

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: P961585

Luminaire Tested: **NAV-SB2A-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8454.2 lumens
Efficiency: N/A
Efficacy: 147.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - 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



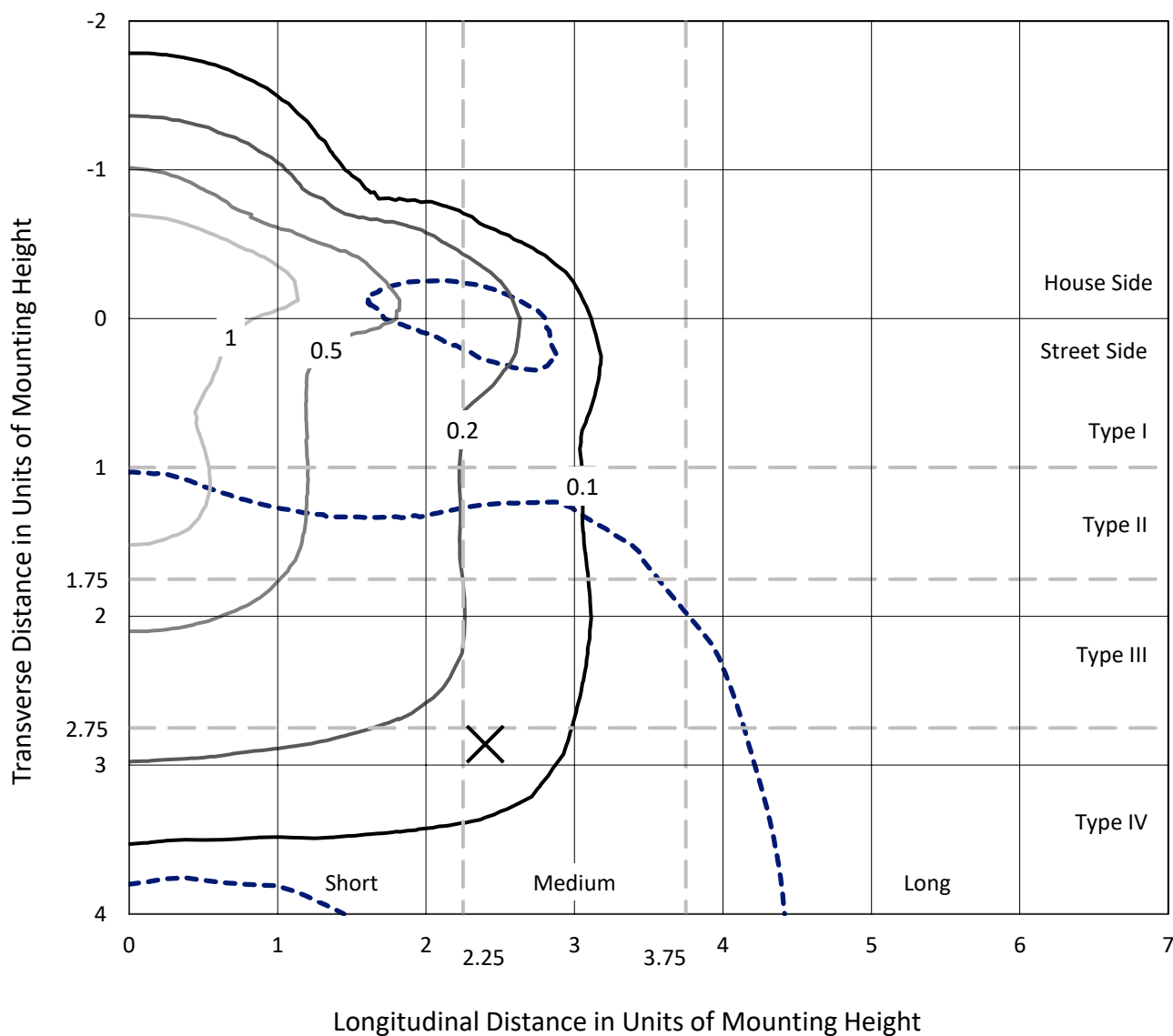
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

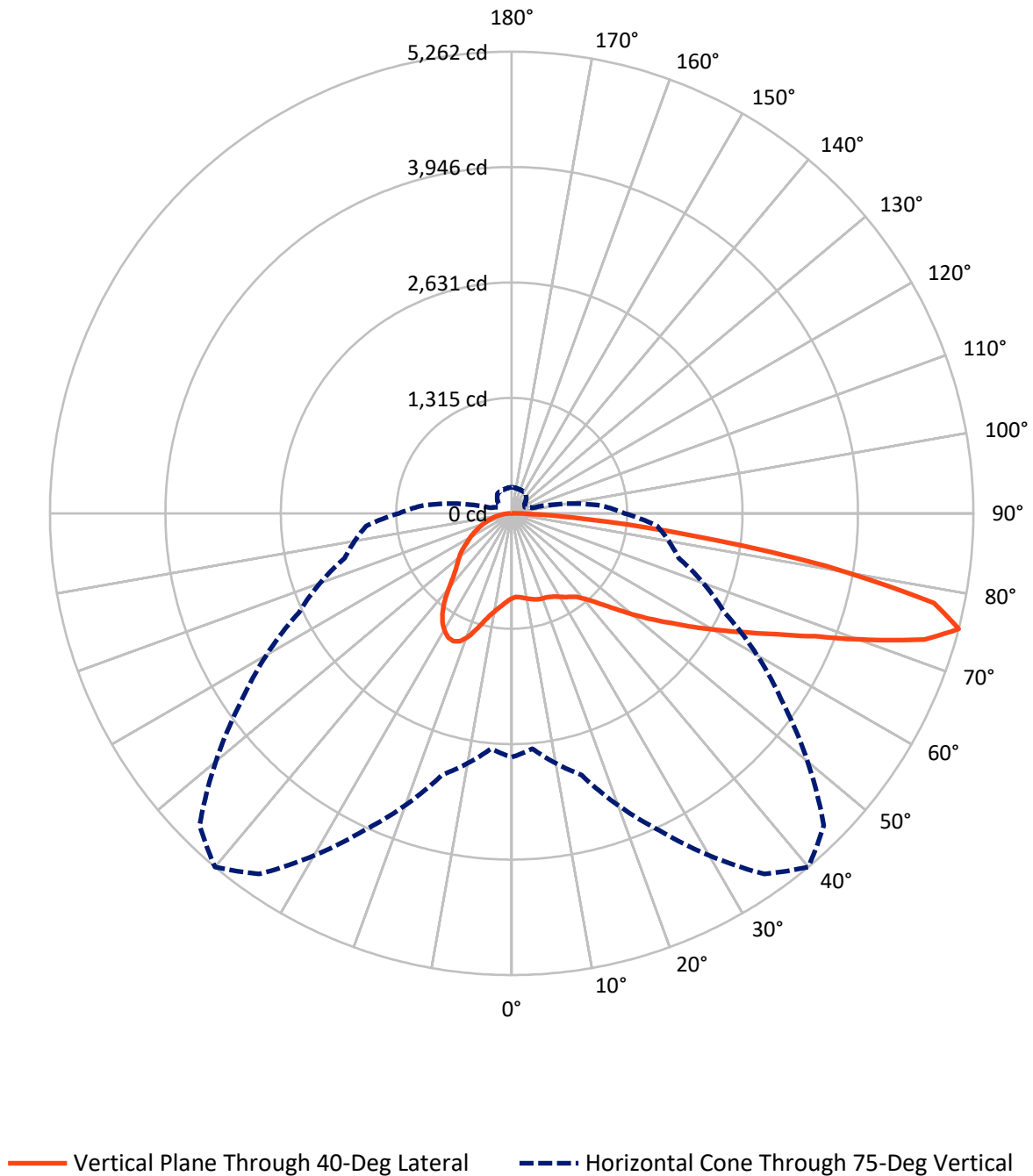
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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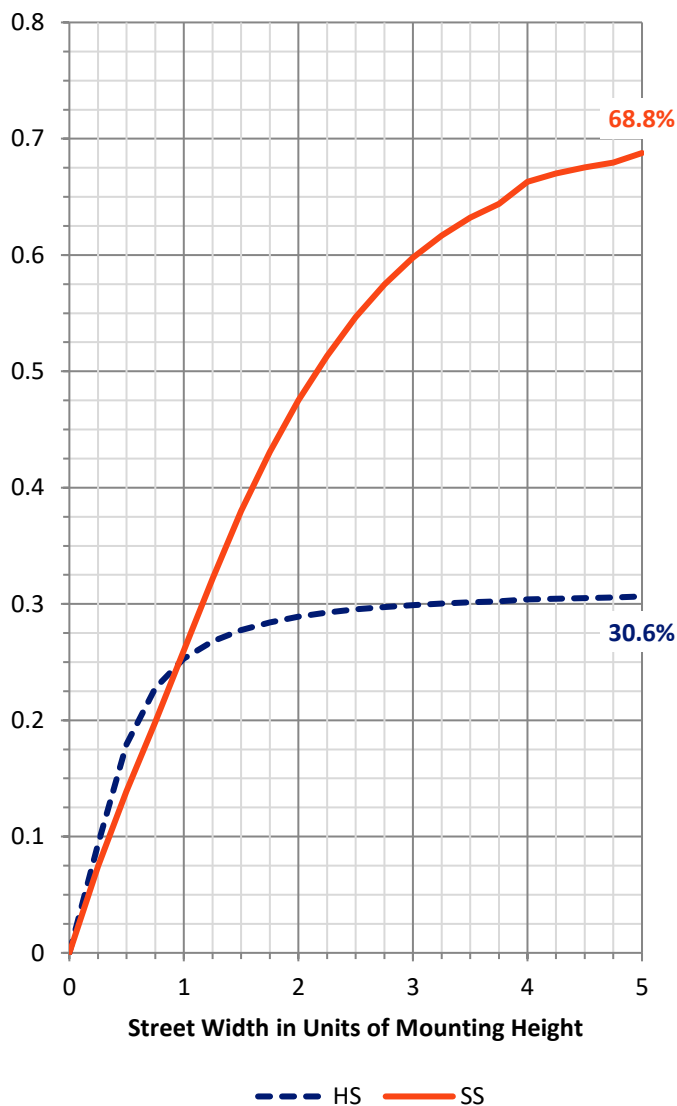
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2619.4	0.0	2619.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5834.8	0.0	5834.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	8454.2	0.0	8454.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	1.1
10°-20°	324.0	3.8
20°-30°	591.6	7.0
30°-40°	839.0	9.9
40°-50°	1132.9	13.4
50°-60°	1524.1	18.0
60°-70°	1934.5	22.9
70°-80°	1755.6	20.8
80°-90°	255.9	3.0
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°	8454.2	100.0
0°-180°	8454.2	100.0

Coefficient of Utilization



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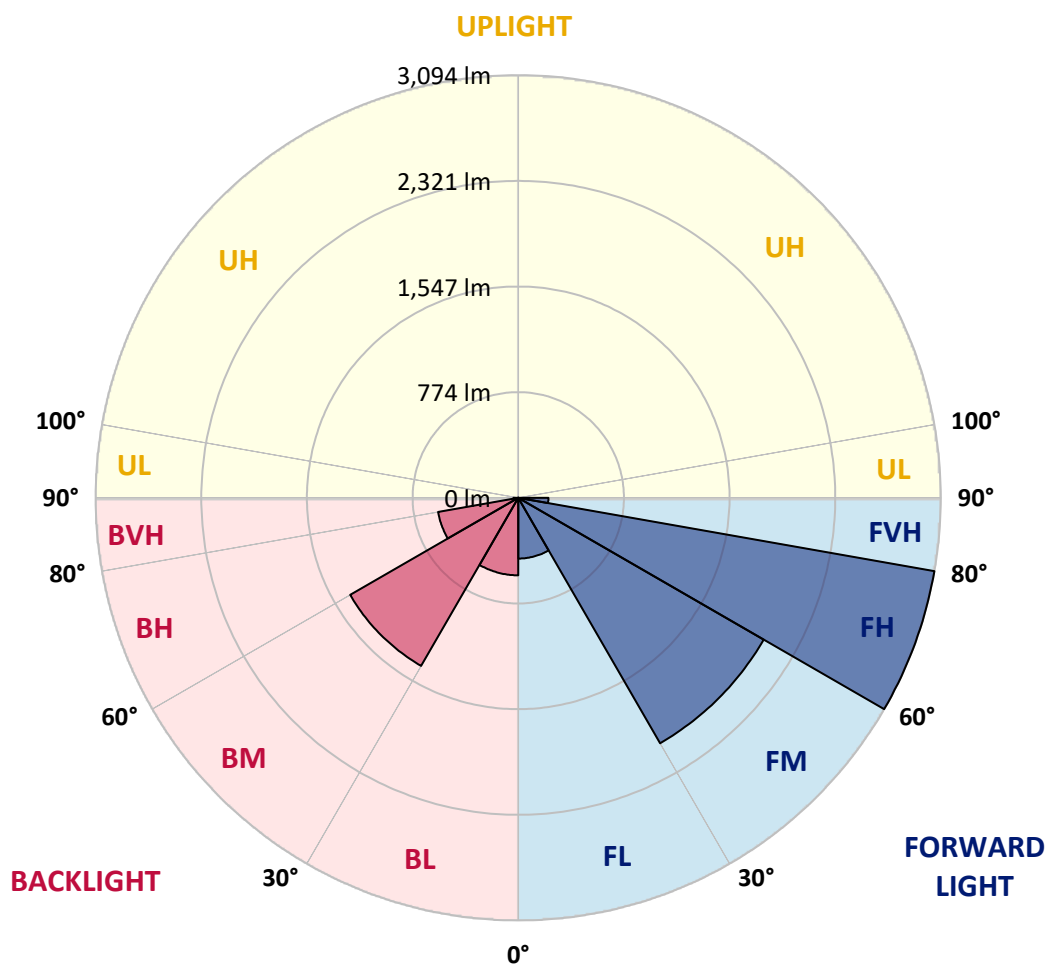
