

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: P960493

Luminaire Tested: **NAV-SB1C-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7017.2 lumens
Efficiency: N/A
Efficacy: 129.0 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

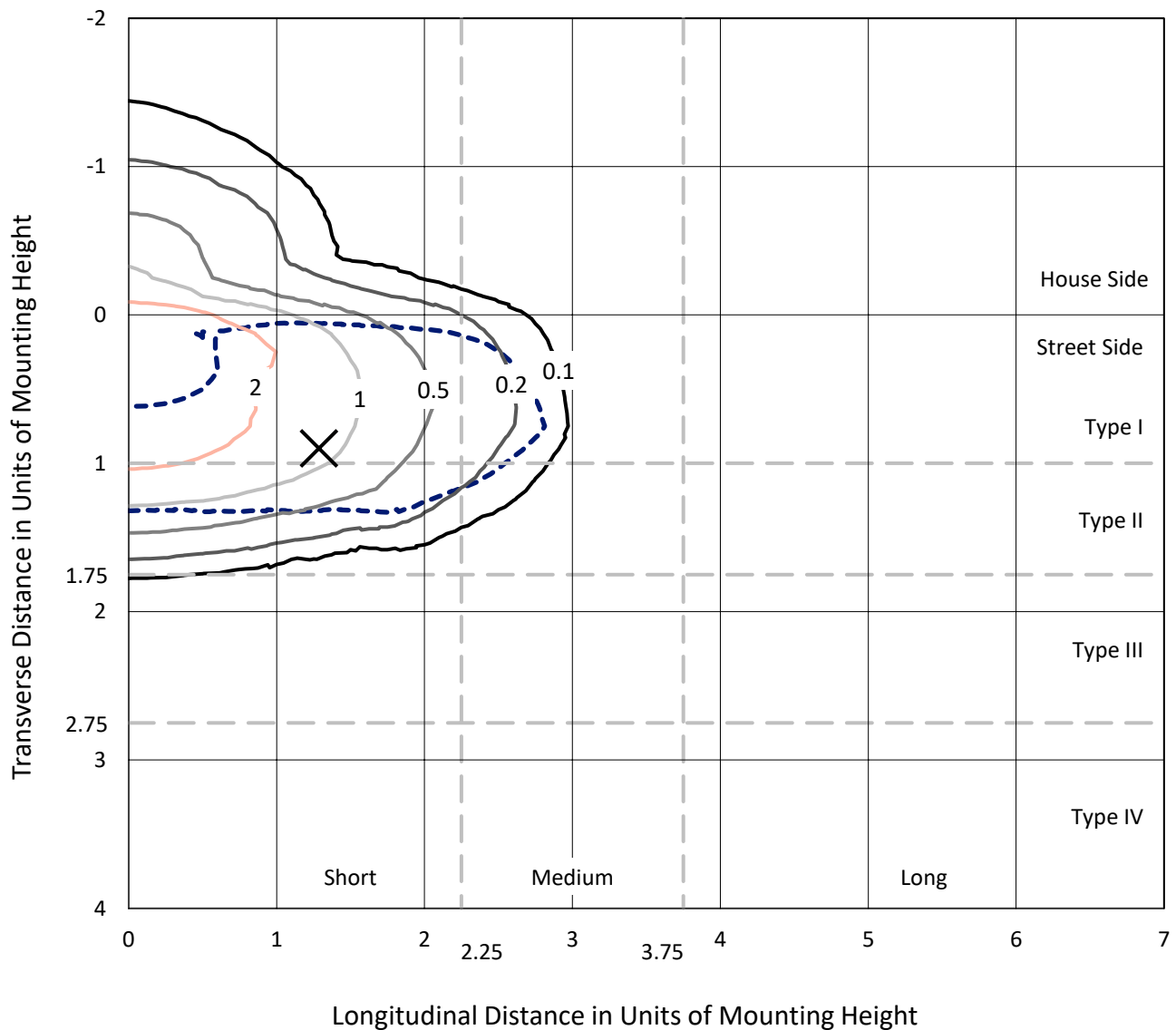
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

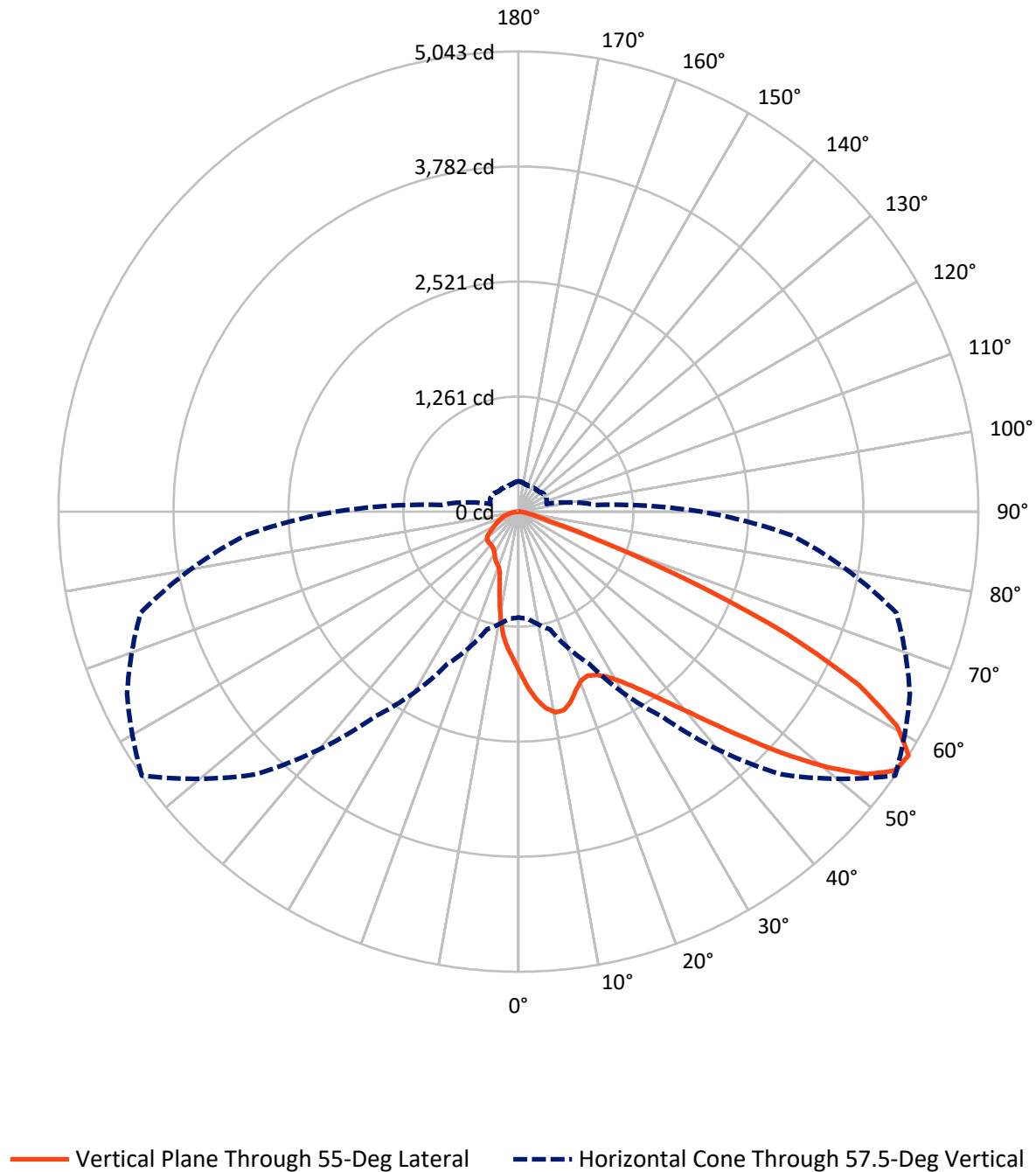
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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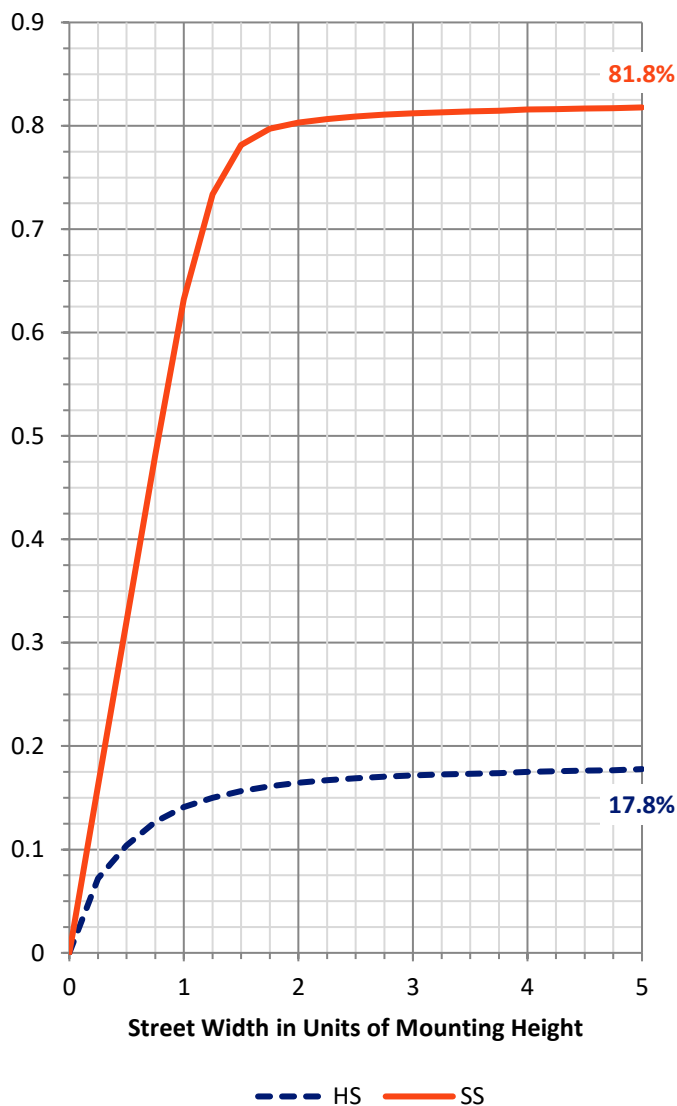
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1269.7	0.0	1269.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5747.4	0.0	5747.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	7017.2	0.0	7017.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	2.3
10°-20°	411.8	5.9
20°-30°	657.1	9.4
30°-40°	1040.4	14.8
40°-50°	1592.5	22.7
50°-60°	1705.7	24.3
60°-70°	1073.1	15.3
70°-80°	317.3	4.5
80°-90°	56.1	0.8
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°	7017.2	100.0
0°-180°	7017.2	100.0

Coefficient of Utilization



