

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: P959456

Luminaire Tested: **NAV-SB1A-830-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959456
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-SB1A-830-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

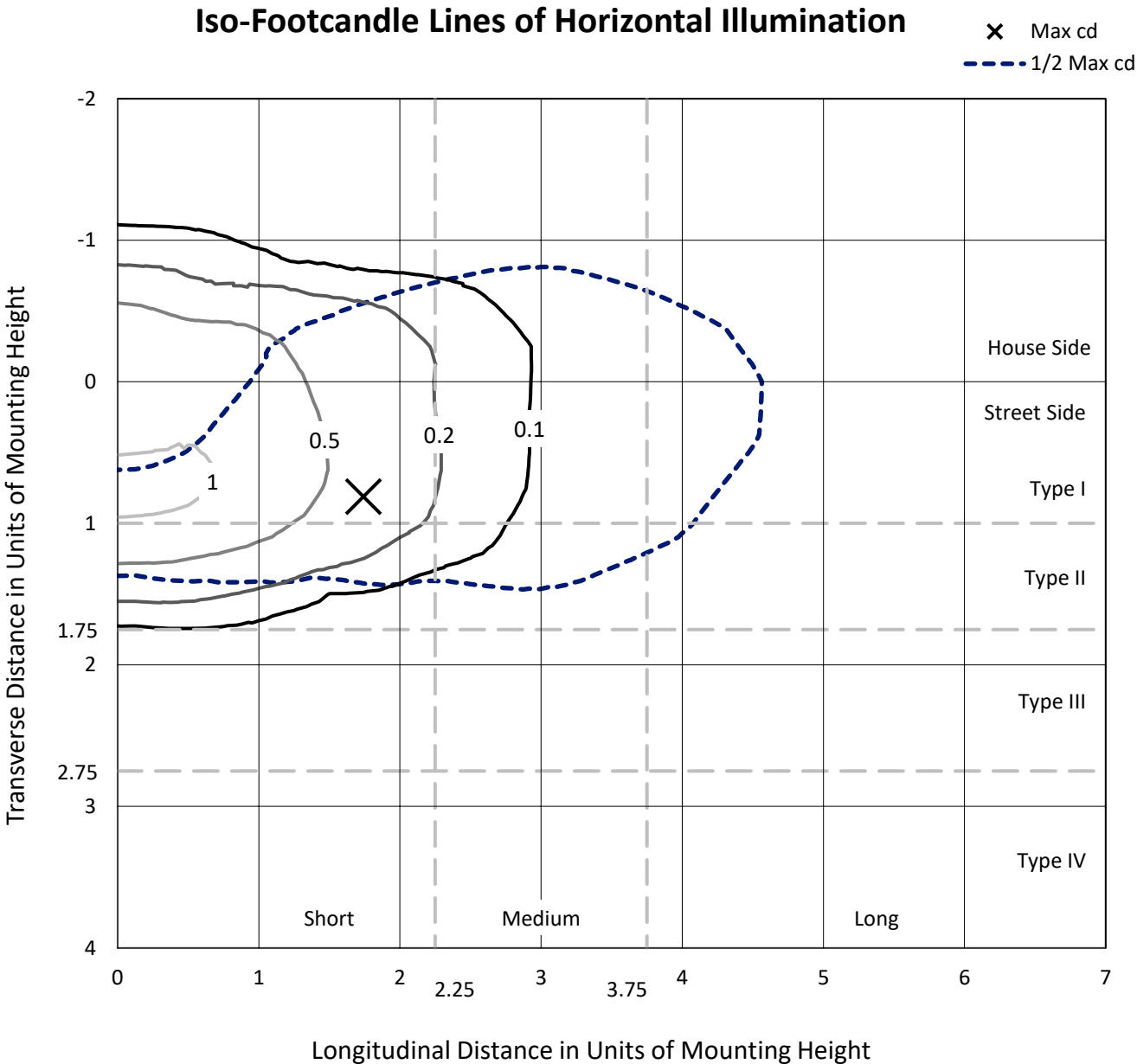
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4188.2 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
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



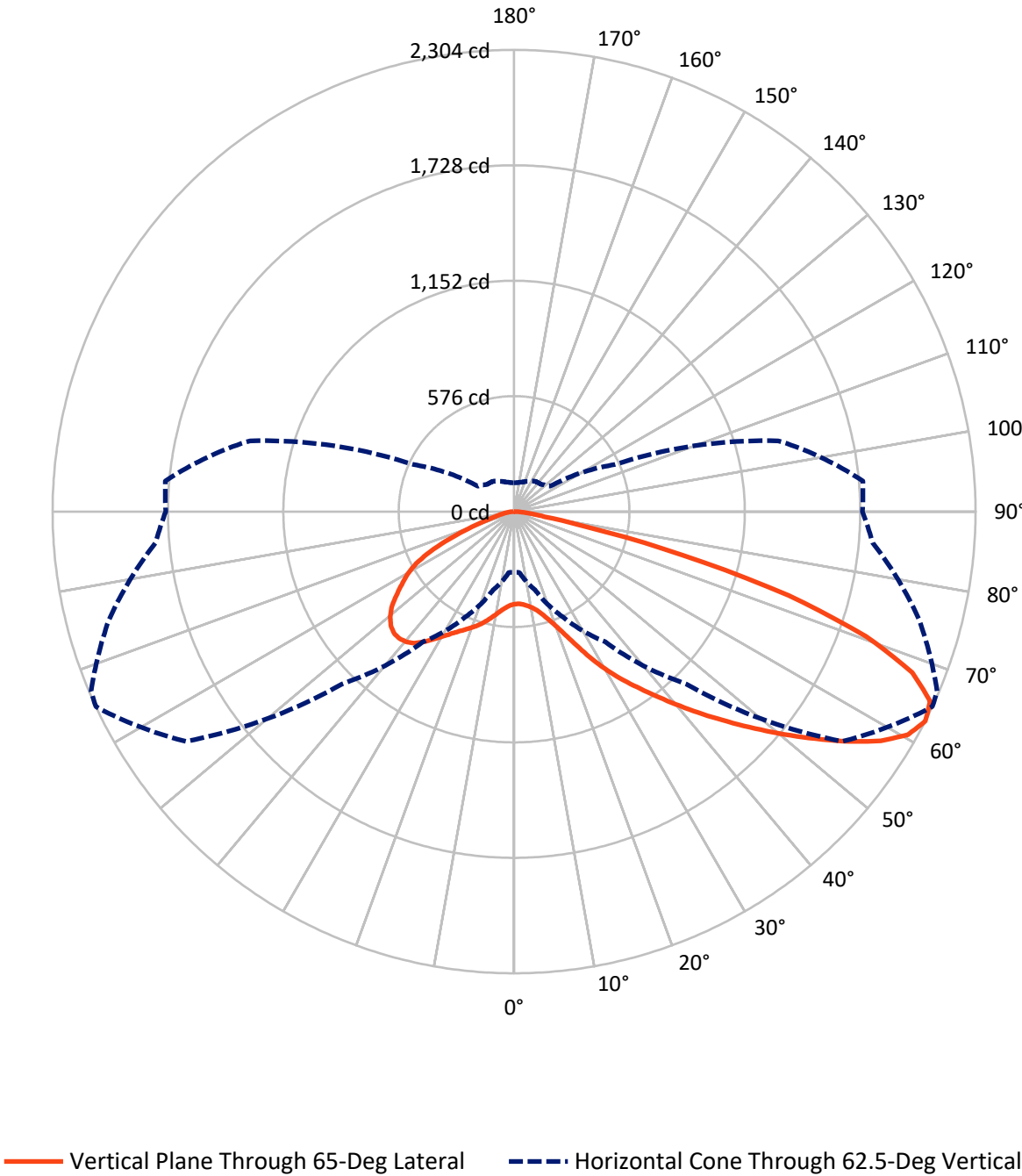
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Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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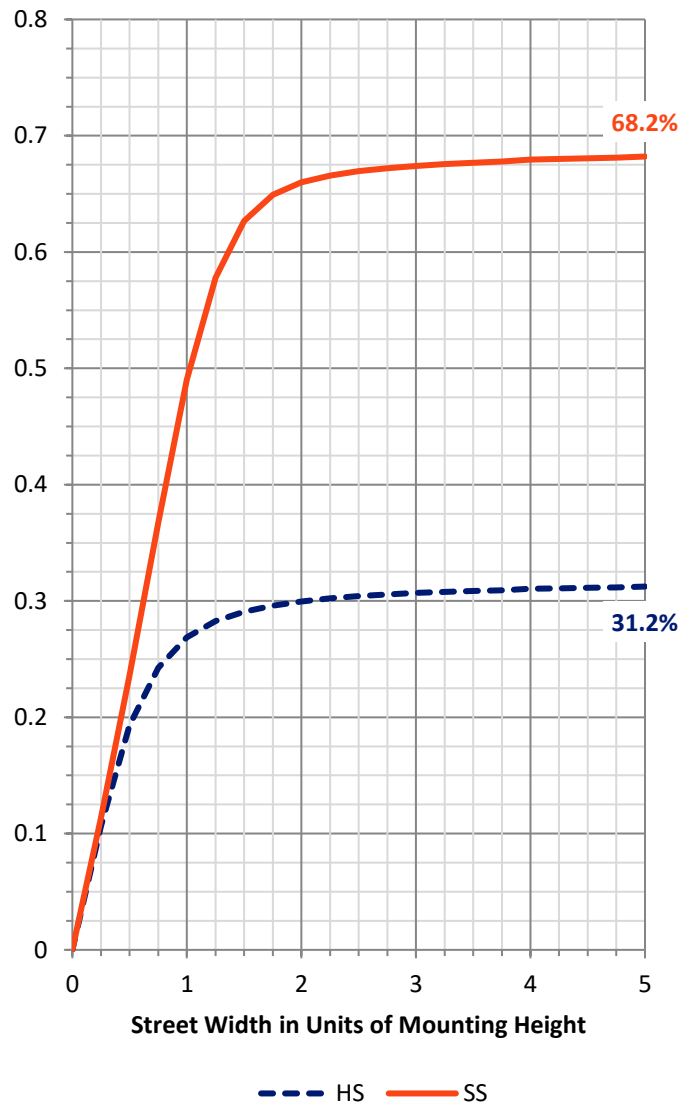
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1321.6	0.0	1321.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	2866.5	0.0	2866.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	4188.2	0.0	4188.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	1.1
10°-20°	156.0	3.7
20°-30°	316.4	7.6
30°-40°	547.5	13.1
40°-50°	828.5	19.8
50°-60°	971.4	23.2
60°-70°	814.4	19.4
70°-80°	449.6	10.7
