

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: P959438

Luminaire Tested: **NAV-SB1A-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959438
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3523.9 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G0

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

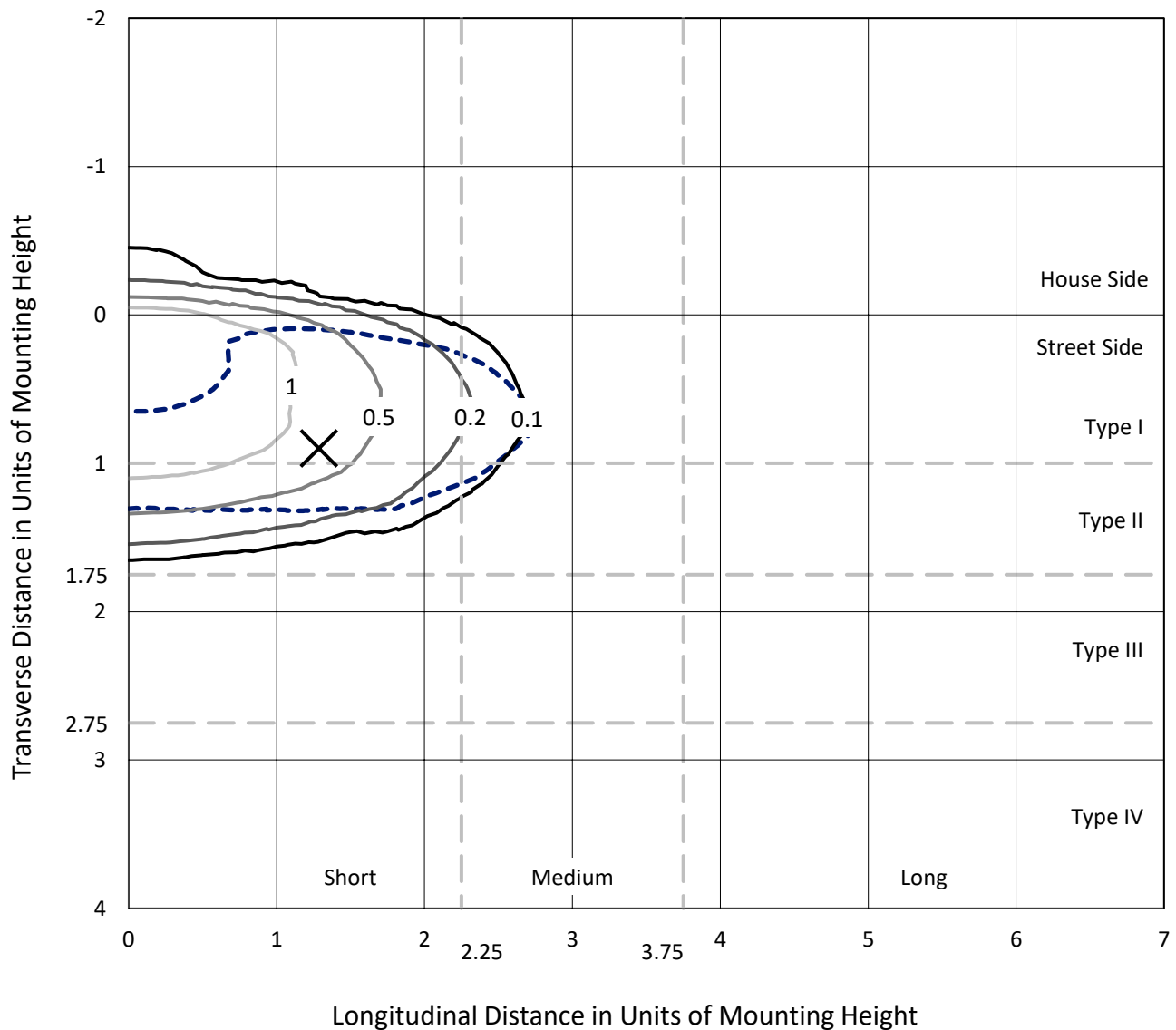


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Iso-Footcandle Lines of Horizontal Illumination

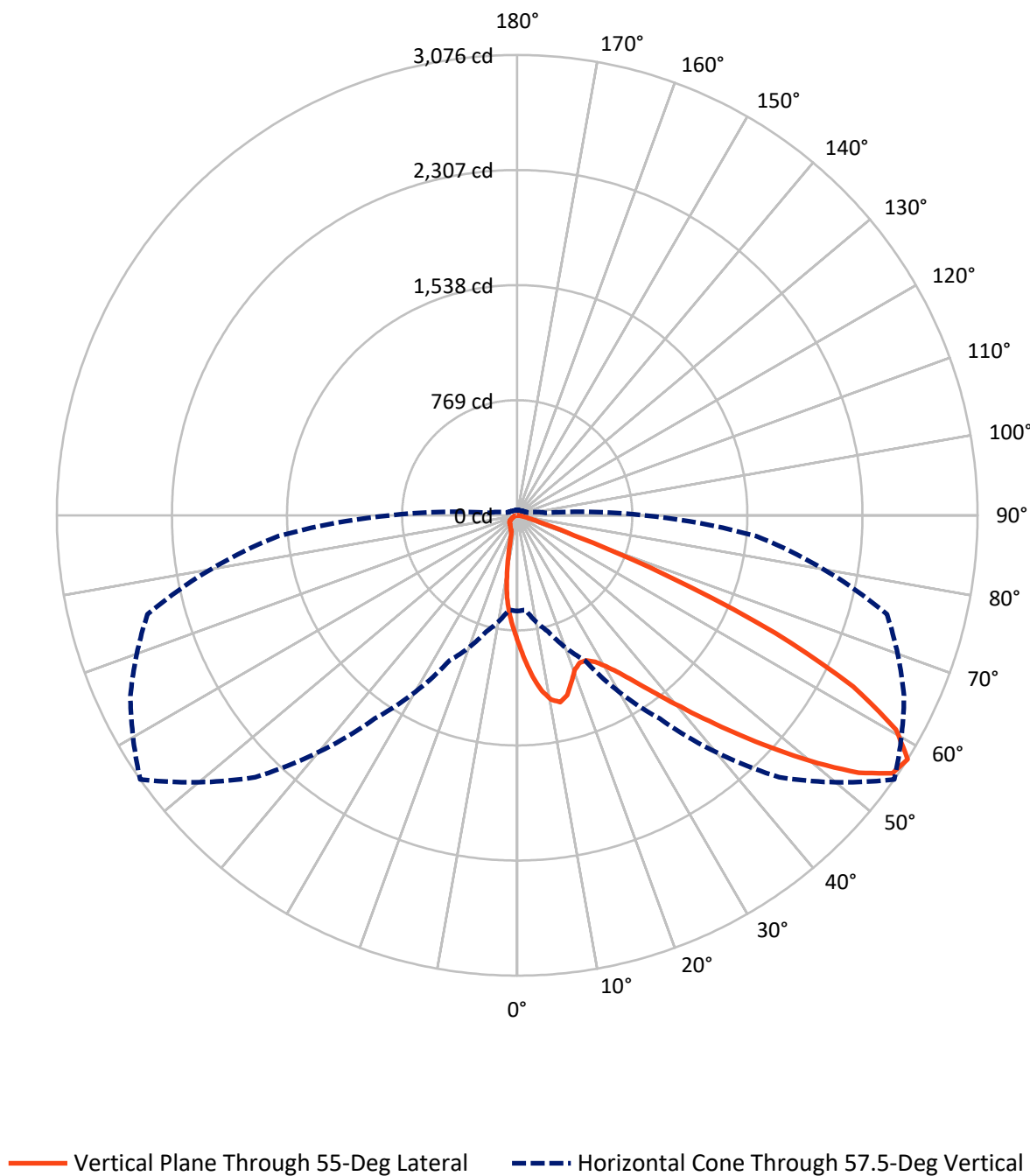
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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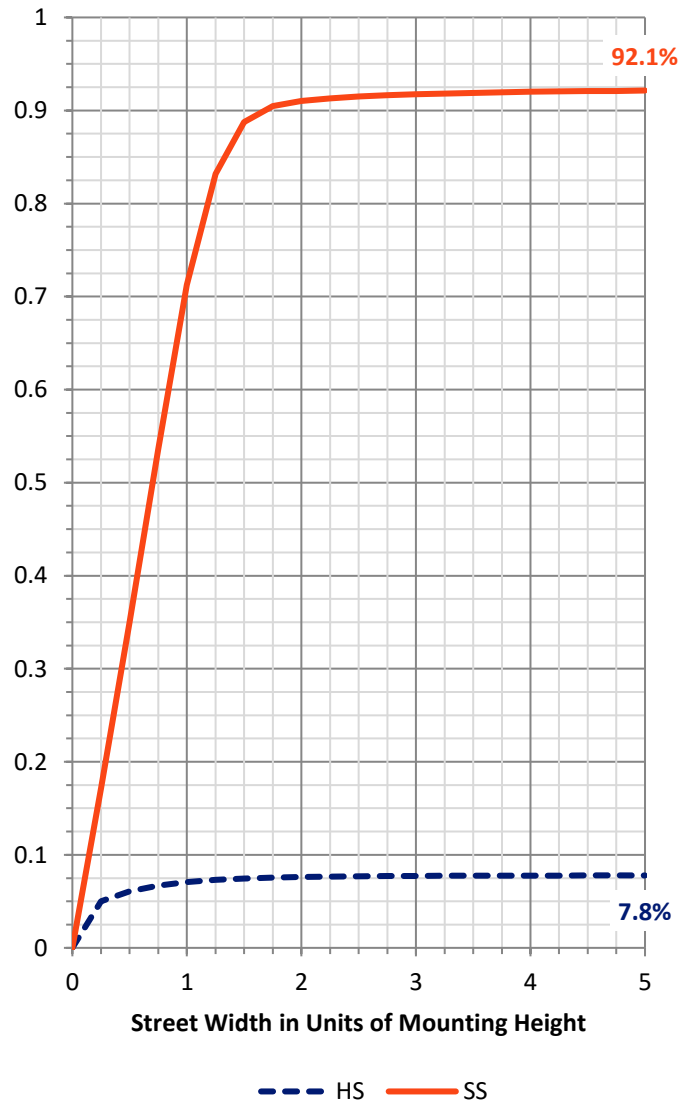
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	275.2	0.0	275.2
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	3248.7	0.0	3248.7
	% Fixture	92.2	0.0	92.2
Total	Lumens	3523.9	0.0	3523.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	2.2
10°-20°	190.9	5.4
20°-30°	305.4	8.7
30°-40°	516.8	14.7
40°-50°	848.5	24.1
50°-60°	932.6	26.5
60°-70°	535.0	15.2
70°-80°	109.3	3.1
80°-90°	6.4	0.2
