

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: P959439

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959439
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-SB1A-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

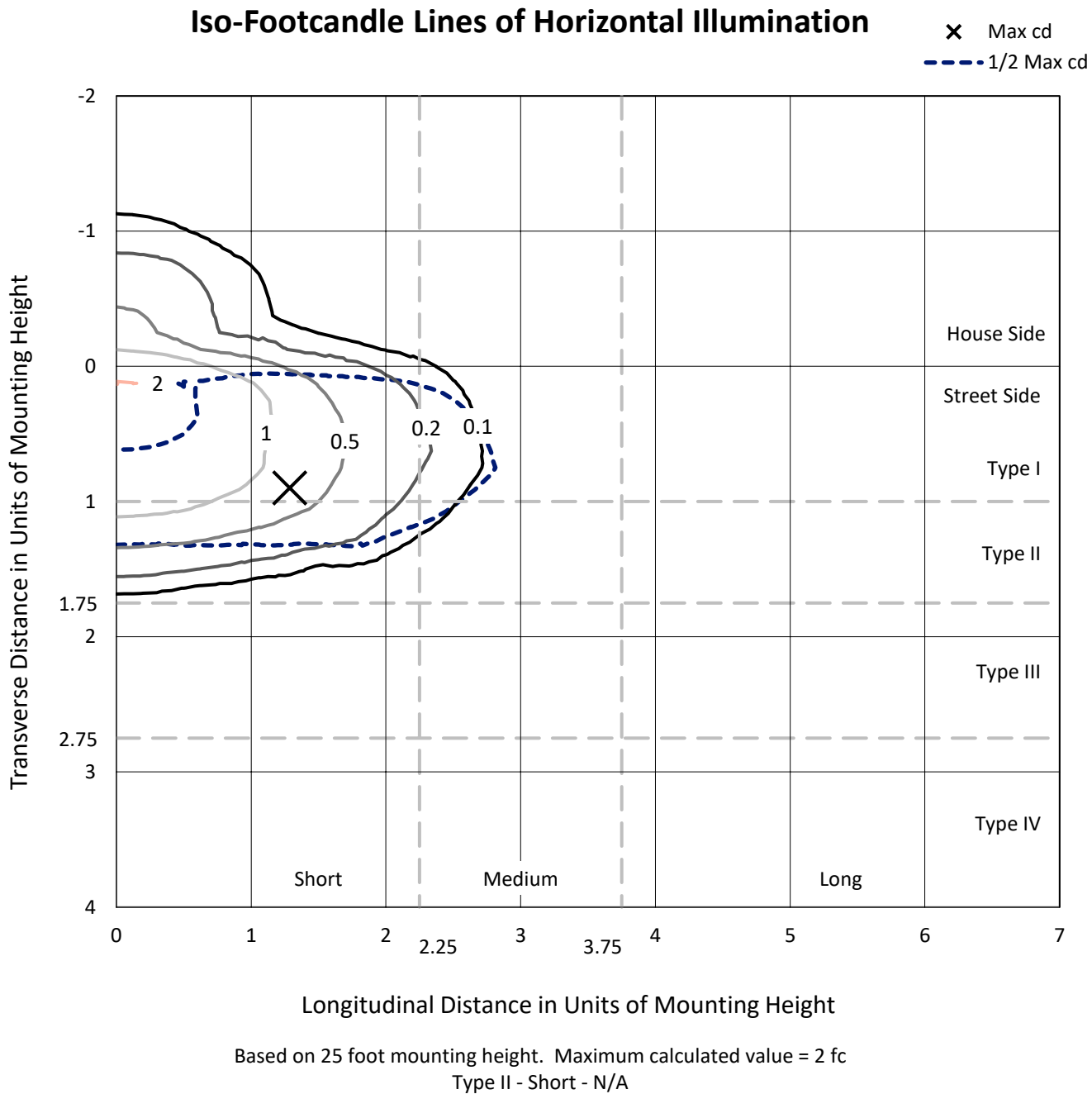
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4203.5 lumens
Efficiency: N/A
Efficacy: 136.0 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): 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

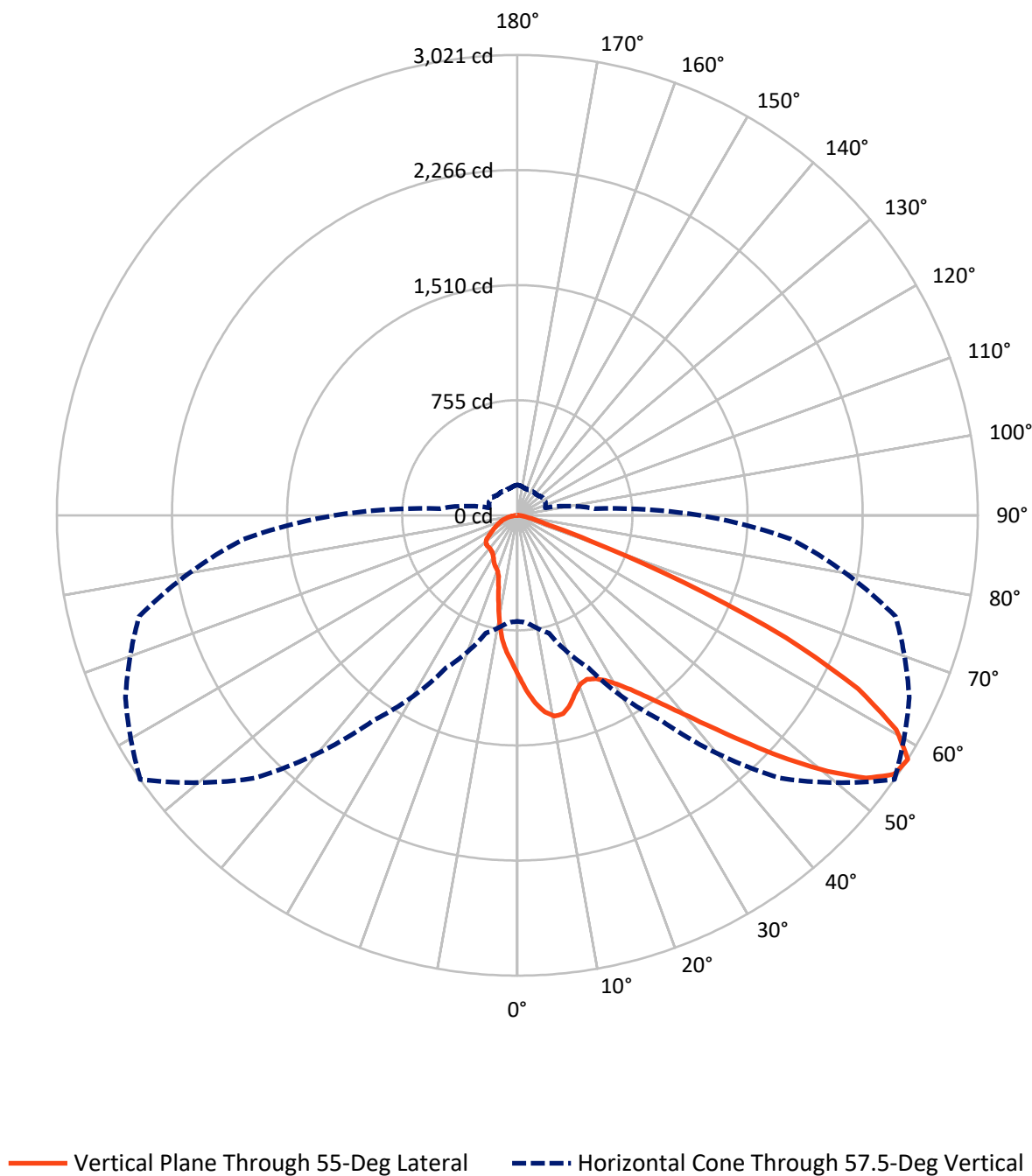


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Luminous Intensity Polar Plot



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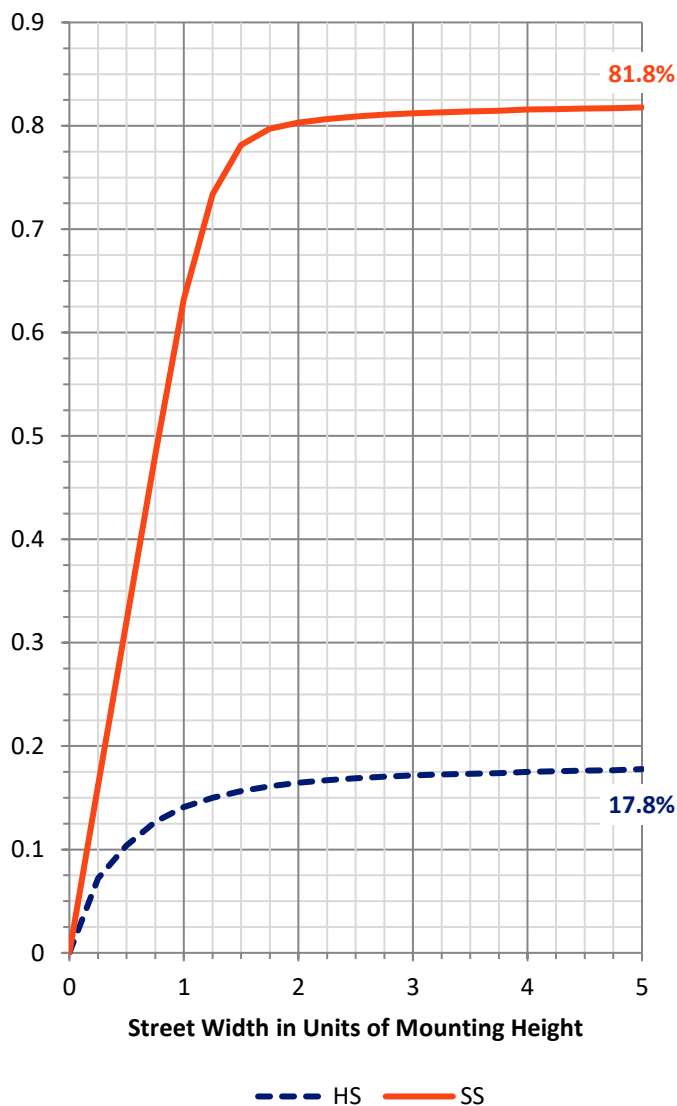
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	760.6	0.0	760.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3442.9	0.0	3442.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	4203.5	0.0	4203.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	2.3
10°-20°	246.7	5.9
20°-30°	393.6	9.4
30°-40°	623.2	14.8
40°-50°	953.9	22.7
50°-60°	1021.8	24.3
60°-70°	642.8	15.3
70°-80°	190.1	4.5