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	444.7	5.3			
FM	(30°-60°)	2075.3	24.5			
FH	(60°-80°)	3094.1	36.6			G2/5000
FVH	(80°-90°)	220.7	2.6			G2/225
BL	(0°-30°)	567.4	6.7	B2/1000		
BM	(30°-60°)	1420.8	16.8	B2/2500		
BH	(60°-80°)	596.0	7.0	B2/1000		G2/1000
BVH	(80°-90°)	35.2	0.4			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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	951.9	957.4	956.0	954.2	954.2	954.7	954.2	957.4	960.4	963.6	968.5
5°	961.9	967.2	964.5	962.3	960.4	960.0	958.7	958.3	960.0	964.0	970.8
7.5°	981.1	986.5	982.5	978.4	974.8	973.0	971.2	968.5	967.2	969.4	978.9
10°	1002.7	1008.0	1003.1	995.9	990.0	987.8	986.0	983.4	981.5	982.9	993.2
12.5°	1024.2	1029.5	1022.8	1012.9	1005.3	1004.0	1001.7	1000.8	1000.4	999.9	1010.2
15°	1044.4	1048.8	1040.3	1028.6	1020.6	1018.3	1016.1	1017.4	1019.7	1022.3	1034.0
17.5°	1060.1	1064.5	1052.0	1036.7	1029.1	1028.2	1026.8	1031.4	1037.6	1044.4	1058.6
20°	1074.4	1078.8	1062.7	1042.1	1033.1	1033.1	1033.6	1042.9	1052.0	1061.8	1081.6
22.5°	1094.5	1098.1	1078.4	1050.1	1037.2	1038.0	1041.6	1051.0	1062.2	1075.7	1103.1
25°	1124.6	1127.3	1103.1	1065.4	1050.6	1053.3	1056.5	1060.9	1071.6	1087.3	1124.1
