

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: P964207

Luminaire Tested: **NAV-SB3B-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964207
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11986.3 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

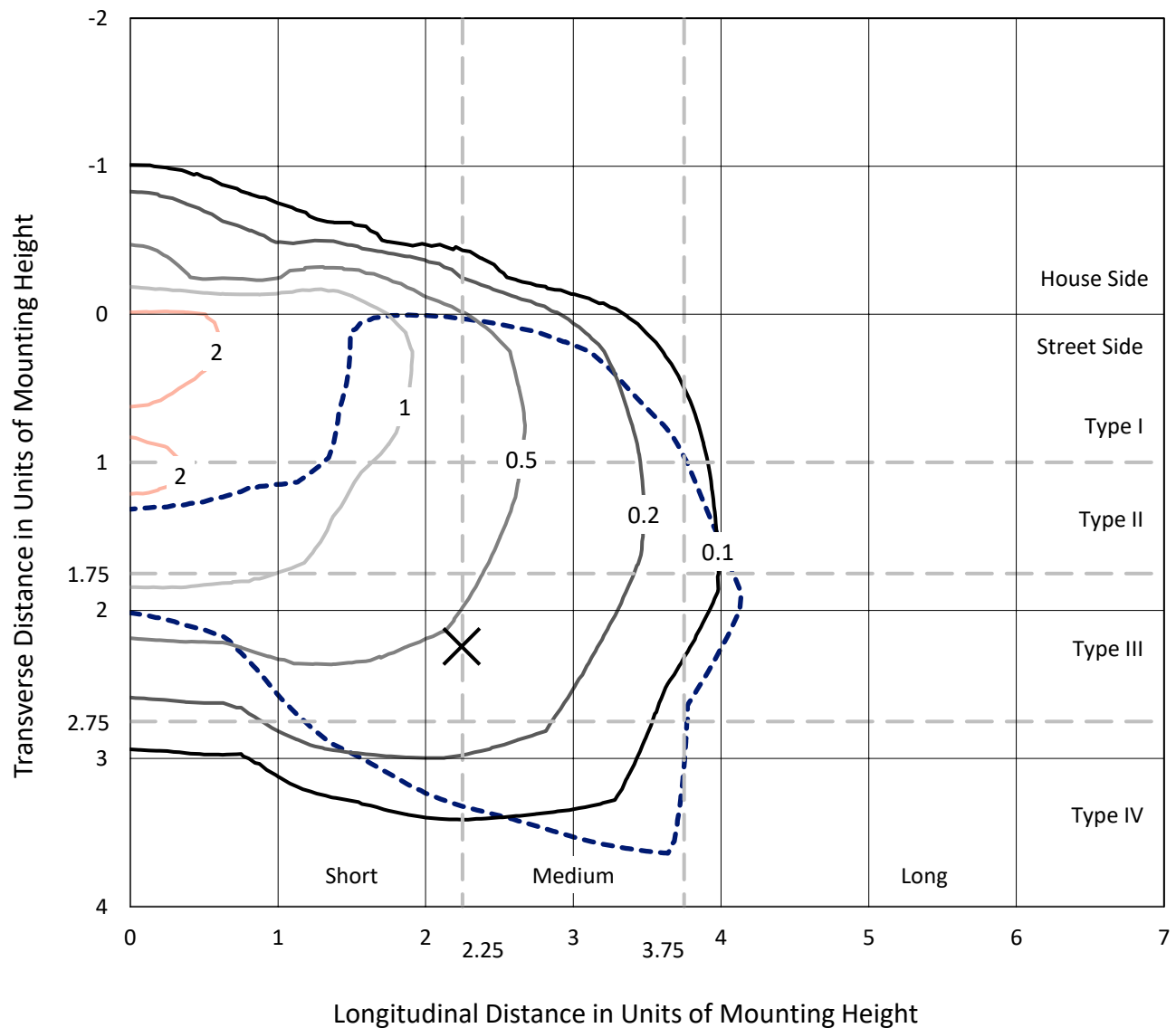
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

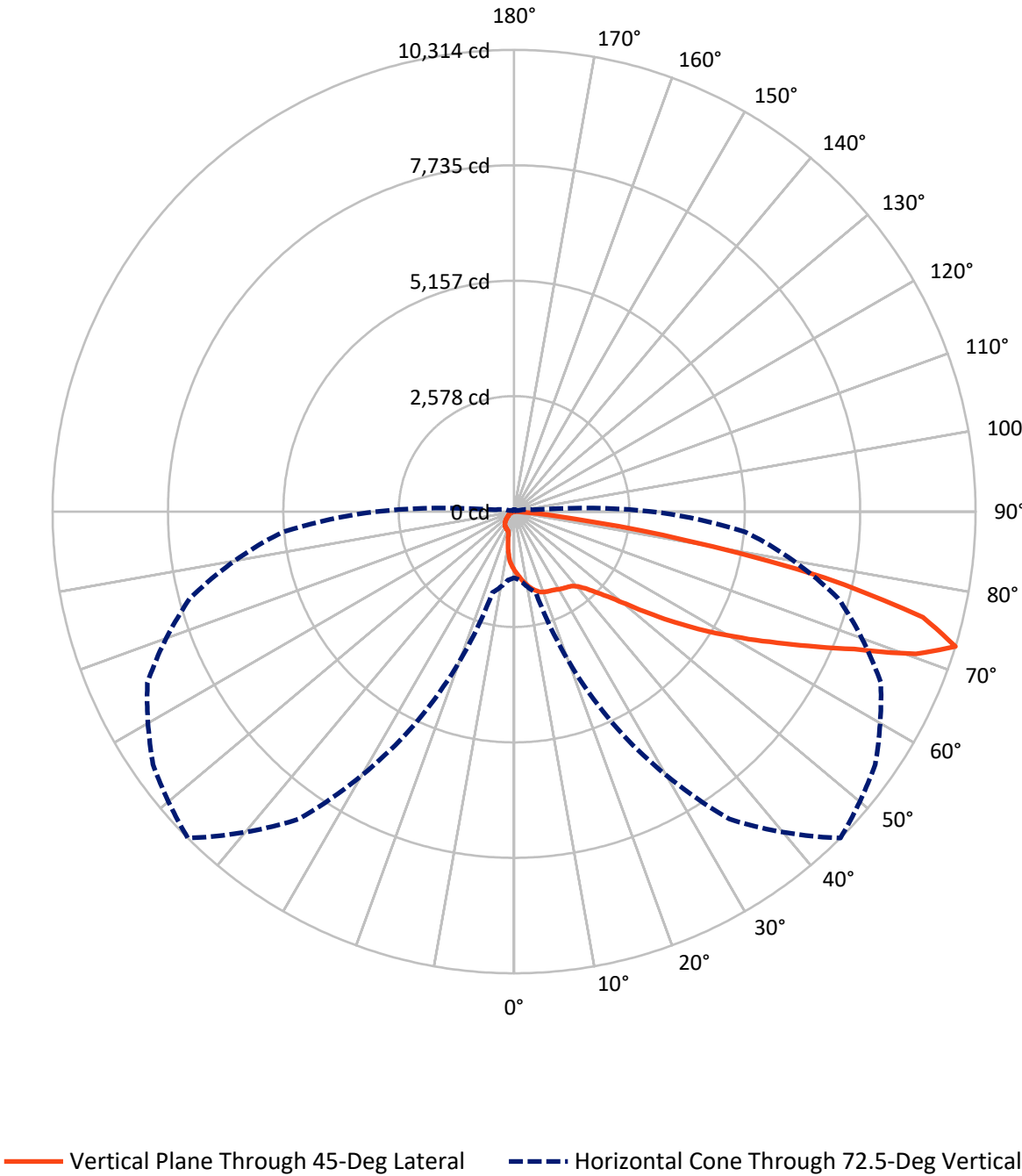
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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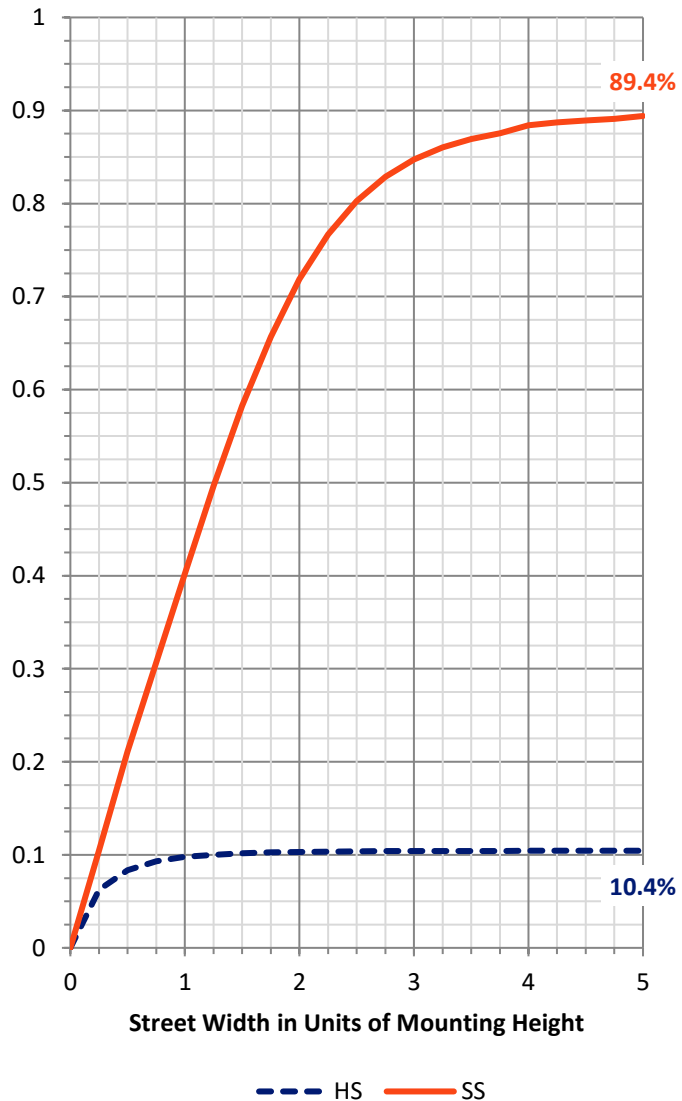
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1259.4	0.0	1259.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	10726.9	0.0	10726.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	11986.3	0.0	11986.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	1.0
10°-20°	361.6	3.0
20°-30°	593.8	5.0
30°-40°	842.1	7.0
40°-50°	1391.9	11.6
50°-60°	2500.5	20.9
60°-70°	3472.1	29.0
70°-80°	2518.5	21.0
80°-90°	182.1	1.5
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°	11986.3	100.0
0°-180°	11986.3	100.0

Coefficient of Utilization



