

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: P962130

Luminaire Tested: **NAV-SB2B-835-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962130
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-SB2B-835-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 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: 8247.1 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

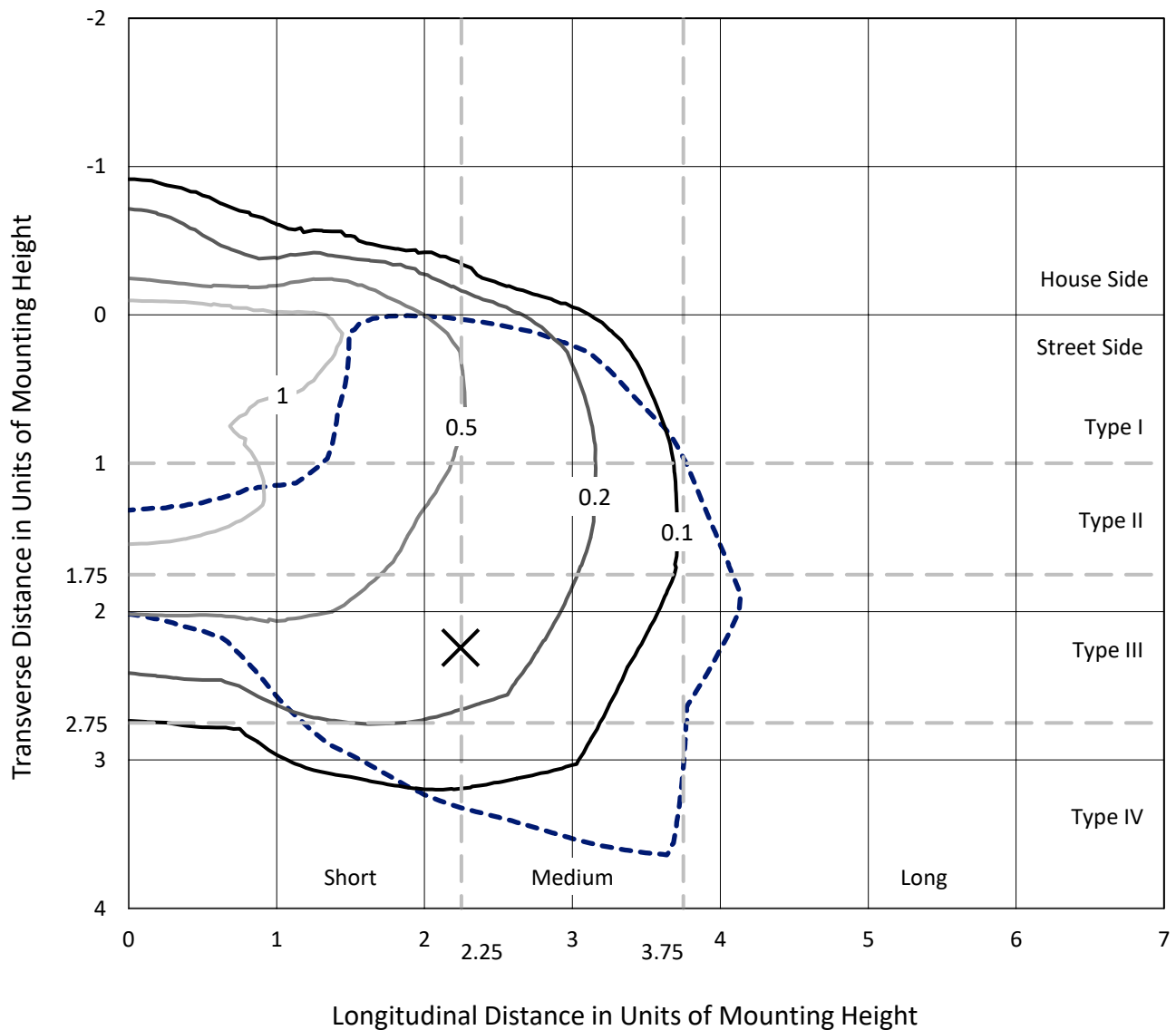
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

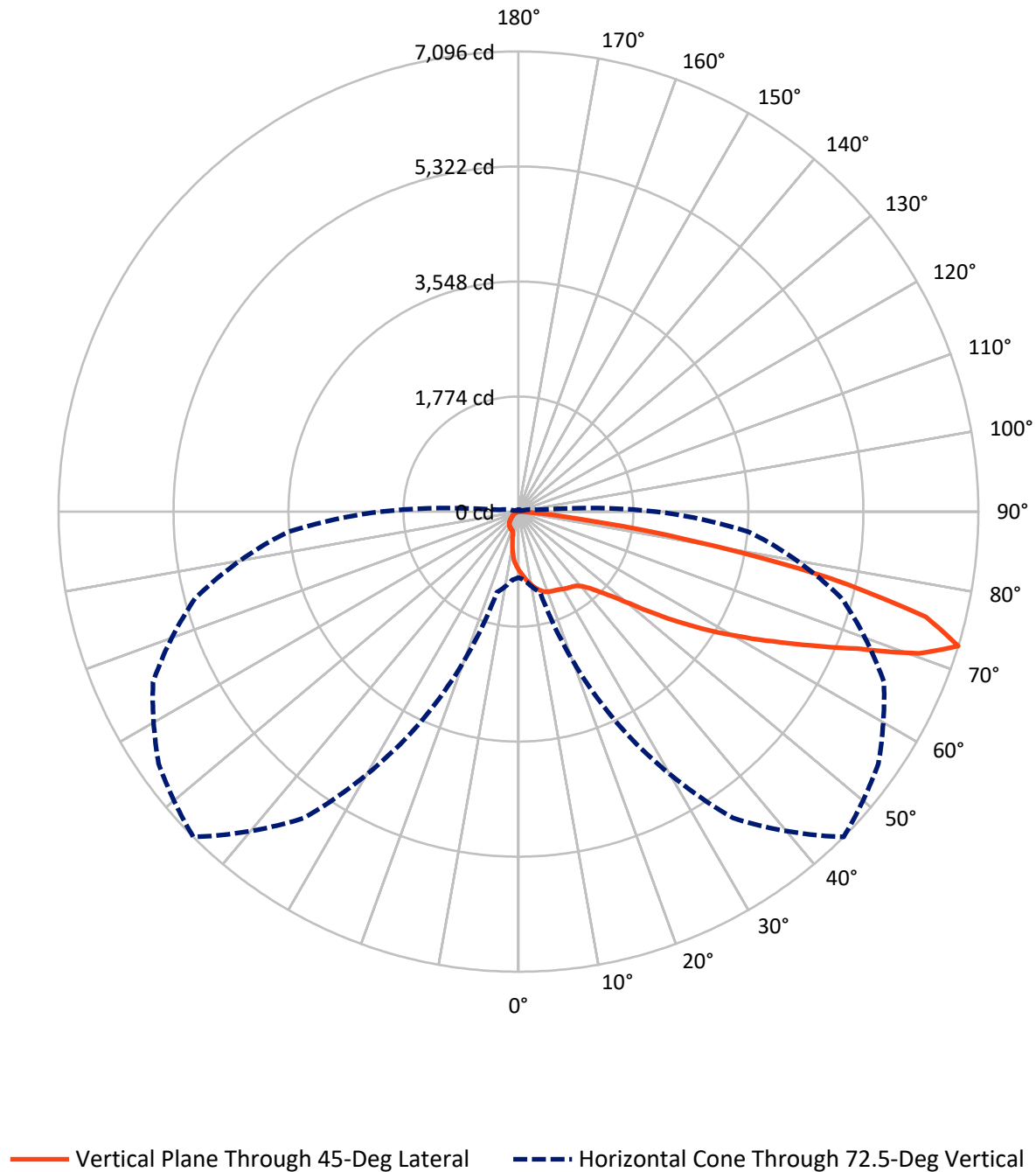
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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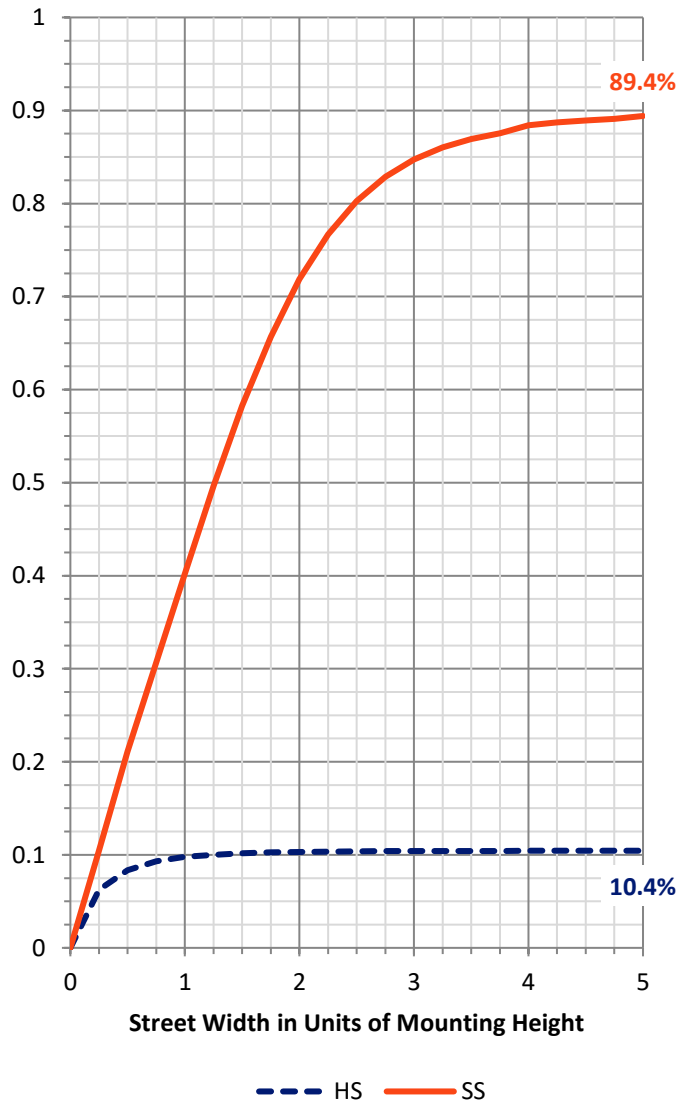
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	866.5	0.0	866.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	7380.6	0.0	7380.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	8247.1	0.0	8247.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.1	1.0
10°-20°	248.8	3.0
20°-30°	408.6	5.0
30°-40°	579.4	7.0
40°-50°	957.7	11.6
50°-60°	1720.4	20.9
60°-70°	2388.9	29.0
70°-80°	1732.9	21.0
80°-90°	125.3	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°	8247.1	100.0
