

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: P962087

Luminaire Tested: **NAV-SB2B-830-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962087
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7573.7 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
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



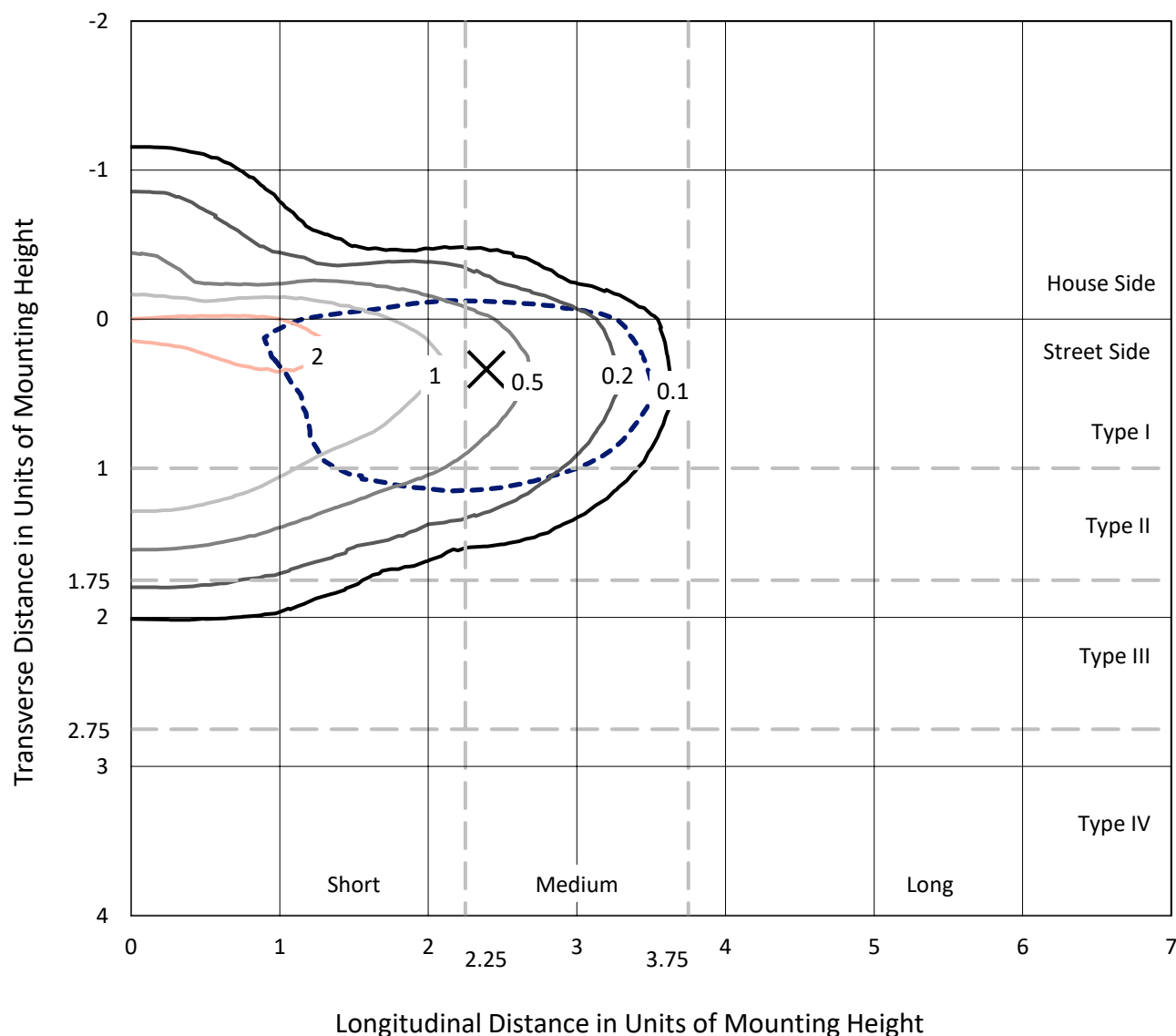
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

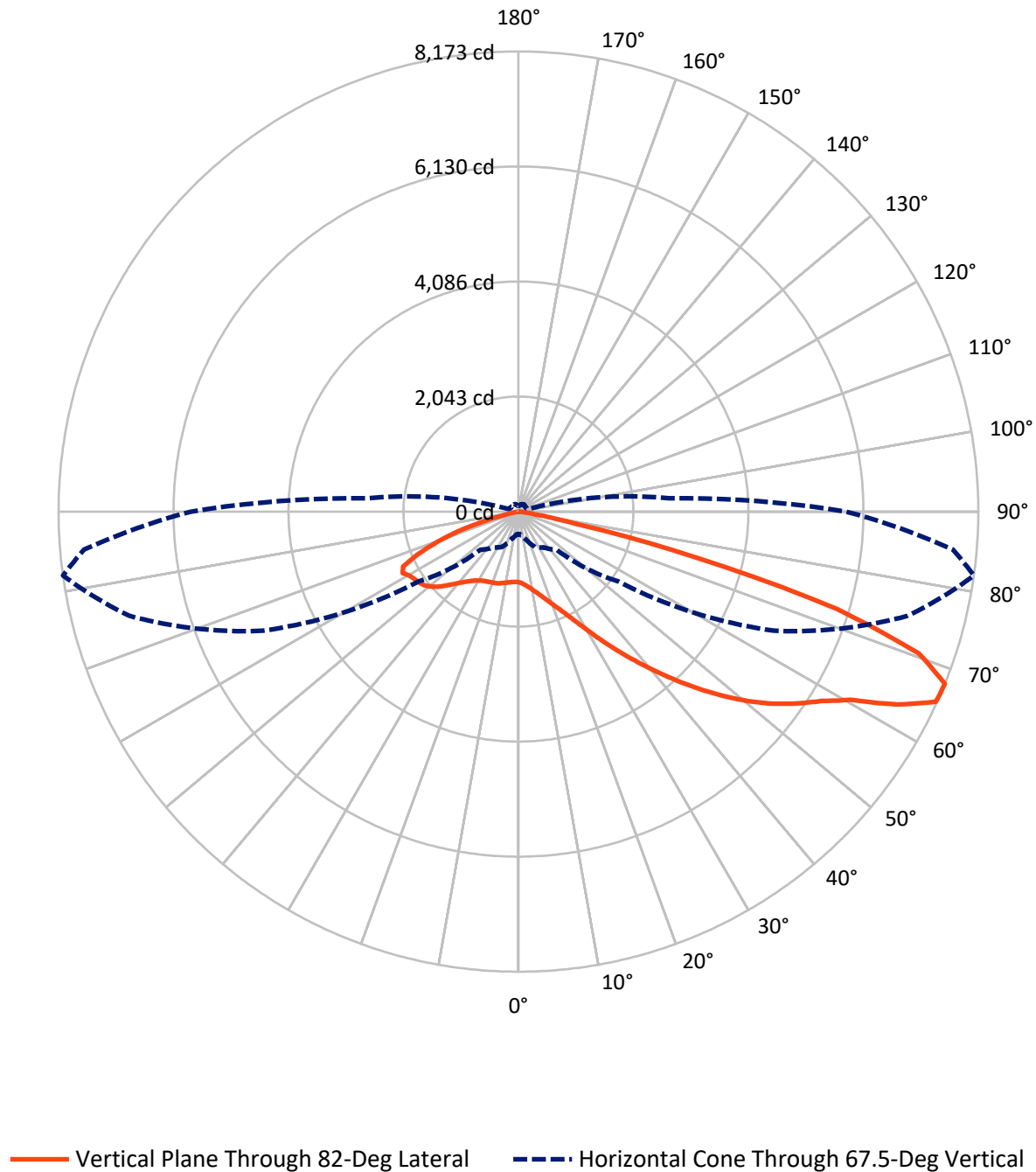
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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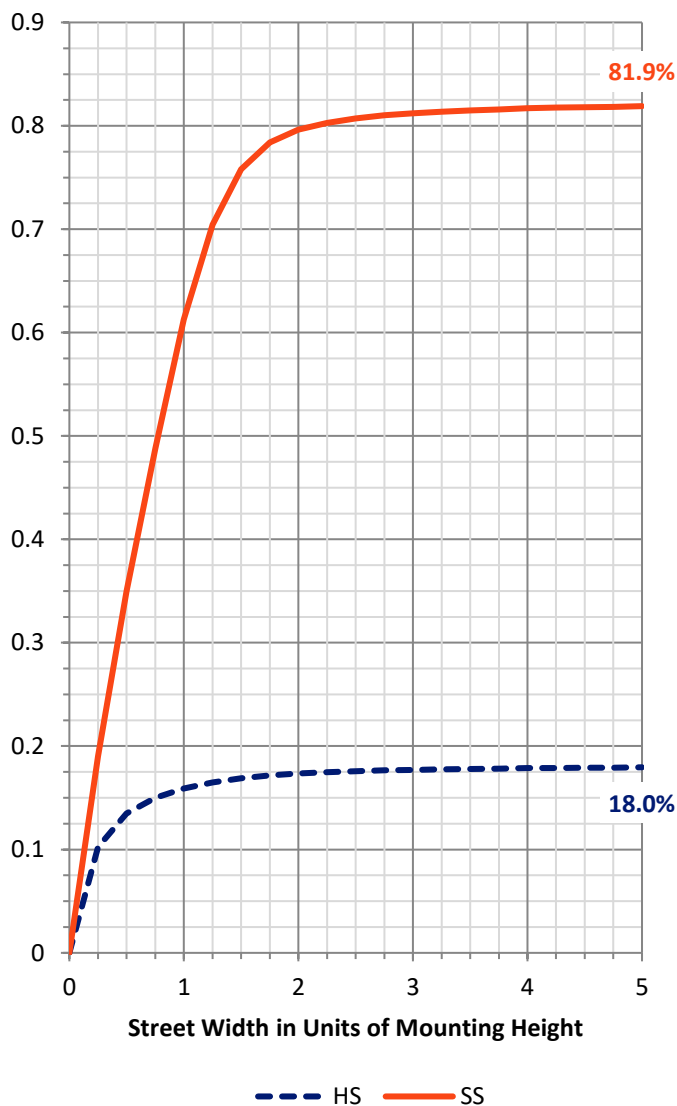
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1371.9	0.0	1371.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6201.8	0.0	6201.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	7573.7	0.0	7573.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	1.5
10°-20°	290.5	3.8
20°-30°	465.3	6.1
30°-40°	822.7	10.9
40°-50°	1441.5	19.0
50°-60°	1922.6	25.4
60°-70°	1789.8	23.6
70°-80°	686.9	9.1
80°-90°	42.7	0.6
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°	7573.7	100.0
0°-180°	7573.7	100.0

Coefficient of Utilization



