

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: P961565

Luminaire Tested: **NAV-SB2A-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961565
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8186.7 lumens
Efficiency: N/A
Efficacy: 142.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

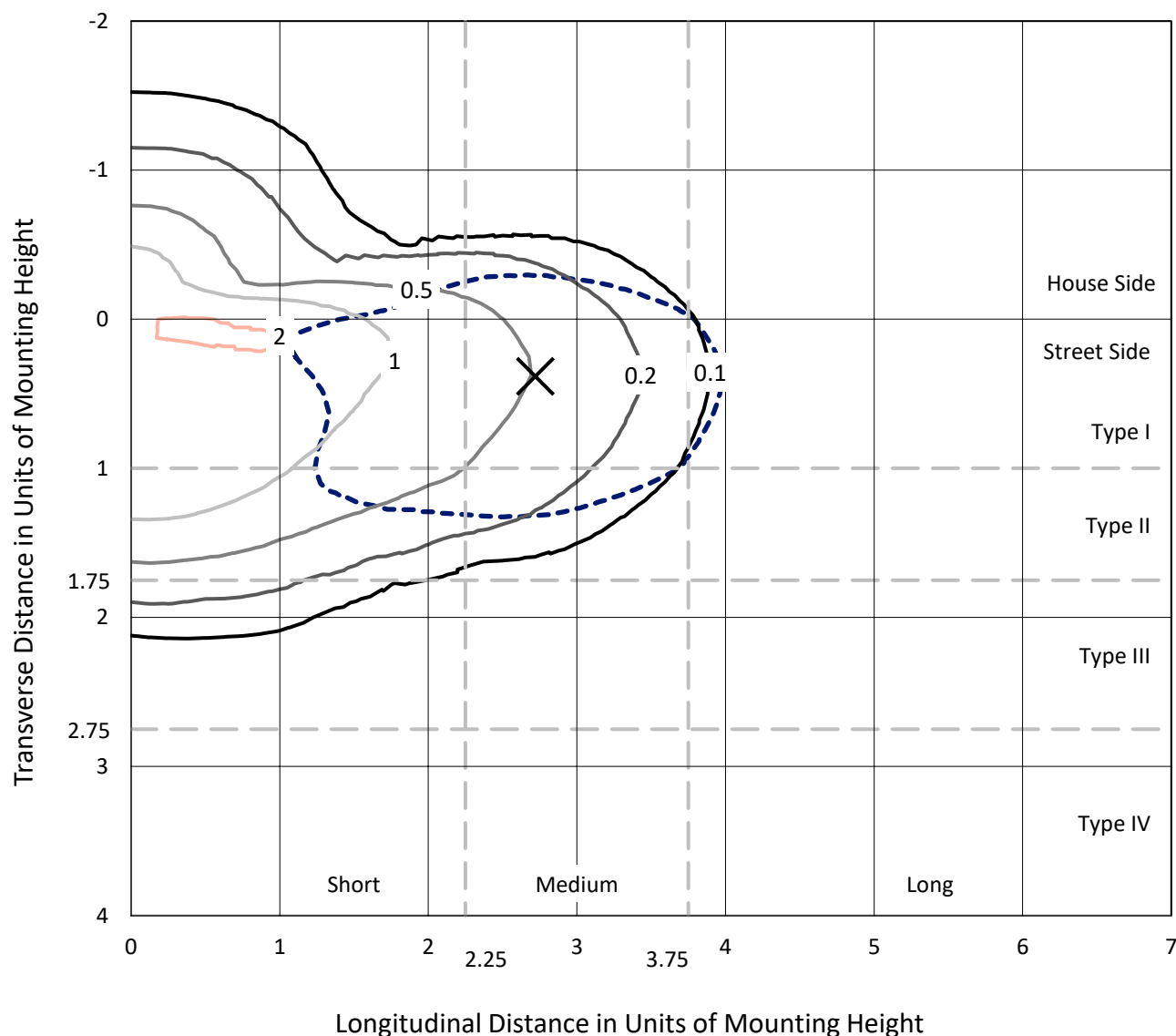
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

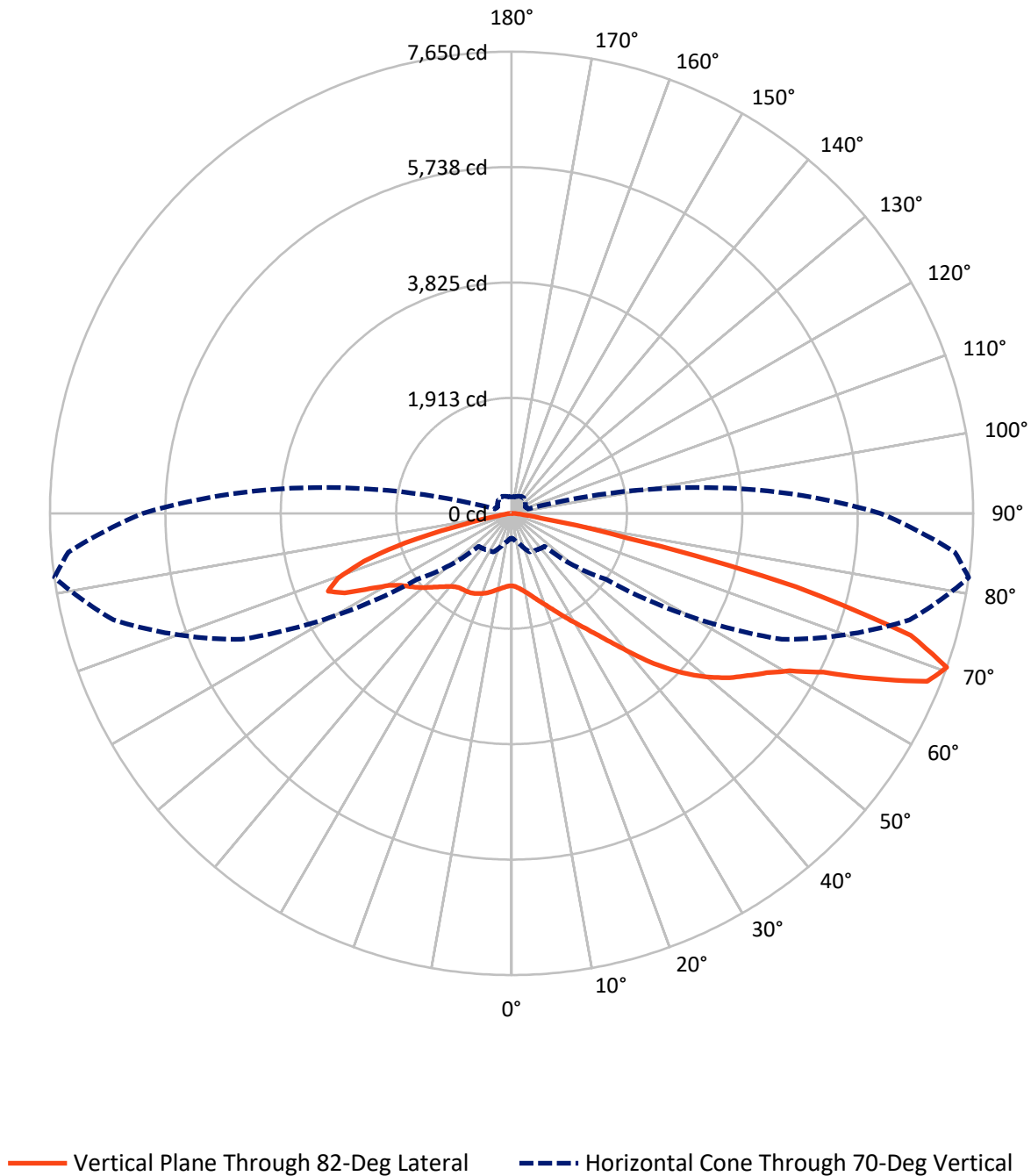
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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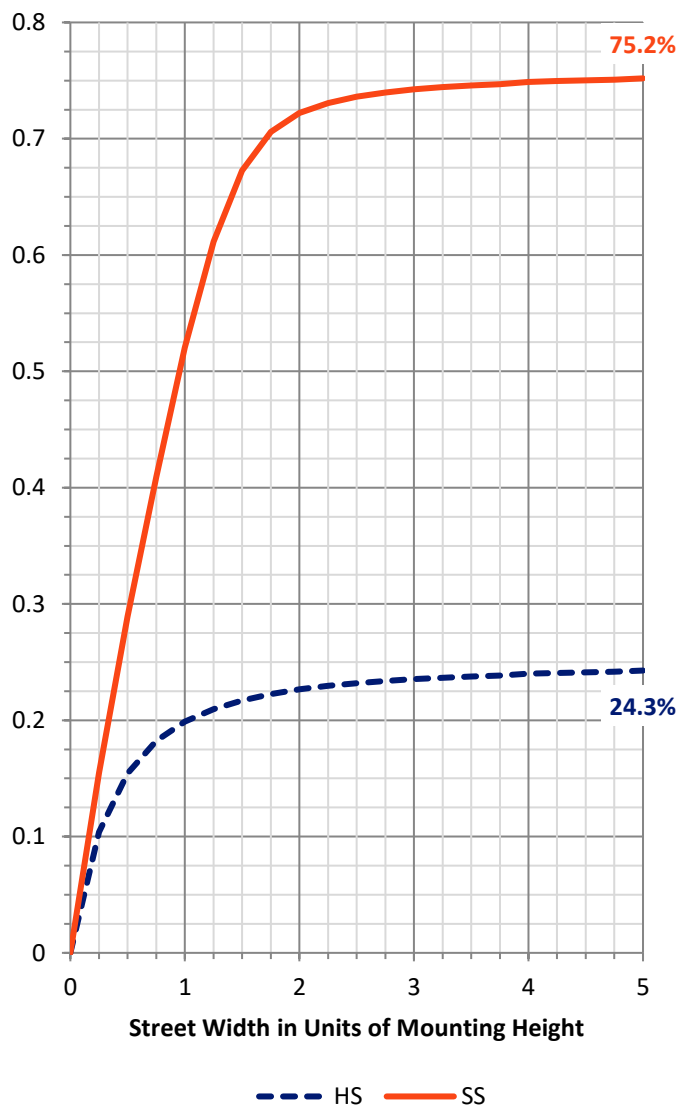
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2018.2	0.0	2018.2
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6168.5	0.0	6168.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	8186.7	0.0	8186.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	1.4
10°-20°	325.6	4.0
20°-30°	544.7	6.7
30°-40°	850.9	10.4
40°-50°	1355.2	16.6
50°-60°	1886.0	23.0
60°-70°	1972.8	24.1
70°-80°	1031.1	12.6
80°-90°	107.1	1.3
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°	8186.7	100.0
0°-180°	8186.7	100.0

Coefficient of Utilization