27.5°	1173.0	1175.3	1143.4	1092.3	1069.9	1074.4	1078.8	1075.7	1080.7	1094.1	1141.1
30°	1241.2	1242.5	1202.1	1134.5	1102.6	1104.8	1105.8	1092.8	1083.3	1094.1	1153.3
32.5°	1321.8	1321.4	1273.5	1185.6	1139.8	1137.5	1130.0	1104.4	1082.4	1091.8	1164.1
35°	1447.0	1442.1	1380.2	1257.3	1182.0	1168.1	1150.2	1117.5	1086.9	1089.6	1173.4
37.5°	1654.1	1638.9	1553.3	1374.8	1244.8	1209.3	1182.8	1138.5	1096.8	1088.8	1184.7
40°	1887.7	1868.5	1774.3	1535.8	1339.0	1282.0	1239.3	1168.5	1112.9	1092.8	1201.3
42.5°	2164.9	2137.5	2036.2	1725.5	1458.2	1375.7	1311.6	1206.6	1136.7	1105.8	1223.6
45°	2505.2	2468.9	2325.4	1939.3	1608.4	1498.6	1412.9	1264.4	1173.0	1130.9	1257.3
47.5°	2849.1	2858.1	2654.0	2184.2	1788.6	1650.1	1539.8	1351.5	1225.9	1171.3	1311.6
50°	3214.6	3220.9	2981.0	2455.4	1993.1	1821.4	1682.4	1448.7	1299.5	1228.6	1392.8
52.5°	3499.8	3500.7	3277.8	2739.3	2206.1	2009.7	1836.2	1559.9	1384.7	1304.8	1500.8
55°	3678.2	3676.0	3485.8	3007.9	2451.0	2207.4	2006.5	1686.4	1488.7	1394.5	1636.6
57.5°	3807.8	3801.1	3629.3	3238.8	2711.9	2441.0	2199.4	1829.9	1611.5	1501.2	1815.6
60°	3857.2	3853.1	3726.7	3438.4	2986.3	2699.3	2421.8	1990.4	1751.0	1627.3	2045.6
62.5°	3875.9	3883.6	3822.1	3631.6	3280.0	2985.4	2666.2	2182.3	1907.9	1769.9	2288.2