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°	3523.9	100.0
0°-180°	3523.9	100.0

Coefficient of Utilization



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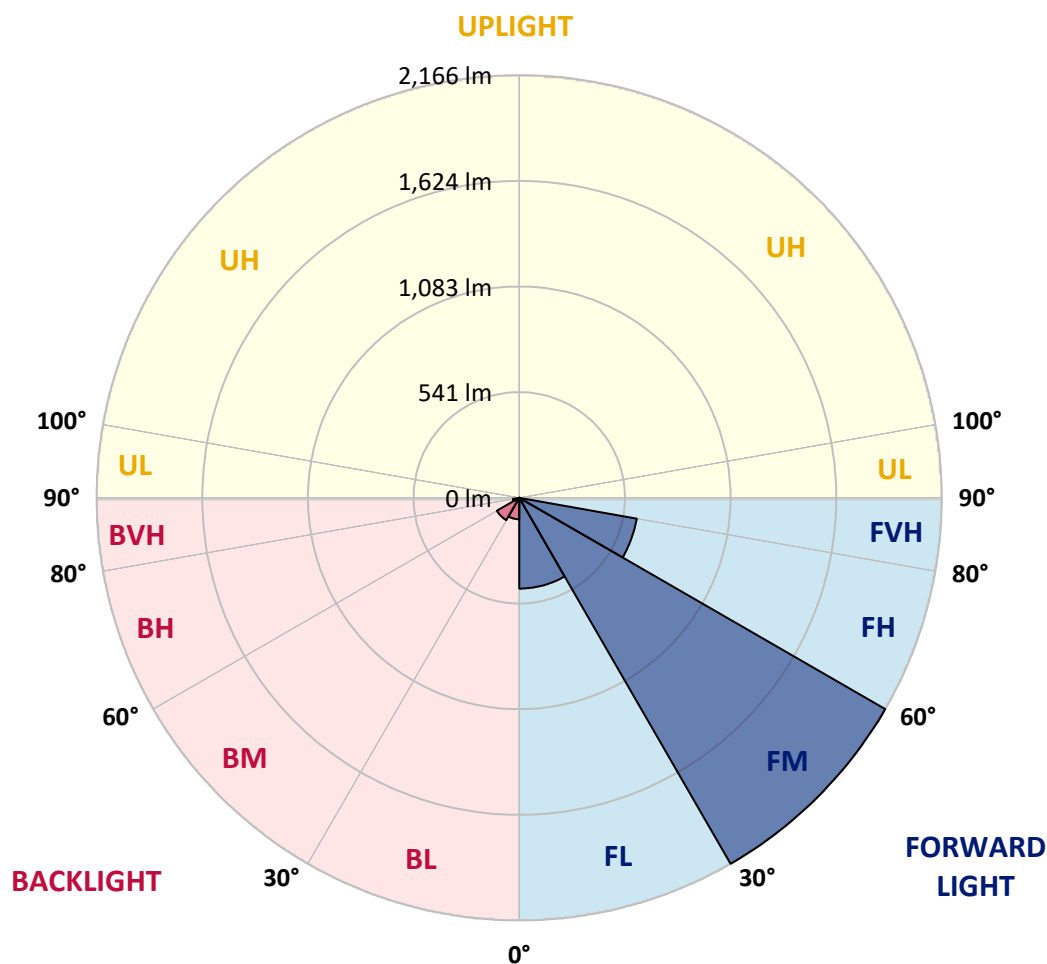
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	465.4	13.2			
FM	(30°-60°)	2165.8	61.5			
FH	(60°-80°)	611.5	17.4			G0/660
FVH	(80°-90°)	6.0	0.2			G0/10
BL	(0°-30°)	109.9	3.1	B0/110		
BM	(30°-60°)	132.2	3.8	B0/220		
BH	(60°-80°)	32.7	0.9	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2
2.5°	1053.7	1040.4	1038.4	1035.9	1010.6	991.7	964.3	934.4	900.7	866.3	851.2
5°	1217.3	1206.8	1204.9	1192.7	1164.1	1131.9	1083.2	1021.7	958.9	885.1	853.3
7.5°	1249.0	1247.0	1255.9	1255.5	1251.6	1226.2	1185.1	1111.9	1017.6	908.0	859.0
10°	1107.5	1112.5	1139.1	1162.4	1225.1	1261.6	1252.7	1192.3	1078.0	934.4	865.3
12.5°	978.7	972.8	991.7	1018.0	1091.0	1199.7	1280.7	1259.4	1147.1	964.1	874.6
15°	897.9	895.4	906.1	918.3	974.0	1083.4	1248.1	1313.9	1213.6	999.4	888.8
17.5°	872.0	870.0	873.3	876.4	912.5	997.1	1170.6	1347.5	1277.3	1039.6	904.4
