

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: P959442

Luminaire Tested: **NAV-SB1A-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

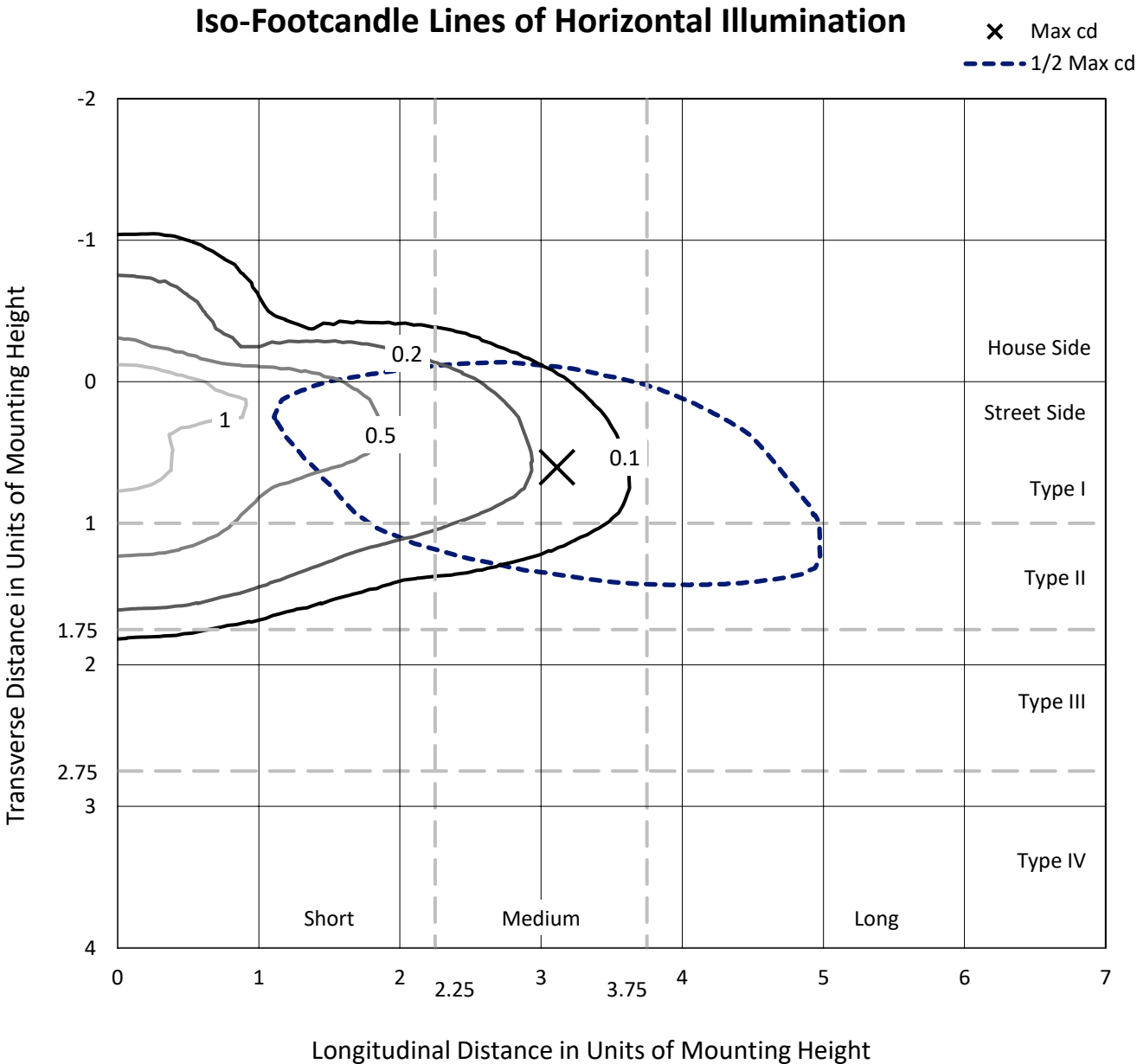
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4108.2 lumens
Efficiency: N/A
Efficacy: 133.0 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): 30.9
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



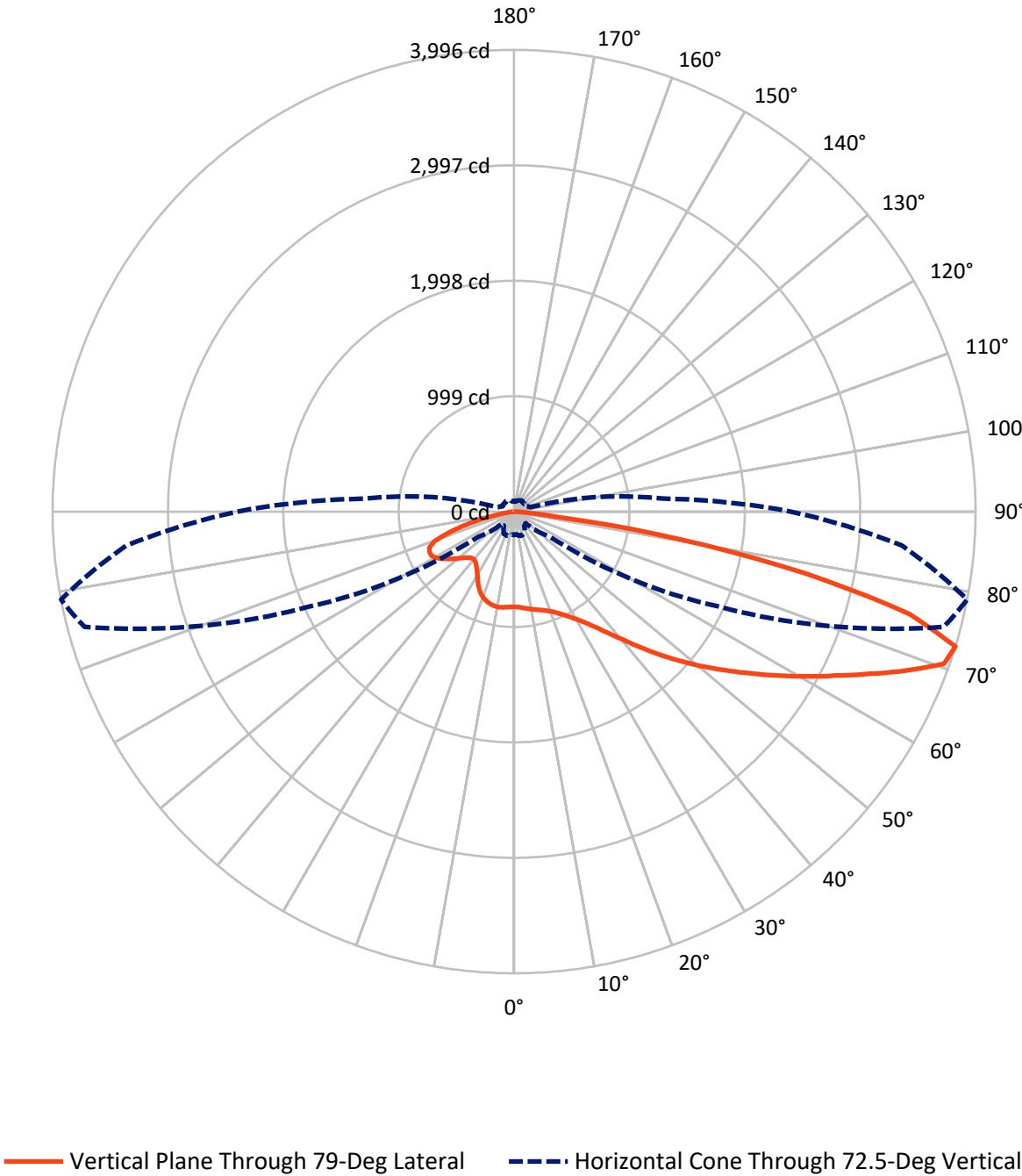
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Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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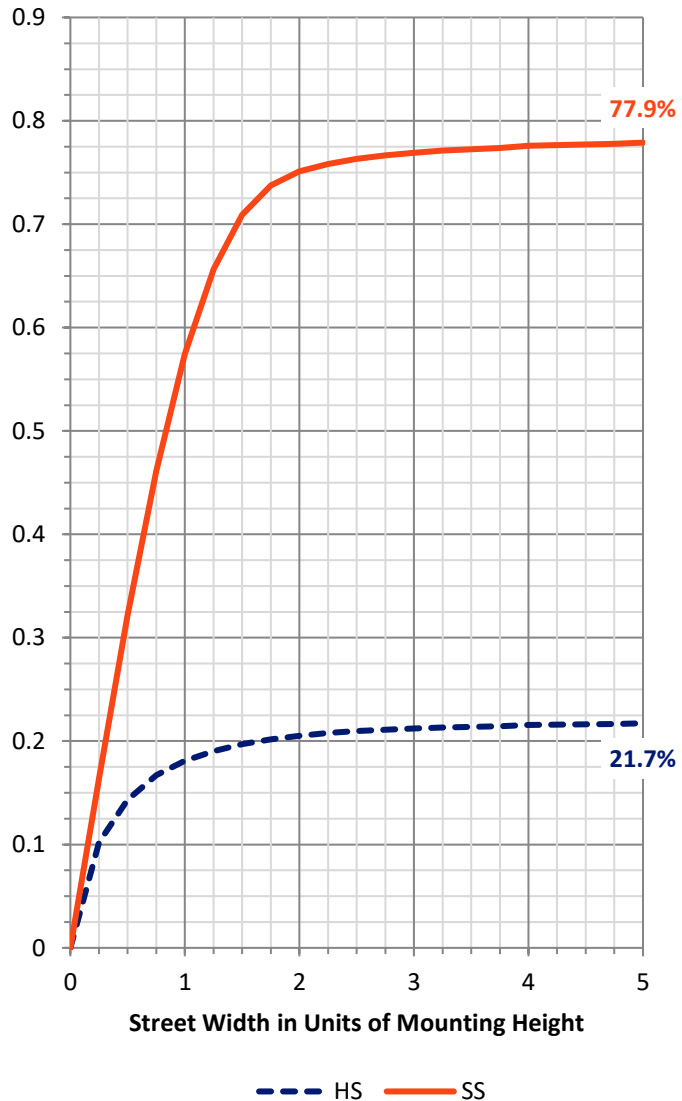
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	904.0	0.0	904.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	3204.2	0.0	3204.2
	% Fixture	78.0	0.0	78.0
Total	Lumens	4108.2	0.0	4108.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.8
10°-20°	195.7	4.8
20°-30°	315.8	7.7
30°-40°	474.0	11.5
40°-50°	672.4	16.4
50°-60°	849.1	20.7
60°-70°	862.4	21.0
70°-80°	587.8	14.3
80°-90°	76.2	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°	4108.2	100.0
0°-180°	4108.2	100.0

Coefficient of Utilization



