

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: P961058

Luminaire Tested: **NAV-SB1D-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961058
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-SB1D-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9593 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 79.6
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

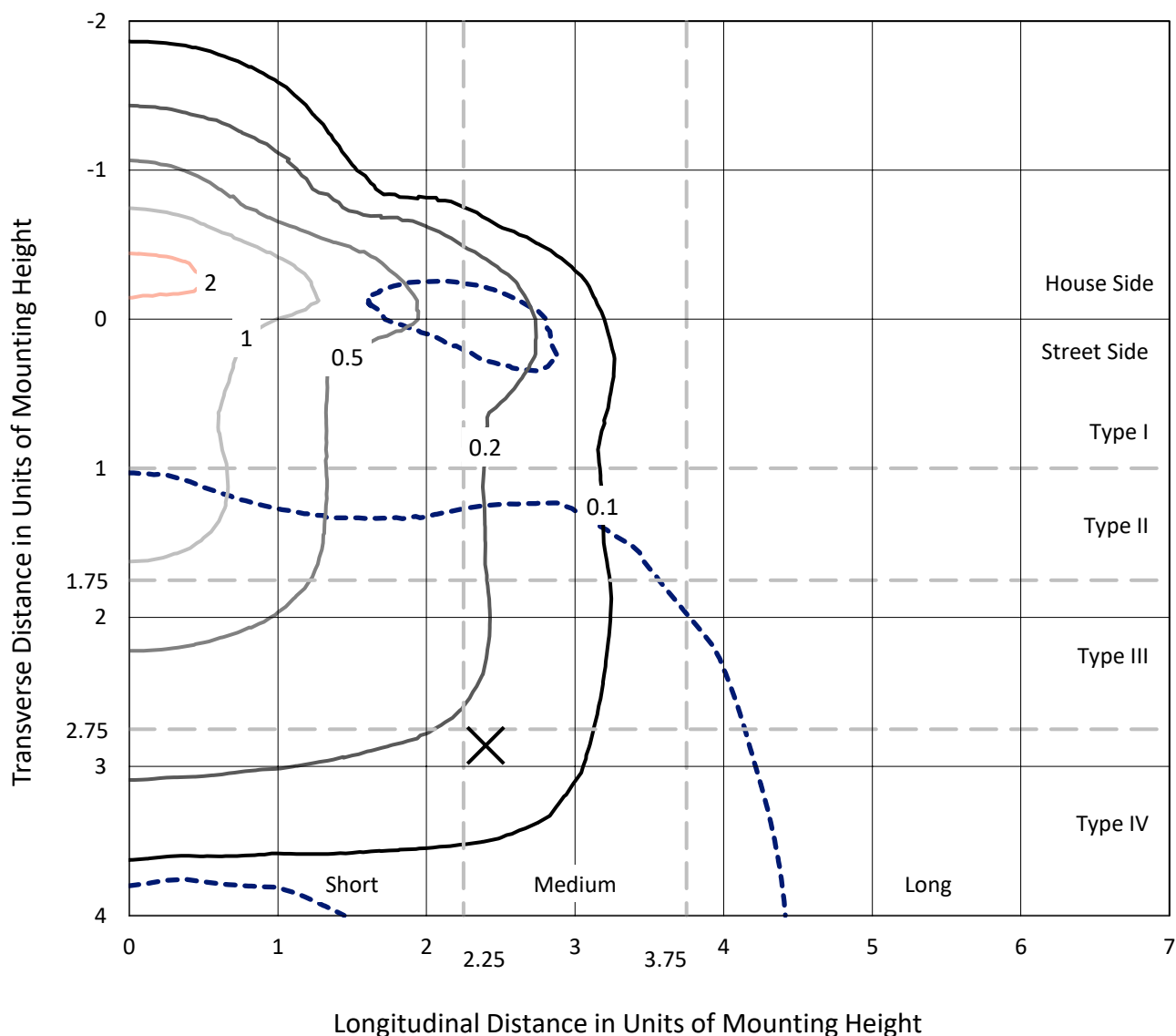


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Iso-Footcandle Lines of Horizontal Illumination