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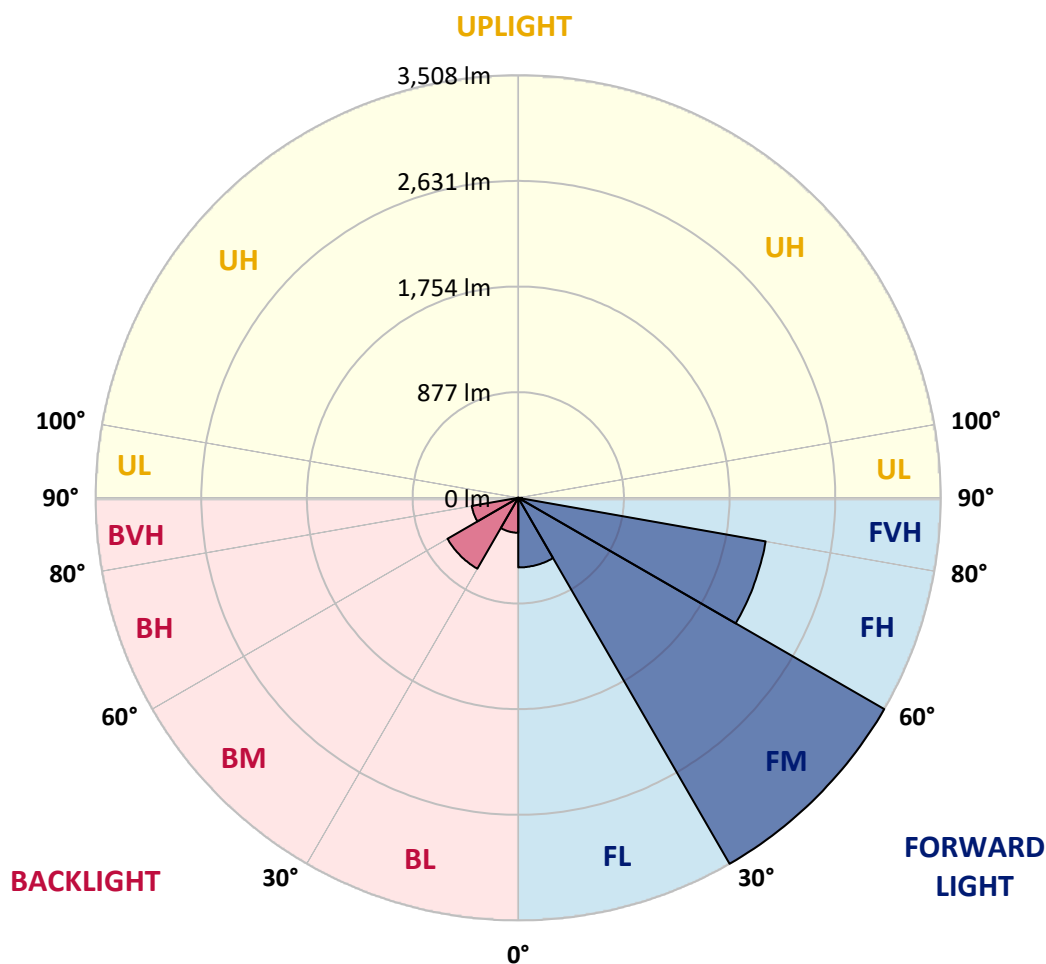
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	577.8	7.6			
FM	(30°-60°)	3507.8	46.3			
FH	(60°-80°)	2085.2	27.5			G2/5000
FVH	(80°-90°)	31.0	0.4			G1/100
BL	(0°-30°)	289.7	3.8	B1/500		
BM	(30°-60°)	679.0	9.0	B1/1000		
BH	(60°-80°)	391.6	5.2	B1/500		G1/500
BVH	(80°-90°)	11.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7
2.5°	1326.1	1333.7	1329.4	1327.3	1323.4	1317.9	1313.6	1300.0	1285.8	1276.5	1273.3
5°	1352.9	1360.5	1360.0	1362.1	1364.9	1366.5	1365.4	1350.1	1329.9	1314.2	1304.9
7.5°	1329.9	1338.6	1345.7	1356.7	1375.8	1395.9	1405.8	1402.5	1381.8	1360.0	1348.5
10°	1265.1	1274.4	1291.3	1316.9	1357.2	1400.9	1437.4	1454.3	1441.1	1417.2	1401.4
12.5°	1146.2	1155.5	1188.7	1244.4	1312.0	1387.7	1457.6	1502.9	1506.1	1482.0	1463.6
15°	1012.6	1021.8	1057.3	1127.1	1230.2	1351.8	1468.4	1554.1	1583.0	1562.2	1539.9
17.5°	929.7	937.9	964.6	1020.8	1128.2	1279.8	1464.6	1608.6	1674.5	1658.2	1631.5
20°	904.7	911.7	924.2	963.5	1053.0	1205.1	1439.6	1659.9	1773.2	1764.0	1734.0
22.5°	931.3	937.9	941.7	959.2	1015.4	1156.0	1407.9	1712.2	1887.7	1888.9	1852.4