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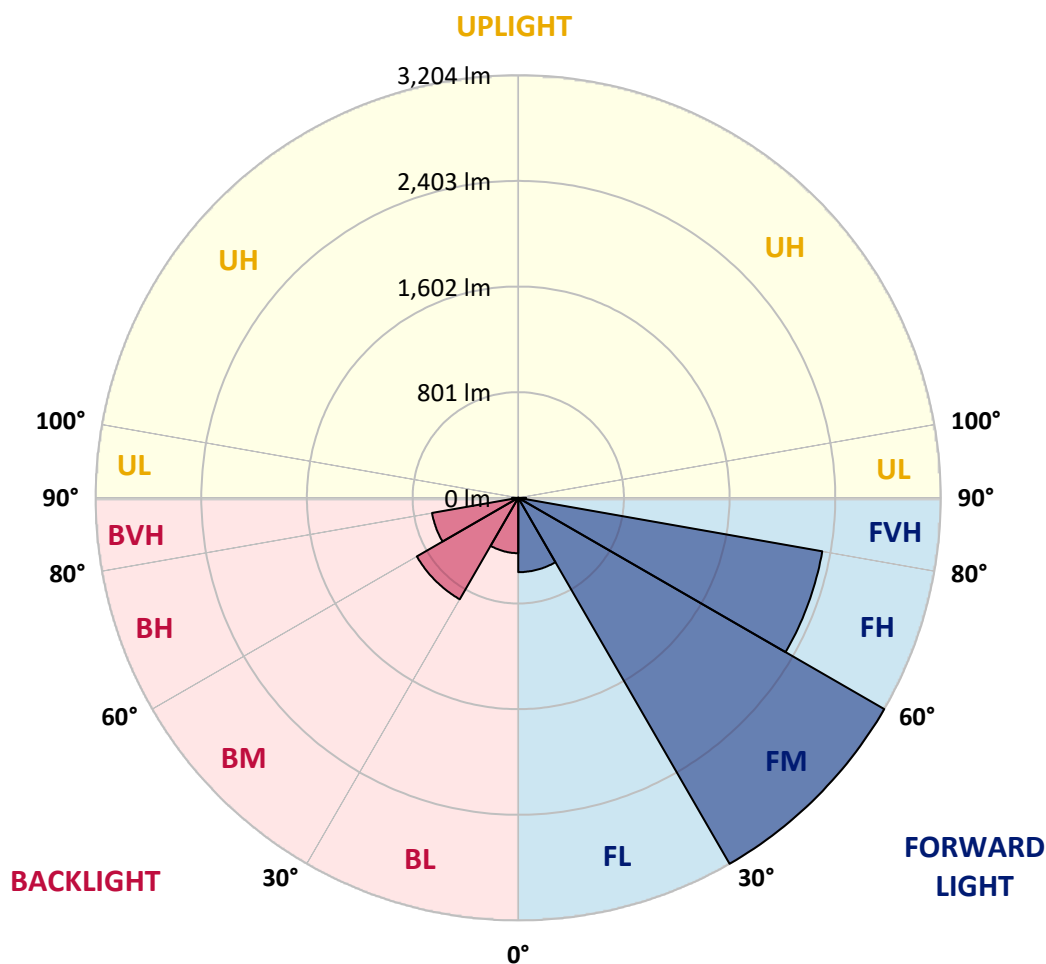
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	563.7	6.9			
FM	(30°-60°)	3204.2	39.1			
FH	(60°-80°)	2340.6	28.6			G2/5000
FVH	(80°-90°)	59.9	0.7			G1/100
BL	(0°-30°)	419.9	5.1	B1/500		
BM	(30°-60°)	887.9	10.8	B1/1000		
BH	(60°-80°)	663.3	8.1	B2/1000		G2/1000
BVH	(80°-90°)	47.1	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3
2.5°	1229.0	1235.8	1233.7	1231.5	1231.5	1228.5	1228.1	1223.7	1220.3	1214.6	1213.3
5°	1244.6	1251.9	1251.1	1252.9	1258.5	1259.8	1261.1	1258.5	1251.5	1244.6	1241.6
7.5°	1230.7	1238.9	1241.6	1251.9	1269.4	1284.9	1296.7	1301.4	1295.0	1284.9	1280.2
10°	1183.8	1192.9	1202.0	1226.7	1257.6	1294.6	1325.8	1344.5	1343.2	1333.6	1325.4
12.5°	1088.7	1098.2	1117.8	1165.9	1222.4	1287.6	1345.8	1384.9	1398.4	1391.4	1377.1
15°	1012.6	1020.9	1035.7	1085.2	1158.6	1257.6	1353.2	1429.2	1463.5	1459.6	1442.3
17.5°	1010.4	1013.9	1023.1	1046.5	1103.0	1210.7	1345.3	1472.6	1538.2	1537.8	1516.1
20°	1048.7	1050.0	1055.1	1060.0	1092.1	1175.1	1325.4	1508.7	1622.1	1622.1	1598.6
22.5°	1101.7	1100.7	1106.0	1101.7	1117.2	1172.0	1312.8	1540.4	1715.4	1722.4	1692.9
25°	1181.1	1176.8	1175.5	1165.5	1168.6	1200.3	1326.7	1576.4	1826.2	1840.6	1803.7
