

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: P961024

Luminaire Tested: **NAV-SB1D-830-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-830-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7550.1 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - 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



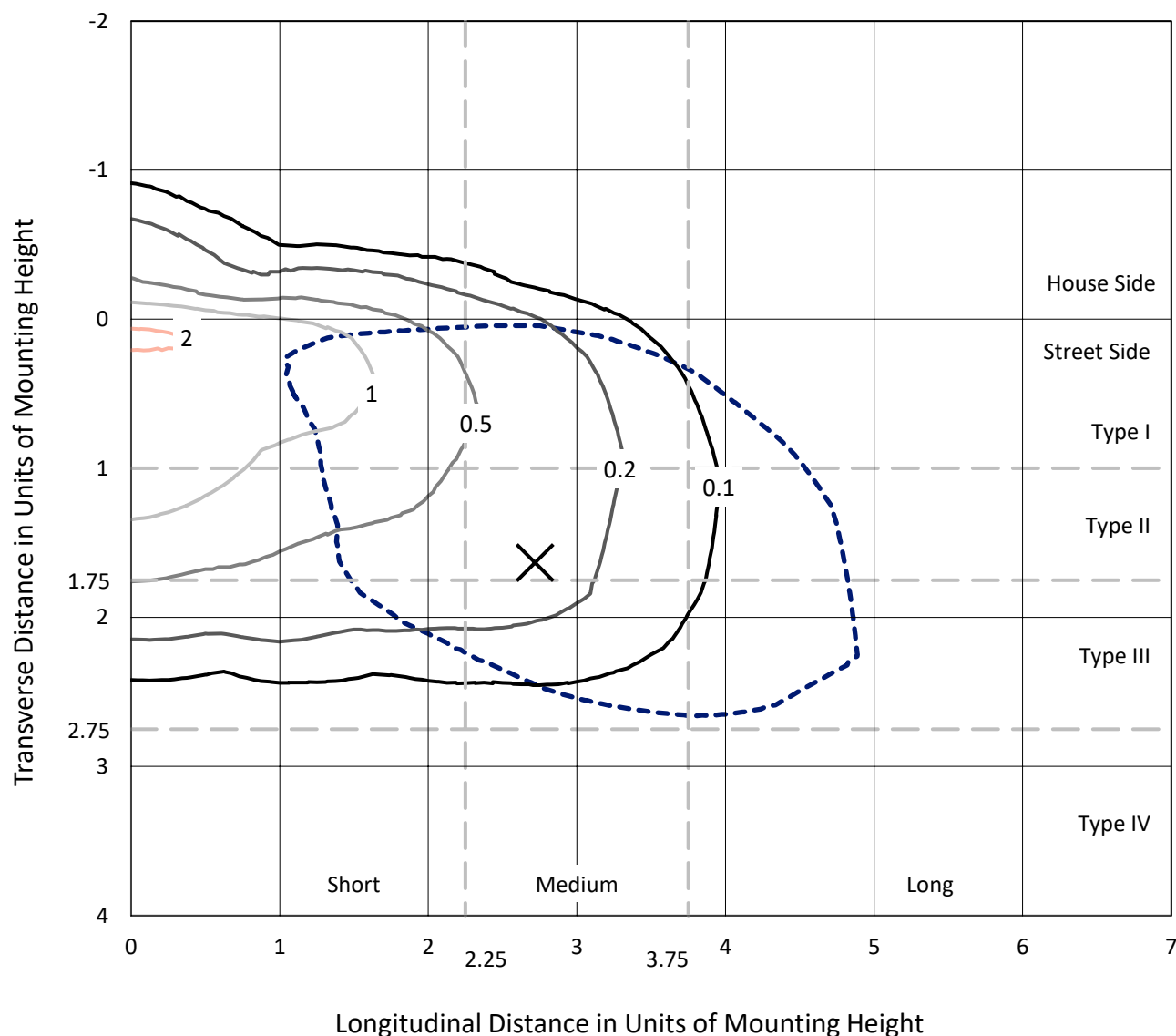
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

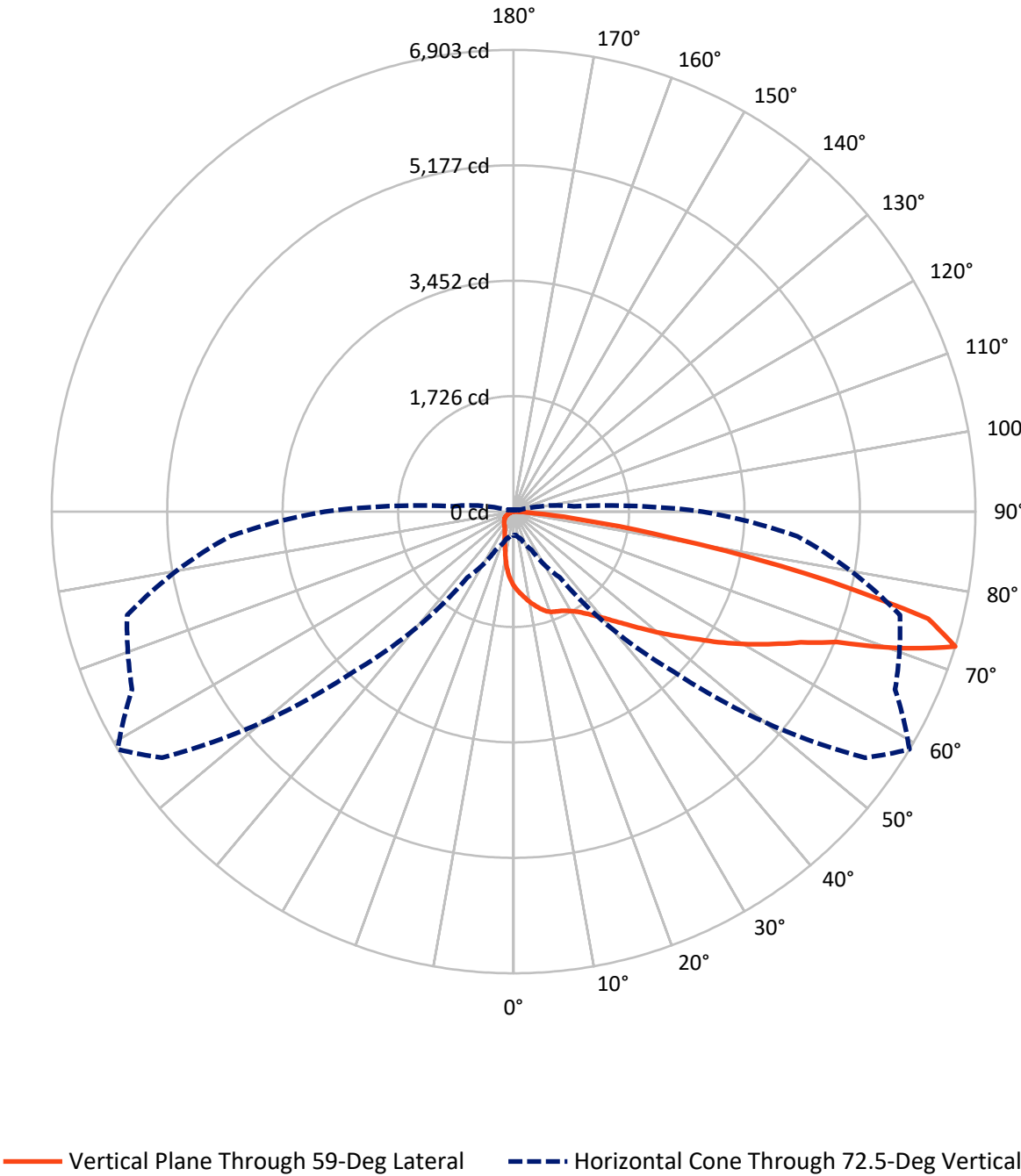
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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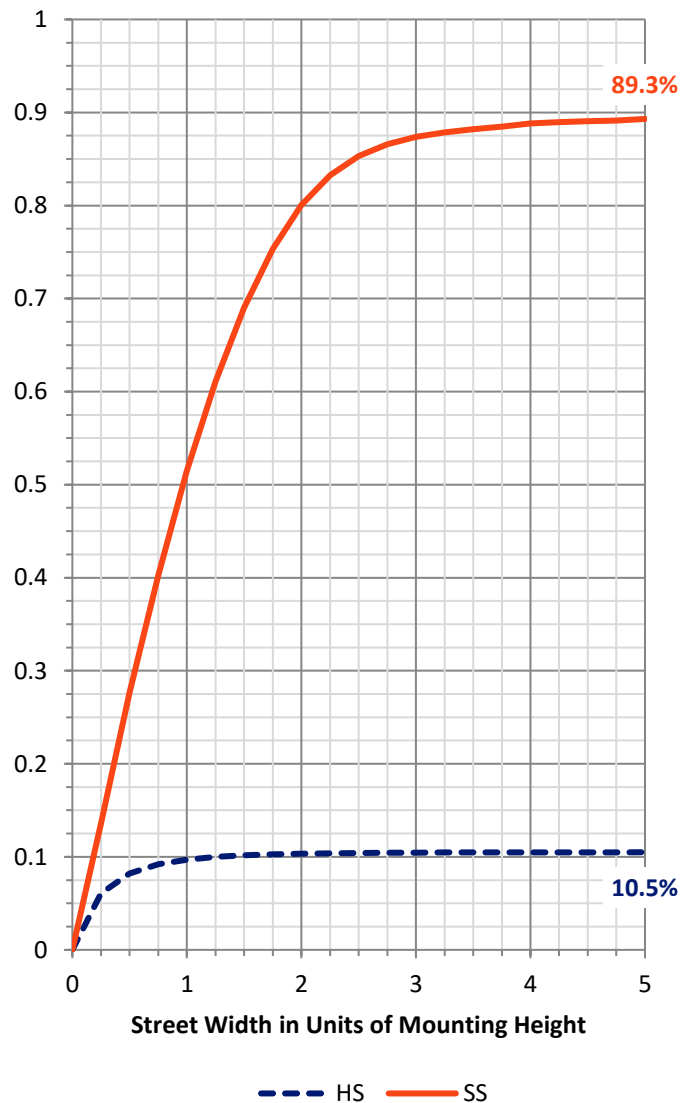
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	797.4	0.0	797.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	6752.7	0.0	6752.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	7550.1	0.0	7550.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	1.3
10°-20°	268.3	3.6
20°-30°	425.2	5.6
30°-40°	682.4	9.0
40°-50°	1089.9	14.4
50°-60°	1578.1	20.9
60°-70°	1872.8	24.8
70°-80°	1390.3	18.4
80°-90°	142.1	1.9
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°	7550.1	100.0
0°-180°	7550.1	100.0

Coefficient of Utilization