25°	993.0	999.5	995.2	1006.0	1030.6	1140.7	1395.9	1773.9	2031.8	2043.7	2002.3
27.5°	1094.4	1094.9	1084.6	1084.0	1087.8	1163.7	1408.5	1839.8	2213.3	2235.7	2184.4
30°	1297.8	1289.7	1249.8	1206.7	1187.1	1232.4	1443.4	1917.8	2427.6	2467.5	2403.1
32.5°	1611.3	1599.3	1526.2	1423.2	1319.6	1343.1	1506.1	2006.6	2661.0	2733.0	2654.4
35°	1951.6	1948.3	1872.0	1718.7	1537.7	1500.6	1608.0	2123.4	2915.6	3030.2	2936.9
37.5°	2267.8	2266.2	2222.6	2042.1	1821.8	1720.4	1771.6	2276.0	3188.3	3354.1	3243.9
40°	2556.9	2561.8	2518.1	2356.8	2134.8	2002.3	1994.1	2464.7	3491.5	3706.9	3576.0
42.5°	2806.6	2812.1	2767.9	2648.5	2444.0	2314.2	2267.3	2696.0	3787.6	4085.9	3931.0
45°	2976.2	3010.0	3003.5	2908.0	2761.4	2626.7	2595.6	2986.0	4125.1	4487.8	4306.1
47.5°	3024.2	3055.2	3104.3	3117.4	3028.0	2895.5	2932.5	3335.6	4466.4	4890.2	4683.5
50°	2905.9	2934.8	3036.7	3172.5	3234.7	3193.8	3260.3	3710.2	4816.0	5291.5	5053.8
52.5°	2672.5	2701.9	2830.6	3045.5	3299.0	3427.7	3589.1	4079.3	5154.6	5671.5	5404.3
55°	2335.0	2366.0	2531.2	2774.5	3176.3	3524.2	3863.3	4447.9	5464.9	6013.5	5720.6
57.5°	1875.7	1898.7	2070.5	2410.7	2867.6	3428.2	4065.7	4850.3	5757.1	6349.4	6034.2