80°-90°	33.6	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°	4203.5	100.0
0°-180°	4203.5	100.0

Coefficient of Utilization



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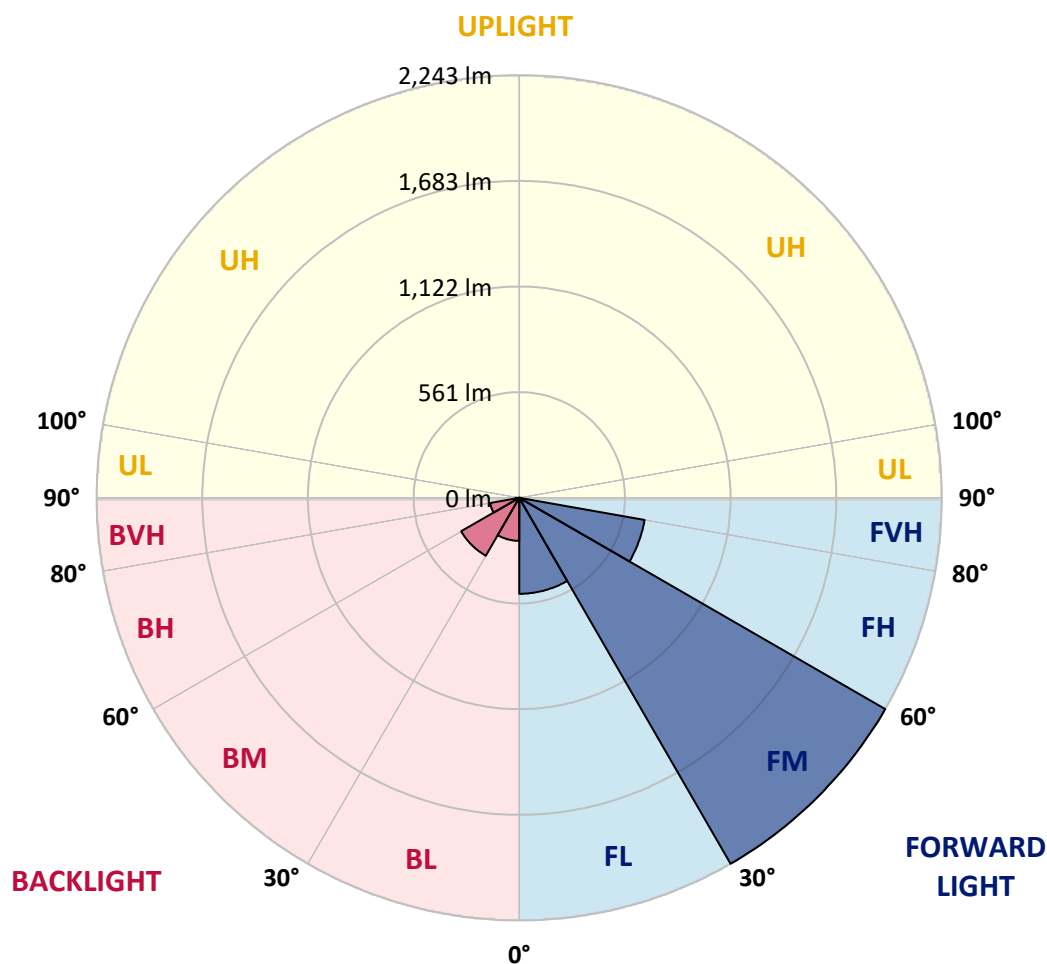
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	509.5	12.1			
FM	(30°-60°)	2243.5	53.4			
FH	(60°-80°)	675.8	16.1			G1/1800
FVH	(80°-90°)	14.2	0.3			G1/100
BL	(0°-30°)	228.6	5.4	B1/500		
BM	(30°-60°)	355.5	8.5	B1/1000		
BH	(60°-80°)	157.1	3.7	B1/500		G1/500
BVH	(80°-90°)	19.4	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°	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3
2.5°	1208.4	1207.6	1212.4	1196.1	1185.0	1169.9	1150.2	1124.9	1097.8	1069.2	1056.8
5°	1317.3	1309.6	1314.7	1302.5	1290.4	1267.7	1238.4	1197.3	1147.2	1090.0	1059.5
7.5°	1300.1	1294.9	1307.7	1318.6	1327.7	1324.9	1303.4	1260.3	1195.6	1112.6	1068.5
10°	1161.7	1155.8	1173.8	1211.4	1266.7	1314.7	1340.8	1314.0	1245.2	1137.3	1077.2
12.5°	1039.6	1036.8	1048.7	1079.1	1140.4	1232.6	1336.0	1361.0	1296.6	1166.7	1088.9
15°	987.4	983.9	991.6	1007.0	1046.1	1131.9	1292.5	1393.1	1347.3	1200.6	1107.6
17.5°	975.9	972.0	975.3	983.3	1008.5	1073.9	1226.9	1409.0	1400.0	1238.4	1123.2
