

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: P961561

Luminaire Tested: **NAV-SB2A-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6995.6 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

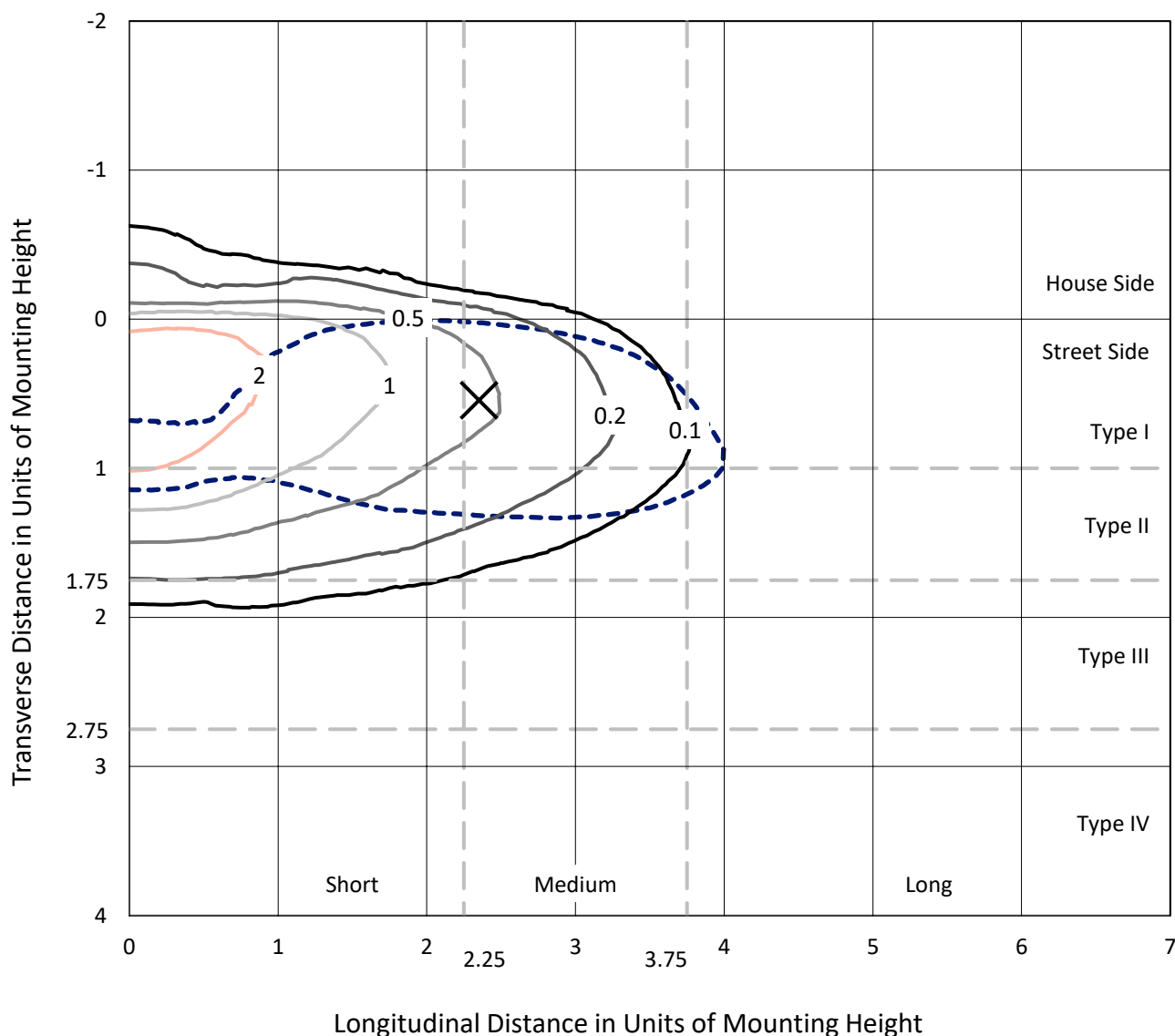
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

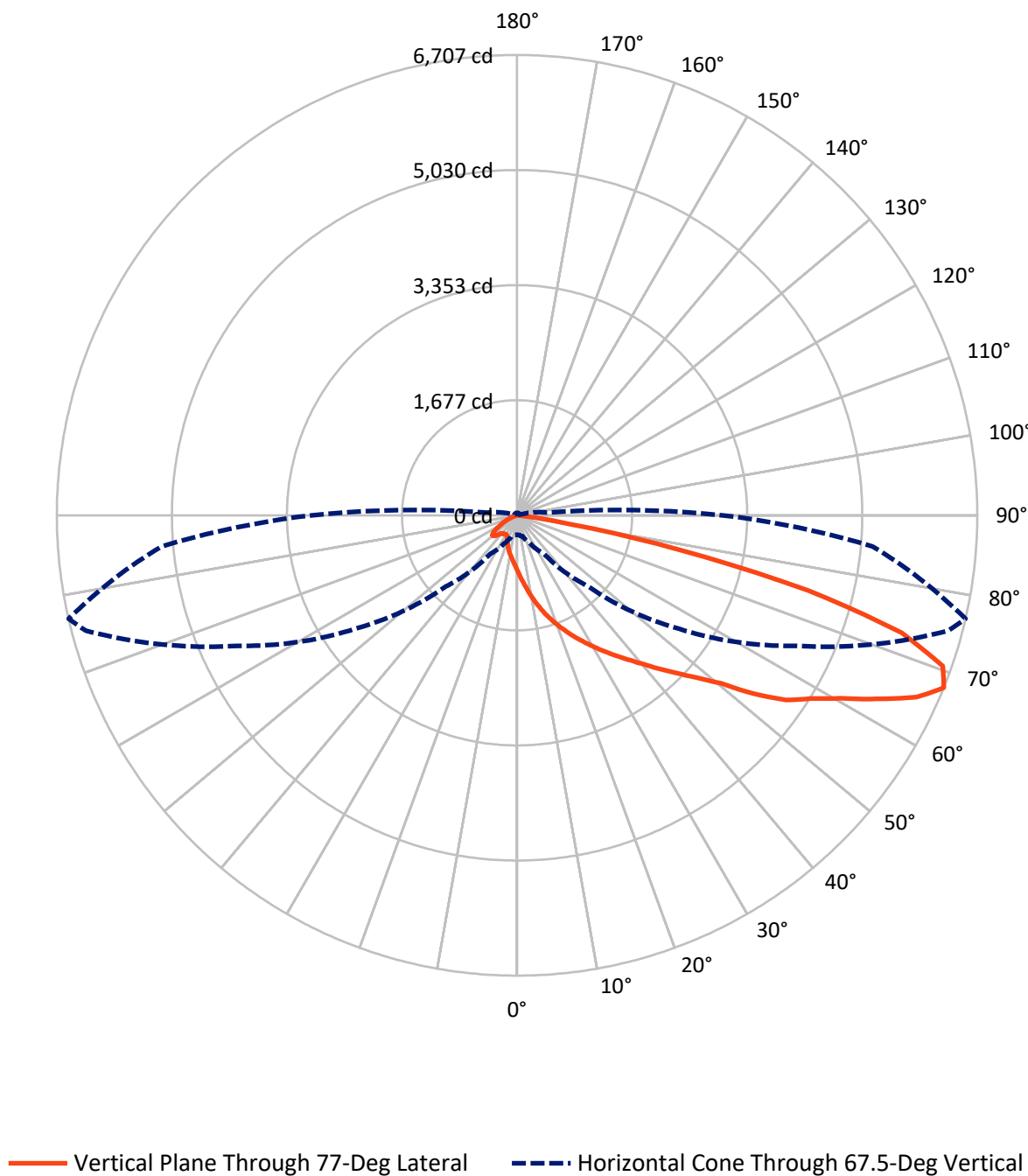
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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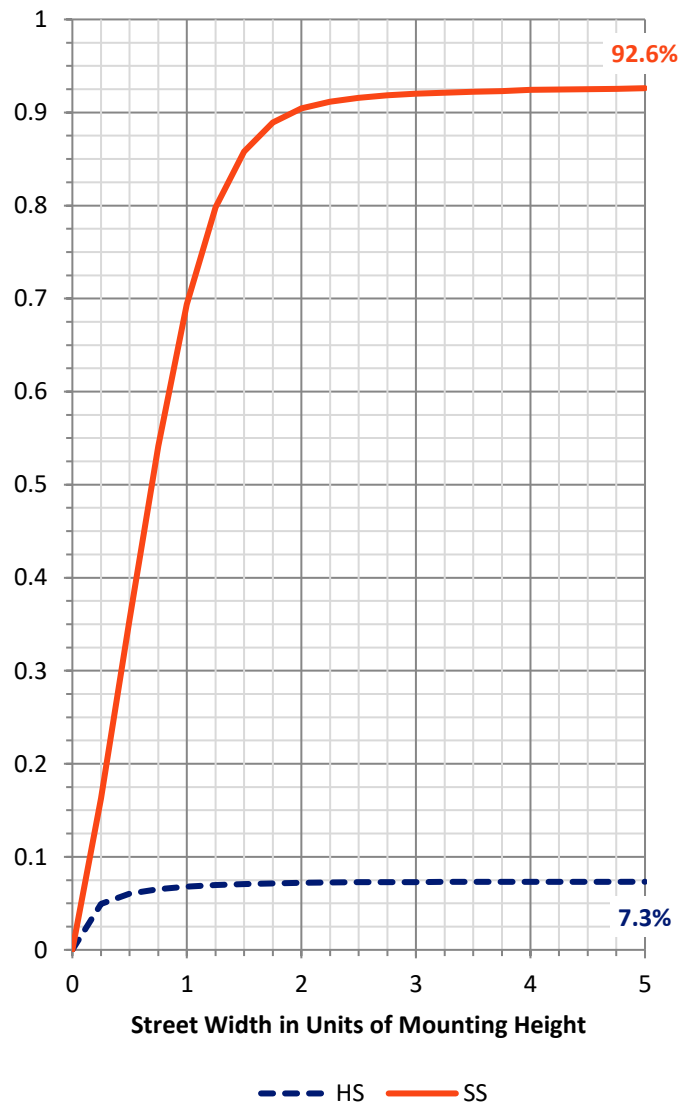
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	514.7	0.0	514.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	6480.9	0.0	6480.9
	% Fixture	92.6	0.0	92.6
Total	Lumens	6995.6	0.0	6995.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.3	1.2
10°-20°	288.3	4.1
20°-30°	556.4	8.0
30°-40°	965.9	13.8
40°-50°	1402.5	20.0
50°-60°	1610.6	23.0
60°-70°	1398.3	20.0
70°-80°	658.6	9.4
80°-90°	32.6	0.5
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°	6995.6	100.0
0°-180°	6995.6	100.0

Coefficient of Utilization



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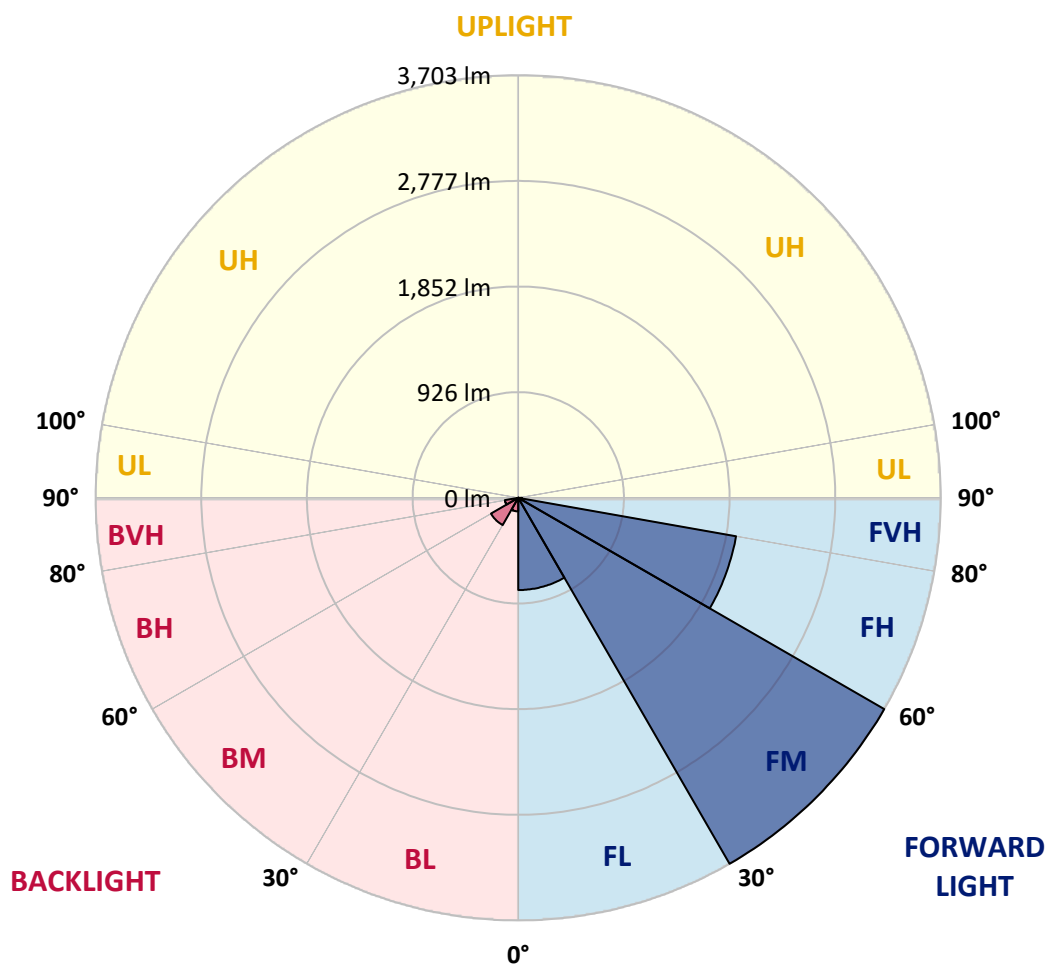