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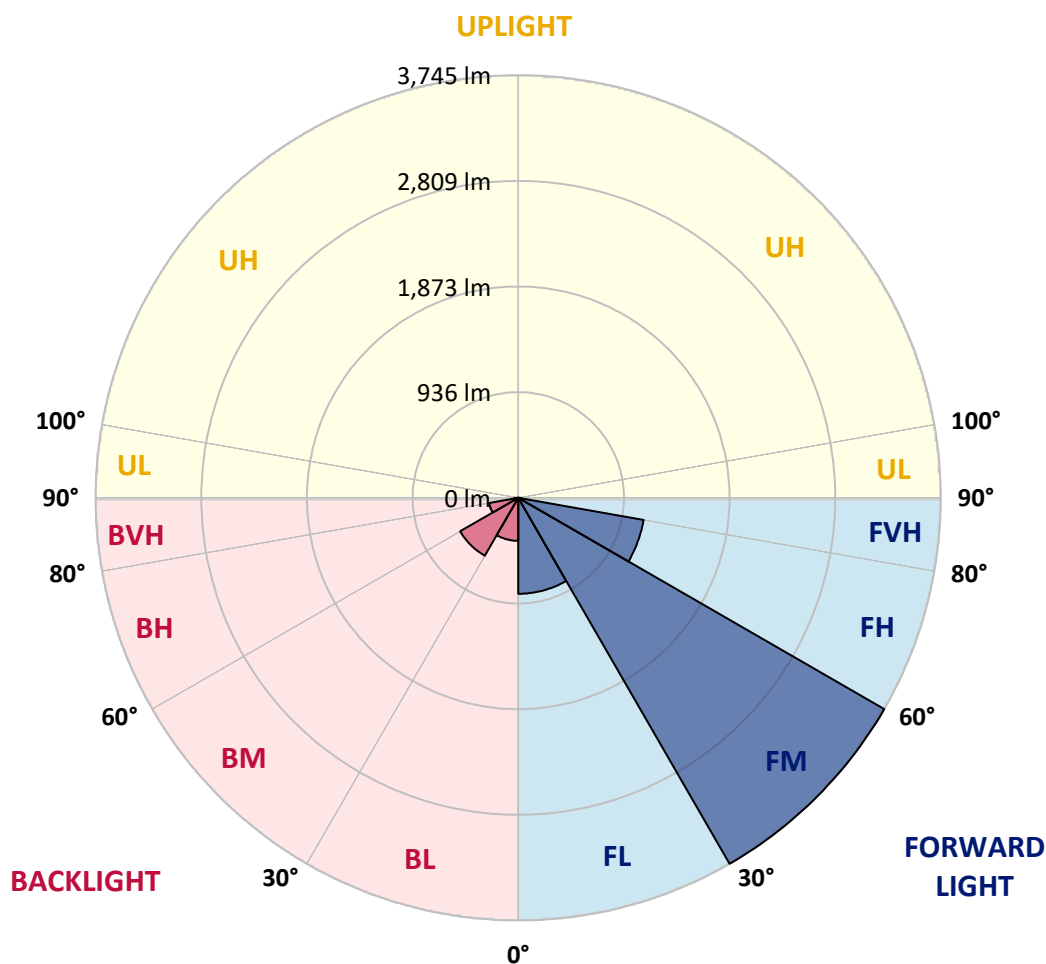
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	850.5	12.1			
FM	(30°-60°)	3745.1	53.4			
FH	(60°-80°)	1128.1	16.1			G1/1800
FVH	(80°-90°)	23.7	0.3			G1/100
BL	(0°-30°)	381.6	5.4	B1/500		
BM	(30°-60°)	593.5	8.5	B1/1000		
BH	(60°-80°)	262.2	3.7	B1/500		G1/500
BVH	(80°-90°)	32.4	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3
2.5°	2017.3	2015.9	2023.8	1996.6	1978.1	1953.0	1920.0	1878.0	1832.6	1784.7	1764.0
5°	2199.0	2186.3	2194.6	2174.3	2154.0	2116.3	2067.3	1998.7	1915.0	1819.6	1768.7
7.5°	2170.3	2161.6	2183.0	2201.2	2216.5	2211.7	2175.8	2104.0	1995.9	1857.3	1783.7
10°	1939.3	1929.5	1959.6	2022.3	2114.5	2194.6	2238.2	2193.6	2078.6	1898.6	1798.2
12.5°	1735.4	1730.7	1750.7	1801.4	1903.7	2057.6	2230.2	2271.9	2164.6	1947.6	1817.7
15°	1648.4	1642.6	1655.3	1681.0	1746.3	1889.6	2157.6	2325.6	2249.1	2004.2	1849.0
17.5°	1629.1	1622.6	1628.0	1641.4	1683.6	1792.7	2048.2	2352.1	2337.2	2067.3	1875.0
20°	1664.7	1659.3	1660.0	1659.3	1688.6	1775.3	1971.9	2341.9	2414.1	2125.3	1900.5
22.5°	1750.7	1741.6	1742.0	1722.7	1738.7	1805.7	1952.0	2314.8	2482.7	2176.2	1919.7