0°-180°	8247.1	100.0

Coefficient of Utilization



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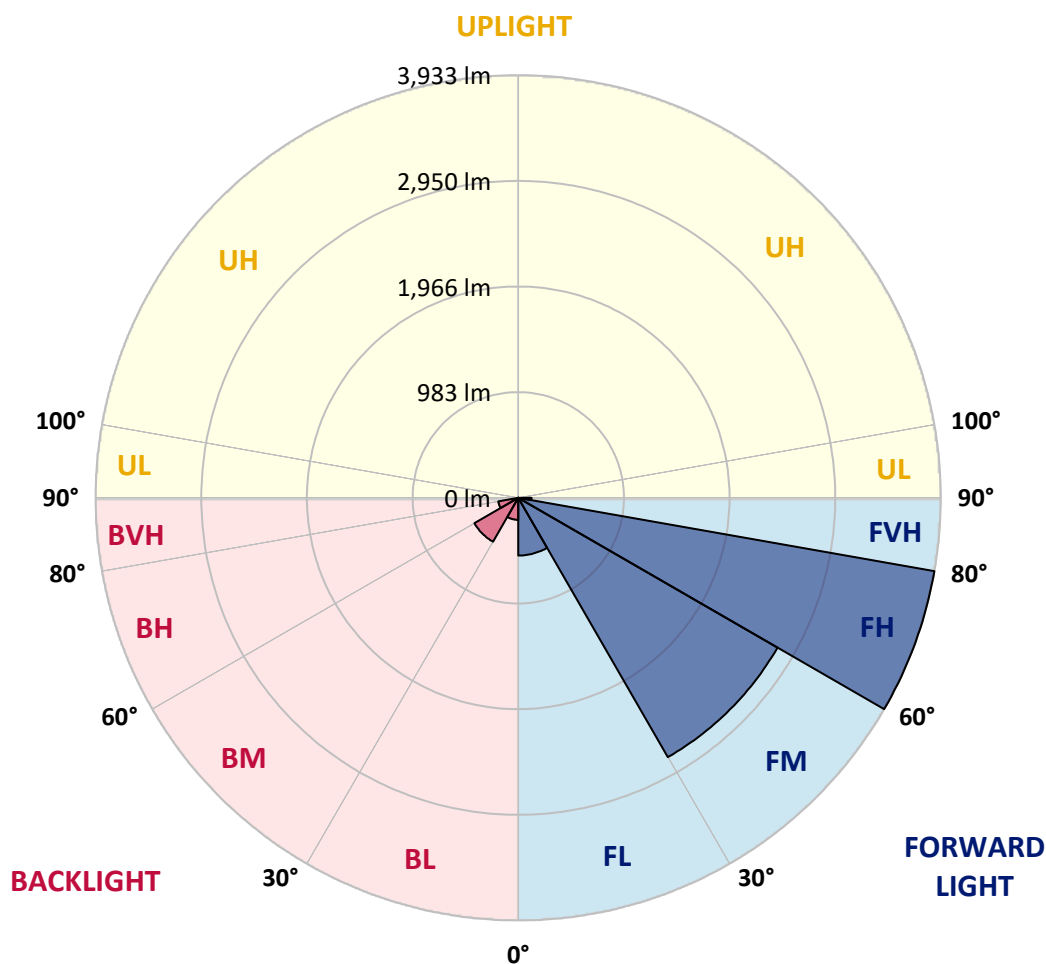
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	537.2	6.5			
FM	(30°-60°)	2786.3	33.8			
FH	(60°-80°)	3932.8	47.7			G2/5000
FVH	(80°-90°)	124.2	1.5			G2/225
BL	(0°-30°)	205.3	2.5	B1/500		
BM	(30°-60°)	471.3	5.7	B1/1000		
BH	(60°-80°)	189.0	2.3	B1/500		G1/500
BVH	(80°-90°)	1.0	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5
2.5°	986.8	988.5	987.4	980.6	969.3	963.2	959.8	948.5	941.3	928.2	914.7
5°	1077.5	1084.1	1080.2	1066.7	1045.4	1030.1	1025.6	1002.6	981.7	957.6	929.4
7.5°	1173.7	1177.1	1169.7	1152.3	1123.6	1097.7	1093.8	1061.7	1028.5	991.3	953.0
10°	1257.1	1261.0	1249.7	1224.4	1191.7	1159.6	1153.9	1118.5	1079.1	1033.5	984.5
12.5°	1326.9	1330.8	1316.1	1285.8	1249.7	1216.5	1210.8	1173.7	1130.4	1079.7	1018.8
15°	1379.8	1387.0	1367.4	1334.7	1295.8	1262.6	1259.8	1223.2	1181.0	1124.7	1060.0
17.5°	1410.7	1418.0	1399.4	1360.1	1326.9	1298.7	1295.3	1264.8	1225.5	1171.5	1099.9
20°	1415.7	1422.5	1402.8	1368.5	1340.9	1318.4	1316.7	1294.7	1266.0	1214.2	1143.3