60°	1222.5	1242.7	1442.3	1821.8	2356.2	3107.6	4106.0	5299.1	6145.4	6786.1	6456.8
62.5°	813.0	826.7	944.9	1223.6	1659.3	2492.0	3869.9	5657.4	6714.7	7546.3	7181.5
65°	557.8	571.4	689.8	884.0	1072.0	1648.4	3191.0	5609.9	7230.6	8149.9	7718.6
67.5°	398.1	409.5	509.8	693.1	775.9	957.6	2163.2	5003.5	7156.3	8172.8	7747.5
70°	285.2	291.7	374.6	539.9	616.7	575.2	1202.9	3826.8	6265.9	7546.8	7157.5
72.5°	199.6	201.7	260.1	411.1	496.7	419.8	572.6	2551.4	4739.1	5923.5	5548.8
75°	135.2	138.0	175.1	301.6	398.6	320.6	303.2	1368.2	2782.1	3278.9	2939.1
77.5°	82.9	83.9	112.9	206.1	298.3	244.3	195.3	579.6	1076.4	1056.8	900.8
80°	46.9	46.9	72.0	128.1	203.4	157.5	136.8	246.5	340.8	299.4	263.9
82.5°	26.1	26.8	52.4	79.6	134.7	93.3	75.2	114.0	147.2	130.3	113.5
85°	10.9	12.0	32.2	37.6	64.4	46.3	30.5	48.0	54.5	48.5	35.5
87.5°	1.1	1.6	9.8	7.1	7.6	9.2	4.4	9.2	7.6	7.6	5.4
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°	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7	1254.7
2.5°	1262.9	1254.7	1234.0	1210.0	1178.3	1163.1	1142.4	1128.2	1116.2	1117.2	1106.4
5°	1287.4	1266.7	1220.4	1162.6	1090.6	1039.4	984.8	947.2	916.7	910.1	895.3
7.5°	1321.2	1288.5	1207.2	1103.1	981.5	889.4	807.0	754.1	716.5	704.5	692.5
