

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: P959330

Luminaire Tested: **NAV-SB1A-740-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-740-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4955.9 lumens
Efficiency: N/A
Efficacy: 160.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
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



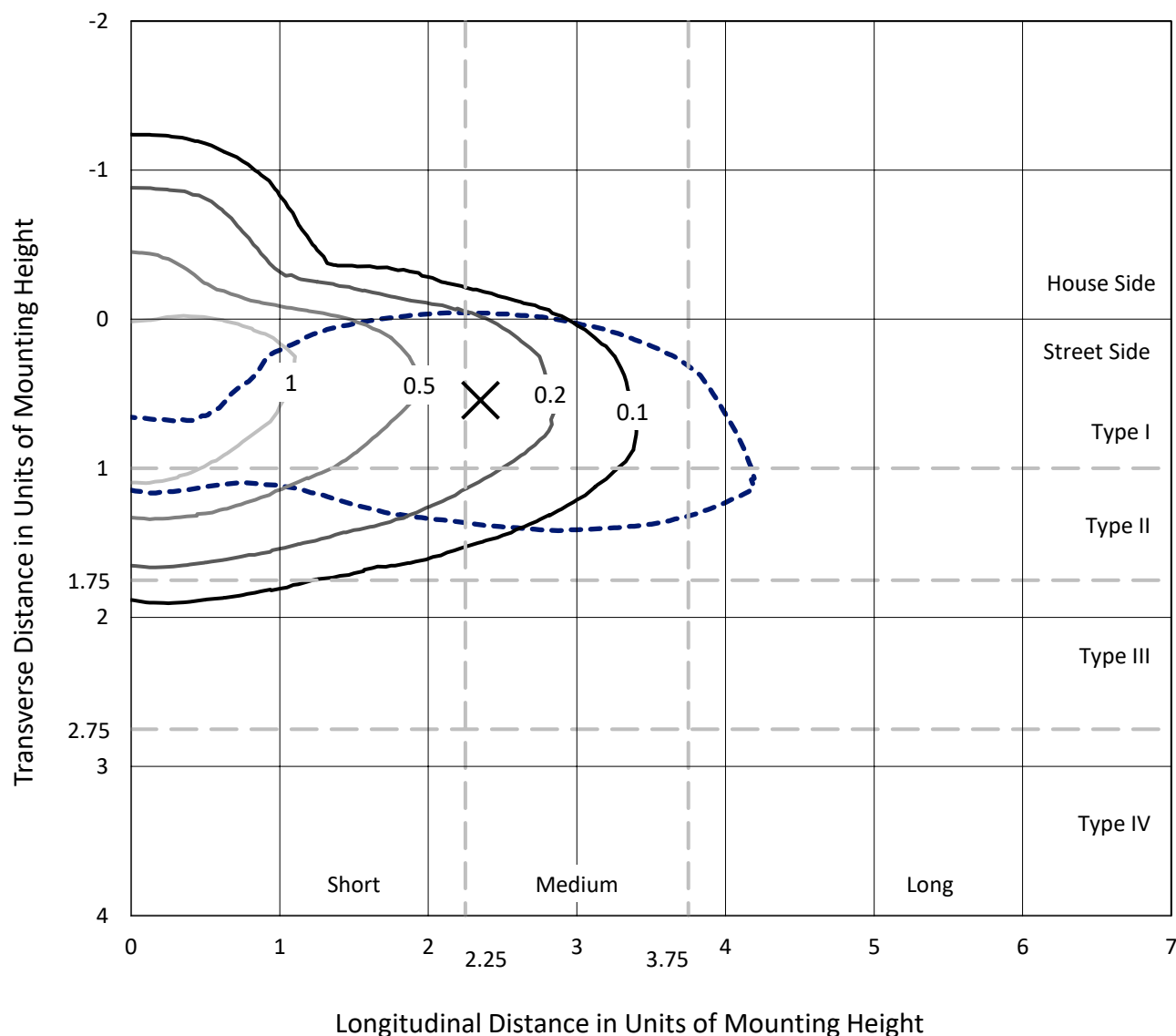
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

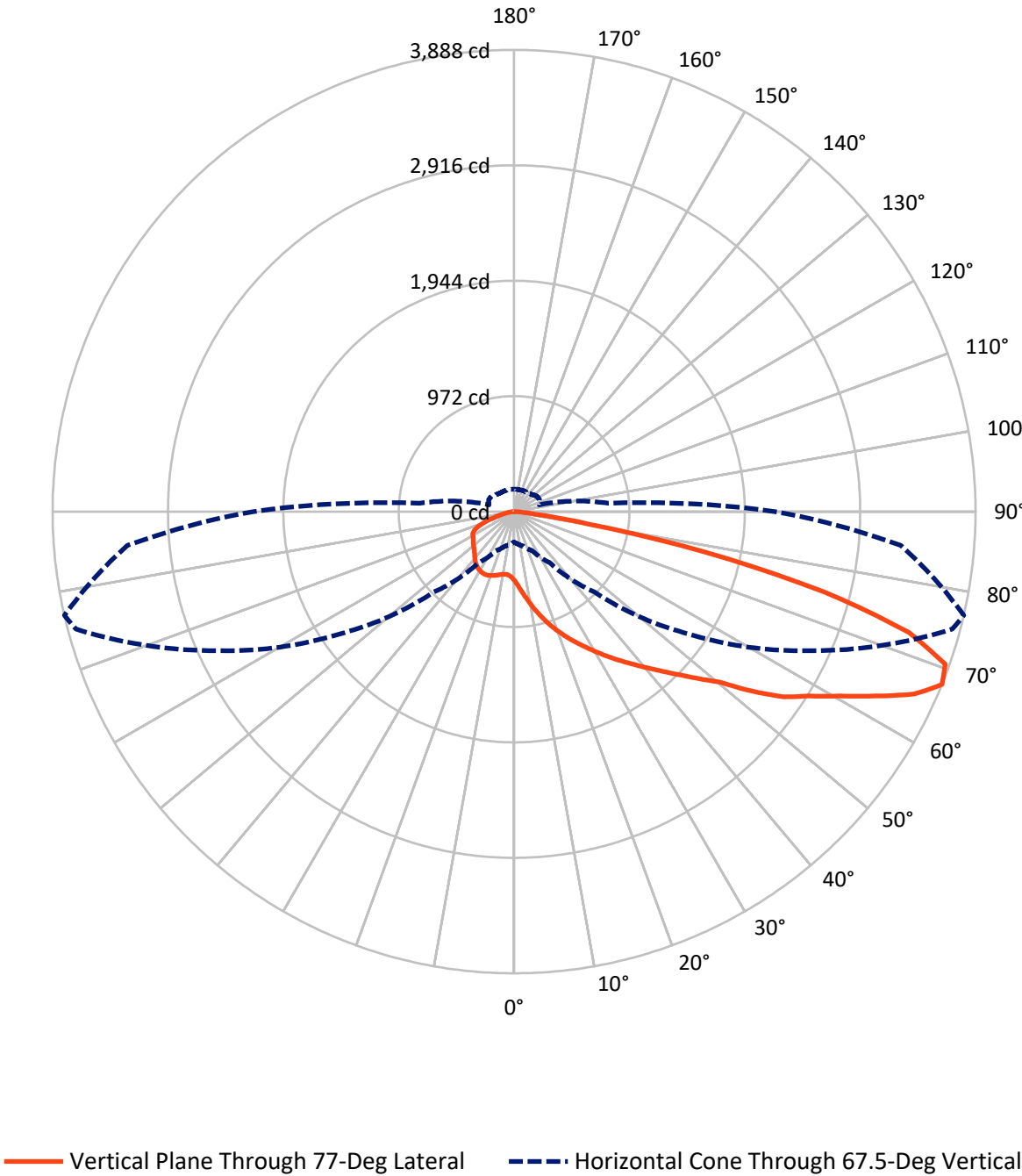
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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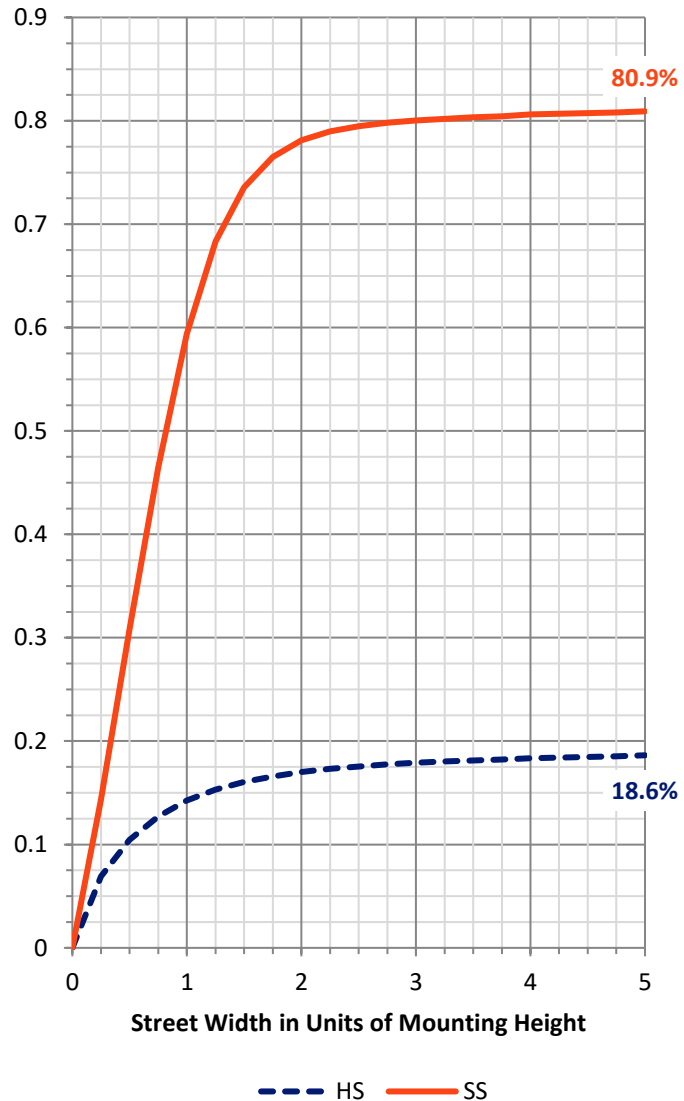
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	937.4	0.0	937.4
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	4018.4	0.0	4018.4
	% Fixture	81.1	0.0	81.1
Total	Lumens	4955.9	0.0	4955.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	1.3
10°-20°	223.9	4.5
20°-30°	422.8	8.5
30°-40°	681.1	13.7
40°-50°	931.6	18.8
50°-60°	1050.8	21.2
60°-70°	980.8	19.8
70°-80°	537.7	10.8
80°-90°	64.9	1.3
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°	4955.9	100.0
0°-180°	4955.9	100.0