25°	1890.7	1874.3	1877.6	1828.6	1824.3	1874.0	1983.2	2293.7	2550.9	2216.8	1923.3
27.5°	2082.2	2063.7	2053.9	1981.0	1946.2	1970.9	2046.6	2300.9	2615.5	2252.0	1914.3
30°	2321.6	2299.2	2279.2	2175.8	2112.7	2103.6	2145.3	2348.8	2691.6	2289.0	1898.6
32.5°	2615.1	2588.9	2552.7	2415.6	2326.8	2279.2	2273.0	2434.1	2780.8	2336.2	1890.7
35°	2964.4	2930.4	2878.8	2701.4	2588.9	2491.8	2441.3	2557.1	2903.1	2407.2	1899.7
37.5°	3324.3	3285.8	3238.7	3027.5	2889.4	2746.1	2646.7	2723.9	3066.0	2503.8	1923.7
40°	3656.2	3613.0	3569.2	3381.3	3232.8	3060.2	2898.1	2935.1	3265.1	2619.1	1964.3
42.5°	3852.1	3820.2	3803.5	3701.9	3587.3	3412.0	3210.7	3185.4	3489.0	2751.8	2010.7
45°	3843.3	3830.3	3881.9	3923.9	3896.7	3799.5	3577.1	3462.1	3713.5	2866.8	2053.6
47.5°	3638.0	3646.7	3761.7	3998.3	4102.4	4153.2	3994.3	3733.9	3908.6	2952.8	2072.8
50°	3079.4	3086.7	3353.0	3863.0	4155.3	4441.5	4408.2	3999.0	4059.9	3005.4	2068.4
52.5°	2637.2	2641.9	2756.2	3461.7	3980.5	4586.7	4781.1	4248.9	4170.6	3020.0	2044.2
55°	1986.4	2002.7	2130.8	2715.9	3525.6	4471.7	5008.2	4506.5	4240.6	3021.4	2018.7
