

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: P959844

Luminaire Tested: **NAV-SB1B-740-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959844
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4950.7 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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

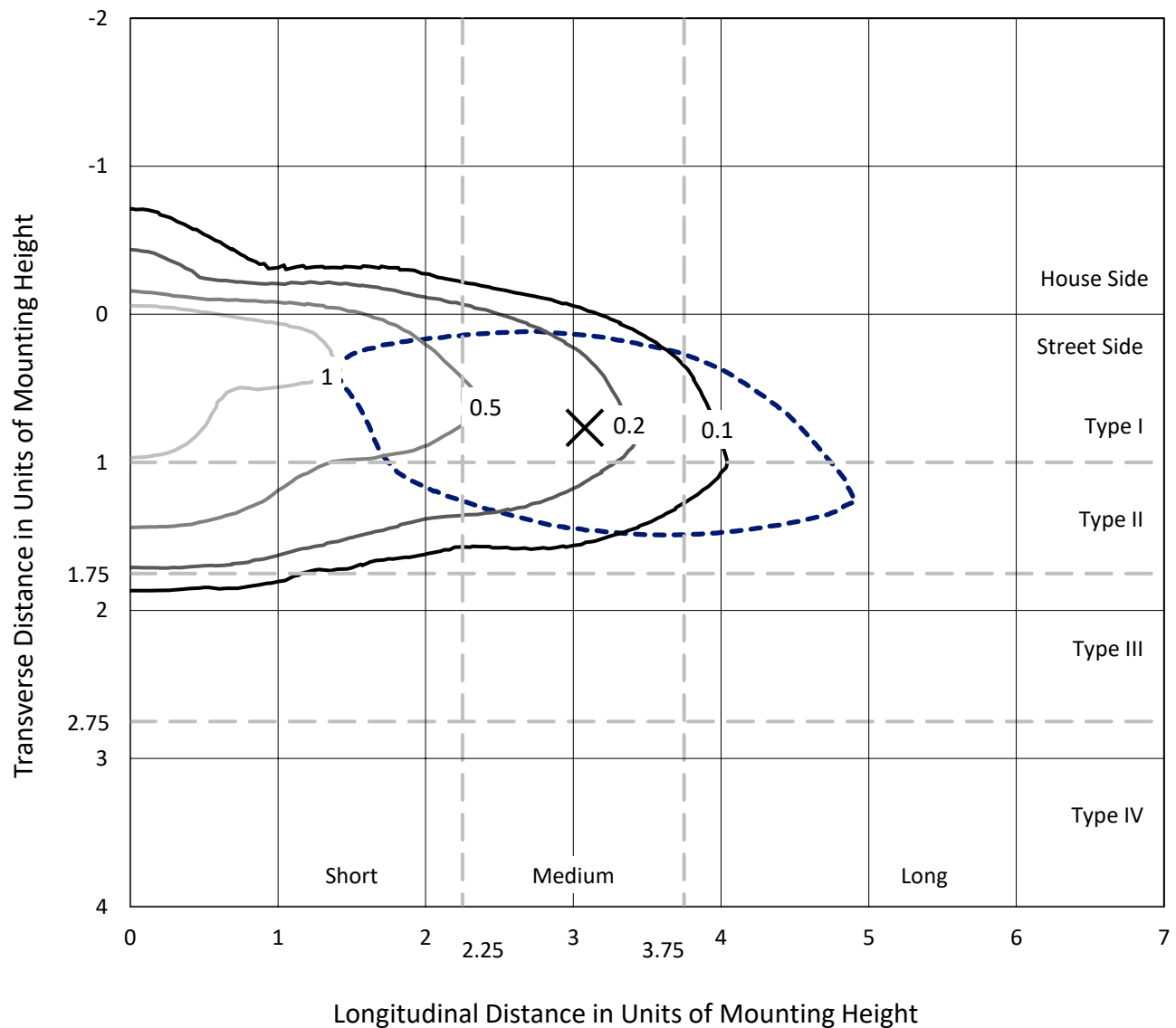


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Iso-Footcandle Lines of Horizontal Illumination

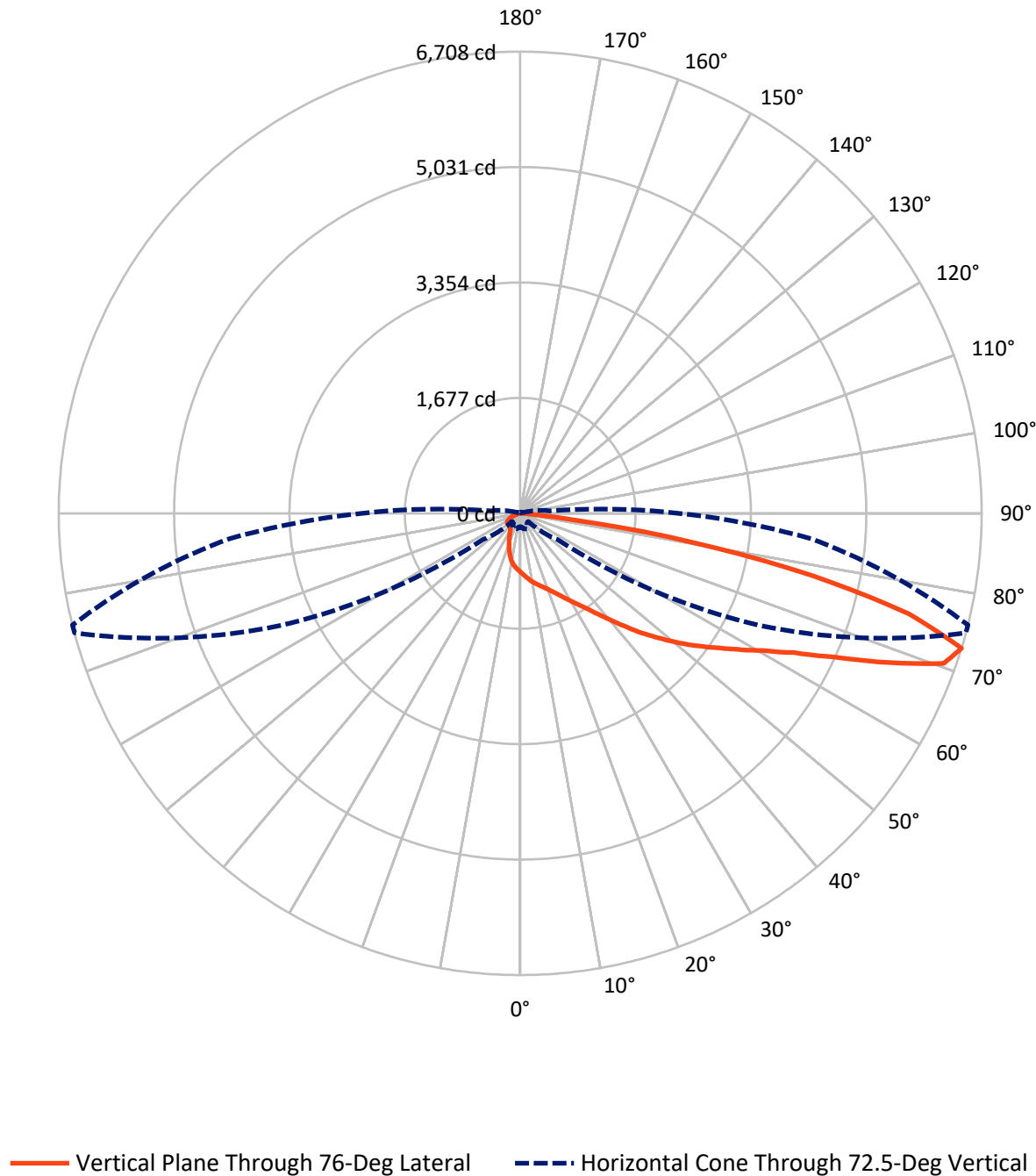
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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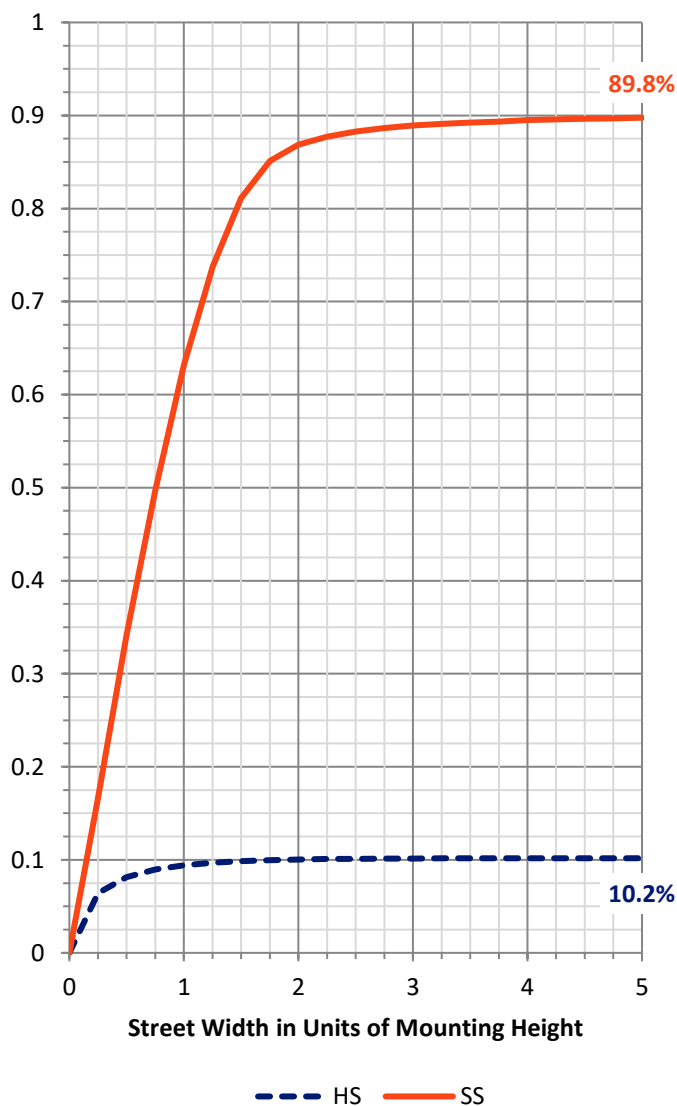
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	506.7	0.0	506.7
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	4444.0	0.0	4444.0
	% Fixture	89.8	0.0	89.8
Total	Lumens	4950.7	0.0	4950.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	1.6
10°-20°	208.6	4.2
20°-30°	330.2	6.7
30°-40°	510.9	10.3
40°-50°	775.9	15.7
50°-60°	1069.7	21.6
60°-70°	1130.1	22.8
70°-80°	775.3	15.7
80°-90°	72.2	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°	4950.7	100.0