27.5°	1287.2	1280.2	1275.4	1252.4	1244.6	1258.5	1369.3	1619.9	1949.7	1974.4	1927.5
30°	1425.3	1412.7	1405.8	1365.8	1337.5	1339.7	1433.6	1677.7	2078.6	2118.6	2059.1
32.5°	1613.9	1594.3	1575.6	1510.0	1458.3	1441.4	1516.5	1757.6	2218.5	2282.4	2205.9
35°	1824.9	1809.3	1789.3	1688.1	1608.6	1569.5	1628.6	1869.3	2382.3	2483.5	2384.0
37.5°	2028.3	2014.7	2024.4	1887.9	1785.4	1728.6	1775.4	2019.1	2584.3	2733.8	2607.3
40°	2238.5	2228.0	2229.4	2099.1	1979.6	1915.7	1953.5	2207.2	2815.9	3031.3	2875.7
42.5°	2467.0	2459.2	2433.1	2317.5	2183.4	2123.8	2158.5	2424.4	3064.3	3370.1	3170.3
45°	2722.9	2718.1	2693.8	2561.3	2407.5	2340.6	2387.5	2664.2	3314.1	3689.0	3466.1
47.5°	2944.0	2947.9	2944.8	2833.2	2673.8	2575.6	2631.7	2914.5	3546.5	3988.7	3749.8
50°	3050.4	3070.8	3100.8	3066.1	2967.0	2867.1	2878.0	3156.0	3768.1	4269.8	4021.8
52.5°	2994.8	3033.5	3115.2	3170.7	3209.0	3188.2	3159.0	3395.7	3976.6	4523.5	4279.0
55°	2787.6	2841.9	2977.4	3111.7	3306.8	3458.4	3496.6	3661.6	4179.8	4746.8	4522.2
57.5°	2410.1	2498.2	2619.9	2891.4	3219.8	3589.0	3890.1	4030.4	4395.3	4985.3	4776.7
60°	1762.8	1881.0	2032.2	2436.1	2915.7	3519.1	4225.0	4596.9	4701.6	5294.1	5108.2
