

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: P961002

Luminaire Tested: **NAV-SB1D-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961002
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-SB1D-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6625.6 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 79.6
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

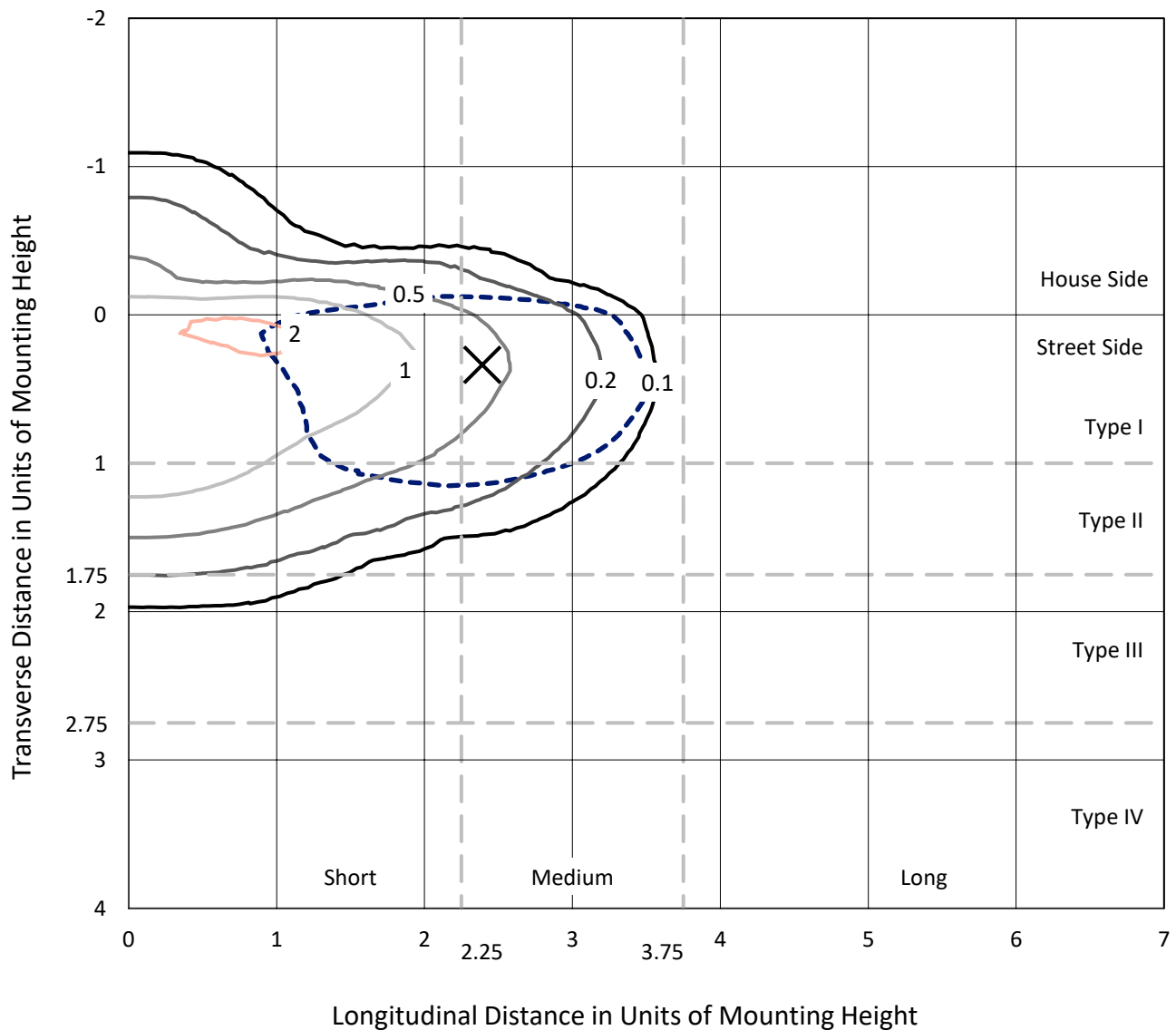


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

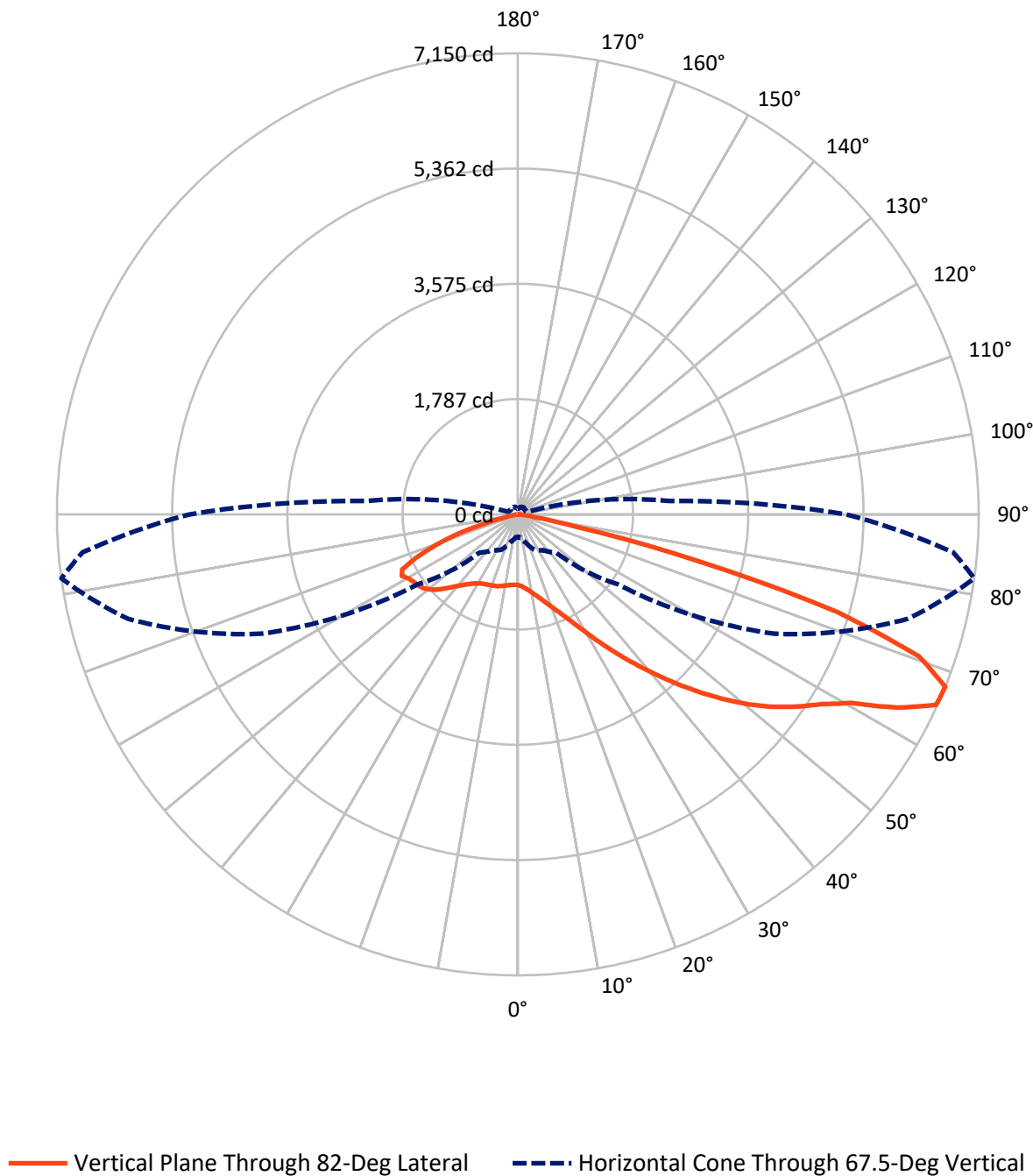


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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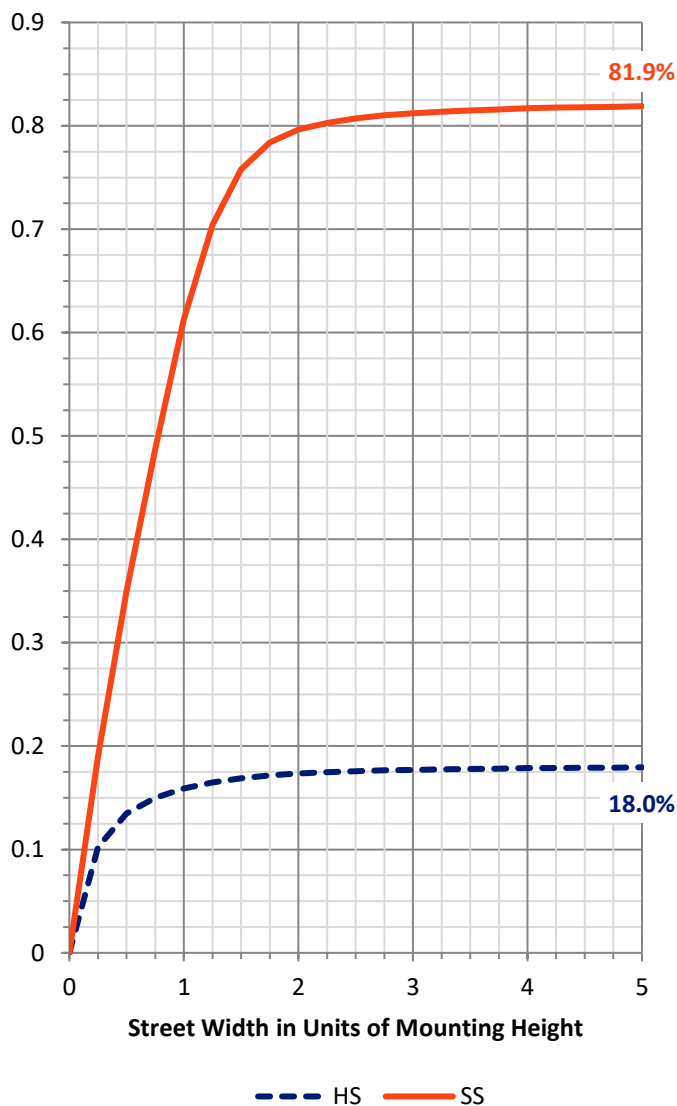
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1200.2	0.0	1200.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5425.4	0.0	5425.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	6625.6	0.0	6625.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.5
10°-20°	254.1	3.8
20°-30°	407.0	6.1
30°-40°	719.7	10.9
40°-50°	1261.0	19.0
50°-60°	1681.9	25.4
60°-70°	1565.8	23.6
70°-80°	600.9	9.1
80°-90°	37.3	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°	6625.6	100.0