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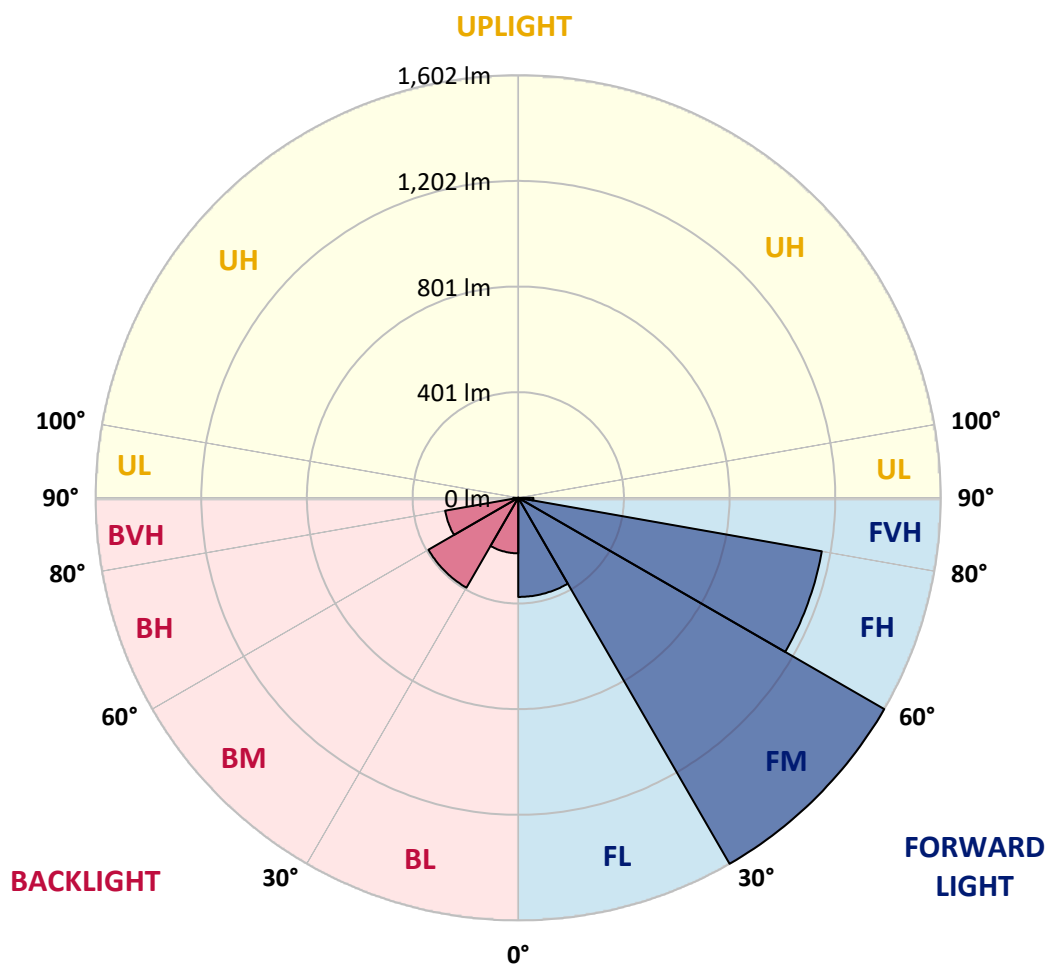
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	375.8	9.1			
FM	(30°-60°)	1602.3	39.0			
FH	(60°-80°)	1168.6	28.4			G1/1800
FVH	(80°-90°)	57.4	1.4			G1/100
BL	(0°-30°)	210.6	5.1	B1/500		
BM	(30°-60°)	393.2	9.6	B1/1000		
BH	(60°-80°)	281.5	6.9	B1/500		G1/500
BVH	(80°-90°)	18.8	0.5			G1/100
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°	79°	85°
0°	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7
2.5°	825.1	821.2	823.6	822.8	823.8	825.1	825.5	826.3	828.4	828.2	827.9
5°	823.4	819.5	822.8	821.6	824.5	827.5	830.1	832.5	836.0	837.5	835.4
7.5°	819.7	817.0	820.3	823.6	828.8	833.3	837.1	842.6	847.5	848.4	849.9
10°	798.2	796.2	803.8	812.3	826.7	839.1	847.1	853.4	858.8	859.7	861.8
12.5°	775.8	773.4	781.9	793.3	816.6	839.1	856.0	864.3	869.0	871.9	875.1
15°	772.1	770.2	774.9	784.9	804.2	833.1	862.0	877.3	881.4	884.7	886.0
17.5°	789.9	786.2	788.2	791.6	803.0	827.7	866.8	892.1	898.3	901.8	901.8
20°	831.2	825.9	823.0	816.0	814.1	828.6	866.4	909.9	918.1	922.5	923.5
22.5°	886.2	882.7	876.2	858.5	839.5	839.3	874.6	932.6	948.1	952.2	949.7