62.5°	1128.1	1201.1	1340.2	1720.7	2271.9	3160.8	4327.5	5305.0	5220.7	5800.7	5605.2
65°	772.3	819.3	946.6	1160.3	1468.7	2352.8	4053.1	5835.8	6045.2	6603.5	6454.8
67.5°	561.3	596.9	705.5	892.7	957.0	1392.3	3145.1	5811.5	6846.7	7430.5	7199.4
70°	409.2	434.4	525.6	705.5	736.4	774.6	1905.3	4940.1	6829.4	7650.4	7373.6
72.5°	303.2	320.6	381.8	547.3	596.0	523.1	943.1	3590.4	5868.4	6919.7	6697.7
75°	219.4	232.4	277.6	418.8	476.9	398.3	470.5	2098.2	4093.4	4867.5	4906.7
77.5°	167.7	177.6	207.3	306.7	381.8	298.9	291.9	965.2	1940.9	1950.5	2059.9
80°	134.7	141.1	157.2	215.9	292.7	223.8	190.2	389.7	613.4	519.2	544.8
82.5°	99.0	109.9	132.9	151.6	209.4	154.3	116.0	196.8	233.3	200.7	202.4
85°	56.5	63.9	80.4	108.6	133.8	94.3	66.4	87.3	108.6	89.1	79.5
87.5°	20.0	26.0	28.2	42.5	58.2	39.1	25.6	25.2	35.7	26.5	22.1
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°	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3	1200.3
2.5°	1209.0	1206.8	1198.1	1186.3	1174.2	1162.5	1158.6	1150.4	1144.6	1141.6	1145.1
5°	1233.3	1226.3	1205.9	1179.9	1152.5	1123.0	1102.1	1083.0	1069.1	1056.1	1061.3
7.5°	1268.0	1255.8	1220.7	1175.1	1126.4	1077.4	1040.9	1013.0	994.4	982.2	984.8