20°	997.2	993.9	994.4	993.9	1011.6	1063.4	1181.2	1402.9	1446.2	1273.2	1138.5
22.5°	1048.7	1043.2	1043.4	1032.0	1041.5	1081.7	1169.3	1386.6	1487.2	1303.6	1149.9
25°	1132.6	1122.8	1124.7	1095.4	1092.9	1122.6	1188.0	1374.0	1528.1	1327.9	1152.1
27.5°	1247.3	1236.3	1230.4	1186.6	1165.8	1180.6	1226.0	1378.3	1566.7	1349.0	1146.7
30°	1390.7	1377.3	1365.3	1303.4	1265.6	1260.1	1285.1	1407.0	1612.4	1371.1	1137.3
32.5°	1566.5	1550.9	1529.2	1447.0	1393.8	1365.3	1361.6	1458.1	1665.8	1399.4	1132.6
35°	1775.8	1755.4	1724.6	1618.3	1550.9	1492.6	1462.5	1531.8	1739.1	1442.1	1138.1
37.5°	1991.4	1968.3	1940.1	1813.6	1730.8	1645.0	1585.5	1631.7	1836.6	1499.8	1152.4
40°	2190.2	2164.3	2138.0	2025.5	1936.6	1833.2	1736.0	1758.2	1955.9	1569.0	1176.7
42.5°	2307.6	2288.4	2278.4	2217.6	2148.9	2044.0	1923.3	1908.1	2090.0	1648.5	1204.5
45°	2302.4	2294.5	2325.3	2350.5	2334.2	2276.0	2142.9	2074.0	2224.6	1717.4	1230.1
47.5°	2179.4	2184.6	2253.5	2395.1	2457.4	2487.9	2392.8	2236.7	2341.4	1768.8	1241.7
50°	1844.7	1849.0	2008.5	2314.0	2489.2	2660.7	2640.7	2395.5	2432.0	1800.3	1239.0
52.5°	1579.8	1582.6	1651.1	2073.7	2384.5	2747.6	2864.1	2545.3	2498.3	1809.0	1224.5