22.5°	1400.6	1409.0	1391.0	1363.4	1344.3	1332.4	1330.1	1317.8	1301.4	1257.6	1183.9
25°	1384.8	1391.5	1378.0	1353.8	1343.7	1342.5	1344.3	1342.0	1338.6	1301.4	1231.1
27.5°	1383.6	1391.0	1375.8	1352.7	1347.1	1358.9	1360.6	1371.2	1374.1	1341.4	1276.7
30°	1393.3	1398.3	1383.6	1359.5	1356.7	1383.6	1384.3	1403.3	1407.8	1375.2	1321.7
32.5°	1414.1	1419.7	1405.1	1369.6	1365.6	1403.3	1405.1	1430.4	1437.7	1411.2	1369.0
35°	1463.1	1469.7	1452.9	1397.7	1383.6	1422.0	1427.0	1456.8	1471.5	1449.6	1418.0
37.5°	1585.2	1565.5	1542.4	1454.6	1424.7	1451.2	1459.7	1494.6	1520.5	1495.2	1476.5
40°	1888.6	1826.7	1754.6	1551.4	1496.8	1513.7	1520.5	1555.3	1590.8	1566.1	1557.1
42.5°	2344.0	2270.8	2154.9	1774.4	1605.5	1613.9	1619.0	1649.3	1699.4	1679.8	1682.0
45°	2749.9	2723.4	2605.2	2154.9	1808.7	1767.0	1773.2	1788.9	1862.7	1855.4	1870.0
47.5°	3061.8	3046.5	2955.4	2591.7	2152.1	1954.5	1971.9	1979.3	2085.7	2111.5	2151.0
50°	3301.5	3295.9	3214.3	2980.1	2600.7	2230.9	2237.1	2221.3	2380.6	2444.7	2519.7
52.5°	3527.8	3547.0	3486.7	3341.0	3079.7	2592.8	2591.7	2517.4	2732.4	2829.2	2957.0
55°	3732.2	3738.9	3745.1	3709.1	3561.7	3004.9	2994.2	2872.6	3140.6	3240.7	3379.2