10°	1308.4	1289.8	1235.8	1167.7	1092.5	1022.1	979.2	955.3	943.5	937.1	938.8
12.5°	1354.9	1328.4	1251.5	1150.8	1040.9	960.4	930.9	923.9	924.4	924.9	925.7
15°	1412.2	1375.3	1264.1	1113.9	973.5	913.2	907.9	919.2	930.9	936.5	936.1
17.5°	1477.0	1424.9	1266.3	1053.0	907.4	882.7	899.2	923.5	941.4	949.1	950.9
20°	1546.5	1475.3	1250.7	967.0	853.2	857.9	887.4	918.8	938.3	948.3	950.9
22.5°	1626.0	1529.1	1213.3	876.7	808.8	831.1	865.8	896.2	916.6	926.6	929.2
25°	1716.8	1589.5	1154.7	800.6	770.6	800.6	835.4	860.6	877.1	886.2	888.8
27.5°	1817.5	1652.5	1076.5	740.3	737.2	769.4	798.0	817.5	826.3	833.2	835.8
30°	1918.8	1709.8	981.7	694.6	708.1	738.5	758.9	767.6	770.2	771.5	774.6
32.5°	2028.3	1759.3	882.3	656.8	680.3	708.5	720.7	724.6	712.5	704.2	706.7
35°	2160.7	1812.3	784.9	626.9	652.9	677.2	681.1	677.6	663.4	646.4	647.3
37.5°	2324.5	1878.4	707.2	605.6	627.3	643.4	638.6	637.8	639.0	619.0	620.3
40°	2525.2	1964.4	650.3	589.1	606.4	609.9	596.4	603.8	610.4	579.9	580.8
42.5°	2748.0	2068.2	614.3	577.8	589.1	580.8	560.0	568.2	567.3	527.4	527.0
45°	2975.3	2181.2	601.7	569.5	573.0	556.5	533.4	535.7	517.4	481.3	482.7
47.5°	3201.2	2302.4	609.5	562.5	553.0	534.3	516.5	507.0	480.0	453.0	453.0