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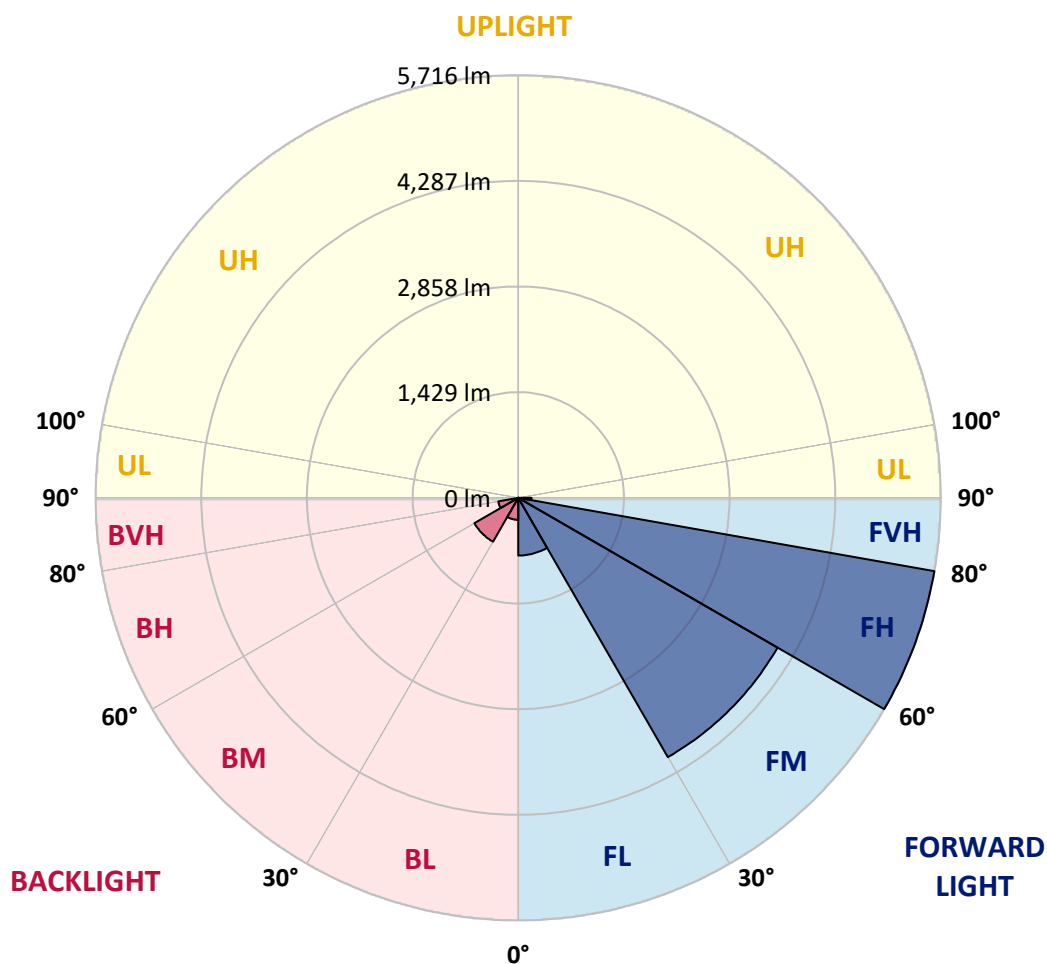
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	780.8	6.5			
FM	(30°-60°)	4049.6	33.8			
FH	(60°-80°)	5716.0	47.7			G3/7500
FVH	(80°-90°)	180.6	1.5			G2/225
BL	(0°-30°)	298.3	2.5	B1/500		
BM	(30°-60°)	685.0	5.7	B1/1000		
BH	(60°-80°)	274.6	2.3	B1/500		G1/500
BVH	(80°-90°)	1.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1
2.5°	1434.2	1436.6	1435.0	1425.3	1408.9	1399.8	1394.9	1378.6	1368.0	1349.1	1329.5
5°	1565.9	1575.7	1570.0	1550.4	1519.3	1497.2	1490.7	1457.1	1426.9	1391.6	1350.7
7.5°	1705.8	1710.7	1700.1	1674.7	1633.0	1595.4	1589.7	1543.0	1494.8	1440.7	1385.1
10°	1827.0	1832.7	1816.3	1779.5	1732.0	1685.4	1677.2	1625.6	1568.4	1502.1	1430.9
12.5°	1928.3	1934.1	1912.9	1868.7	1816.3	1768.0	1759.8	1705.8	1642.9	1569.2	1480.8
15°	2005.3	2016.0	1987.3	1939.8	1883.3	1835.2	1831.1	1777.9	1716.5	1634.7	1540.6
17.5°	2050.3	2061.0	2033.9	1976.6	1928.3	1887.4	1882.5	1838.3	1781.1	1702.5	1598.7
20°	2057.7	2067.4	2038.8	1988.9	1948.8	1916.1	1913.7	1881.7	1840.0	1764.7	1661.6
22.5°	2035.5	2047.8	2021.6	1981.5	1953.8	1936.5	1933.3	1915.3	1891.5	1827.8	1720.6