0°-180°	6625.6	100.0

Coefficient of Utilization



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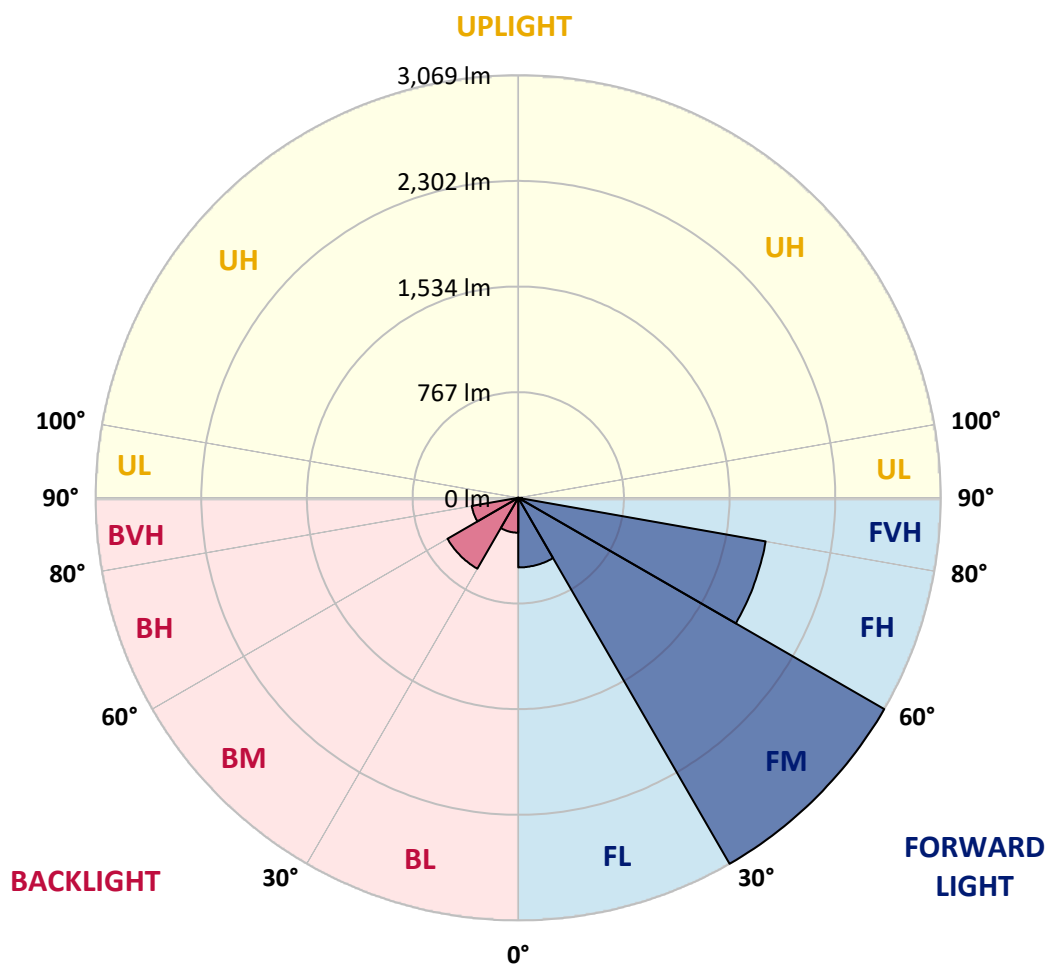
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	505.5	7.6			
FM	(30°-60°)	3068.7	46.3			
FH	(60°-80°)	1824.1	27.5			G2/5000
FVH	(80°-90°)	27.1	0.4			G1/100
BL	(0°-30°)	253.5	3.8	B1/500		
BM	(30°-60°)	594.0	9.0	B1/1000		
BH	(60°-80°)	342.6	5.2	B1/500		G1/500
BVH	(80°-90°)	10.2	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°	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7
2.5°	1160.1	1166.8	1163.0	1161.1	1157.7	1153.0	1149.1	1137.2	1124.8	1116.7	1113.9
5°	1183.5	1190.2	1189.7	1191.6	1194.0	1195.5	1194.4	1181.1	1163.5	1149.6	1141.5
7.5°	1163.5	1171.1	1177.3	1186.8	1203.6	1221.2	1229.8	1226.9	1208.8	1189.7	1179.7
10°	1106.7	1114.8	1129.6	1152.0	1187.4	1225.5	1257.5	1272.2	1260.8	1239.8	1226.0
12.5°	1002.8	1010.9	1040.0	1088.6	1147.7	1214.0	1275.1	1314.7	1317.5	1296.5	1280.3
15°	885.8	893.9	925.0	986.0	1076.1	1182.5	1284.6	1359.6	1384.8	1366.6	1347.2
17.5°	813.3	820.5	843.9	893.0	987.0	1119.6	1281.2	1407.2	1464.9	1450.7	1427.3
20°	791.4	797.6	808.5	842.9	921.2	1054.2	1259.3	1452.1	1551.3	1543.1	1516.9