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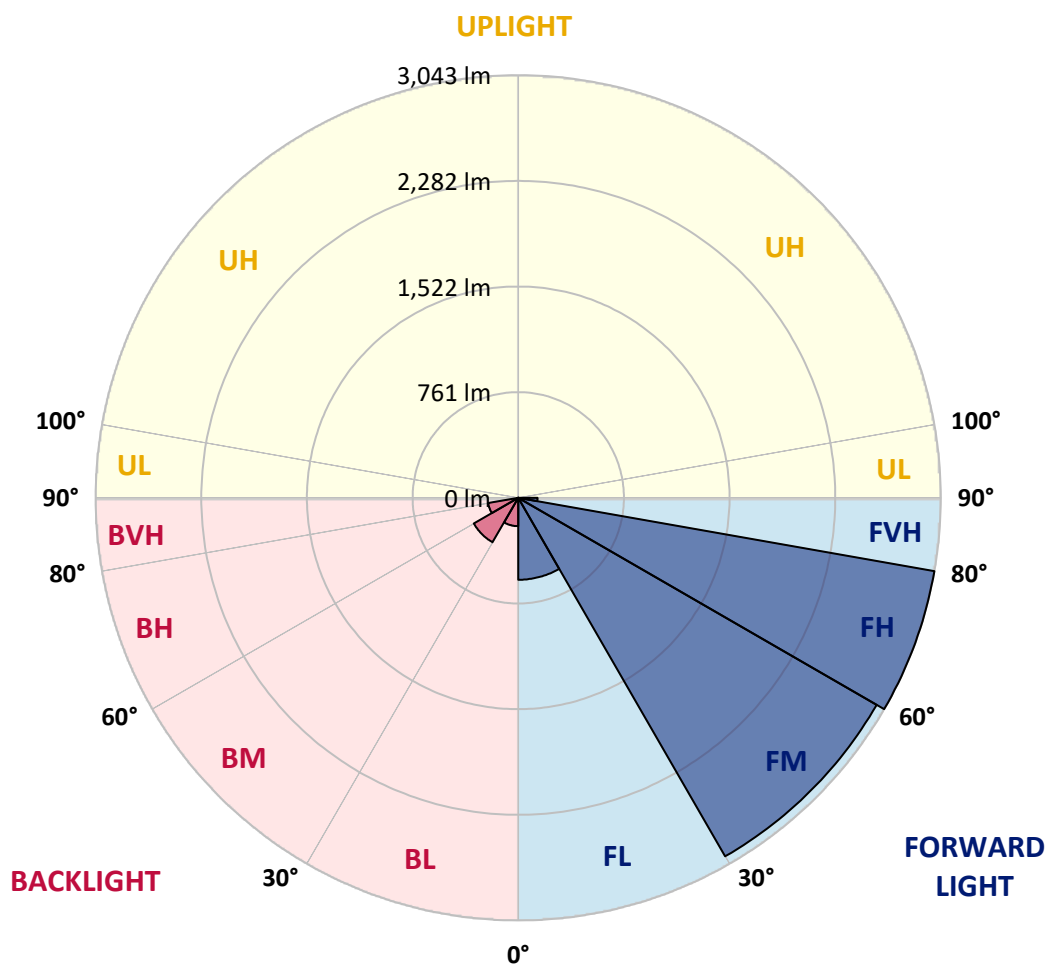
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	590.3	7.8			
FM	(30°-60°)	2980.7	39.5			
FH	(60°-80°)	3043.1	40.3			G2/5000
FVH	(80°-90°)	138.6	1.8			G2/225
BL	(0°-30°)	204.3	2.7	B1/500		
BM	(30°-60°)	369.7	4.9	B1/1000		
BH	(60°-80°)	219.9	2.9	B1/500		G1/500
BVH	(80°-90°)	3.5	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5
2.5°	1238.7	1231.8	1232.9	1221.0	1212.6	1203.8	1186.4	1184.0	1171.7	1150.0	1127.8
5°	1346.6	1342.2	1338.3	1325.0	1307.7	1286.1	1257.0	1246.6	1224.0	1186.4	1143.1
7.5°	1425.6	1420.1	1422.1	1408.8	1395.0	1370.8	1331.0	1311.7	1281.7	1224.5	1158.9
10°	1440.8	1437.9	1450.7	1455.6	1455.6	1440.3	1401.4	1382.2	1338.3	1265.4	1175.2
12.5°	1355.0	1355.6	1387.6	1426.1	1476.3	1490.7	1464.5	1443.8	1400.5	1308.7	1195.9
15°	1255.0	1255.5	1286.6	1335.9	1418.2	1500.5	1521.2	1507.9	1463.0	1355.6	1220.0
17.5°	1194.8	1192.4	1213.1	1253.5	1339.8	1455.6	1555.6	1564.6	1528.1	1407.3	1246.6
20°	1186.4	1182.0	1192.9	1213.1	1274.7	1399.4	1559.6	1601.6	1595.1	1466.0	1277.1
22.5°	1237.8	1230.8	1225.0	1225.9	1252.0	1352.6	1549.8	1622.3	1664.1	1536.5	1319.1
