

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: P961523

Luminaire Tested: **NAV-SB2A-827-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961523
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-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 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: 7926.3 lumens
Efficiency: N/A
Efficacy: 138.3 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



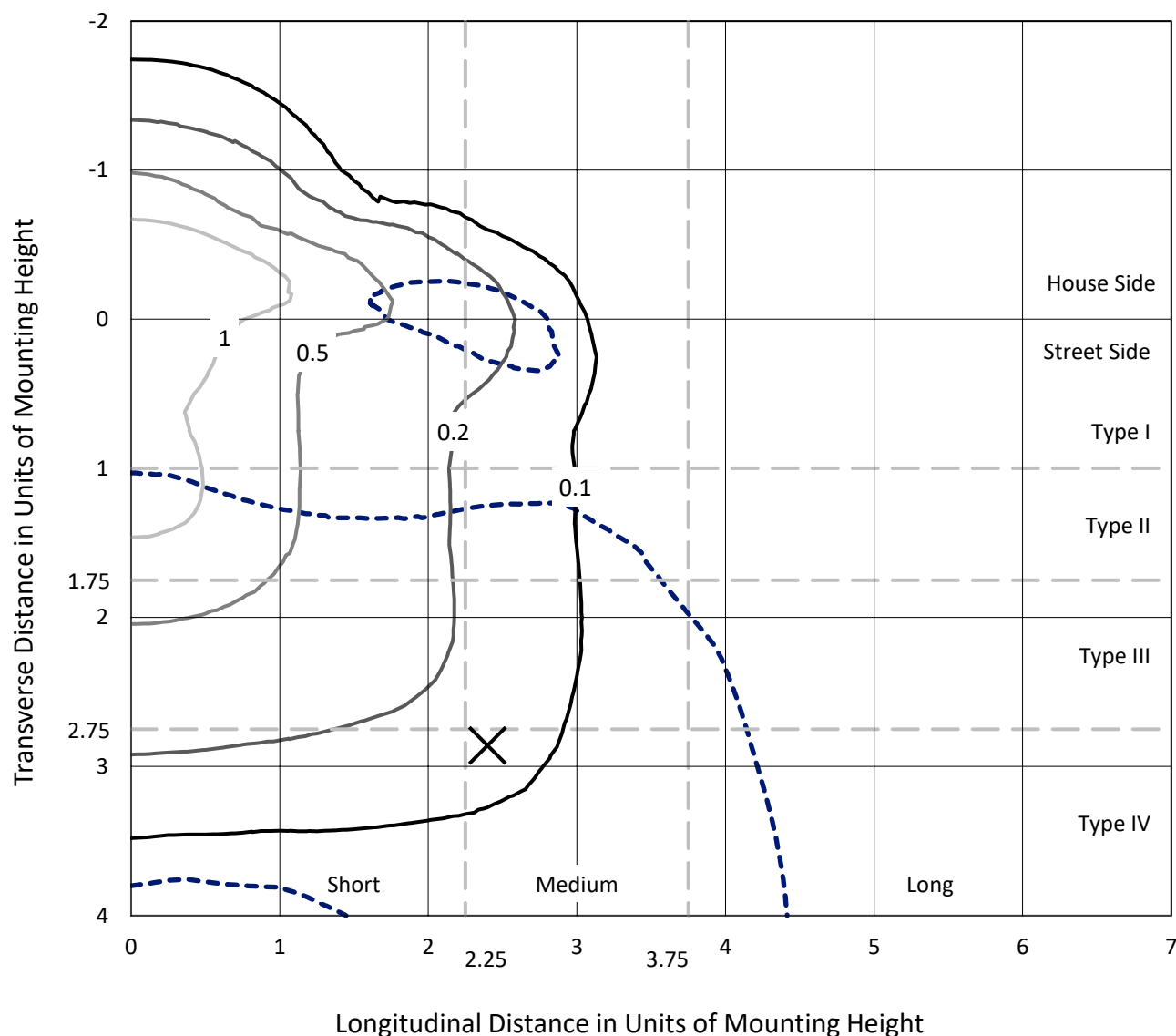
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

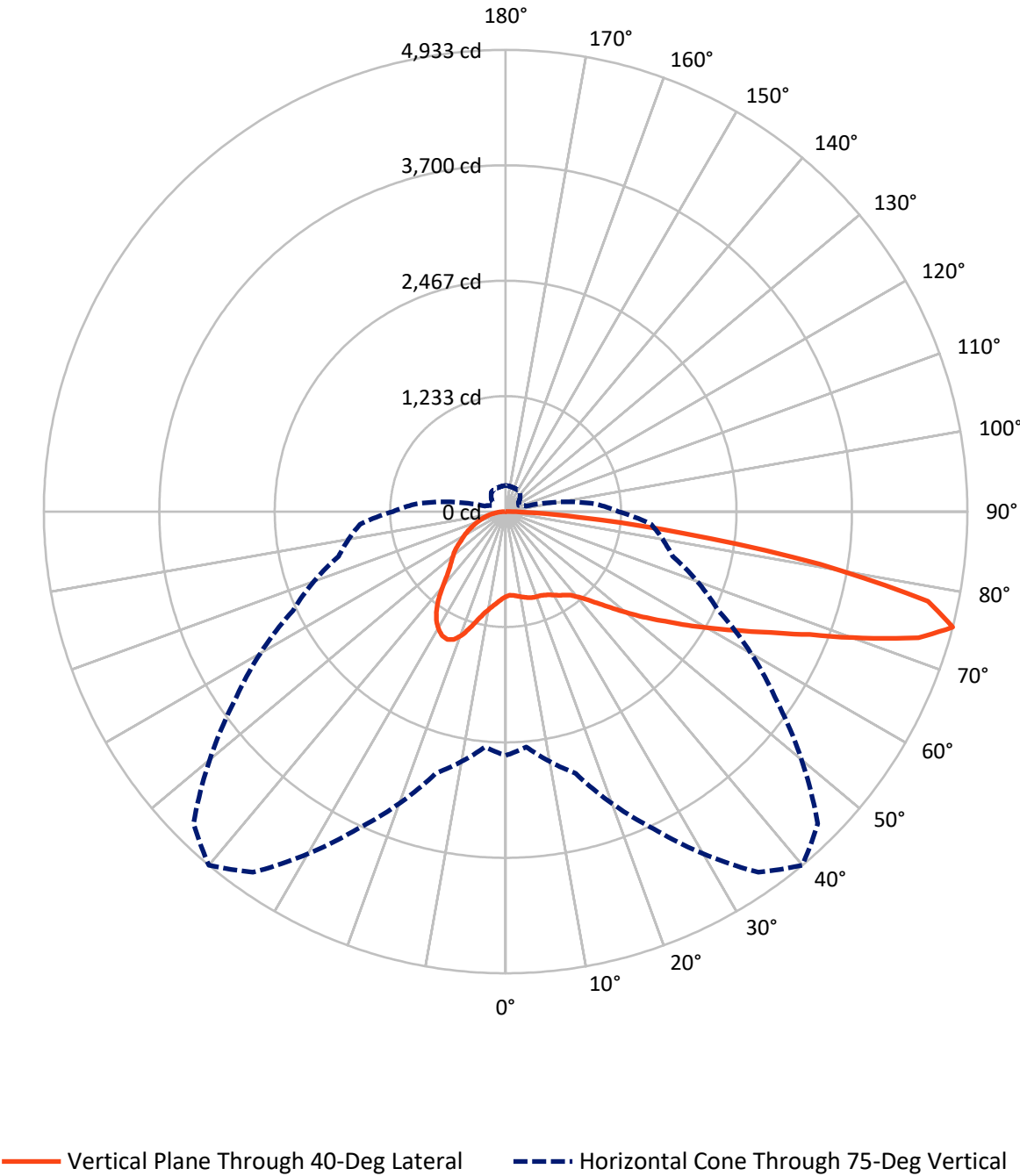
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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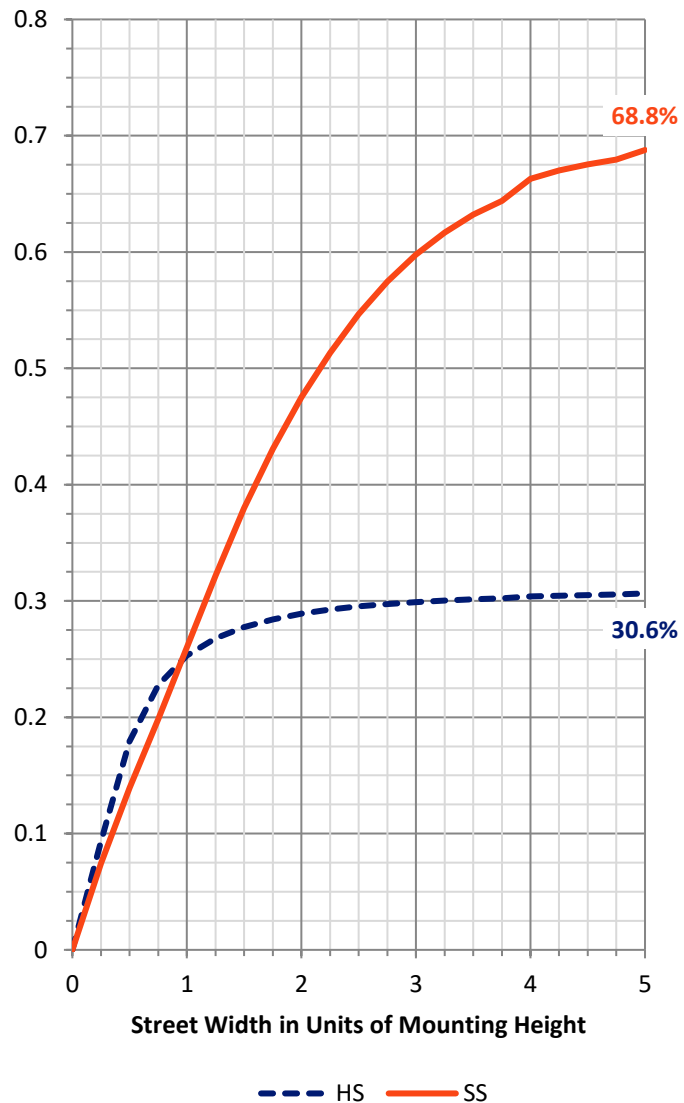
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2455.8	0.0	2455.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5470.5	0.0	5470.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	7926.3	0.0	7926.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	1.1
10°-20°	303.8	3.8
20°-30°	554.6	7.0
30°-40°	786.6	9.9
40°-50°	1062.2	13.4
50°-60°	1429.0	18.0
60°-70°	1813.7	22.9
70°-80°	1646.0	20.8
80°-90°	239.9	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°	7926.3	100.0
0°-180°	7926.3	100.0