80°-90°	58.4	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°	4188.2	100.0
0°-180°	4188.2	100.0

Coefficient of Utilization



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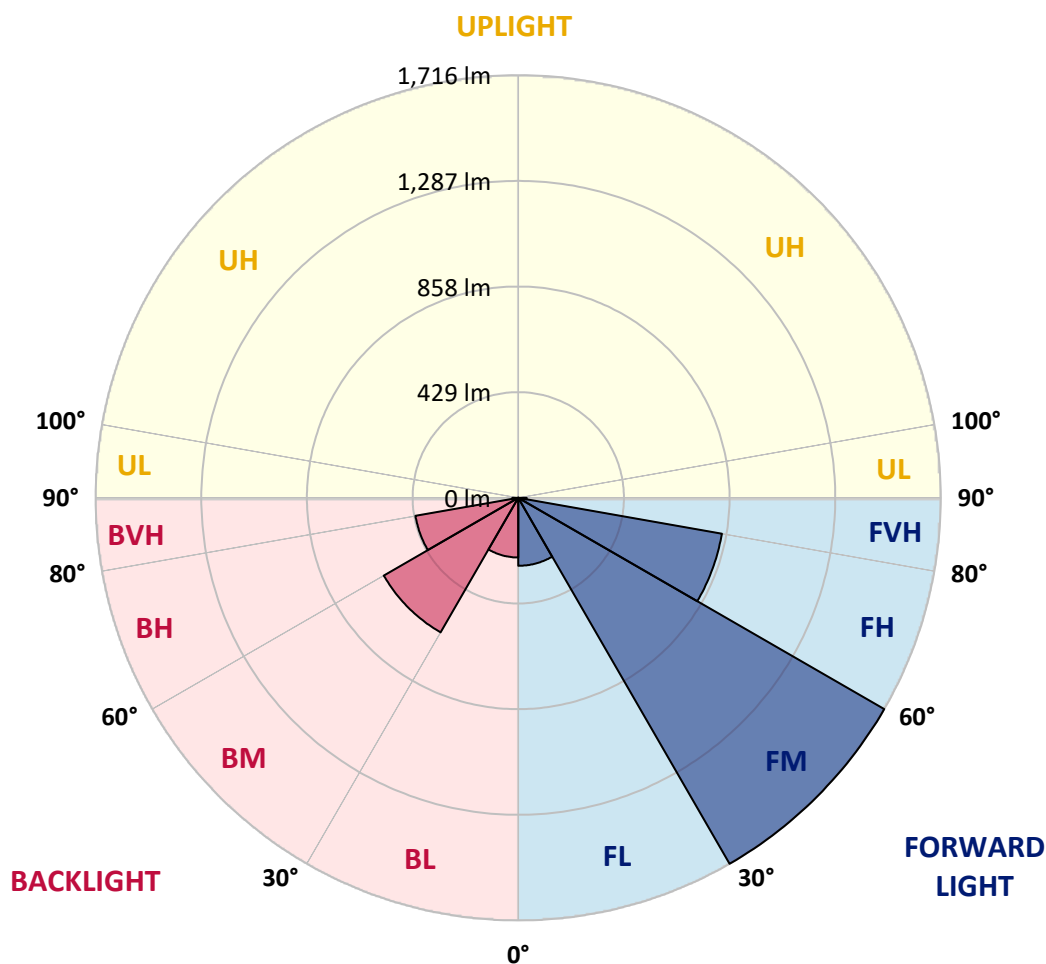
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	276.1	6.6			
FM	(30°-60°)	1716.4	41.0			
FH	(60°-80°)	840.0	20.1			G1/1800
FVH	(80°-90°)	34.0	0.8			G1/100
BL	(0°-30°)	242.4	5.8	B1/500		
BM	(30°-60°)	630.9	15.1	B1/1000		
BH	(60°-80°)	424.0	10.1	B1/500		G1/500
BVH	(80°-90°)	24.4	0.6			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6
2.5°	458.5	457.2	458.3	458.3	458.7	458.5	460.0	460.4	461.0	462.4	462.4
5°	453.9	453.7	455.6	457.4	459.1	460.6	462.6	465.5	465.9	467.4	469.3
7.5°	452.4	451.1	454.2	456.3	460.4	464.1	469.3	474.2	476.1	476.7	480.4
10°	464.1	462.0	464.7	466.1	469.6	473.2	479.3	487.0	489.1	491.7	495.9
12.5°	484.1	481.7	485.8	487.8	491.1	494.4	498.5	505.8	507.0	511.7	515.6
15°	511.5	508.7	511.3	513.6	519.1	522.1	526.2	533.4	533.4	537.1	540.0
17.5°	548.7	545.0	546.9	547.8	551.2	555.9	562.7	569.1	572.4	571.0	567.1
20°	604.0	599.5	599.5	595.1	593.9	597.6	606.7	615.3	618.8	612.1	602.5
22.5°	687.3	680.8	677.1	662.3	656.4	656.8	665.9	676.6	679.5	667.5	646.0