Coefficient of Utilization



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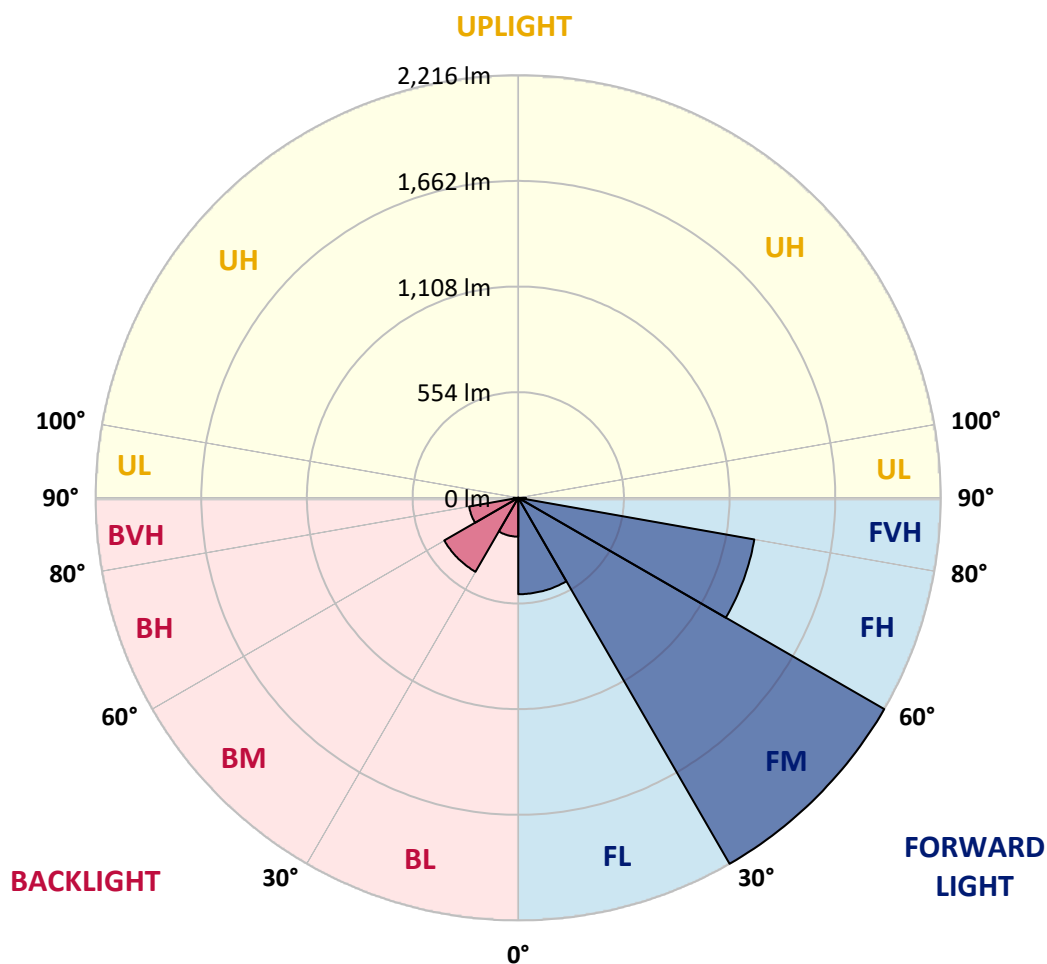
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	505.2	10.2			
FM	(30°-60°)	2215.7	44.7			
FH	(60°-80°)	1257.0	25.4			G1/1800
FVH	(80°-90°)	40.6	0.8			G1/100
BL	(0°-30°)	203.8	4.1	B1/500		
BM	(30°-60°)	447.8	9.0	B1/1000		
BH	(60°-80°)	261.5	5.3	B1/500		G1/500
BVH	(80°-90°)	24.3	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5
2.5°	728.1	733.2	726.8	726.8	705.3	694.0	672.5	656.2	626.8	621.7	602.2
5°	860.6	866.9	858.0	854.1	828.8	805.5	769.5	733.9	681.5	676.1	630.4
7.5°	963.2	971.4	963.4	959.3	936.8	910.7	868.5	818.9	745.0	734.4	668.2
10°	1046.8	1048.1	1045.5	1047.0	1029.4	1007.9	964.7	906.9	814.6	800.2	714.0
12.5°	1094.2	1100.0	1105.2	1114.4	1111.3	1098.0	1059.1	990.0	888.2	869.8	763.8
15°	1116.4	1126.7	1138.2	1159.4	1176.5	1179.9	1150.2	1079.3	963.2	941.0	814.3
17.5°	1124.3	1134.1	1152.2	1183.0	1219.8	1244.6	1231.2	1166.0	1037.3	1011.8	867.3
20°	1164.5	1167.3	1178.3	1207.4	1247.4	1288.5	1298.6	1249.4	1110.8	1081.9	922.0
22.5°	1250.4	1244.9	1247.9	1261.2	1289.9	1329.7	1352.5	1323.1	1186.2	1153.0	977.2