25°	2012.7	2022.4	2002.8	1967.7	1952.9	1951.3	1953.8	1950.5	1945.6	1891.5	1789.3
27.5°	2011.0	2021.6	1999.6	1966.1	1957.9	1975.0	1977.4	1993.0	1997.1	1949.7	1855.6
30°	2024.9	2032.3	2011.0	1975.8	1971.7	2011.0	2011.9	2039.6	2046.2	1998.7	1921.1
32.5°	2055.2	2063.3	2042.1	1990.5	1984.8	2039.6	2042.1	2078.9	2089.6	2051.1	1989.7
35°	2126.4	2136.2	2111.6	2031.4	2011.0	2066.6	2074.0	2117.3	2138.7	2106.8	2061.0
37.5°	2303.9	2275.3	2241.8	2114.1	2070.7	2109.1	2121.4	2172.2	2209.8	2173.0	2146.0
40°	2744.8	2654.9	2550.2	2254.8	2175.5	2200.0	2209.8	2260.5	2312.1	2276.1	2263.0
42.5°	3406.8	3300.4	3131.9	2578.8	2333.4	2345.6	2353.0	2397.2	2469.9	2441.3	2444.6
45°	3996.7	3958.2	3786.3	3131.9	2628.7	2568.1	2577.2	2600.1	2707.2	2696.6	2717.9
47.5°	4449.9	4427.8	4295.3	3766.8	3127.8	2840.6	2866.0	2876.7	3031.2	3068.8	3126.1
50°	4798.4	4790.2	4671.6	4331.2	3779.9	3242.3	3251.3	3228.4	3460.0	3553.3	3662.0
52.5°	5127.4	5155.1	5067.6	4855.7	4476.1	3768.4	3766.8	3658.7	3971.3	4112.0	4297.7
55°	5424.3	5434.1	5443.2	5390.8	5176.5	4367.3	4351.7	4175.0	4564.4	4710.1	4911.4
57.5°	5703.3	5707.4	5787.6	5894.8	5905.4	5010.3	4981.7	4769.8	5212.4	5316.4	5439.9