Coefficient of Utilization



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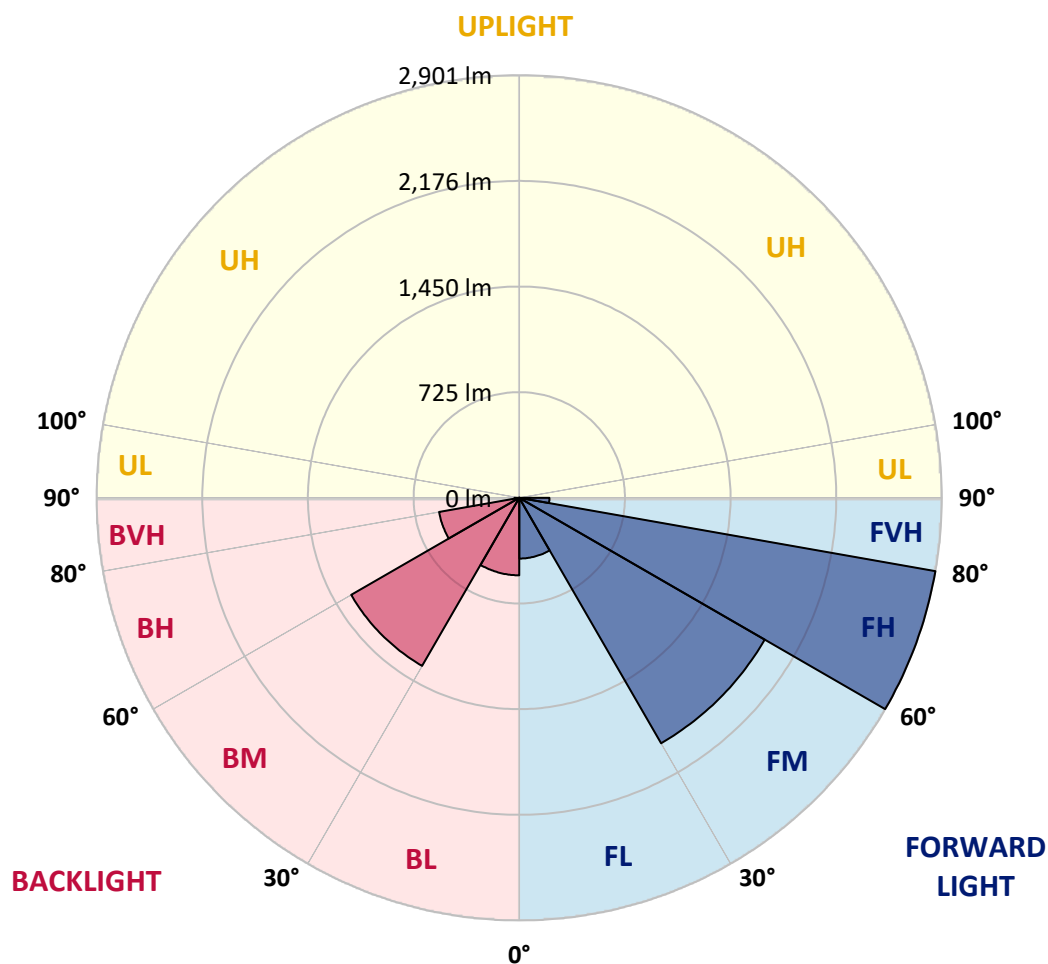
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	416.9	5.3			
FM	(30°-60°)	1945.7	24.5			
FH	(60°-80°)	2900.9	36.6			G2/5000
FVH	(80°-90°)	206.9	2.6			G2/225
BL	(0°-30°)	532.0	6.7	B2/1000		
BM	(30°-60°)	1332.1	16.8	B2/2500		
BH	(60°-80°)	558.8	7.0	B2/1000		G2/1000
BVH	(80°-90°)	33.0	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°	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4
2.5°	892.5	897.6	896.3	894.6	894.6	895.0	894.6	897.6	900.5	903.4	908.0
5°	901.8	906.8	904.3	902.2	900.5	900.1	898.8	898.4	900.1	903.8	910.2
7.5°	919.8	924.9	921.1	917.3	914.0	912.2	910.6	908.0	906.8	908.9	917.8
10°	940.0	945.0	940.4	933.7	928.2	926.2	924.4	922.0	920.2	921.5	931.2
12.5°	960.2	965.2	958.9	949.7	942.6	941.3	939.2	938.4	937.9	937.5	947.2
15°	979.1	983.3	975.3	964.4	956.8	954.7	952.6	953.9	956.0	958.5	969.4
17.5°	993.8	998.0	986.3	972.0	964.8	964.0	962.7	966.9	972.8	979.1	992.6
20°	1007.3	1011.5	996.4	977.0	968.6	968.6	969.0	977.8	986.3	995.5	1014.0
22.5°	1026.2	1029.6	1011.1	984.6	972.4	973.2	976.6	985.4	995.9	1008.5	1034.2