25°	1392.5	1376.1	1359.7	1344.3	1358.9	1381.4	1407.2	1396.8	1265.3	1223.0	1033.0
27.5°	1571.7	1551.8	1515.8	1465.3	1447.7	1455.6	1467.1	1465.0	1338.4	1295.7	1090.6
30°	1748.2	1725.0	1682.0	1609.1	1562.5	1541.6	1532.9	1526.9	1418.0	1372.5	1148.6
32.5°	1889.2	1870.8	1828.6	1747.0	1679.5	1643.7	1614.7	1593.8	1501.1	1455.6	1210.0
35°	2012.5	1995.4	1947.1	1858.0	1784.6	1746.5	1708.6	1663.9	1587.6	1541.6	1276.0
37.5°	2125.1	2107.9	2041.7	1949.1	1875.1	1848.8	1815.1	1739.0	1674.3	1630.9	1345.8
40°	2196.2	2192.4	2130.5	2025.6	1948.8	1935.8	1924.5	1826.3	1770.5	1730.1	1422.6
42.5°	2214.4	2222.8	2173.7	2087.5	2014.3	2003.9	2030.2	1925.1	1878.5	1839.9	1509.6
45°	2170.6	2194.9	2162.8	2104.1	2060.9	2055.2	2123.8	2033.0	1997.9	1962.7	1614.5
47.5°	2059.8	2101.0	2087.7	2079.5	2073.4	2097.8	2206.2	2147.6	2133.2	2102.6	1734.2
50°	1836.3	1914.3	1937.6	1989.2	2048.6	2130.8	2281.1	2272.7	2291.4	2260.4	1880.1
52.5°	1449.8	1557.2	1692.3	1821.7	1972.4	2119.7	2363.5	2452.3	2531.0	2514.2	2111.8
55°	1196.7	1245.1	1348.9	1586.3	1824.5	2073.4	2400.7	2597.4	2769.0	2753.9	2287.5
57.5°	1002.3	1045.5	1109.5	1307.8	1600.9	1968.3	2423.6	2685.8	2931.9	2930.4	2461.0