25°	793.1	782.9	777.9	756.1	742.9	731.3	738.5	752.2	756.1	741.4	706.6
27.5°	898.9	899.5	894.8	868.7	846.8	825.6	821.9	836.3	840.5	823.7	780.7
30°	1047.3	1031.9	1022.7	991.5	960.2	930.6	915.4	921.3	922.4	902.4	852.4
32.5°	1175.3	1171.4	1151.8	1124.4	1084.2	1038.0	1012.6	1003.2	1001.4	973.0	913.7
35°	1321.1	1319.0	1298.3	1265.7	1222.2	1157.9	1112.0	1085.4	1083.2	1043.1	974.3
37.5°	1469.3	1469.3	1449.0	1413.5	1368.5	1288.1	1218.3	1176.0	1169.0	1116.8	1036.1
40°	1587.5	1580.3	1584.0	1569.1	1517.5	1432.1	1336.3	1274.8	1265.5	1202.9	1101.7
42.5°	1654.7	1652.2	1674.4	1691.1	1670.0	1601.9	1466.3	1381.9	1368.9	1297.6	1177.2
45°	1669.6	1667.1	1706.5	1767.8	1797.4	1769.4	1607.5	1494.8	1478.9	1396.7	1258.3
47.5°	1635.1	1629.9	1687.9	1784.5	1879.3	1928.6	1760.4	1617.0	1594.0	1493.2	1341.5
50°	1531.2	1526.2	1614.0	1742.4	1906.9	2036.9	1926.5	1746.8	1711.5	1596.6	1425.6
52.5°	1305.4	1307.8	1445.4	1621.9	1870.6	2104.2	2069.5	1883.4	1841.1	1702.4	1504.5
55°	1016.9	1022.1	1191.2	1385.4	1725.5	2094.0	2167.0	2024.3	1982.0	1802.0	1586.0
57.5°	728.2	751.1	909.6	1101.9	1446.7	1932.1	2188.3	2158.1	2117.2	1910.6	1665.7
