

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: P959981

Luminaire Tested: **NAV-SB1B-830-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959981
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-SB1B-830-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5283.9 lumens
Efficiency: N/A
Efficacy: 132.8 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): 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

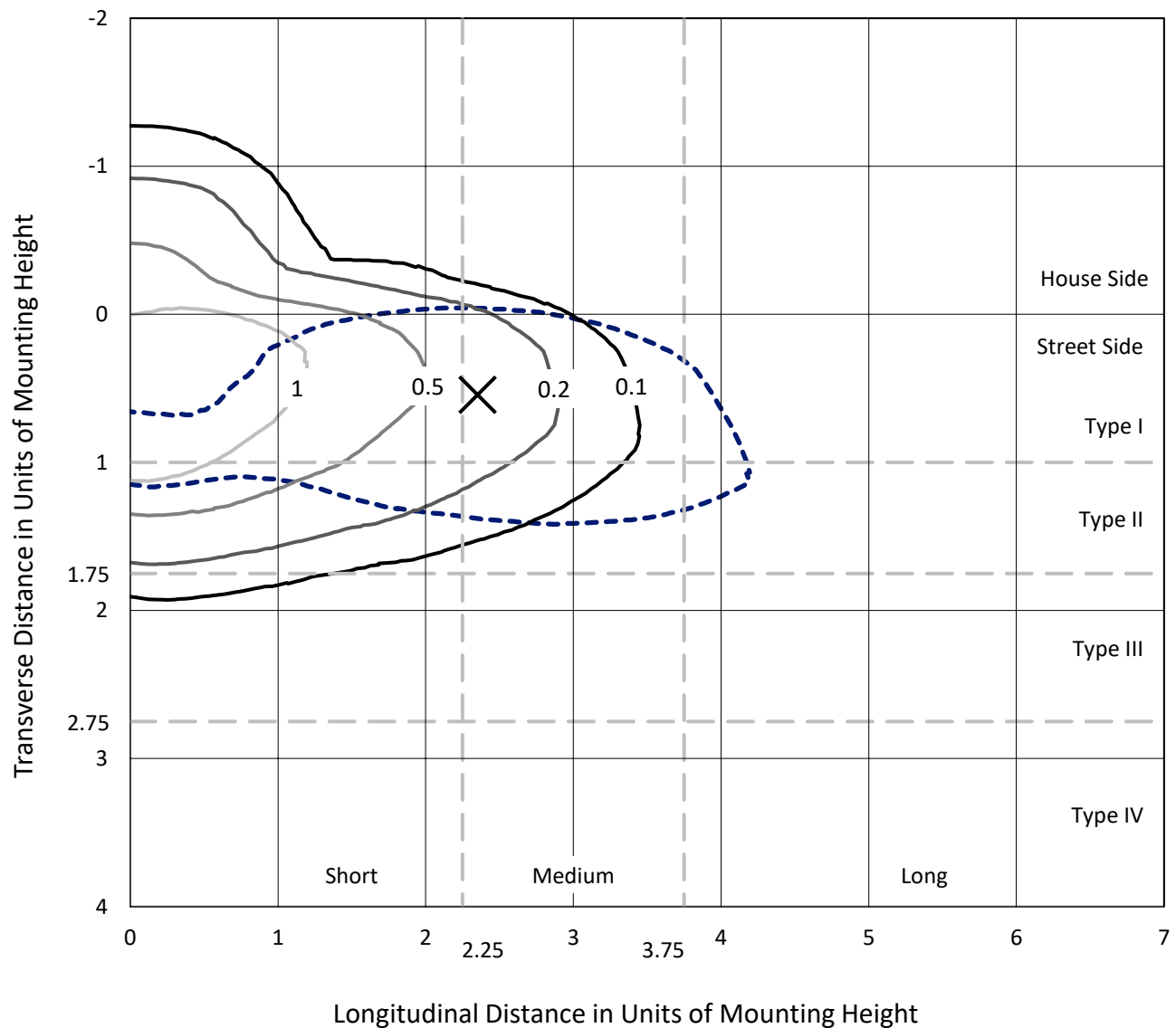


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Iso-Footcandle Lines of Horizontal Illumination

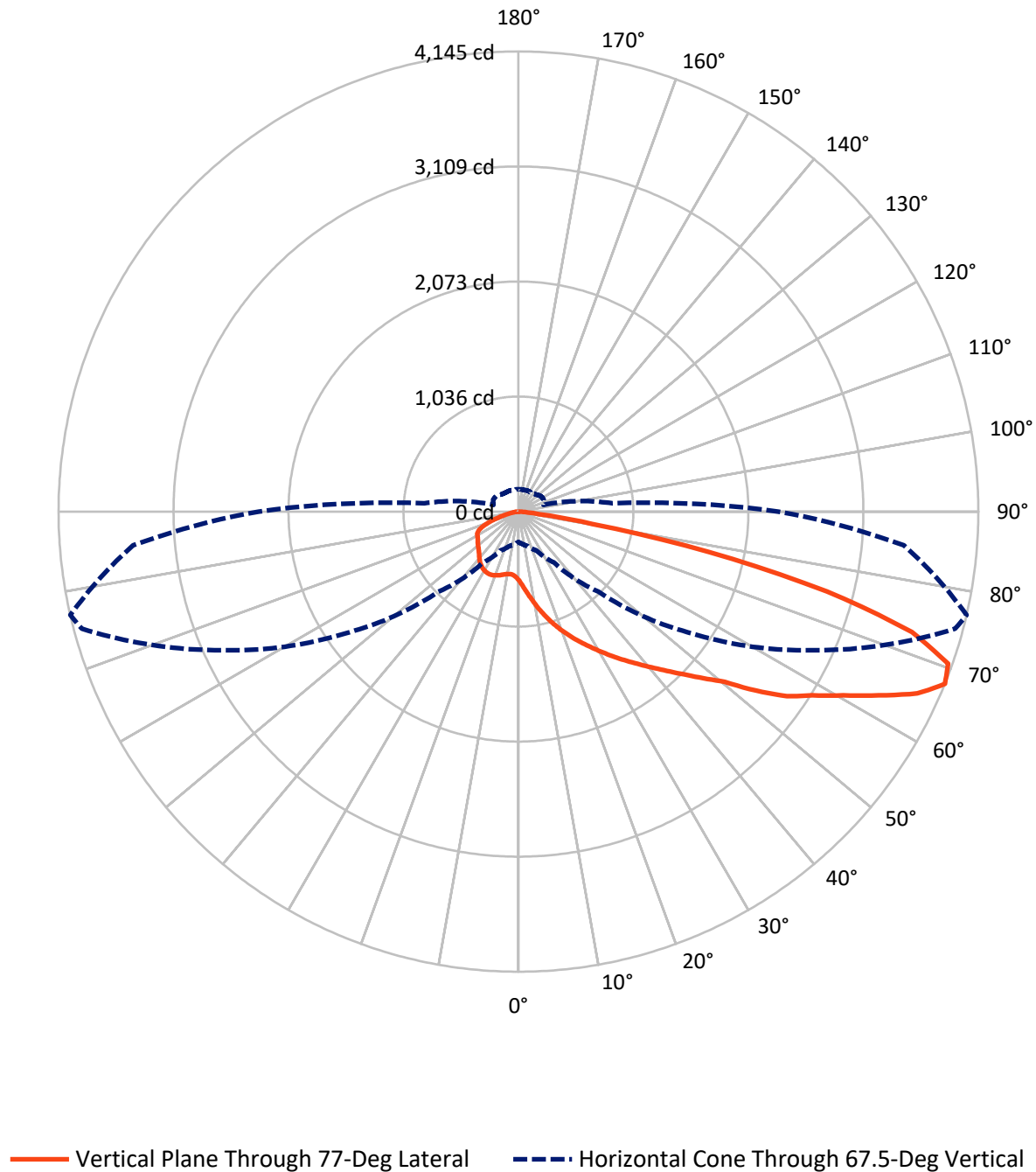
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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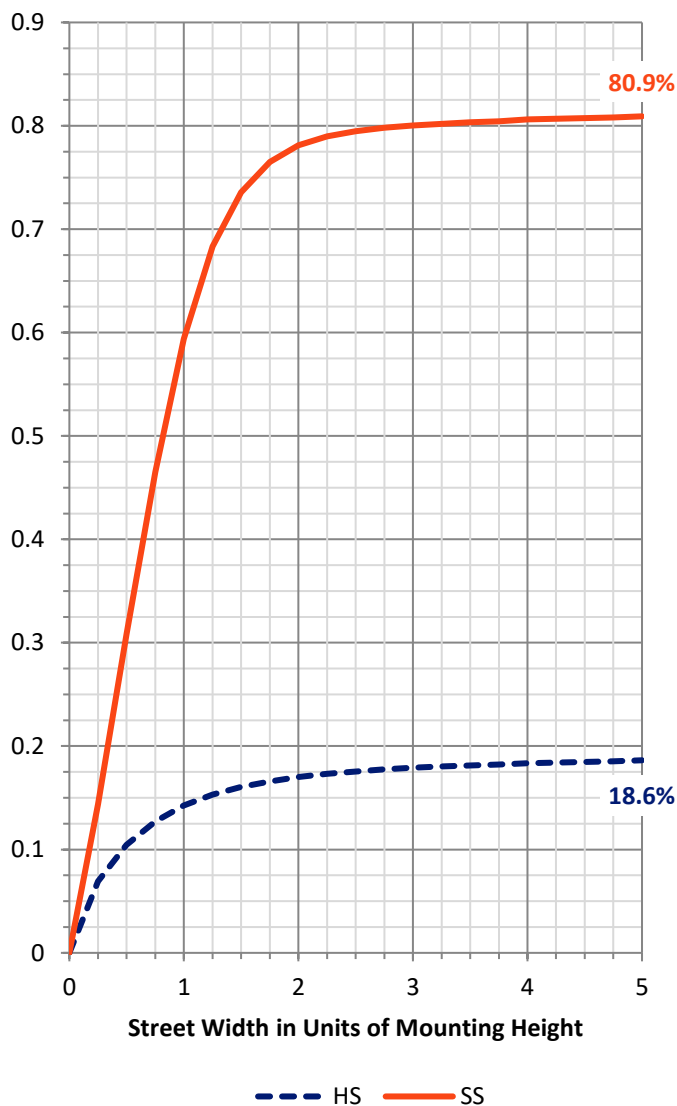
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	999.5	0.0	999.5
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	4284.4	0.0	4284.4
	% Fixture	81.1	0.0	81.1
Total	Lumens	5283.9	0.0	5283.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	1.3
10°-20°	238.7	4.5
20°-30°	450.8	8.5
30°-40°	726.2	13.7
40°-50°	993.2	18.8
50°-60°	1120.4	21.2
60°-70°	1045.7	19.8
70°-80°	573.2	10.8