20°	893.1	890.5	890.0	887.6	902.6	960.4	1100.3	1349.8	1334.4	1076.0	917.9
22.5°	954.6	951.5	940.8	931.3	932.6	965.4	1069.1	1325.9	1377.4	1110.2	926.3
25°	1066.0	1061.1	1038.8	1006.8	986.3	1000.2	1073.9	1294.4	1418.5	1136.9	922.2
27.5°	1205.5	1199.0	1170.6	1122.8	1076.0	1059.1	1108.4	1272.6	1452.6	1157.3	913.3
30°	1342.2	1333.7	1305.7	1268.5	1200.4	1146.9	1170.8	1282.3	1493.2	1178.6	901.6
32.5°	1489.7	1481.7	1444.5	1398.5	1342.0	1270.1	1256.1	1329.0	1543.0	1208.4	893.3
35°	1676.4	1663.8	1611.0	1548.3	1488.2	1415.4	1371.8	1409.6	1609.2	1253.8	897.9
37.5°	1889.0	1872.0	1815.1	1728.4	1650.1	1568.7	1512.6	1520.4	1706.4	1314.7	911.9
40°	2089.3	2073.9	2021.3	1939.6	1841.3	1742.5	1682.7	1665.3	1840.5	1388.8	936.7
42.5°	2209.5	2195.5	2173.4	2138.9	2056.0	1955.2	1879.8	1842.2	1999.1	1477.3	967.0
45°	2216.2	2204.1	2233.8	2274.0	2257.7	2190.5	2098.6	2029.7	2158.3	1560.6	998.2
47.5°	2108.4	2100.1	2190.5	2331.0	2400.9	2429.1	2344.4	2201.6	2289.8	1620.3	1011.1
50°	1814.7	1811.6	1997.6	2255.3	2455.4	2638.1	2603.6	2361.6	2391.7	1651.2	998.9