25°	1054.4	1056.9	1034.2	998.9	985.0	987.5	990.5	994.7	1004.8	1019.5	1053.9
27.5°	1099.7	1101.9	1072.0	1024.1	1003.1	1007.3	1011.5	1008.5	1013.2	1025.8	1069.9
30°	1163.7	1164.9	1127.1	1063.6	1033.8	1035.9	1036.7	1024.5	1015.7	1025.8	1081.3
32.5°	1239.3	1238.9	1193.9	1111.5	1068.7	1066.5	1059.4	1035.5	1014.9	1023.7	1091.3
35°	1356.6	1352.0	1294.0	1178.9	1108.1	1095.1	1078.3	1047.7	1019.1	1021.6	1100.2
37.5°	1550.8	1536.6	1456.3	1288.9	1167.1	1133.9	1109.0	1067.4	1028.3	1020.7	1110.7
40°	1769.9	1751.8	1663.6	1439.9	1255.3	1201.9	1161.9	1095.5	1043.4	1024.5	1126.3
42.5°	2029.7	2004.1	1909.1	1617.7	1367.1	1289.8	1229.7	1131.3	1065.7	1036.7	1147.3
45°	2348.8	2314.8	2180.2	1818.2	1508.0	1405.0	1324.7	1185.5	1099.7	1060.3	1178.9
47.5°	2671.3	2679.7	2488.4	2047.7	1677.0	1547.0	1443.6	1267.1	1149.3	1098.1	1229.7
50°	3013.9	3019.8	2794.9	2302.1	1868.7	1707.6	1577.4	1358.3	1218.3	1151.9	1305.7
52.5°	3281.2	3282.0	3073.2	2568.2	2068.3	1884.3	1721.6	1462.6	1298.2	1223.3	1407.1
55°	3448.5	3446.5	3268.2	2820.1	2297.9	2069.7	1881.3	1581.2	1395.7	1307.5	1534.4
57.5°	3570.1	3563.7	3402.7	3036.6	2542.6	2288.6	2062.1	1715.6	1511.0	1407.5	1702.2
60°	3616.3	3612.5	3493.9	3223.6	2799.9	2530.8	2270.6	1866.1	1641.6	1525.6	1917.9