0°-180°	4950.7	100.0

Coefficient of Utilization



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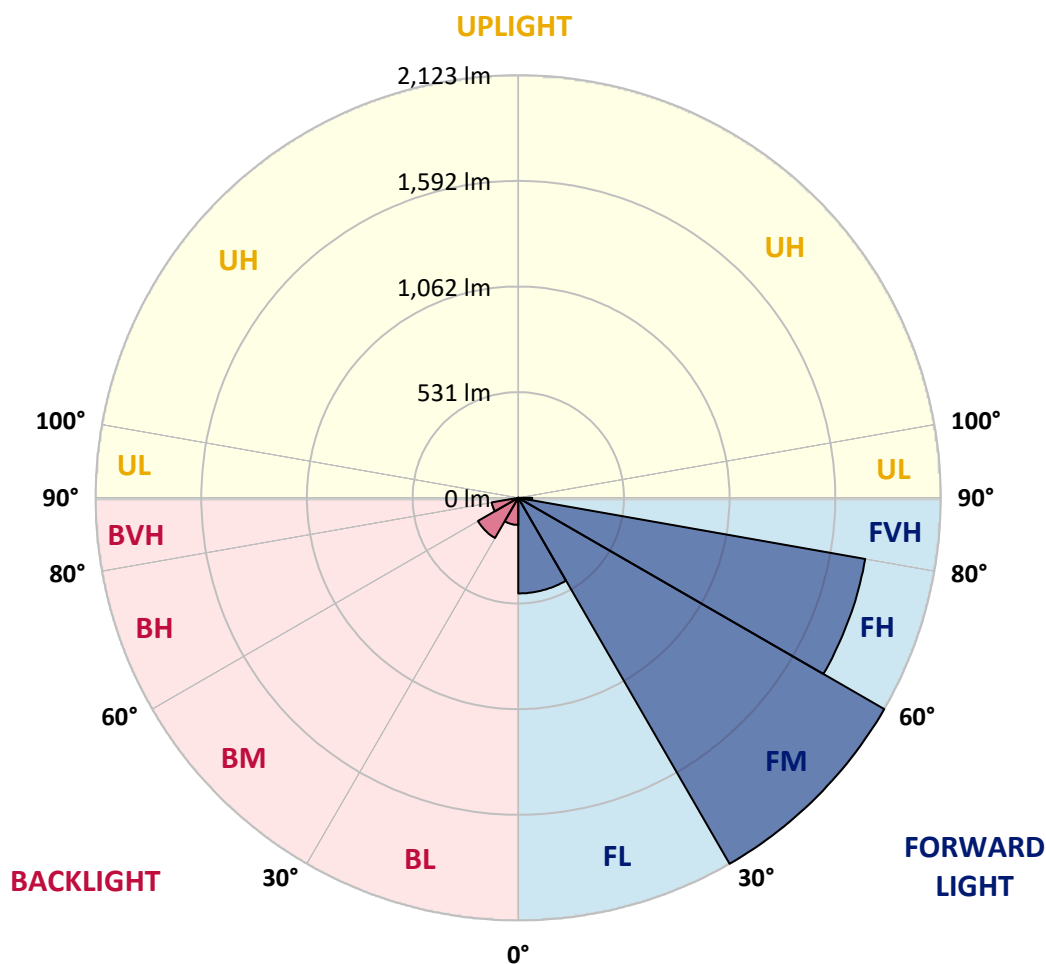
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	480.5	9.7			
FM	(30°-60°)	2123.3	42.9			
FH	(60°-80°)	1770.1	35.8			G1/1800
FVH	(80°-90°)	70.2	1.4			G1/100
BL	(0°-30°)	136.2	2.8	B1/500		
BM	(30°-60°)	233.3	4.7	B1/1000		
BH	(60°-80°)	135.3	2.7	B1/500		G1/500
BVH	(80°-90°)	2.0	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-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6
2.5°	994.6	981.4	984.0	970.8	964.7	950.0	934.5	914.3	891.9	891.9	870.0
5°	1099.3	1090.9	1090.9	1075.5	1063.6	1040.5	1012.9	977.2	934.9	930.7	889.3
7.5°	1163.5	1158.4	1161.6	1152.6	1143.0	1118.9	1086.1	1039.6	979.5	974.4	912.0
10°	1176.1	1175.7	1184.7	1187.3	1193.7	1181.5	1152.3	1098.6	1023.5	1016.1	931.6
12.5°	1127.5	1121.5	1143.6	1169.6	1206.2	1222.6	1207.6	1152.6	1063.6	1053.4	950.0
15°	1047.9	1049.2	1070.4	1110.5	1171.6	1230.0	1249.6	1205.3	1104.4	1092.2	967.3
17.5°	1002.3	997.5	1015.8	1051.8	1119.2	1201.7	1269.2	1254.4	1147.8	1134.0	984.9