60°	793.8	839.6	905.1	1045.5	1339.8	1786.7	2418.5	2786.7	3139.9	3152.7	2672.6
62.5°	558.4	608.8	681.5	812.5	1072.9	1551.3	2314.1	2859.5	3384.8	3419.5	2927.1
65°	367.1	400.4	455.1	568.2	799.4	1248.7	2114.9	2869.0	3646.7	3705.6	3166.0
67.5°	257.4	270.2	302.4	363.8	527.0	957.6	1797.4	2771.1	3821.4	3887.7	3269.6
70°	200.8	207.3	223.6	248.2	331.1	643.9	1377.3	2516.3	3784.1	3853.2	3161.4
72.5°	173.4	179.6	185.7	188.8	222.0	397.5	933.0	2103.8	3432.3	3479.2	2748.7
75°	157.3	158.9	164.0	163.0	169.3	257.9	538.5	1532.9	2708.2	2692.0	2029.2
77.5°	132.2	134.3	142.8	141.4	150.5	176.3	279.6	989.2	1755.7	1646.2	1129.4
80°	112.0	113.1	122.3	120.7	130.7	127.6	142.8	504.2	744.7	630.9	325.6
82.5°	38.8	48.1	93.4	96.1	99.7	77.3	82.4	205.7	227.4	174.2	68.3
85°	19.0	20.2	47.6	67.5	67.2	38.8	40.2	73.4	71.6	56.3	22.8
87.5°	3.1	3.8	5.6	26.3	21.0	10.2	13.8	14.3	14.9	12.8	5.1
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°	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5	581.5
2.5°	587.8	575.1	548.3	523.4	504.0	485.3	474.8	465.9	460.7	459.7	459.7
5°	603.7	577.4	528.5	487.4	460.4	440.5	430.0	423.4	420.0	418.0	417.8
7.5°	626.5	587.8	518.2	471.5	443.3	429.0	423.6	422.6	422.4	422.6	423.4