60°	471.9	476.1	639.1	832.8	1101.7	1644.4	2145.0	2259.5	2227.6	2021.4	1732.5
62.5°	302.5	305.2	404.6	582.5	792.8	1216.6	1999.5	2303.7	2293.8	2094.7	1796.5
65°	222.3	220.1	271.8	385.0	534.1	750.3	1716.8	2282.4	2301.7	2140.5	1849.5
67.5°	185.5	182.6	208.0	266.6	393.5	426.1	1270.3	2144.0	2214.8	2135.3	1888.5
70°	169.0	166.5	181.8	197.9	307.0	285.3	640.3	1863.9	1972.9	2075.9	1882.1
72.5°	143.2	138.6	159.7	175.8	238.8	218.8	264.7	1431.7	1564.7	1885.8	1793.4
75°	111.0	108.0	126.1	154.7	179.5	170.8	167.3	869.4	1014.5	1458.5	1569.1
77.5°	88.0	83.8	100.3	120.6	161.4	128.8	121.9	374.4	518.2	931.1	1174.0
80°	66.3	62.6	76.3	95.4	124.0	97.2	78.9	152.7	195.4	471.7	590.4
82.5°	47.2	43.9	53.2	70.0	83.4	87.1	48.5	85.6	96.2	181.8	131.9
85°	30.2	28.3	35.7	43.9	53.0	56.1	29.5	44.8	49.1	74.9	54.9
87.5°	16.5	13.4	19.2	20.4	24.6	22.3	14.1	16.3	17.6	27.2	23.3
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°	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6	461.6
2.5°	463.3	463.9	466.1	466.7	468.2	470.2	471.5	472.8	472.8	474.2	474.2
5°	469.6	471.1	475.6	478.1	482.0	485.8	488.2	491.1	492.8	493.6	494.2
7.5°	481.7	484.1	490.7	494.8	501.5	507.0	510.7	514.6	515.4	517.8	516.9