10°	1364.9	1317.4	1190.3	1028.4	853.4	736.2	647.8	606.4	580.8	572.1	565.5
12.5°	1415.5	1350.6	1168.0	937.4	721.4	608.5	552.4	531.7	523.5	520.7	519.2
15°	1479.4	1392.2	1134.2	829.4	609.7	530.5	506.6	503.9	504.9	503.9	503.3
17.5°	1555.1	1437.4	1079.1	718.1	534.3	490.8	482.1	484.2	487.0	486.4	485.3
20°	1638.1	1482.0	1008.8	619.4	483.1	462.4	457.5	459.7	461.9	460.7	460.2
22.5°	1732.4	1530.1	930.8	542.5	448.7	436.2	430.8	431.3	431.3	429.2	428.0
25°	1845.3	1583.0	849.0	488.0	422.6	412.8	406.2	404.1	400.8	394.2	393.2
27.5°	1980.0	1639.2	770.5	449.9	401.9	392.6	385.0	379.6	371.4	360.4	359.4
30°	2131.5	1707.3	704.0	425.9	385.5	376.3	367.6	359.4	347.4	333.7	332.6
32.5°	2309.8	1780.3	655.5	410.1	370.8	361.0	350.7	340.8	327.7	314.1	314.7
35°	2522.5	1868.7	627.1	399.1	359.4	346.2	334.8	323.9	314.1	302.1	301.0
37.5°	2753.1	1962.5	618.4	393.7	351.7	331.5	318.5	310.8	309.8	302.7	302.1
40°	3005.6	2073.8	624.9	390.4	343.6	317.3	303.2	301.6	304.2	291.7	292.2
42.5°	3272.8	2205.7	635.8	386.6	332.1	303.2	289.6	289.6	287.4	269.9	269.9
45°	3561.9	2357.8	646.7	377.3	318.5	289.0	278.6	274.8	265.6	248.7	248.2
47.5°	3853.0	2512.7	654.9	360.4	302.1	277.1	267.7	259.0	245.4	230.1	229.6