80°-90°	69.1	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°	5283.9	100.0
0°-180°	5283.9	100.0

Coefficient of Utilization



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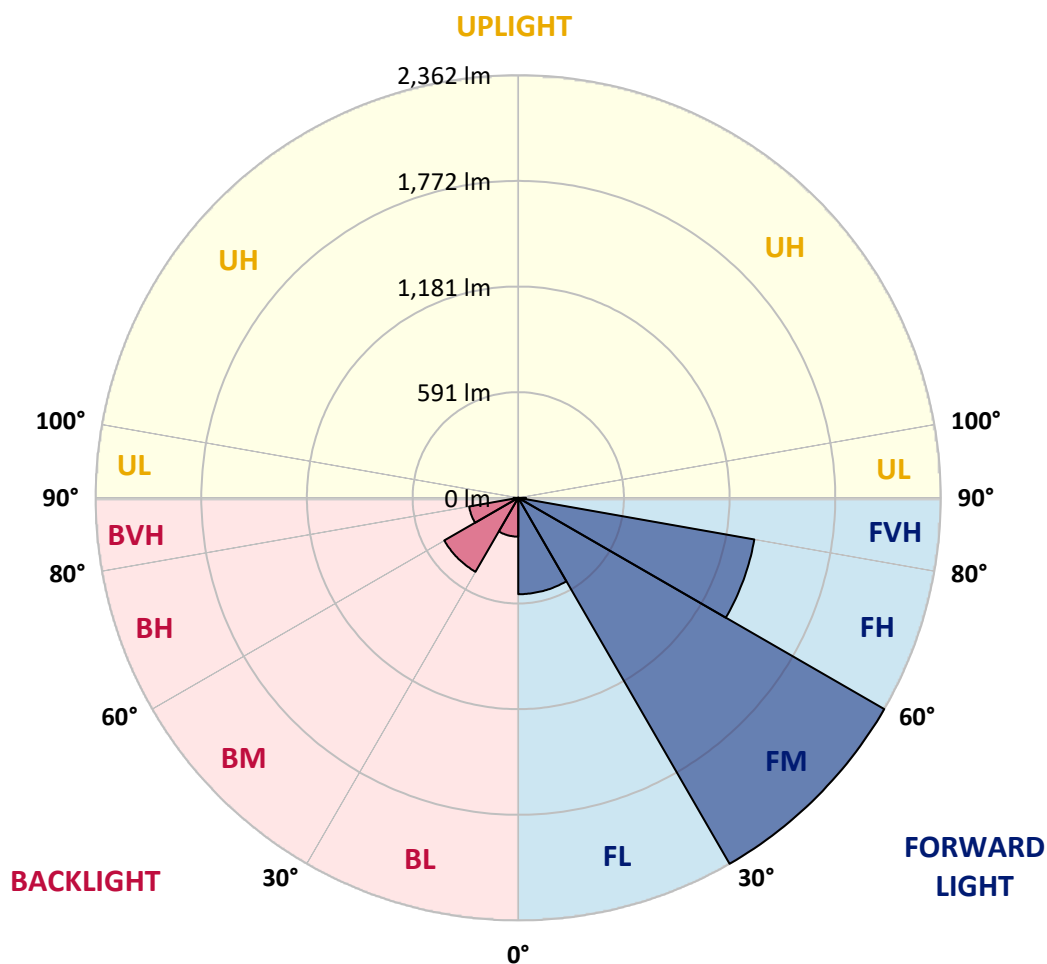
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	538.6	10.2			
FM	(30°-60°)	2362.4	44.7			
FH	(60°-80°)	1340.1	25.4			G1/1800
FVH	(80°-90°)	43.2	0.8			G1/100
BL	(0°-30°)	217.3	4.1	B1/500		
BM	(30°-60°)	477.4	9.0	B1/1000		
BH	(60°-80°)	278.8	5.3	B1/500		G1/500
BVH	(80°-90°)	25.9	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°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9
2.5°	776.2	781.7	774.9	774.9	751.9	739.9	717.1	699.6	668.2	662.8	642.1
5°	917.6	924.3	914.8	910.7	883.8	858.8	820.4	782.5	726.6	720.9	672.1
7.5°	1026.9	1035.7	1027.2	1022.8	998.9	971.0	926.0	873.1	794.3	783.1	712.4
10°	1116.1	1117.5	1114.7	1116.3	1097.6	1074.6	1028.6	966.9	868.5	853.2	761.3
12.5°	1166.6	1172.8	1178.2	1188.1	1184.8	1170.7	1129.1	1055.5	947.0	927.3	814.5
15°	1190.3	1201.2	1213.5	1236.1	1254.4	1257.9	1226.3	1150.8	1026.9	1003.2	868.2
17.5°	1198.7	1209.1	1228.5	1261.2	1300.5	1327.0	1312.7	1243.2	1106.0	1078.7	924.7
20°	1241.6	1244.6	1256.2	1287.4	1329.9	1373.8	1384.5	1332.1	1184.3	1153.4	983.0
