1588.5	1509.9	1382.8
42.5°	2077.0	2074.0	2101.9	2122.8	2096.3	2010.7	1840.5	1734.7	1718.3	1628.8	1477.7
45°	2095.8	2092.5	2142.1	2219.1	2256.2	2221.0	2017.8	1876.3	1856.4	1753.3	1579.5
47.5°	2052.5	2045.9	2118.8	2240.1	2359.0	2420.9	2209.8	2029.8	2000.9	1874.3	1684.0
50°	1922.1	1915.8	2026.0	2187.1	2393.7	2556.8	2418.2	2192.7	2148.5	2004.2	1789.5
52.5°	1638.7	1641.6	1814.4	2035.9	2348.1	2641.3	2597.7	2364.2	2311.1	2137.0	1888.6
55°	1276.4	1283.0	1495.3	1739.0	2165.9	2628.5	2720.1	2541.0	2488.1	2262.0	1990.9
57.5°	914.0	942.9	1141.7	1383.1	1816.0	2425.3	2746.9	2709.0	2657.7	2398.3	2090.9
60°	592.4	597.6	802.2	1045.5	1382.8	2064.1	2692.6	2836.4	2796.2	2537.4	2174.6
62.5°	379.7	383.2	507.9	731.2	995.3	1527.1	2509.8	2891.7	2879.4	2629.3	2255.1
65°	279.0	276.3	341.2	483.3	670.5	941.8	2155.0	2865.0	2889.3	2686.8	2321.6
67.5°	232.9	229.1	261.1	334.7	493.9	534.8	1594.5	2691.2	2780.1	2680.4	2370.5
70°	212.2	208.9	228.3	248.5	385.4	358.1	803.8	2339.7	2476.6	2605.9	2362.5
72.5°	179.8	174.0	200.5	220.7	299.7	274.7	332.2	1797.1	1964.1	2367.2	2251.3
75°	139.4	135.6	158.2	194.2	225.3	214.4	210.0	1091.3	1273.5	1830.8	1969.5
77.5°	110.5	105.3	126.0	151.4	202.6	161.7	153.0	470.0	650.5	1168.7	1473.6
80°	83.2	78.5	95.7	119.7	155.7	121.9	99.0	191.8	245.2	592.1	741.1
82.5°	59.1	55.1	66.8	87.8	104.8	109.4	60.8	107.4	120.8	228.3	165.5
85°	37.9	35.5	44.7	55.1	66.5	70.4	37.1	56.2	61.6	94.1	69.0
87.5°	20.7	16.9	24.0	25.6	30.9	28.1	17.7	20.5	22.1	34.1	29.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3
2.5°	581.5	582.3	585.1	585.9	587.7	590.2	591.8	593.5	593.5	595.1	595.1
5°	589.4	591.3	597.1	600.0	605.0	609.9	612.8	616.4	618.6	619.7	620.2
7.5°	604.6	607.7	615.9	621.0	629.6	636.3	640.9	645.9	647.0	650.0	648.8
10°	625.5	628.9	638.3	648.1	658.2	666.6	671.0	674.6	675.9	676.4	675.1
12.5°	649.1	654.4	666.4	678.3	689.0	696.3	697.4	696.6	692.8	689.5	689.5
15°	678.3	683.0	696.3	709.4	719.8	721.2	714.3	710.0	705.3	704.5	704.5
17.5°	713.2	715.7	728.0	740.8	741.6	737.0	726.9	722.8	718.4	715.4	715.7
20°	753.9	753.1	761.8	767.2	761.5	747.3	732.1	725.3	720.9	717.3	717.6
22.5°	802.5	796.1	795.1	793.7	778.4	748.7	728.0	719.2	712.4	707.6	709.2
25°	873.1	849.1	832.4	823.2	788.8	741.4	714.8	695.6	682.6	674.2	677.5
27.5°	961.4	921.1	879.0	856.4	788.8	726.3	683.3	651.9	630.9	622.2	626.5
30°	1045.7	1003.5	941.6	896.6	786.9	701.8	632.2	588.6	564.1	555.3	560.5
32.5°	1117.8	1071.6	1007.8	940.4	782.3	661.9	569.0	520.7	496.9	486.6	491.8
35°	1184.6	1135.5	1074.4	988.7	770.0	603.6	499.4	462.6	436.1	419.5	425.0
37.5°	1253.1	1194.6	1137.3	1032.4	747.8	535.5	446.0	414.6	383.5	361.1	367.2
40°	1327.5	1257.7	1204.8	1058.3	711.7	470.5	404.5	375.9	342.9	319.1	323.8
42.5°	1414.5	1333.2	1279.7	1071.6	661.9	424.4	377.5	349.4	318.3	298.9	302.8
45°	1505.3	1416.4	1348.2	1071.3	606.6	402.8	368.8	340.9	306.6	286.4	289.7
47.5°	1600.5	1503.4	1407.4	1053.9	558.6	405.9	363.9	322.7	284.7	265.1	267.8
50°	1696.0	1598.6	1464.6	1021.2	538.1	399.3	345.5	297.0	252.3	234.5	235.6
52.5°	1790.6	1699.8	1514.0	974.6	517.4	375.0	322.2	263.7	238.9	226.6	226.6
55°	1885.8	1799.9	1567.7	906.6	465.6	346.7	282.8	251.2	228.3	217.1	216.1
57.5°	1981.2	1915.5	1618.8	838.8	400.4	311.8	261.3	236.0	217.6	208.1	206.4
60°	2080.5	2047.8	1671.5	776.2	336.0	267.0	245.5	223.7	205.1	194.4	193.6
62.5°	2182.8	2193.5	1712.6	695.8	276.9	239.7	231.3	208.9	191.0	180.8	180.6
65°	2286.0	2333.9	1739.6	584.2	224.5	213.8	216.1	192.8	174.6	165.8	165.5
67.5°	2363.6	2435.1	1731.9	442.1	184.1	189.3	196.9	175.9	158.8	151.9	152.2
70°	2372.4	2423.1	1656.7	302.8	154.1	165.3	175.7	159.3	141.6	136.6	136.9
72.5°	2256.2	2259.5	1447.0	197.7	130.4	145.1	153.2	142.4	125.2	120.2	120.0
75°	1951.5	1868.6	1062.4	130.4	109.1	124.6	132.3	124.6	108.0	109.1	105.3
77.5°	1478.6	1323.4	645.0	92.8	91.1	104.8	115.1	109.7	95.4	107.2	94.4
80°	761.8	716.0	287.7	69.3	72.1	83.7	94.6	87.5	75.5	72.1	65.7
82.5°	174.6	203.0	113.5	49.6	52.1	60.3	72.3	65.7	54.3	45.8	45.3
85°	61.1	66.8	50.2	31.1	30.5	37.6	49.1	43.9	36.8	29.4	31.1
87.5°	19.4	25.3	18.9	12.5	13.1	16.9	22.7	20.7	17.2	11.2	11.7
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)