20°	996.8	996.5	1000.7	1017.1	1068.5	1161.2	1266.9	1302.3	1198.8	1182.7	1010.3
22.5°	1034.7	1034.1	1030.5	1027.4	1041.5	1121.8	1257.3	1347.9	1259.8	1242.5	1046.3
25°	1092.9	1091.9	1086.4	1066.8	1053.1	1100.5	1248.2	1390.2	1332.1	1312.8	1090.0
27.5°	1163.8	1163.2	1153.2	1123.7	1088.0	1102.5	1243.8	1433.9	1415.6	1396.7	1140.4
30°	1250.9	1249.6	1229.0	1187.3	1140.7	1133.0	1249.9	1483.1	1502.6	1488.2	1198.5
32.5°	1360.1	1356.5	1329.5	1266.6	1201.4	1173.8	1261.5	1533.5	1605.8	1592.2	1276.2
35°	1444.5	1439.1	1423.3	1367.8	1271.7	1223.8	1288.4	1593.2	1729.7	1717.8	1375.4
37.5°	1517.1	1511.7	1498.8	1453.1	1372.6	1287.8	1331.8	1672.8	1876.2	1870.3	1496.5
40°	1595.4	1586.5	1580.3	1531.6	1458.7	1380.0	1393.8	1766.0	2044.8	2045.4	1642.0
42.5°	1655.8	1652.3	1652.9	1615.4	1541.8	1489.1	1476.0	1871.0	2246.7	2252.8	1817.0
45°	1707.5	1704.7	1716.6	1690.2	1625.6	1560.8	1572.4	1989.8	2467.7	2480.2	2012.9
47.5°	1747.3	1750.6	1767.6	1750.6	1712.7	1611.2	1657.7	2118.0	2699.8	2701.5	2215.2
50°	1787.2	1788.4	1816.7	1808.4	1792.9	1675.1	1736.5	2261.1	2944.6	2947.5	2404.4
52.5°	1799.7	1797.7	1842.7	1863.2	1864.0	1754.1	1838.2	2417.3	3184.5	3193.8	2599.0