10°	498.3	501.0	508.4	516.3	524.3	531.1	534.5	537.3	538.4	538.8	537.8
12.5°	517.1	521.3	530.8	540.4	548.9	554.7	555.6	554.9	551.9	549.3	549.3
15°	540.4	544.1	554.7	565.2	573.4	574.5	569.1	565.6	561.9	561.3	561.3
17.5°	568.2	570.2	579.9	590.2	590.8	587.1	579.0	575.8	572.4	569.9	570.2
20°	600.5	599.9	606.9	611.2	606.7	595.3	583.2	577.8	574.3	571.4	571.6
22.5°	639.3	634.3	633.3	632.3	620.1	596.4	579.9	573.0	567.5	563.6	565.0
25°	695.6	676.4	663.2	655.8	628.4	590.6	569.5	554.1	543.9	537.1	539.8
27.5°	766.0	733.8	700.3	682.2	628.4	578.6	544.3	519.3	502.6	495.6	499.1
30°	833.1	799.4	750.1	714.2	626.9	559.0	503.7	468.9	449.4	442.4	446.5
32.5°	890.4	853.7	802.9	749.2	623.2	527.4	453.3	414.8	395.9	387.7	391.8
35°	943.7	904.6	855.9	787.7	613.4	480.8	397.8	368.5	347.5	334.2	338.6
37.5°	998.2	951.7	906.1	822.5	595.8	426.5	355.3	330.3	305.6	287.7	292.4
40°	1057.5	1001.9	959.7	843.1	566.9	374.8	322.3	299.4	273.2	254.2	257.9
42.5°	1126.9	1062.1	1019.5	853.7	527.4	338.1	300.7	278.4	253.6	238.1	241.2
45°	1199.2	1128.3	1074.0	853.5	483.3	320.9	293.8	271.6	244.3	228.2	230.7
47.5°	1275.0	1197.7	1121.2	839.6	445.0	323.3	289.9	257.1	226.8	211.3	213.4