65°	3942.4	3956.2	3943.7	3884.4	3611.9	3320.4	2990.3	2410.6	2079.2	1922.7	2541.5
67.5°	4073.7	4087.6	4093.0	4187.1	4017.2	3737.9	3394.8	2694.9	2279.7	2081.5	2732.1
70°	4070.6	4066.6	4161.6	4427.9	4524.8	4315.9	3940.1	3044.7	2518.6	2213.3	2756.3
72.5°	3705.2	3672.9	3897.5	4425.2	4947.2	4919.4	4605.9	3495.8	2725.0	2229.5	2391.7
75°	2779.6	2693.5	3090.4	3988.1	5017.6	5261.9	5029.3	3775.5	2676.1	1969.8	1664.5
77.5°	1188.7	1102.2	1569.9	2952.3	4490.7	4919.0	4640.9	3293.9	2136.2	1302.6	817.4
80°	311.2	310.8	474.4	1338.4	3054.1	3632.5	3186.7	2127.2	1220.6	465.5	225.5
82.5°	128.7	125.6	174.5	520.6	1492.3	2038.4	1663.6	948.8	440.7	126.0	74.9
85°	48.0	47.6	84.8	179.8	526.4	840.7	608.4	242.6	109.9	61.4	33.6
87.5°	13.4	13.0	18.3	62.3	128.2	194.6	104.0	39.9	31.0	24.2	9.8
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°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	969.9	972.1	976.2	979.3	983.4	987.8	994.1	998.1	1002.1	1004.9	1003.1
5°	974.0	978.9	989.1	999.5	1011.6	1022.8	1035.8	1045.2	1052.9	1055.0	1056.0
7.5°	982.9	991.0	1008.5	1025.9	1045.2	1063.6	1082.4	1098.6	1111.6	1116.5	1116.9
10°	998.6	1009.3	1034.0	1058.6	1084.2	1112.4	1136.7	1160.0	1178.4	1186.0	1186.4