55°	1735.4	1741.0	1813.5	1897.0	1930.1	1863.2	1975.7	2614.8	3440.1	3444.0	2791.7
57.5°	1421.4	1451.6	1612.1	1805.8	1972.8	2019.7	2173.2	2845.7	3735.2	3731.7	2987.0
60°	862.6	898.5	1090.6	1514.5	1833.4	2176.7	2464.2	3203.4	4057.7	4047.7	3184.5
62.5°	482.4	493.2	554.6	906.6	1394.4	2076.9	2748.3	3662.9	4490.6	4456.9	3378.8
65°	355.5	359.1	373.5	444.1	685.3	1597.4	2686.1	4212.4	5098.9	5038.8	3611.6
67.5°	308.9	312.5	326.6	336.2	306.1	839.2	2213.0	4517.3	5871.2	5792.5	3926.7
70°	260.1	262.1	284.8	291.3	219.0	319.2	1421.7	4423.2	6586.0	6529.9	4264.8
72.5°	193.9	201.7	234.7	250.2	175.7	169.5	669.2	3867.2	6707.1	6707.8	4242.1
75°	131.7	138.8	176.6	205.8	135.5	118.8	270.1	2887.7	5840.3	5840.3	3718.6
77.5°	89.9	95.7	123.0	161.5	102.8	81.6	140.0	1832.8	4190.0	4337.4	2650.4
80°	39.9	43.4	79.3	117.3	78.0	52.7	79.3	1003.6	2533.8	2502.6	1038.9
82.5°	19.6	22.4	50.7	73.2	50.4	32.4	41.7	477.2	821.1	780.4	162.2
85°	3.9	5.1	27.3	31.2	23.5	14.5	15.8	146.8	98.9	113.1	34.3
87.5°	0.0	0.0	8.3	5.7	2.6	3.2	3.2	13.1	7.7	9.0	9.0
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°	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6	855.6