22.5°	814.8	820.5	823.8	839.1	888.3	1011.3	1231.6	1497.8	1651.5	1652.4	1620.4
25°	868.7	874.4	870.5	880.1	901.6	997.9	1221.2	1551.7	1777.4	1787.9	1751.6
27.5°	957.4	957.9	948.8	948.3	951.7	1017.9	1232.2	1609.5	1936.2	1955.8	1911.0
30°	1135.3	1128.2	1093.4	1055.6	1038.5	1078.1	1262.7	1677.7	2123.7	2158.5	2102.3
32.5°	1409.6	1399.1	1335.2	1245.1	1154.4	1175.0	1317.5	1755.4	2327.9	2390.8	2322.1
35°	1707.2	1704.4	1637.6	1503.6	1345.2	1312.8	1406.7	1857.5	2550.6	2650.9	2569.3
37.5°	1984.0	1982.6	1944.3	1786.5	1593.8	1505.0	1549.9	1991.1	2789.1	2934.2	2837.8
40°	2236.8	2241.1	2202.9	2061.7	1867.5	1751.6	1744.4	2156.2	3054.4	3242.8	3128.3
42.5°	2455.3	2460.0	2421.4	2316.9	2138.0	2024.5	1983.5	2358.4	3313.4	3574.4	3438.9
45°	2603.6	2633.2	2627.5	2543.9	2415.6	2297.8	2270.7	2612.2	3608.7	3926.0	3767.1
47.5°	2645.6	2672.8	2715.7	2727.1	2648.9	2533.0	2565.5	2918.0	3907.3	4277.9	4097.1
50°	2542.1	2567.3	2656.6	2775.3	2829.7	2793.9	2852.2	3245.7	4213.1	4629.1	4421.0
52.5°	2337.9	2363.6	2476.2	2664.2	2886.0	2998.6	3139.8	3568.6	4509.3	4961.5	4727.8
55°	2042.6	2069.8	2214.3	2427.1	2778.7	3083.0	3379.7	3891.1	4780.8	5260.6	5004.5