57.5°	1160.4	1178.2	1336.4	1843.6	2740.2	4070.8	5042.7	4735.0	4288.1	3009.8	2003.5
60°	568.5	576.0	644.9	968.9	1689.7	3298.6	4765.5	4845.7	4314.6	3003.6	2002.7
62.5°	383.0	382.0	384.9	478.1	832.5	2119.2	4188.0	4652.0	4300.5	2980.0	1995.5
65°	329.3	325.4	314.5	335.6	431.3	969.2	3235.7	4073.8	4192.8	2920.9	1945.9
67.5°	284.7	285.2	285.5	279.0	308.0	447.3	1977.3	3209.0	3806.0	2640.8	1754.3
70°	235.7	239.0	240.5	240.5	251.0	293.5	844.1	2199.3	3002.1	2070.6	1413.0
72.5°	214.7	207.9	208.6	205.0	205.0	223.4	339.9	1246.8	1891.4	1164.8	862.2
75°	175.2	179.6	180.3	177.7	169.4	170.5	201.7	523.1	809.3	483.2	426.2
77.5°	151.3	151.3	152.7	150.9	144.4	127.7	134.6	202.7	275.3	198.0	212.9
80°	121.6	121.2	127.3	131.0	120.8	94.3	86.0	112.1	122.3	87.0	110.6
82.5°	59.1	62.7	87.4	99.7	91.7	68.2	52.6	69.7	65.3	38.4	49.7
85°	34.4	32.7	39.2	55.5	52.6	37.7	25.4	36.3	34.1	19.6	20.0
87.5°	10.9	10.1	8.0	18.9	15.3	10.6	6.9	10.6	9.4	4.3	4.3
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3	1758.3
2.5°	1738.3	1695.6	1653.1	1614.3	1590.7	1575.4	1560.3	1543.1	1536.6	1526.8
5°	1720.9	1638.2	1564.6	1501.1	1443.4	1398.1	1352.4	1315.4	1298.7	1309.9