22.5°	1333.2	1327.2	1330.4	1344.7	1375.2	1417.8	1442.1	1410.7	1264.7	1229.3	1041.9
25°	1484.6	1467.1	1449.7	1433.3	1448.8	1472.8	1500.4	1489.2	1349.0	1304.0	1101.4
27.5°	1675.8	1654.6	1616.0	1562.3	1543.5	1552.0	1564.3	1562.0	1427.0	1381.5	1162.8
30°	1864.0	1839.2	1793.3	1715.6	1665.9	1643.6	1634.4	1628.0	1511.9	1463.3	1224.7
32.5°	2014.2	1994.6	1949.7	1862.6	1790.6	1752.4	1721.6	1699.2	1600.5	1552.0	1290.1
35°	2145.7	2127.5	2075.9	1981.0	1902.7	1862.1	1821.7	1774.0	1692.7	1643.6	1360.5
37.5°	2265.8	2247.5	2176.8	2078.1	1999.3	1971.2	1935.2	1854.1	1785.1	1738.8	1434.9
40°	2341.6	2337.5	2271.5	2159.7	2077.8	2063.9	2051.9	1947.2	1887.7	1844.6	1516.8
42.5°	2360.9	2369.9	2317.5	2225.7	2147.7	2136.4	2164.6	2052.5	2002.8	1961.6	1609.5
45°	2314.2	2340.2	2305.8	2243.4	2197.3	2191.2	2264.3	2167.6	2130.2	2092.5	1721.3
47.5°	2196.2	2240.1	2225.9	2217.2	2210.6	2236.5	2352.2	2289.7	2274.5	2241.8	1849.0
50°	1957.9	2041.0	2065.8	2120.9	2184.2	2271.7	2432.1	2423.1	2443.0	2410.0	2004.5
52.5°	1545.7	1660.2	1804.2	1942.3	2102.9	2260.0	2520.0	2614.6	2698.6	2680.6	2251.5
55°	1275.9	1327.5	1438.2	1691.4	1945.2	2210.6	2559.5	2769.2	2952.2	2936.1	2439.0