57.5°	1640.9	1661.0	1811.3	2108.9	2508.7	2999.0	3556.7	4243.2	5036.4	5554.5	5278.7
60°	1069.5	1087.1	1261.8	1593.8	2061.3	2718.6	3592.0	4635.8	5376.1	5936.6	5648.5
62.5°	711.2	723.1	826.7	1070.4	1451.6	2180.0	3385.5	4949.1	5874.1	6601.6	6282.4
65°	488.0	499.9	603.4	773.3	937.9	1442.1	2791.6	4907.6	6325.4	7129.6	6752.3
67.5°	348.2	358.2	446.0	606.3	678.9	837.6	1892.4	4377.2	6260.5	7149.7	6777.6
70°	249.5	255.2	327.7	472.2	539.6	503.3	1052.4	3347.8	5481.5	6602.0	6261.4
72.5°	174.6	176.5	227.6	359.7	434.6	367.4	500.9	2232.0	4145.8	5181.9	4854.2
75°	118.3	120.6	153.1	263.8	348.7	280.5	265.3	1196.9	2433.8	2868.4	2571.2
77.5°	72.5	73.5	98.7	180.3	261.0	213.7	170.8	507.1	941.7	924.4	788.0
80°	41.0	41.0	62.9	112.1	177.9	137.9	119.7	215.7	298.2	261.9	230.8
82.5°	22.9	23.4	45.8	69.6	117.9	81.6	65.8	99.7	128.8	114.0	99.2
85°	9.5	10.5	28.2	32.9	56.3	40.6	26.8	42.0	47.7	42.4	31.1
87.5°	0.9	1.4	8.6	6.3	6.7	8.1	3.8	8.1	6.7	6.7	4.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7	1097.7
2.5°	1104.7	1097.7	1079.5	1058.5	1030.8	1017.5	999.4	987.0	976.5	977.4	967.9
5°	1126.3	1108.1	1067.5	1017.0	954.1	909.2	861.5	828.6	801.9	796.1	783.3
7.5°	1155.8	1127.2	1056.2	965.0	858.6	778.1	706.0	659.7	626.8	616.3	605.8