25°	1339.3	1328.4	1309.2	1284.5	1279.2	1342.7	1542.8	1644.9	1728.3	1626.7	1374.3
27.5°	1463.5	1448.2	1411.2	1374.3	1342.7	1370.3	1557.2	1680.9	1800.7	1731.6	1438.4
30°	1600.0	1581.4	1544.4	1474.4	1424.0	1431.9	1591.2	1728.3	1893.4	1850.4	1518.7
32.5°	1800.7	1757.3	1692.7	1585.8	1519.3	1498.6	1642.5	1788.3	2008.2	2008.7	1635.1
35°	1972.7	1948.5	1883.4	1750.4	1613.9	1586.7	1710.0	1873.1	2167.5	2218.2	1797.7
37.5°	2085.6	2052.6	1995.4	1895.3	1760.7	1677.4	1800.2	1977.1	2336.0	2456.7	1998.3
40°	2211.7	2179.3	2103.3	2009.2	1931.3	1833.2	1914.1	2096.9	2520.9	2701.8	2227.5
42.5°	2364.1	2321.7	2232.0	2130.5	2049.1	2038.3	2062.9	2246.3	2710.6	2967.9	2466.1
45°	2543.0	2503.0	2400.0	2271.9	2200.5	2181.2	2250.2	2420.3	2922.1	3259.7	2707.1
47.5°	2710.6	2664.3	2553.4	2436.5	2357.2	2296.5	2449.3	2625.8	3161.6	3564.8	2934.9
50°	2853.1	2805.7	2704.3	2579.5	2525.8	2446.4	2645.1	2855.0	3399.2	3874.9	3143.0
52.5°	2950.7	2908.7	2789.5	2704.7	2668.3	2628.3	2874.3	3098.1	3635.9	4158.8	3348.5
55°	2928.5	2891.0	2786.1	2780.1	2777.6	2819.6	3148.4	3373.6	3876.9	4427.5	3553.1
57.5°	2858.0	2815.6	2684.5	2774.7	2862.0	2990.1	3445.1	3699.4	4141.1	4680.9	3750.2