12.5°	1018.3	1031.8	1064.1	1098.1	1133.5	1172.6	1204.0	1232.7	1255.5	1265.9	1265.9
15°	1043.9	1061.4	1102.6	1148.3	1200.4	1254.6	1294.6	1326.4	1352.0	1364.5	1363.6
17.5°	1071.6	1095.0	1147.0	1216.1	1290.5	1361.8	1408.5	1431.7	1458.2	1470.3	1469.8
20°	1098.6	1127.3	1201.7	1302.2	1401.3	1477.0	1514.6	1521.0	1522.7	1524.1	1527.7
22.5°	1126.4	1164.9	1270.3	1410.7	1516.9	1569.4	1574.8	1547.9	1510.2	1492.7	1497.6
25°	1156.9	1208.0	1360.0	1530.4	1616.5	1622.8	1581.5	1516.1	1444.7	1412.0	1417.0
27.5°	1186.4	1257.8	1467.6	1644.7	1688.2	1633.0	1544.3	1451.5	1365.4	1330.9	1334.9
30°	1216.1	1314.7	1586.4	1744.8	1721.0	1607.5	1485.5	1382.0	1295.4	1259.1	1263.1
32.5°	1246.1	1381.1	1723.2	1816.9	1715.1	1553.3	1412.4	1303.9	1227.7	1189.6	1194.5
35°	1280.2	1462.7	1852.8	1856.4	1676.1	1473.4	1316.1	1210.6	1144.3	1113.9	1120.5
37.5°	1324.6	1566.3	1967.1	1866.2	1607.9	1356.4	1196.4	1100.3	1045.7	1031.8	1041.6
40°	1379.8	1690.9	2054.6	1850.5	1507.1	1214.2	1065.4	988.7	957.8	960.9	971.7
42.5°	1451.5	1830.3	2116.0	1810.2	1366.7	1067.6	950.6	916.6	931.3	943.9	955.5
45°	1544.8	1975.2	2154.1	1741.6	1208.0	943.4	882.9	890.9	902.2	903.5	912.5
47.5°	1664.0	2121.9	2179.3	1638.1	1046.1	856.0	839.9	841.6	839.4	829.9	837.1