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	807.9	11.5			
FM	(30°-60°)	3703.3	52.9			
FH	(60°-80°)	1937.8	27.7			G2/5000
FVH	(80°-90°)	32.0	0.5			G1/100
BL	(0°-30°)	119.2	1.7	B1/500		
BM	(30°-60°)	275.8	3.9	B1/1000		
BH	(60°-80°)	119.1	1.7	B1/500		G1/500
BVH	(80°-90°)	0.6	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7
2.5°	1116.8	1123.8	1113.9	1094.7	1066.0	1047.3	1001.7	958.8	910.9	895.7	848.0
5°	1361.4	1367.6	1356.2	1335.4	1297.1	1260.6	1200.7	1110.8	1017.4	987.4	902.7
7.5°	1542.6	1546.1	1541.7	1522.6	1486.1	1444.8	1377.9	1271.5	1132.9	1099.9	970.1
10°	1672.9	1684.2	1682.9	1675.6	1651.2	1617.8	1546.5	1425.3	1262.4	1219.9	1046.0
12.5°	1759.3	1771.9	1779.3	1795.8	1794.6	1773.2	1710.7	1582.6	1391.4	1341.4	1131.6
15°	1784.5	1798.1	1826.2	1864.5	1898.4	1909.3	1865.4	1736.8	1533.5	1469.6	1219.3
17.5°	1770.2	1791.1	1824.9	1885.4	1959.6	2008.7	2004.0	1885.8	1662.4	1589.5	1305.4
20°	1802.0	1821.9	1848.4	1899.2	1985.7	2074.7	2110.4	2028.3	1790.7	1714.2	1395.7
22.5°	1977.4	1973.9	1976.6	1984.8	2036.5	2124.7	2198.1	2157.7	1917.5	1839.3	1491.4