52.5°	1573.4	1562.3	1670.7	2013.2	2376.2	2748.1	2857.0	2518.4	2463.1	1657.1	970.5
55°	1193.4	1183.6	1319.6	1608.2	2120.3	2709.0	3042.3	2680.3	2514.1	1642.0	919.3
57.5°	640.1	634.1	806.0	1070.4	1657.5	2474.4	3075.8	2851.5	2557.1	1602.3	847.9
60°	249.3	248.2	312.4	519.4	1007.4	2013.0	2907.0	2954.4	2584.0	1553.4	788.1
62.5°	150.8	154.1	164.5	233.2	445.1	1250.5	2517.8	2837.4	2602.1	1508.7	738.8
65°	124.7	124.9	126.3	160.1	213.2	523.3	1895.4	2452.8	2557.6	1429.0	668.8
67.5°	106.9	108.9	113.9	127.1	150.4	229.5	1091.2	1900.0	2286.6	1243.3	559.8
70°	84.4	86.9	93.2	104.6	116.0	143.6	403.3	1264.2	1746.8	937.2	423.3
72.5°	71.0	70.8	74.1	85.0	92.1	101.1	155.2	708.4	1015.2	447.4	209.5
75°	54.9	57.2	61.3	71.0	75.4	73.2	84.0	258.8	363.8	135.6	71.2
77.5°	43.0	44.8	48.5	58.0	62.3	52.0	48.5	92.6	117.0	48.7	32.2
80°	19.4	20.9	33.0	42.8	50.8	35.9	26.3	47.4	52.0	22.1	16.3
82.5°	3.5	5.8	19.4	22.5	26.0	23.3	13.7	24.6	25.4	8.9	5.6
85°	0.2	0.4	6.8	8.3	10.5	7.6	4.1	9.7	8.5	3.1	2.2
87.5°	0.0	0.0	0.0	0.2	0.2	1.1	1.3	1.7	1.3	1.1	0.8