60°	5890.7	5909.5	6078.9	6376.6	6506.7	5673.9	5658.3	5442.3	5871.8	5920.1	5897.2
62.5°	5620.7	5735.2	6162.3	6753.0	7074.6	6409.4	6402.0	6199.1	6565.6	6526.4	6330.0
65°	4549.8	4743.6	5494.7	7007.4	7631.7	7230.8	7241.4	7025.5	7278.2	7150.6	6681.9
67.5°	3182.6	3387.1	4275.7	7027.9	8254.3	8195.4	8256.8	7918.0	8035.1	7748.7	6765.3
70°	2200.8	2306.4	2884.8	6587.8	8739.5	9524.1	9522.5	9014.4	8787.7	8021.1	6339.8
72.5°	1480.0	1534.8	1873.6	5226.4	8382.8	10313.6	10266.1	9852.2	9041.4	7501.6	5179.7
75°	624.2	664.3	867.3	2937.1	6632.0	9435.7	9307.3	8706.8	8033.4	5907.1	3231.7
77.5°	198.0	215.1	341.9	1051.3	3653.0	7092.6	6956.7	5437.4	5384.2	2963.4	1181.4
80°	94.1	109.7	192.3	422.2	1437.5	3857.6	3838.7	2466.8	2316.2	800.1	237.3
82.5°	40.9	48.3	106.4	225.8	643.1	1376.2	1403.9	839.4	694.6	303.5	72.8
85°	13.1	17.2	49.1	103.9	271.6	341.9	337.9	199.7	279.8	165.2	25.3
87.5°	0.0	0.0	16.4	23.7	27.8	19.7	22.1	17.2	77.7	45.8	9.0
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°	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1	1313.1
2.5°	1319.7	1306.6	1283.7	1262.4	1243.6	1224.8	1213.3	1197.0	1195.4	1195.4	1199.5