57.5°	3924.1	3927.0	3982.1	4055.8	4063.2	3447.4	3427.6	3281.8	3586.4	3657.9	3742.9
60°	4053.1	4066.0	4182.5	4387.4	4476.9	3903.9	3893.2	3744.5	4040.1	4073.3	4057.6
62.5°	3867.3	3946.1	4239.9	4646.3	4867.6	4410.0	4404.8	4265.2	4517.5	4490.4	4355.3
65°	3130.5	3263.8	3780.6	4821.4	5251.0	4975.1	4982.4	4833.8	5007.7	4920.0	4597.4
67.5°	2189.8	2330.5	2941.9	4835.5	5679.3	5638.8	5681.1	5448.0	5528.4	5331.4	4654.8
70°	1514.2	1586.9	1984.9	4532.7	6013.2	6553.0	6551.9	6202.3	6046.4	5518.9	4362.1
72.5°	1018.3	1056.1	1289.1	3596.0	5767.7	7096.2	7063.6	6778.7	6220.8	5161.5	3563.8
75°	429.5	457.0	596.7	2020.9	4563.1	6492.2	6403.8	5990.6	5527.3	4064.3	2223.5
77.5°	136.2	148.0	235.3	723.3	2513.5	4880.0	4786.5	3741.1	3704.6	2038.9	812.8
80°	64.8	75.4	132.3	290.5	989.0	2654.1	2641.2	1697.2	1593.7	550.5	163.3
82.5°	28.2	33.2	73.2	155.4	442.5	946.8	966.0	577.6	478.0	208.9	50.1
85°	9.0	11.8	33.8	71.4	186.9	235.3	232.5	137.4	192.5	113.7	17.4
87.5°	0.0	0.0	11.3	16.3	19.2	13.5	15.2	11.8	53.5	31.6	6.1
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°	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5	903.5
2.5°	907.9	899.0	883.2	868.6	855.7	842.7	834.9	823.6	822.5	822.5	825.2