10°	1194.0	1152.5	1041.3	899.6	746.5	644.0	566.7	530.4	508.0	500.4	494.7
12.5°	1238.4	1181.6	1021.8	820.0	631.1	532.4	483.2	465.1	458.0	455.5	454.2
15°	1294.2	1217.8	992.2	725.6	533.3	464.1	443.1	440.7	441.8	440.7	440.3
17.5°	1360.5	1257.5	944.0	628.2	467.5	429.4	421.7	423.6	426.0	425.5	424.6
20°	1432.9	1296.5	882.5	541.9	422.6	404.6	400.3	402.1	404.1	403.1	402.6
22.5°	1515.5	1338.5	814.3	474.7	392.6	381.6	376.9	377.3	377.3	375.5	374.4
25°	1614.3	1384.8	742.7	426.9	369.7	361.1	355.4	353.5	350.7	344.9	343.9
27.5°	1732.0	1434.0	674.0	393.5	351.6	343.5	336.8	332.0	324.8	315.3	314.4
30°	1864.7	1493.5	615.8	372.6	337.2	329.1	321.5	314.4	303.9	291.9	291.0
32.5°	2020.7	1557.5	573.4	358.7	324.4	315.8	306.7	298.2	286.7	274.8	275.2
35°	2206.7	1634.8	548.6	349.2	314.4	302.9	292.9	283.3	274.8	264.2	263.3
37.5°	2408.5	1716.8	541.0	344.4	307.7	290.1	278.6	271.9	270.9	264.8	264.2
40°	2629.3	1814.1	546.6	341.5	300.5	277.7	265.3	263.8	266.2	255.2	255.6
42.5°	2863.1	1929.6	556.2	338.2	290.5	265.3	253.3	253.3	251.4	236.2	236.2
45°	3115.9	2062.7	565.8	330.2	278.6	252.9	243.7	240.5	232.3	217.5	217.1