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°	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2	849.2
2.5°	835.5	804.6	774.7	750.1	735.7	711.5	695.4	692.7	686.0	691.9
5°	819.4	764.2	708.4	658.4	617.4	564.3	524.8	508.0	493.4	498.5
7.5°	811.8	724.7	637.8	552.4	464.5	379.9	316.8	290.5	270.5	273.4
10°	801.6	683.6	547.3	417.0	299.4	215.8	172.3	156.2	147.3	147.5
12.5°	793.8	634.5	442.4	282.7	182.3	137.8	124.3	120.3	117.8	118.0
15°	789.9	576.7	338.8	188.4	130.4	116.6	113.5	111.7	110.0	109.8
17.5°	783.3	512.4	247.9	137.6	114.1	109.3	106.5	104.6	102.3	101.9
20°	773.6	439.4	181.2	116.2	106.9	103.2	99.3	96.7	94.1	93.7
22.5°	755.5	362.2	139.3	107.5	101.7	97.6	92.8	89.8	87.1	86.7
25°	722.1	289.9	117.4	102.1	97.2	92.1	86.9	82.8	80.4	79.9
27.5°	679.7	227.8	106.5	97.2	91.2	86.7	80.9	76.9	74.7	74.3
30°	629.8	175.4	100.1	91.4	84.4	80.4	75.1	72.0	70.6	70.6
32.5°	575.8	140.1	97.6	85.8	78.2	73.9	69.8	68.5	68.1	67.8
35°	525.2	121.7	96.2	81.3	72.8	68.7	66.9	67.1	68.1	68.1
37.5°	480.2	115.8	95.6	78.0	68.1	64.4	65.4	67.3	66.5	66.5
40°	439.6	116.4	95.2	75.6	64.1	61.9	64.1	62.6	60.4	60.2