55°	1189.9	1199.8	1276.4	1627.0	2112.0	2678.7	3000.1	2699.5	2540.3	1809.9	1209.3
57.5°	695.2	705.8	800.5	1104.3	1641.5	2438.6	3020.8	2836.5	2568.8	1803.0	1200.2
60°	340.5	345.1	386.3	580.5	1012.2	1975.9	2854.7	2902.7	2584.6	1799.3	1199.8
62.5°	229.5	228.8	230.5	286.4	498.7	1269.5	2508.8	2786.7	2576.1	1785.1	1195.4
65°	197.3	195.0	188.4	201.0	258.4	580.7	1938.4	2440.3	2511.6	1749.7	1165.6
67.5°	170.6	170.8	171.0	167.1	184.5	267.9	1184.5	1922.3	2279.9	1582.0	1050.8
70°	141.2	143.2	144.1	144.1	150.4	175.8	505.6	1317.5	1798.4	1240.4	846.4
72.5°	128.6	124.5	124.9	122.8	122.8	133.9	203.6	746.9	1133.0	697.7	516.5
75°	105.0	107.5	108.0	106.5	101.5	102.1	120.8	313.3	484.8	289.5	255.3
77.5°	90.6	90.6	91.5	90.4	86.5	76.5	80.7	121.5	164.9	118.7	127.5
80°	72.8	72.6	76.3	78.4	72.4	56.5	51.5	67.1	73.2	52.2	66.3
82.5°	35.5	37.6	52.4	59.8	54.9	40.9	31.5	41.7	39.2	23.1	29.7
85°	20.6	19.6	23.5	33.2	31.5	22.5	15.2	21.7	20.4	11.7	12.0
87.5°	6.6	6.0	4.8	11.3	9.1	6.3	4.1	6.3	5.6	2.6	2.6
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°	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3	1053.3