47.5°	3370.7	2198.1	572.9	315.3	264.2	242.3	234.2	226.6	214.6	201.3	200.8
50°	3612.5	2319.8	565.3	293.4	248.0	232.3	223.8	213.2	200.4	191.3	189.8
52.5°	3828.6	2425.3	532.8	267.6	230.8	221.8	214.2	203.3	192.7	183.2	182.2
55°	4016.6	2510.6	475.6	243.2	215.7	212.8	205.1	191.3	177.0	168.8	167.9
57.5°	4196.9	2575.4	404.1	223.2	201.8	202.7	191.3	178.9	165.5	156.9	156.0
60°	4436.8	2662.3	331.5	204.7	187.0	189.8	177.4	168.4	151.7	140.7	139.3
62.5°	4820.4	2797.3	263.3	181.7	169.8	170.8	165.5	154.6	134.5	121.7	120.6
65°	5124.7	2747.7	207.5	156.9	150.3	151.7	151.7	139.8	118.3	103.5	102.1
67.5°	5090.4	2352.7	165.5	132.6	131.6	132.6	135.9	126.0	105.0	93.1	91.1
70°	4689.2	1871.3	132.6	110.2	114.5	112.1	121.7	115.0	94.4	82.5	81.1
72.5°	3826.2	1348.1	101.2	91.1	87.7	91.6	109.7	103.5	78.7	65.4	64.0
75°	2235.8	719.3	75.3	72.1	63.4	76.4	97.3	88.3	60.1	48.2	46.7
77.5°	728.0	250.9	55.4	53.0	47.3	61.5	83.0	74.4	49.1	38.1	36.7
80°	195.1	75.8	37.7	34.8	30.5	45.8	65.8	59.1	35.3	24.8	24.3
82.5°	78.2	32.0	21.9	19.6	16.7	31.5	52.0	47.7	26.2	15.8	15.8
85°	25.3	10.5	8.1	6.3	7.6	19.6	31.1	32.4	18.7	8.1	6.3
87.5°	3.4	1.4	1.4	1.9	1.4	3.4	9.5	9.0	5.2	0.9	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)