50°	1812.9	2264.4	2201.6	1500.8	908.5	801.2	779.7	773.5	742.5	712.1	716.1
52.5°	1982.4	2395.3	2211.0	1330.4	801.2	755.5	720.6	681.1	623.3	613.9	616.9
55°	2170.7	2516.4	2186.8	1121.0	711.1	696.8	643.9	596.3	590.1	582.0	583.3
57.5°	2395.8	2646.9	2137.5	887.3	618.8	628.2	576.7	582.0	570.8	558.2	556.1
60°	2641.9	2781.8	2051.0	674.3	523.3	542.5	559.1	558.7	555.6	545.3	541.7
62.5°	2863.4	2870.6	1880.6	516.6	439.4	476.2	521.5	521.0	518.3	512.5	510.2
65°	2995.4	2857.2	1596.3	406.7	370.3	421.5	470.4	474.0	474.4	474.0	474.0
67.5°	2972.0	2699.8	1206.2	323.7	313.4	365.9	419.7	424.7	428.2	429.2	430.0
70°	2708.4	2354.1	786.5	258.3	262.8	317.0	371.8	376.7	379.8	383.3	385.2
72.5°	2111.1	1730.8	450.2	209.0	218.3	274.9	324.2	330.0	331.8	338.6	341.2
75°	1286.5	1017.8	243.0	164.5	179.4	234.9	277.2	283.8	287.0	295.1	295.9
77.5°	611.6	440.7	138.6	128.2	144.4	191.9	234.1	241.7	233.2	237.7	234.1
80°	206.7	163.7	87.4	97.8	110.3	149.8	187.5	195.1	177.1	176.2	174.5
82.5°	72.2	66.3	55.6	65.0	71.3	107.2	141.7	151.6	131.8	131.4	125.2
85°	28.3	26.9	31.0	35.5	42.6	65.9	93.3	98.2	81.2	65.5	64.6
87.5°	5.8	6.3	7.6	8.1	13.0	22.9	33.6	41.2	32.7	27.8	25.5
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)