60°	2650.4	2635.7	2555.8	2764.3	2897.5	3157.2	3784.2	4026.7	4427.0	4903.7	3925.2
62.5°	2211.3	2224.1	2223.6	2786.1	2961.5	3347.4	4092.3	4358.0	4706.5	5118.1	4080.9
65°	1655.8	1700.2	1756.8	2590.9	3047.3	3687.1	4460.5	4717.4	4990.4	5367.5	4239.2
67.5°	1112.5	1148.0	1186.4	2125.5	2792.0	4044.0	5072.2	5209.8	5330.5	5644.1	4417.1
70°	636.8	648.2	701.9	1327.5	2152.1	3945.4	6068.5	6118.2	5837.8	5984.7	4546.8
72.5°	356.9	352.9	423.9	630.0	1202.7	3378.5	6417.4	6903.0	6291.8	5979.2	4257.4
75°	238.6	239.0	291.8	397.3	468.7	2365.1	5530.2	6400.7	6019.6	5301.9	3478.6
77.5°	162.7	168.1	214.4	307.1	216.9	1153.9	3658.5	4483.7	4873.6	4094.3	2401.6
80°	70.5	71.0	141.4	220.4	146.4	367.3	1896.8	2402.1	3056.7	2299.1	951.4
82.5°	36.5	41.4	90.2	142.5	92.1	128.6	896.2	1049.5	1282.6	674.9	195.2
85°	12.8	15.3	55.7	70.0	46.3	45.8	312.0	318.0	271.6	101.6	53.7
87.5°	0.0	2.5	21.7	17.2	5.9	5.4	37.0	31.1	24.6	14.2	17.7
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°	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5	1116.5
2.5°	1117.5	1104.1	1082.5	1055.9	1024.8	1008.1	983.9	969.1	955.8	956.3	967.1