2.5°	858.4	846.5	820.5	794.8	768.5	744.5	727.7	711.0	700.7	696.3	696.9
5°	865.2	841.1	786.5	729.3	672.8	617.6	576.2	537.3	525.1	504.8	506.1
7.5°	875.8	836.6	750.5	654.2	562.3	481.4	422.9	376.4	357.7	339.8	339.5
10°	882.8	828.2	702.9	574.2	450.0	359.1	303.2	269.5	257.3	246.3	246.0
12.5°	885.7	812.8	648.4	484.6	350.0	273.6	240.3	224.5	220.3	216.5	216.5
15°	888.3	797.8	587.3	398.2	276.5	229.0	215.8	210.6	207.8	205.2	205.2
17.5°	890.5	778.5	517.7	323.7	233.5	210.9	204.6	199.2	196.9	193.9	193.9
20°	898.2	759.8	455.4	267.2	210.0	198.1	191.1	185.3	183.4	181.4	181.7
22.5°	912.7	744.8	395.0	229.0	195.9	185.0	176.0	169.5	168.3	167.0	166.0
25°	930.1	726.1	338.1	204.3	182.0	169.8	159.9	154.5	153.2	153.5	152.8
27.5°	952.2	705.5	289.4	188.5	169.8	155.8	144.5	140.3	140.9	142.3	141.7
30°	976.6	686.6	251.1	177.6	159.0	143.2	132.0	129.1	131.3	133.2	132.6
32.5°	1012.9	669.9	224.5	168.9	149.3	132.9	123.9	120.4	123.0	125.6	124.9
35°	1062.3	661.5	209.4	161.5	140.9	124.9	115.9	113.4	115.9	116.5	116.2
37.5°	1123.1	660.9	203.0	155.4	133.2	118.2	108.2	107.2	109.2	109.5	108.9
40°	1201.4	665.1	198.1	151.0	125.3	110.5	101.2	100.2	100.9	103.1	102.8