57.5°	1068.7	1114.7	1183.0	1394.3	1706.8	2098.6	2584.0	2863.6	3126.0	3124.4	2623.9
60°	846.3	895.1	965.0	1114.7	1428.4	1904.9	2578.6	2971.1	3347.8	3361.4	2849.4
62.5°	595.4	649.1	726.6	866.2	1143.9	1653.9	2467.3	3048.8	3608.7	3645.8	3120.8
65°	391.4	426.8	485.2	605.8	852.4	1331.3	2254.8	3058.9	3888.0	3950.8	3375.5
67.5°	274.4	288.0	322.4	387.9	561.9	1020.9	1916.3	2954.5	4074.4	4145.0	3486.0
70°	214.1	220.9	238.4	264.6	352.9	686.5	1468.5	2682.7	4034.5	4108.2	3370.6
72.5°	184.9	191.5	198.0	201.3	236.8	423.8	994.8	2243.1	3659.5	3709.4	2930.7
75°	167.8	169.3	174.9	173.7	180.6	274.9	574.1	1634.4	2887.3	2870.2	2163.5
77.5°	141.0	143.2	152.2	150.9	160.4	187.9	298.1	1054.7	1871.9	1755.1	1204.2
80°	119.5	120.5	130.4	128.7	139.4	136.1	152.2	537.6	794.0	672.6	347.2
82.5°	41.4	51.2	99.5	102.6	106.4	82.4	87.8	219.2	242.5	185.7	72.8
85°	20.2	21.5	50.7	72.0	71.8	41.4	42.8	78.3	76.4	60.0	24.3
87.5°	3.3	4.1	6.0	28.1	22.3	10.9	14.8	15.3	15.8	13.6	5.4
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°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9
2.5°	626.8	613.2	584.5	558.0	537.3	517.4	506.2	496.7	491.2	490.2	490.2
5°	643.7	615.6	563.5	519.6	491.0	469.7	458.5	451.4	447.8	445.7	445.4