10°	657.9	605.1	517.3	467.6	444.1	436.1	435.9	436.1	437.2	437.5	437.7
12.5°	692.0	622.7	521.3	471.0	453.9	449.5	448.7	448.4	449.3	449.8	450.0
15°	729.1	646.0	528.3	478.2	464.5	459.9	459.2	457.7	457.4	457.2	456.9
17.5°	767.2	669.0	536.0	485.8	471.5	465.0	462.3	458.7	455.9	455.1	455.9
20°	805.9	691.8	541.3	489.6	472.0	463.0	457.4	451.3	446.4	443.6	444.6
22.5°	847.1	715.6	544.7	488.6	467.4	455.1	444.8	437.7	430.3	425.5	425.7
25°	887.1	736.3	544.4	483.3	458.4	442.8	429.8	420.6	410.3	405.2	405.2
27.5°	925.8	754.9	538.0	473.8	445.7	428.2	412.7	401.6	391.7	386.8	386.5
30°	965.8	770.5	528.0	459.9	430.5	411.3	394.2	384.8	375.8	371.2	370.9
32.5°	1005.4	784.8	513.9	442.8	413.2	394.7	377.8	369.1	363.8	363.8	364.1
35°	1047.3	794.8	495.3	422.9	394.7	377.1	363.8	358.6	358.1	355.1	354.3
37.5°	1091.6	801.2	472.5	402.4	376.6	360.0	355.9	349.7	344.6	337.9	336.9
40°	1138.2	807.6	445.2	381.2	357.4	348.2	346.3	338.1	323.6	307.2	304.9
42.5°	1194.6	812.0	416.8	360.0	337.1	334.2	336.6	322.6	299.3	287.0	287.3
45°	1260.1	819.2	390.6	339.0	316.4	316.4	327.2	308.7	289.6	281.9	283.2
47.5°	1345.1	835.8	366.3	315.9	297.2	302.4	306.2	292.1	281.4	271.9	271.7