62.5°	3633.9	3641.1	3583.5	3404.8	3075.2	2799.1	2499.7	2046.1	1788.8	1659.4	2145.3
65°	3696.2	3709.2	3697.5	3641.9	3386.3	3113.0	2803.7	2260.1	1949.4	1802.7	2382.8
67.5°	3819.4	3832.4	3837.4	3925.7	3766.4	3504.5	3182.8	2526.6	2137.3	1951.5	2561.5
70°	3816.4	3812.6	3901.8	4151.5	4242.3	4046.4	3694.1	2854.5	2361.4	2075.1	2584.2
72.5°	3473.8	3443.5	3654.1	4148.9	4638.3	4612.2	4318.3	3277.4	2554.8	2090.3	2242.4
75°	2606.1	2525.4	2897.4	3739.1	4704.3	4933.4	4715.2	3539.7	2509.0	1846.8	1560.6
77.5°	1114.5	1033.3	1471.8	2767.9	4210.3	4611.8	4351.1	3088.2	2002.7	1221.3	766.4
80°	291.7	291.3	444.7	1254.9	2863.3	3405.7	2987.8	1994.3	1144.3	436.3	211.5
82.5°	120.6	117.7	163.5	488.1	1399.1	1911.1	1559.6	889.6	413.3	118.2	70.2
85°	45.0	44.6	79.4	168.6	493.5	788.2	570.5	227.4	103.0	57.6	31.6
87.5°	12.6	12.2	17.2	58.4	120.2	182.4	97.6	37.4	29.0	22.7	9.2
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°	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4	906.4
2.5°	909.3	911.4	915.2	918.2	922.0	926.2	932.0	935.8	939.6	942.1	940.4
5°	913.1	917.8	927.4	937.1	948.4	958.9	971.1	980.0	987.1	989.2	990.0
7.5°	921.5	929.1	945.5	961.9	980.0	997.2	1014.9	1030.0	1042.2	1046.8	1047.2
10°	936.2	946.3	969.4	992.6	1016.5	1043.0	1065.7	1087.6	1104.8	1111.9	1112.4