5°	914.2	899.5	871.5	841.5	807.2	774.6	741.9	710.4	700.3	693.0	696.4
7.5°	932.2	909.1	864.7	807.8	742.5	671.0	620.9	566.8	546.0	534.7	536.5
10°	958.1	926.6	859.1	759.4	653.5	556.2	484.7	426.1	403.6	394.0	394.0
12.5°	986.8	947.9	848.9	699.2	556.2	439.6	369.8	342.9	339.5	339.5	339.5
15°	1021.1	973.9	831.5	628.2	454.3	347.9	323.1	324.2	327.6	329.8	329.8
17.5°	1056.6	1001.4	803.8	548.9	364.2	313.0	313.5	315.2	318.1	320.3	320.3
20°	1094.9	1029.0	767.3	464.4	312.4	302.9	304.5	306.3	308.5	309.7	310.2
22.5°	1136.0	1054.9	724.0	381.7	295.0	294.4	295.0	296.6	299.5	299.5	300.6
25°	1179.9	1083.6	674.3	321.4	286.0	286.0	287.1	288.2	290.5	290.5	291.0
27.5°	1224.9	1110.1	622.1	289.9	278.1	277.6	277.6	279.2	280.3	280.8	281.5
30°	1274.5	1141.0	569.7	283.1	271.9	269.1	267.4	268.5	269.7	270.2	271.3
32.5°	1325.1	1170.9	523.0	286.0	265.7	260.7	255.0	253.9	253.9	256.1	257.8
35°	1381.4	1203.6	487.0	295.5	262.3	248.3	239.2	234.2	234.7	238.1	239.8
37.5°	1448.9	1242.9	460.4	304.0	260.0	234.2	219.6	213.3	209.4	213.3	212.2
40°	1537.3	1300.9	441.4	310.8	257.3	217.8	198.1	188.0	180.7	183.0	181.8
42.5°	1667.4	1392.2	434.0	311.3	251.0	198.7	176.2	162.7	152.0	152.5	150.3