25°	952.6	947.5	939.2	915.3	878.5	860.3	888.6	961.8	987.7	988.7	981.1
27.5°	1029.2	1021.3	1010.0	978.6	929.0	893.4	909.9	995.3	1033.1	1032.7	1017.0
30°	1109.8	1102.0	1090.0	1051.8	989.4	937.9	939.4	1031.4	1087.0	1084.6	1057.9
32.5°	1168.7	1162.9	1160.4	1130.9	1058.9	990.5	973.3	1071.3	1153.4	1151.3	1113.9
35°	1213.9	1206.3	1209.1	1194.1	1134.8	1049.4	1014.9	1118.9	1234.3	1234.1	1187.6
37.5°	1258.6	1251.9	1254.3	1244.4	1205.0	1124.1	1065.5	1177.1	1334.4	1339.3	1276.6
40°	1299.5	1292.3	1301.9	1292.5	1259.5	1203.7	1123.1	1243.0	1450.5	1459.7	1384.5
42.5°	1324.1	1318.4	1334.2	1334.4	1306.9	1270.8	1186.2	1315.6	1584.9	1605.3	1517.0
45°	1332.5	1330.6	1354.4	1359.5	1348.8	1309.7	1243.2	1394.7	1729.6	1766.1	1668.1
47.5°	1323.4	1319.7	1352.7	1371.2	1379.6	1328.0	1290.4	1480.3	1877.3	1930.8	1832.8
50°	1277.4	1270.2	1319.3	1358.1	1388.4	1339.9	1337.9	1579.2	2045.3	2103.7	1998.3
52.5°	1194.5	1189.1	1245.0	1312.5	1369.3	1345.8	1391.4	1687.2	2204.8	2280.4	2168.1
55°	1088.8	1081.6	1143.1	1231.2	1321.6	1343.9	1444.8	1808.0	2393.0	2469.7	2343.5
57.5°	921.0	906.6	984.4	1088.8	1244.0	1341.4	1500.5	1928.1	2584.2	2676.2	2530.5