7.5°	668.0	626.8	552.6	502.7	472.6	457.4	451.7	450.6	450.3	450.6	451.4
10°	701.5	645.0	551.6	498.6	473.4	465.0	464.7	465.0	466.2	466.4	466.7
12.5°	737.8	663.9	555.9	502.1	483.9	479.2	478.4	478.2	479.0	479.5	479.8
15°	777.4	688.7	563.2	509.7	495.3	490.4	489.5	488.0	487.7	487.4	487.2
17.5°	817.9	713.2	571.4	517.9	502.7	495.9	492.8	489.0	486.1	485.2	486.1
20°	859.2	737.5	577.2	522.0	503.3	493.6	487.7	481.1	475.9	472.9	474.1
22.5°	903.1	762.9	580.7	520.9	498.4	485.2	474.3	466.7	458.8	453.6	453.9
25°	945.9	784.9	580.5	515.3	488.7	472.1	458.2	448.4	437.5	432.0	432.0
27.5°	987.1	804.9	573.6	505.1	475.1	456.5	439.9	428.2	417.6	412.4	412.2
30°	1029.6	821.5	562.9	490.4	459.0	438.6	420.4	410.2	400.7	395.8	395.4
32.5°	1071.9	836.8	548.0	472.1	440.4	420.9	402.8	393.6	387.9	387.9	388.2
35°	1116.6	847.5	528.1	450.9	420.9	402.0	387.9	382.4	381.8	378.5	377.7
37.5°	1163.8	854.2	503.8	429.1	401.5	383.8	379.4	372.9	367.4	360.3	359.3
40°	1213.5	861.1	474.6	406.4	381.0	371.3	369.3	360.6	345.0	327.6	325.1
42.5°	1273.8	865.7	444.3	383.8	359.5	356.2	359.0	344.0	319.1	306.1	306.3
45°	1343.6	873.3	416.5	361.4	337.4	337.4	348.8	329.2	308.7	300.5	302.0
47.5°	1434.1	891.0	390.6	336.8	316.9	322.4	326.5	311.5	300.0	290.0	289.7