25°	2255.4	2239.8	2213.3	2168.6	2155.6	2198.1	2274.6	2272.4	2051.3	1967.5	1589.1
27.5°	2574.3	2571.7	2509.6	2401.9	2341.0	2324.5	2361.0	2384.0	2183.8	2094.3	1687.3
30°	2879.7	2886.6	2802.8	2682.9	2571.3	2506.5	2473.5	2490.0	2318.4	2231.1	1788.4
32.5°	3145.5	3152.9	3061.7	2921.4	2783.3	2705.1	2635.6	2594.7	2465.2	2370.1	1899.6
35°	3370.1	3377.6	3272.8	3117.7	2970.4	2899.7	2821.0	2709.4	2612.9	2524.4	2023.5
37.5°	3570.9	3568.6	3428.3	3272.0	3127.3	3071.3	3030.0	2850.6	2765.0	2679.5	2160.8
40°	3689.5	3698.6	3578.7	3406.2	3265.9	3225.1	3222.5	3025.7	2940.5	2857.5	2311.1
42.5°	3724.2	3740.2	3653.4	3511.8	3384.4	3340.2	3408.3	3215.0	3144.7	3063.9	2480.9
45°	3661.6	3677.3	3637.7	3539.5	3465.3	3436.6	3568.2	3411.4	3362.7	3282.9	2672.5
47.5°	3479.2	3498.7	3508.3	3487.5	3486.5	3515.6	3711.6	3618.1	3621.6	3540.0	2894.5
50°	3126.0	3159.0	3246.8	3320.6	3434.9	3578.3	3851.0	3842.3	3913.6	3843.2	3183.8
52.5°	2484.0	2530.8	2833.2	3035.2	3292.0	3566.5	4004.4	4202.1	4425.7	4322.8	3591.7
55°	1996.1	1996.1	2242.0	2619.9	3013.1	3489.2	4071.3	4435.8	4774.6	4750.3	3878.8