5°	1119.0	1096.8	1041.6	982.9	917.9	870.0	816.8	779.3	750.7	743.8	754.2
7.5°	1123.4	1085.9	995.7	898.1	789.7	709.3	635.9	589.6	563.4	556.5	563.4
10°	1129.3	1074.1	943.9	794.6	660.0	563.4	502.2	472.7	460.8	452.0	457.5
12.5°	1134.3	1061.8	878.9	687.7	544.7	469.2	422.9	398.3	388.0	381.5	385.0
15°	1142.6	1045.5	808.4	588.0	466.8	405.2	361.3	343.1	340.1	341.1	342.6
17.5°	1151.0	1029.7	729.5	510.1	409.6	349.0	322.4	319.4	323.4	327.3	328.8
20°	1160.4	1007.1	649.6	451.5	356.9	310.1	303.2	305.1	307.1	314.0	316.0
22.5°	1174.1	978.5	579.6	401.7	313.0	291.3	287.9	289.4	290.8	297.8	299.7
25°	1193.9	947.9	523.0	355.9	285.4	276.0	272.5	272.5	274.6	281.0	283.4
27.5°	1214.6	904.6	477.1	313.5	269.2	259.3	253.4	253.4	255.8	263.2	266.2
30°	1237.8	865.1	441.2	282.0	255.3	242.5	234.6	232.7	235.6	245.0	247.4
32.5°	1279.6	839.5	415.5	267.2	243.0	227.2	216.4	210.9	213.9	224.8	227.8
35°	1343.3	833.5	397.8	259.7	231.1	213.4	198.1	189.7	192.3	203.6	207.0
37.5°	1417.7	845.8	380.6	249.9	219.9	200.1	179.9	169.1	173.0	183.4	186.3
40°	1524.6	897.2	367.3	242.5	208.5	184.4	161.6	150.9	157.2	166.2	167.6
42.5°	1653.7	988.3	363.8	235.6	194.7	167.6	144.9	137.0	142.0	150.4	151.8