50°	1351.1	1273.6	1166.9	813.5	428.7	318.1	275.3	236.7	201.0	186.9	187.8
52.5°	1426.5	1354.1	1206.1	776.3	412.2	298.8	256.7	210.1	190.3	180.6	180.6
55°	1502.3	1433.9	1249.0	722.2	370.9	276.1	225.3	200.1	181.8	172.9	172.1
57.5°	1578.4	1526.0	1289.6	668.2	319.0	248.4	208.2	188.0	173.4	165.7	164.5
60°	1657.4	1631.4	1331.6	618.4	267.7	212.7	195.6	178.1	163.4	154.9	154.3
62.5°	1738.9	1747.4	1364.4	554.3	220.6	191.0	184.3	166.5	152.1	144.0	143.8
65°	1821.1	1859.4	1385.9	465.5	178.9	170.4	172.1	153.6	139.1	132.1	131.9
67.5°	1883.0	1939.9	1379.8	352.2	146.7	150.8	156.9	140.1	126.5	121.1	121.3
70°	1890.0	1930.4	1319.8	241.2	122.8	131.7	139.9	126.9	112.7	108.9	109.1
72.5°	1797.4	1800.0	1152.7	157.5	103.8	115.6	122.1	113.5	99.7	95.8	95.6
75°	1554.7	1488.6	846.3	103.8	86.9	99.3	105.4	99.3	86.0	86.9	83.8
77.5°	1177.9	1054.3	513.8	73.9	72.6	83.4	91.7	87.3	76.1	85.4	75.1
80°	606.9	570.4	229.2	55.1	57.4	66.7	75.4	69.7	60.2	57.4	52.4
82.5°	139.1	161.6	90.4	39.6	41.5	48.0	57.6	52.4	43.3	36.5	36.1
85°	48.7	53.2	40.0	24.8	24.3	30.0	39.2	35.0	29.3	23.5	24.8
87.5°	15.5	20.2	15.0	10.0	10.5	13.4	18.0	16.5	13.7	8.9	9.3
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)