57.5°	1627.3	1646.9	1803.7	2137.7	2609.5	3305.0	4112.5	4582.6	5055.6	5037.9	4159.4
60°	1004.4	1046.5	1342.7	1672.5	2150.3	2977.0	4086.5	4731.2	5396.6	5411.0	4497.4
62.5°	565.6	581.3	713.3	1203.4	1672.1	2536.1	3887.1	4814.1	5832.9	5893.6	4845.8
65°	390.5	398.3	449.2	749.0	1159.0	2019.1	3497.4	4762.5	6269.8	6392.7	5141.2
67.5°	283.7	287.6	319.3	457.5	687.7	1464.0	2886.6	4501.8	6501.4	6706.9	5197.7
70°	218.1	220.7	243.7	300.6	406.2	903.5	2096.4	3983.6	6333.7	6579.2	4908.4
72.5°	177.2	179.9	197.6	222.4	269.4	534.3	1270.7	3235.0	5593.4	5858.5	4178.6
75°	149.4	152.9	169.0	185.0	211.2	343.2	596.0	2252.8	4206.4	4380.1	2905.8
77.5°	82.9	76.5	137.2	153.3	178.1	217.2	278.9	1325.8	2355.8	2404.0	1289.3
80°	51.7	53.4	109.1	123.4	136.8	109.5	127.7	510.4	816.7	775.8	249.8
82.5°	3.1	7.0	83.8	89.1	93.8	46.9	48.2	173.3	196.8	180.7	44.3
85°	0.0	0.0	38.2	30.9	32.6	13.4	13.9	40.4	26.5	28.7	8.7
87.5°	0.0	0.0	0.0	0.8	0.0	1.3	2.6	3.5	1.3	1.7	3.1
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°	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7	806.7
2.5°	817.5	787.2	725.5	665.1	616.0	570.4	537.8	507.0	491.3	490.5	489.5