42.5°	1300.6	682.4	191.4	145.1	116.5	102.8	95.4	93.2	92.8	95.4	95.0
45°	1425.3	720.7	182.4	135.8	108.9	96.4	89.0	86.4	85.4	86.1	87.0
47.5°	1561.1	767.5	173.4	127.2	103.4	91.2	83.8	80.6	79.0	79.0	79.0
50°	1692.8	820.5	167.3	118.2	99.5	86.4	78.3	75.1	72.6	72.0	71.6
52.5°	1823.2	872.6	162.5	109.2	95.0	80.3	73.2	69.7	66.8	65.5	64.9
55°	1942.0	922.0	154.2	100.6	89.3	73.9	68.1	64.6	61.0	58.7	57.8
57.5°	2055.9	963.1	138.8	91.5	80.3	67.8	62.6	58.7	54.6	51.7	50.4
60°	2159.7	984.3	119.5	81.9	71.3	61.3	56.5	53.0	47.6	42.7	41.4
62.5°	2238.7	976.0	98.6	70.9	62.0	55.6	49.5	45.9	39.5	33.7	31.5
65°	2319.7	930.4	78.7	59.4	54.2	47.9	41.4	37.9	30.5	24.4	22.8
67.5°	2424.6	833.0	62.0	49.5	46.8	37.9	32.4	30.2	25.0	19.3	17.9
70°	2492.1	647.1	48.2	40.2	38.5	27.6	25.0	24.7	19.9	14.8	13.1
72.5°	2307.1	424.2	36.9	30.5	27.6	17.9	19.3	19.3	14.5	9.9	8.7
75°	1925.9	248.3	26.6	21.8	15.8	11.6	13.1	13.1	9.0	4.8	3.9
77.5°	1375.4	132.3	17.6	13.5	8.0	5.1	7.1	6.8	2.9	0.3	0.0
80°	526.0	45.6	8.3	5.4	2.3	0.9	0.6	0.3	0.3	0.0	0.0
82.5°	80.3	11.9	1.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	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)