60°	676.3	655.0	750.4	874.0	1092.4	1318.1	1569.4	2062.9	2813.7	2896.4	2734.8
62.5°	393.8	381.4	443.7	559.1	823.4	1181.3	1608.1	2219.5	3039.2	3126.1	2935.6
65°	305.8	302.3	307.7	316.6	458.3	884.5	1488.8	2372.4	3326.1	3386.9	3144.9
67.5°	279.7	277.1	279.4	262.7	232.5	492.6	1177.8	2411.0	3633.4	3670.3	3328.1
70°	248.6	245.6	253.4	239.0	183.0	224.1	761.0	2270.7	3877.9	3947.2	3467.4
72.5°	202.5	199.1	217.3	210.7	154.1	143.8	382.2	1937.0	3852.3	3996.1	3367.6
75°	155.6	153.6	175.4	180.8	125.6	113.3	183.4	1439.9	3390.0	3534.9	2902.4
77.5°	120.8	119.3	130.4	150.2	101.3	87.8	112.7	913.4	2554.7	2580.1	2000.1
80°	90.6	86.3	96.5	116.2	78.9	64.1	76.5	532.6	1614.8	1463.8	870.5
82.5°	56.7	54.5	63.0	77.6	55.7	44.1	49.7	294.3	647.2	381.2	168.0
85°	32.4	31.5	34.3	44.3	30.2	25.4	28.5	130.0	118.2	81.3	50.6
87.5°	13.0	12.6	15.7	19.8	11.1	9.3	10.0	31.3	26.0	24.1	16.7
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°	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7	824.7
2.5°	827.1	827.1	824.0	819.3	813.8	810.4	804.7	803.2	797.3	795.6	798.4
5°	837.1	835.4	825.9	812.5	794.1	777.1	758.4	746.7	730.1	724.3	728.7
7.5°	849.6	844.9	828.8	799.3	760.6	722.5	683.0	653.0	624.3	614.1	615.4