7.5°	1710.7	1591.0	1477.5	1361.1	1249.0	1159.4	1081.4	1026.6	1001.9	1008.1
10°	1701.7	1537.7	1364.7	1180.8	1019.7	908.7	828.9	787.2	771.6	774.8
12.5°	1693.3	1477.8	1228.7	986.7	815.5	742.2	719.3	719.8	722.6	724.8
15°	1691.9	1405.7	1076.7	816.9	705.2	700.5	725.2	740.8	749.1	751.6
17.5°	1689.7	1319.4	921.8	701.2	678.3	710.2	733.1	743.3	749.8	750.2
20°	1681.0	1209.8	778.8	646.1	672.5	700.1	714.2	722.2	727.6	729.5
22.5°	1654.1	1087.9	667.5	621.4	649.3	671.5	688.2	697.2	700.5	702.6
25°	1605.9	951.5	590.6	597.8	617.0	644.9	658.4	660.2	659.1	662.4
27.5°	1542.8	805.3	542.6	565.9	590.6	614.5	621.8	620.6	618.5	622.1
30°	1466.6	674.0	512.2	530.0	563.8	585.5	592.0	589.5	585.2	589.1
32.5°	1386.1	566.6	487.2	504.9	541.6	563.0	569.5	567.0	563.8	567.0
35°	1311.0	491.5	463.9	488.3	524.2	545.2	553.6	553.9	553.9	557.9
37.5°	1242.1	447.6	444.7	477.8	512.2	531.1	543.0	543.8	528.2	529.2
40°	1178.2	429.2	436.0	470.9	500.6	518.8	519.5	478.9	450.2	449.5
42.5°	1126.0	425.5	438.6	470.2	492.3	493.0	441.9	410.3	402.3	402.6
45°	1077.0	424.5	444.3	470.2	479.9	425.9	391.4	383.0	383.8	386.7