50°	1565.1	933.7	363.9	312.0	301.3	312.3	306.6	297.9	284.4	276.3	275.5
52.5°	1727.6	958.7	340.1	289.7	288.0	298.9	290.8	282.6	272.4	261.6	259.4
55°	1838.3	963.4	320.2	273.3	279.0	278.0	274.9	267.5	262.1	247.6	247.9
57.5°	1962.2	972.6	303.8	263.5	273.3	261.3	260.2	253.9	246.8	237.0	233.7
60°	2110.3	987.1	289.7	259.6	268.3	250.4	245.0	242.5	235.3	230.5	231.9
62.5°	2271.7	1000.2	275.2	260.2	262.7	239.7	231.5	230.7	226.4	224.8	224.8
65°	2381.9	964.4	257.2	259.6	253.7	228.9	218.4	218.2	214.6	214.1	213.8
67.5°	2343.5	851.3	232.9	252.0	244.4	217.9	206.4	205.4	200.7	201.0	201.0
70°	2151.0	689.8	199.4	233.2	232.9	208.1	193.9	190.3	184.1	185.2	186.2
72.5°	1789.8	511.2	154.4	201.8	214.6	199.2	179.5	173.7	165.8	167.0	166.7
75°	1292.5	347.5	112.3	153.5	186.9	188.5	165.3	155.5	146.0	147.6	148.1
77.5°	661.4	196.9	82.6	105.8	146.8	171.3	152.4	139.4	137.1	152.4	150.3
80°	215.8	98.7	57.3	74.2	96.2	140.2	133.7	118.7	118.1	121.7	104.4
82.5°	64.4	41.7	36.8	48.8	53.2	107.4	115.4	89.7	77.2	81.3	84.0
85°	22.1	20.2	21.0	24.3	25.3	63.0	80.8	59.4	56.2	61.9	61.1
87.5°	5.2	7.1	6.0	5.4	5.4	15.3	31.4	24.8	34.3	23.0	22.1
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)