50°	1467.9	875.7	341.2	292.6	282.7	292.9	287.5	279.3	266.8	259.1	258.4
52.5°	1620.3	899.2	319.0	271.7	270.2	280.3	272.8	265.1	255.5	245.3	243.3
55°	1724.3	903.5	300.3	256.4	261.7	260.7	257.9	250.9	245.8	232.3	232.6
57.5°	1840.4	912.2	285.0	247.1	256.4	245.1	244.1	238.2	231.5	222.3	219.2
60°	1979.3	925.8	271.7	243.5	251.7	234.8	229.7	227.4	220.8	216.2	217.4
62.5°	2130.8	938.1	258.1	244.1	246.3	224.9	217.2	216.4	212.4	210.8	210.8
65°	2234.1	904.6	241.3	243.5	237.9	214.6	204.9	204.7	201.3	200.8	200.6
67.5°	2198.0	798.4	218.4	236.4	229.2	204.4	193.6	192.6	188.3	188.5	188.5
70°	2017.4	647.0	187.0	218.7	218.4	195.2	181.9	178.6	172.7	173.7	174.8
72.5°	1678.6	479.4	144.8	189.3	201.3	186.8	168.3	163.0	155.5	156.5	156.3
75°	1212.4	326.0	105.4	144.0	175.3	176.8	155.0	145.9	136.8	138.4	138.9
77.5°	620.3	184.7	77.5	99.2	137.7	160.6	143.0	130.7	128.6	143.0	140.9
80°	202.3	92.6	53.7	69.6	90.3	131.5	125.4	111.3	110.8	114.1	98.0
82.5°	60.4	39.2	34.5	45.8	49.9	100.8	108.2	84.2	72.4	76.3	78.8
85°	20.7	19.0	19.7	22.8	23.8	59.1	75.7	55.8	52.7	58.1	57.3
87.5°	4.8	6.7	5.6	5.1	5.1	14.3	29.4	23.3	32.2	21.5	20.7
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)