45°	1813.9	1104.6	379.6	226.7	179.5	151.3	131.6	127.2	128.6	137.0	140.9
47.5°	1986.0	1224.0	422.9	218.8	166.2	138.1	121.3	117.4	116.3	124.2	129.1
50°	2160.0	1329.9	474.2	213.0	156.7	127.2	113.4	108.4	106.0	110.9	112.9
52.5°	2332.1	1414.2	507.7	203.1	147.4	116.3	106.5	99.1	94.6	97.1	99.1
55°	2506.5	1488.2	509.7	188.3	138.5	109.5	99.5	91.2	85.8	85.8	86.7
57.5°	2669.7	1553.2	480.6	168.6	126.2	103.0	90.2	83.3	77.4	75.4	76.0
60°	2814.1	1601.6	432.3	146.4	115.3	94.6	80.9	75.4	68.1	64.1	63.1
62.5°	2942.8	1625.2	366.2	123.7	102.0	84.8	72.0	66.0	56.2	51.2	50.7
65°	3051.7	1601.0	297.2	102.5	90.7	73.9	61.6	55.7	44.9	38.9	38.9
67.5°	3159.7	1490.7	224.8	86.3	78.8	62.1	50.7	45.3	37.4	32.5	32.5
70°	3173.5	1258.5	157.2	72.5	65.6	47.8	40.9	37.4	30.5	26.1	25.6
72.5°	2825.0	905.5	95.6	59.1	51.2	34.0	32.5	29.6	22.7	19.7	19.3
75°	2258.1	555.0	56.2	44.4	34.0	24.2	24.2	21.2	15.3	12.8	12.8
77.5°	1560.7	290.4	33.0	28.6	20.2	14.2	15.8	12.8	7.4	5.9	5.9
80°	625.0	110.4	17.7	13.3	9.3	6.5	5.4	3.0	1.4	1.0	1.4
82.5°	124.7	29.1	5.9	3.5	3.5	1.4	0.0	0.0	0.0	0.0	0.0
85°	32.1	6.5	1.4	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	0.0	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)