50°	4129.5	2651.8	646.2	335.4	283.5	265.6	255.7	243.7	229.0	218.6	217.0
52.5°	4376.4	2772.2	609.1	305.9	263.9	253.6	244.9	232.3	220.3	209.4	208.3
55°	4591.3	2869.9	543.7	278.1	246.5	243.2	234.5	218.6	202.3	193.0	192.0
57.5°	4797.4	2944.0	461.9	255.2	230.6	231.8	218.6	204.5	189.2	179.4	178.4
60°	5071.7	3043.2	378.9	233.9	213.7	217.0	202.8	192.5	173.4	160.8	159.2
62.5°	5510.2	3197.6	301.0	207.8	194.1	195.3	189.2	176.7	153.8	139.1	138.0
65°	5858.1	3140.9	237.2	179.4	171.8	173.4	173.4	159.8	135.2	118.3	116.6
67.5°	5818.8	2689.4	189.2	151.6	150.5	151.6	155.4	143.9	119.9	106.3	104.1
70°	5360.2	2139.2	151.6	126.0	130.9	128.1	139.1	131.4	107.9	94.3	92.7
72.5°	4373.8	1541.0	115.6	104.1	100.3	104.7	125.5	118.3	90.0	74.7	73.1
75°	2555.7	822.3	86.2	82.3	72.6	87.2	111.2	100.9	68.7	55.0	53.4
77.5°	832.1	286.8	63.2	60.6	54.0	70.3	94.9	85.1	56.2	43.7	42.0
80°	223.0	86.7	43.0	39.8	34.8	52.4	75.2	67.6	40.4	28.4	27.8
82.5°	89.4	36.5	25.1	22.3	19.1	36.0	59.4	54.5	30.0	18.0	18.0
85°	28.9	12.0	9.2	7.1	8.7	22.3	35.5	37.1	21.2	9.2	7.1
87.5°	3.8	1.6	1.6	2.2	1.6	3.8	10.9	10.4	6.0	1.1	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)