50°	3422.7	2429.7	638.2	548.7	525.6	514.8	501.7	484.8	456.1	433.1	431.3
52.5°	3628.2	2557.8	670.2	525.6	491.3	497.8	489.5	470.1	441.8	418.3	418.8
55°	3822.8	2685.9	682.9	493.9	459.2	483.1	478.3	442.2	408.4	389.2	387.4
57.5°	4034.8	2840.2	669.0	453.6	433.1	466.2	447.9	408.0	388.4	374.0	372.7
60°	4328.5	3082.2	639.0	403.5	408.4	441.0	409.7	393.2	371.9	355.8	355.0
62.5°	4816.3	3533.5	590.8	354.0	379.2	403.5	391.4	374.9	353.2	337.5	337.5
65°	5537.4	4160.8	500.0	315.4	346.7	367.1	371.9	355.4	332.7	316.2	317.1
67.5°	6145.6	4554.4	378.3	283.2	313.2	337.5	351.0	335.0	311.0	295.0	295.4
70°	6112.1	4268.5	288.8	251.5	283.6	308.4	325.8	313.2	287.6	272.3	273.7
72.5°	5428.8	3570.8	233.7	219.4	253.7	278.0	298.9	289.4	263.2	248.5	248.5
75°	3988.3	2534.7	186.8	186.8	216.4	246.3	269.4	263.2	239.3	228.9	225.9
77.5°	1681.2	1063.4	146.4	155.1	179.9	211.6	240.3	242.4	221.5	234.6	212.9
80°	447.0	293.3	111.6	122.1	141.1	174.7	209.0	208.1	185.5	173.3	161.1
82.5°	170.3	115.5	79.5	86.0	102.1	133.8	165.5	170.8	148.1	128.1	128.1
85°	65.6	49.5	49.1	51.7	59.6	88.7	125.2	129.5	111.6	94.7	97.8
87.5°	16.9	14.8	18.2	17.4	27.4	47.4	71.6	74.3	68.2	39.6	56.5
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)