10°	861.2	854.4	827.1	775.3	708.4	642.6	579.5	535.5	501.9	488.3	491.3
12.5°	872.7	860.3	815.6	735.5	634.3	545.0	477.9	443.5	422.9	406.4	411.8
15°	883.6	866.2	797.8	682.3	553.1	462.5	412.9	385.5	369.0	358.1	360.1
17.5°	896.2	871.1	771.0	614.8	475.7	405.3	364.9	348.3	345.1	343.8	344.6
20°	913.8	875.8	735.8	539.2	418.7	359.7	338.8	337.2	337.0	336.4	338.6
22.5°	932.6	881.2	689.3	470.5	370.3	331.2	327.5	324.4	322.5	322.3	324.6
25°	955.1	882.9	631.1	414.2	329.0	317.8	313.3	308.8	307.5	307.5	308.8
27.5°	976.8	877.1	563.2	365.3	305.8	305.3	299.7	298.2	298.0	298.6	300.3
30°	998.6	865.9	495.9	320.1	292.2	292.2	290.3	291.4	292.2	294.5	296.0
32.5°	1027.9	854.2	439.6	286.6	280.5	278.4	280.3	282.5	283.4	286.2	288.5
35°	1070.9	845.9	394.8	268.3	268.3	265.6	266.6	266.2	264.2	262.9	266.0
37.5°	1127.8	845.5	357.9	259.9	258.2	257.7	258.0	255.1	247.5	238.4	238.6
40°	1196.3	857.3	329.4	254.0	252.8	255.3	254.0	246.4	225.6	209.7	209.3
42.5°	1288.2	890.7	311.2	246.8	250.8	254.0	248.8	222.5	208.4	197.7	197.3
45°	1396.5	945.0	301.9	239.2	247.1	251.0	225.8	214.2	203.0	190.1	189.3
47.5°	1518.9	1013.5	299.7	232.1	238.8	241.2	216.0	210.7	197.9	184.1	183.0