5°	842.3	778.5	655.1	546.0	458.3	388.0	342.3	309.8	293.3	287.6	286.7
7.5°	877.1	781.0	593.4	441.8	338.5	278.0	251.9	241.5	238.1	234.1	233.3
10°	921.0	787.2	538.2	355.8	266.7	236.4	225.9	221.5	218.9	216.4	215.5
12.5°	970.1	792.8	483.5	295.4	234.6	218.9	211.6	206.3	202.8	199.9	199.0
15°	1017.8	796.3	426.6	253.3	218.1	205.5	197.6	192.0	187.3	183.8	183.3
17.5°	1065.2	801.0	373.2	228.1	204.6	192.0	184.2	177.2	173.3	169.4	169.0
20°	1117.8	800.2	322.8	210.2	191.2	178.6	170.3	163.8	159.9	155.5	155.1
22.5°	1166.3	795.8	278.5	195.1	177.2	165.0	155.9	149.4	145.5	142.1	141.7
25°	1222.4	792.3	241.5	181.1	164.2	152.0	142.1	136.0	131.6	128.5	128.1
27.5°	1276.3	787.2	214.6	168.5	151.6	139.9	130.3	123.4	119.4	117.3	117.3
30°	1329.3	785.9	204.6	156.4	140.3	128.5	119.0	112.5	109.5	108.6	108.1
32.5°	1393.2	789.4	209.0	152.0	129.9	118.2	109.1	104.2	101.2	101.2	101.2
35°	1461.3	788.4	215.5	155.9	122.9	107.7	100.8	97.8	94.7	94.7	94.7
37.5°	1546.9	789.8	220.7	162.5	120.3	99.0	95.1	91.2	89.5	89.5	89.5
40°	1674.6	832.8	218.1	168.1	119.4	93.0	85.2	83.8	82.5	82.5	82.5
42.5°	1831.1	926.2	221.5	168.5	119.0	88.7	78.2	80.8	77.8	77.3	76.9