45°	1849.8	1536.3	471.7	304.0	237.6	177.8	153.1	135.1	128.3	126.7	124.4
47.5°	2099.7	1746.2	558.9	288.7	217.8	157.6	130.6	115.4	110.3	107.5	105.8
50°	2434.7	2015.9	655.8	271.9	198.1	138.5	112.0	102.5	99.1	96.2	95.7
52.5°	2823.1	2289.4	735.1	255.0	178.5	121.6	100.2	94.6	91.7	89.5	89.0
55°	3179.3	2478.0	730.7	237.0	159.3	108.0	91.7	88.4	85.0	82.7	81.6
57.5°	3401.2	2504.5	602.3	217.3	137.4	97.4	83.8	81.6	77.7	74.8	74.3
60°	3503.0	2353.6	422.2	191.4	115.4	87.2	75.4	74.3	69.3	65.3	64.2
62.5°	3521.7	2073.3	281.5	159.3	96.2	77.7	67.0	65.3	58.5	51.8	48.4
65°	3446.3	1672.5	194.7	124.4	82.2	67.5	57.4	54.0	46.7	40.0	37.7
67.5°	3207.5	1174.2	135.7	89.5	69.8	53.5	45.6	44.5	38.8	33.2	31.6
70°	2770.2	669.3	90.6	67.0	55.1	36.6	36.0	37.1	31.6	27.1	24.8
72.5°	2123.9	306.3	56.3	49.0	37.7	24.8	28.7	29.3	24.2	20.3	18.0
75°	1250.3	131.2	35.5	31.6	19.2	16.3	20.8	21.4	16.3	12.9	11.3
77.5°	425.6	49.5	22.5	18.6	9.5	9.0	13.5	13.5	9.0	5.0	3.9
80°	96.9	18.6	11.3	7.3	4.5	3.9	4.5	3.9	2.3	0.5	0.0
82.5°	27.6	7.3	4.5	2.8	1.6	1.6	0.5	0.0	0.0	0.0	0.0
85°	7.9	3.4	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	0.5	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)