2.5°	1041.3	1015.7	990.3	967.0	952.8	943.7	934.6	924.4	920.4	914.6
5°	1030.8	981.3	937.3	899.2	864.7	837.5	810.1	787.9	778.0	784.6
7.5°	1024.8	953.0	885.1	815.3	748.1	694.5	647.8	615.0	600.2	603.9
10°	1019.4	921.2	817.5	707.4	610.8	544.4	496.5	471.5	462.2	464.1
12.5°	1014.3	885.3	736.1	591.0	488.5	444.6	430.9	431.1	432.9	434.2
15°	1013.5	842.0	644.9	489.3	422.4	419.6	434.4	443.7	448.7	450.3
17.5°	1012.2	790.4	552.2	420.0	406.3	425.5	439.2	445.3	449.2	449.4
20°	1007.0	724.7	466.6	387.0	402.9	419.4	427.8	432.7	435.9	437.0
22.5°	990.9	651.7	399.9	372.3	389.0	402.2	412.3	417.7	419.6	420.9
25°	962.0	570.0	353.7	358.1	369.6	386.3	394.4	395.4	394.8	396.8
27.5°	924.1	482.4	325.1	339.0	353.7	368.1	372.5	371.8	370.5	372.7
30°	878.5	403.7	306.8	317.4	337.7	350.8	354.6	353.1	350.5	352.9
32.5°	830.4	339.4	291.8	302.5	324.4	337.2	341.1	339.7	337.7	339.7
35°	785.4	294.5	278.0	292.5	314.0	326.6	331.6	331.8	331.8	334.3
37.5°	744.0	268.1	266.4	286.2	306.8	318.2	325.3	325.7	316.4	317.0
40°	705.8	257.1	261.2	282.1	299.9	310.8	311.2	286.8	269.7	269.3
42.5°	674.6	254.9	262.7	281.7	294.9	295.3	264.7	245.8	241.0	241.2