45°	2002.2	1028.3	243.7	159.4	118.6	86.4	74.7	77.8	73.0	73.0	73.0
47.5°	2172.1	1129.4	266.3	146.4	117.3	86.0	71.6	69.9	68.7	69.1	69.1
50°	2406.2	1212.0	275.0	128.5	114.3	85.2	66.0	66.4	65.6	66.4	66.4
52.5°	2661.2	1229.4	264.6	108.6	105.6	82.5	62.1	63.9	63.4	64.3	64.3
55°	2820.2	1210.7	218.5	90.4	92.0	72.2	58.2	61.7	61.7	61.7	61.7
57.5°	2984.4	1131.2	155.1	73.4	76.5	59.0	54.7	59.6	59.0	58.6	58.6
60°	3102.6	1002.7	102.1	60.4	60.8	48.7	50.8	56.1	55.6	53.4	53.4
62.5°	3190.7	860.6	65.6	51.2	46.4	43.9	46.4	50.8	49.1	44.3	43.5
65°	3180.8	663.8	50.4	43.9	38.2	38.2	40.4	44.3	39.1	31.3	30.4
67.5°	2995.3	449.2	41.7	36.9	32.2	31.7	33.4	36.9	33.4	26.5	25.6
70°	2663.8	293.7	33.4	28.7	25.6	23.5	27.0	31.7	28.2	21.3	20.4
72.5°	2162.0	179.0	25.2	20.8	18.7	15.2	21.3	26.0	22.5	15.7	14.8
75°	1398.8	91.2	17.4	13.4	9.9	9.1	15.7	19.6	15.7	9.5	8.3
77.5°	535.2	38.2	9.5	6.0	5.2	4.3	8.7	11.7	6.6	2.2	1.7
80°	102.9	16.1	4.8	3.1	2.6	1.7	1.3	0.8	0.0	0.0	0.0
82.5°	17.8	5.2	1.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	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)