47.5°	1022.2	420.0	445.5	463.6	444.3	378.7	368.6	364.9	363.5	364.2
50°	962.4	404.5	431.6	450.6	383.5	358.4	345.7	344.6	346.4	347.5
52.5°	899.2	379.0	408.1	426.9	355.5	340.6	326.5	329.0	337.0	339.6
55°	857.9	349.3	376.9	379.8	335.9	323.9	312.0	317.8	332.6	337.3
57.5°	847.1	317.8	341.3	338.0	310.9	309.4	302.2	307.3	326.2	333.0
60°	843.8	289.5	306.6	304.0	286.6	293.5	291.6	294.2	300.7	302.9
62.5°	818.4	267.0	275.3	271.7	264.9	276.8	281.2	275.7	280.7	283.3
65°	753.8	248.9	244.9	242.3	245.2	256.1	264.9	253.9	258.6	265.9
67.5°	647.2	224.2	213.3	216.2	225.3	231.0	242.3	230.0	234.0	246.3
70°	523.5	193.0	183.2	191.6	200.3	212.2	214.0	205.7	215.1	228.9
72.5°	370.3	161.4	154.6	171.6	174.5	190.0	186.1	182.1	195.2	199.9
75°	256.9	130.3	126.3	139.3	149.9	163.3	160.3	165.0	192.6	194.7
77.5°	162.6	101.2	98.7	107.0	121.6	136.4	141.1	194.7	329.0	342.0
80°	94.3	75.4	72.6	79.1	91.7	105.6	136.0	239.0	216.9	214.4
82.5°	52.6	51.9	48.3	50.0	61.3	76.2	192.3	168.3	136.7	141.1
85°	24.7	30.4	26.1	25.0	34.4	89.3	128.4	96.1	63.9	62.4
87.5°	6.6	5.8	5.8	6.6	14.6	76.9	51.1	41.0	24.3	23.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)