12.5°	954.7	967.4	997.6	1029.6	1062.8	1099.3	1128.7	1155.7	1177.1	1186.7	1186.7
15°	978.7	995.1	1033.8	1076.7	1125.4	1176.3	1213.7	1243.5	1267.5	1279.3	1278.5
17.5°	1004.8	1026.6	1075.4	1140.1	1209.9	1276.7	1320.5	1342.3	1367.1	1378.5	1378.1
20°	1030.0	1056.9	1126.7	1220.9	1313.7	1384.8	1420.1	1426.0	1427.7	1429.0	1432.3
22.5°	1056.1	1092.2	1190.9	1322.6	1422.2	1471.4	1476.4	1451.2	1415.9	1399.5	1404.1
25°	1084.7	1132.5	1275.1	1434.8	1515.6	1521.4	1482.8	1421.4	1354.5	1323.9	1328.5
27.5°	1112.4	1179.3	1376.0	1542.0	1582.8	1531.1	1447.8	1360.8	1280.1	1247.7	1251.5
30°	1140.1	1232.7	1487.4	1635.8	1613.5	1507.2	1392.8	1295.7	1214.5	1180.5	1184.3
32.5°	1168.3	1294.9	1615.6	1703.4	1608.0	1456.3	1324.3	1222.5	1151.1	1115.3	1119.9
35°	1200.3	1371.3	1737.1	1740.4	1571.4	1381.4	1233.9	1135.1	1072.9	1044.3	1050.6
37.5°	1241.9	1468.4	1844.3	1749.7	1507.6	1271.7	1121.7	1031.7	980.4	967.4	976.6
40°	1293.6	1585.4	1926.3	1735.0	1413.0	1138.5	998.9	927.0	898.0	900.9	911.0
42.5°	1360.8	1716.1	1983.9	1697.2	1281.4	1001.0	891.2	859.3	873.2	885.0	895.8
45°	1448.3	1851.9	2019.7	1632.8	1132.5	884.6	827.8	835.4	845.8	847.1	855.6
47.5°	1560.2	1989.3	2043.1	1535.8	980.8	802.6	787.4	789.0	787.0	778.2	784.8