5°	1328.7	1307.4	1266.5	1223.1	1173.2	1125.8	1078.3	1032.5	1017.8	1007.2	1012.1
7.5°	1354.8	1321.3	1256.6	1174.0	1079.1	975.2	902.4	823.9	793.6	777.3	779.7
10°	1392.5	1346.6	1248.4	1103.7	949.9	808.3	704.4	619.3	586.6	572.7	572.7
12.5°	1434.2	1377.8	1233.8	1016.2	808.3	639.0	537.5	498.3	493.3	493.3	493.3
15°	1484.1	1415.4	1208.4	913.1	660.2	505.6	469.7	471.3	476.1	479.4	479.4
17.5°	1535.7	1455.5	1168.3	797.7	529.3	454.9	455.7	458.2	462.3	465.6	465.6
20°	1591.3	1495.6	1115.1	675.0	454.1	440.1	442.6	445.1	448.3	450.0	450.8
22.5°	1651.1	1533.2	1052.2	554.7	428.8	427.9	428.8	431.1	435.2	435.2	436.9
25°	1714.8	1574.9	980.1	467.2	415.6	415.6	417.3	418.9	422.2	422.2	423.0
27.5°	1780.3	1613.4	904.0	421.4	404.2	403.3	403.3	405.8	407.4	408.3	409.1
30°	1852.3	1658.3	828.0	411.5	395.1	391.0	388.6	390.2	391.9	392.7	394.3
32.5°	1926.0	1701.7	760.0	415.6	386.1	378.8	370.6	369.0	369.0	372.3	374.7
35°	2007.8	1749.2	707.7	429.6	381.3	360.8	347.7	340.3	341.1	346.0	348.5
37.5°	2106.0	1806.5	669.2	441.8	378.0	340.3	319.1	310.1	304.3	310.1	308.4
40°	2234.4	1890.7	641.4	451.6	373.9	316.6	288.0	273.3	262.6	265.9	264.2
42.5°	2423.4	2023.2	630.8	452.4	364.9	288.8	256.0	236.5	220.9	221.7	218.4