50°	1652.4	1094.6	305.6	223.7	226.8	218.6	212.8	208.0	194.7	181.0	179.5
52.5°	1790.4	1183.9	317.2	212.1	214.9	205.8	211.5	207.4	192.8	174.2	173.0
55°	1926.0	1273.9	328.6	198.6	202.7	194.2	207.8	204.7	183.9	163.0	161.8
57.5°	2063.7	1363.4	339.7	186.7	191.1	183.2	201.9	197.7	173.8	152.5	152.1
60°	2206.9	1450.3	344.9	175.2	178.1	173.0	193.0	185.8	162.6	141.9	141.2
62.5°	2341.1	1522.6	336.4	163.6	165.5	163.4	181.2	171.7	151.3	130.0	129.8
65°	2475.6	1565.7	310.3	152.3	152.7	151.7	164.7	156.4	138.0	119.5	118.2
67.5°	2597.5	1589.8	268.9	140.1	139.1	138.7	149.2	139.9	125.2	109.1	107.8
70°	2623.4	1528.6	205.3	125.9	125.9	124.7	132.3	122.8	111.0	98.0	97.6
72.5°	2396.0	1285.8	145.9	109.6	111.2	109.1	115.4	107.3	96.7	88.0	85.4
75°	1932.1	942.9	106.1	92.8	95.8	92.1	98.0	92.4	83.2	83.0	74.7
77.5°	1327.6	583.0	77.0	76.5	78.6	73.9	80.7	77.6	69.3	65.6	61.5
80°	566.5	232.5	56.1	59.1	59.1	54.7	62.6	63.4	56.3	54.5	54.5
82.5°	112.7	66.1	39.4	40.6	38.2	36.9	44.3	49.1	67.8	75.4	75.6
85°	33.9	24.3	23.7	22.1	19.6	19.8	26.0	49.3	60.9	34.7	30.0
87.5°	9.3	6.0	6.3	5.0	4.1	5.4	8.9	37.4	20.4	8.7	7.4
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)