45°	645.1	254.2	266.2	281.7	287.5	255.1	234.5	229.5	229.9	231.6
47.5°	612.3	251.6	266.8	277.7	266.2	226.8	220.8	218.6	217.7	218.2
50°	576.5	242.3	258.6	269.9	229.7	214.7	207.0	206.4	207.6	208.2
52.5°	538.7	227.0	244.5	255.7	213.0	204.1	195.6	197.1	201.9	203.4
55°	513.9	209.3	225.8	227.6	201.2	194.0	186.9	190.3	199.3	202.1
57.5°	507.4	190.3	204.5	202.5	186.2	185.3	181.0	184.1	195.4	199.5
60°	505.4	173.4	183.6	182.1	171.7	175.8	174.8	176.2	180.2	181.4
62.5°	490.3	159.9	164.9	162.8	158.7	165.8	168.4	165.1	168.2	169.7
65°	451.5	149.0	146.7	145.1	146.9	153.4	158.7	152.1	155.0	159.3
67.5°	387.7	134.3	127.8	129.6	135.0	138.4	145.1	137.8	140.1	147.5
70°	313.5	115.6	109.8	114.7	119.9	127.1	128.2	123.2	128.8	137.1
72.5°	221.9	96.7	92.6	102.8	104.6	113.9	111.5	109.1	117.0	119.7
75°	153.9	78.0	75.6	83.4	89.8	97.8	96.0	98.9	115.4	116.6
77.5°	97.4	60.6	59.1	64.1	72.8	81.7	84.6	116.6	197.1	204.9
80°	56.5	45.2	43.5	47.4	54.9	63.2	81.5	143.2	130.0	128.4
82.5°	31.5	31.1	28.9	30.0	36.7	45.6	115.2	100.9	81.9	84.6
85°	14.8	18.2	15.7	15.0	20.6	53.5	76.9	57.6	38.2	37.4
87.5°	3.9	3.5	3.5	3.9	8.7	46.0	30.6	24.6	14.6	14.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)