45°	2688.5	2232.8	685.6	441.8	345.2	258.5	222.5	196.4	186.5	184.1	180.8
47.5°	3051.7	2537.9	812.4	419.7	316.6	229.1	189.8	167.7	160.3	156.3	153.9
50°	3538.5	2929.8	953.1	395.1	288.0	201.3	162.8	148.9	144.0	139.9	139.1
52.5°	4103.0	3327.5	1068.5	370.6	259.3	176.7	145.7	137.5	133.4	130.1	129.3
55°	4620.9	3601.5	1062.0	344.4	231.5	157.1	133.4	128.4	123.5	120.2	118.6
57.5°	4943.3	3640.0	875.5	315.8	199.7	141.6	121.9	118.6	113.0	108.9	108.0
60°	5091.4	3420.7	613.6	278.2	167.7	126.8	109.7	108.0	100.7	94.9	93.3
62.5°	5118.3	3013.3	409.1	231.5	139.9	113.0	97.4	94.9	85.1	75.2	70.3
65°	5008.7	2430.7	283.1	180.8	119.4	98.2	83.4	78.5	68.0	58.1	54.8
67.5°	4661.8	1706.6	197.2	130.1	101.5	77.7	66.3	64.7	56.5	48.3	45.8
70°	4026.1	972.8	131.7	97.4	80.2	53.2	52.4	54.0	45.8	39.3	36.0
72.5°	3086.9	445.1	81.8	71.1	54.8	36.0	41.7	42.5	35.2	29.4	26.1
75°	1817.1	190.6	51.6	45.8	27.8	23.7	30.2	31.1	23.7	18.9	16.4
77.5°	618.5	72.0	32.7	27.0	13.9	13.1	19.7	19.7	13.1	7.4	5.7
80°	140.7	27.0	16.4	10.7	6.6	5.7	6.6	5.7	3.3	0.8	0.0
82.5°	40.1	10.7	6.6	4.1	2.5	2.5	0.8	0.0	0.0	0.0	0.0
85°	11.5	4.9	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)