42.5°	408.5	121.9	94.3	73.7	61.7	60.2	59.3	56.9	56.7	57.2
45°	385.9	126.7	94.1	72.8	59.1	56.3	55.1	52.8	57.2	58.2
47.5°	359.2	126.7	94.1	69.8	54.7	53.7	52.0	49.3	53.7	54.7
50°	324.6	118.6	90.4	66.3	51.2	50.6	47.6	44.3	43.5	44.1
52.5°	281.0	104.0	81.1	61.5	47.8	46.5	42.8	40.4	39.8	39.8
55°	231.2	87.1	68.5	54.5	44.1	41.7	39.2	38.0	37.4	36.9
57.5°	188.0	71.4	54.9	48.5	40.6	37.6	36.7	35.5	34.3	33.7
60°	154.3	56.3	45.4	43.0	37.2	34.3	34.1	32.4	29.5	29.1
62.5°	119.1	41.3	38.2	37.4	33.7	31.3	30.9	27.4	23.1	22.1
65°	84.0	32.2	30.9	32.8	30.0	27.8	26.8	21.5	16.9	16.3
67.5°	59.1	27.0	24.3	28.7	26.0	23.3	22.5	18.2	14.1	13.7
70°	42.1	21.9	20.0	24.6	20.9	20.4	19.2	15.2	11.5	11.1
72.5°	29.7	16.7	15.5	21.3	14.3	17.6	15.7	11.7	8.7	8.3
75°	21.9	12.0	10.9	12.4	10.5	13.2	11.1	7.8	5.4	5.2
77.5°	16.1	7.6	6.6	6.0	6.0	8.3	6.0	3.3	2.4	2.2
80°	11.3	3.5	3.1	2.6	2.4	1.9	0.8	0.4	0.2	0.2
82.5°	6.8	1.5	1.5	1.1	0.6	0.0	0.0	0.0	0.0	0.0
85°	1.5	0.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.2	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

(END OF REPORT)