50°	1699.7	2123.0	2064.1	1407.1	851.8	751.2	731.0	725.2	696.2	667.6	671.4
52.5°	1858.6	2245.8	2073.0	1247.3	751.2	708.4	675.6	638.6	584.4	575.5	578.5
55°	2035.1	2359.2	2050.3	1051.0	666.8	653.3	603.7	559.1	553.3	545.7	546.9
57.5°	2246.2	2481.6	2004.1	832.0	580.2	589.0	540.7	545.7	535.2	523.4	521.3
60°	2477.0	2608.2	1922.9	632.3	490.6	508.7	524.3	523.8	520.9	511.2	507.9
62.5°	2684.7	2691.4	1763.2	484.3	411.9	446.5	488.9	488.5	486.0	480.5	478.4
65°	2808.3	2678.8	1496.6	381.3	347.3	395.1	441.0	444.3	444.7	444.3	444.3
67.5°	2786.5	2531.2	1130.9	303.5	293.9	343.1	393.5	398.1	401.5	402.3	403.1
70°	2539.2	2207.1	737.4	242.1	246.3	297.2	348.5	353.1	356.1	359.5	361.1
72.5°	1979.3	1622.8	422.1	195.9	204.7	257.7	303.9	309.4	311.1	317.4	319.9
75°	1206.1	954.3	227.9	154.3	168.2	220.3	259.8	266.1	269.1	276.6	277.5
77.5°	573.4	413.3	129.9	120.2	135.4	179.9	219.5	226.6	218.6	222.8	219.5
80°	193.8	153.4	82.0	91.6	103.4	140.4	175.7	182.9	166.0	165.2	163.5
82.5°	67.6	62.2	52.2	61.0	66.8	100.4	132.8	142.1	123.6	123.2	117.3
85°	26.4	25.2	29.0	33.2	40.0	61.8	87.4	92.0	76.1	61.4	60.6
87.5°	5.4	5.8	7.2	7.6	12.2	21.4	31.6	38.6	30.6	26.0	24.0
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)