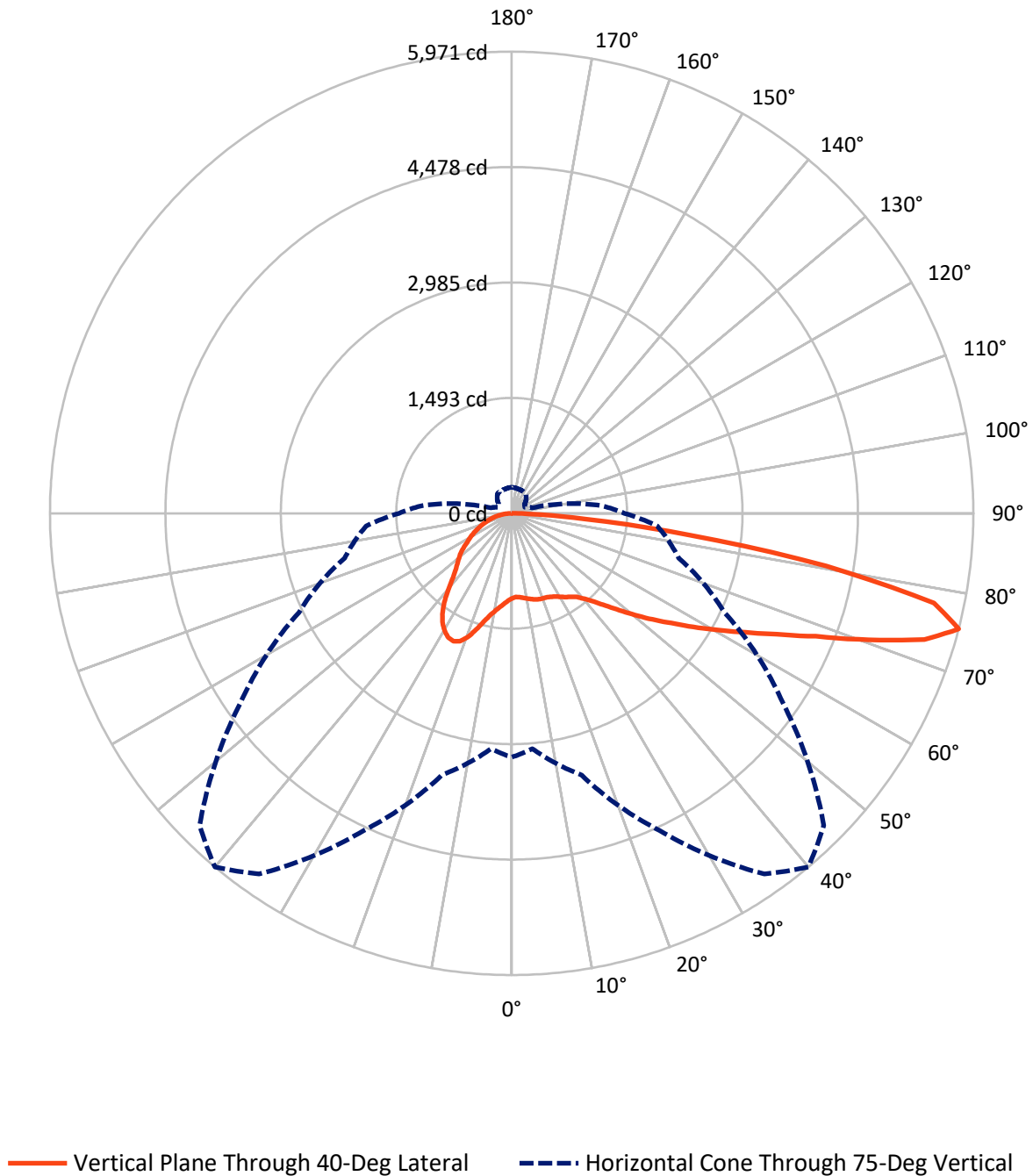
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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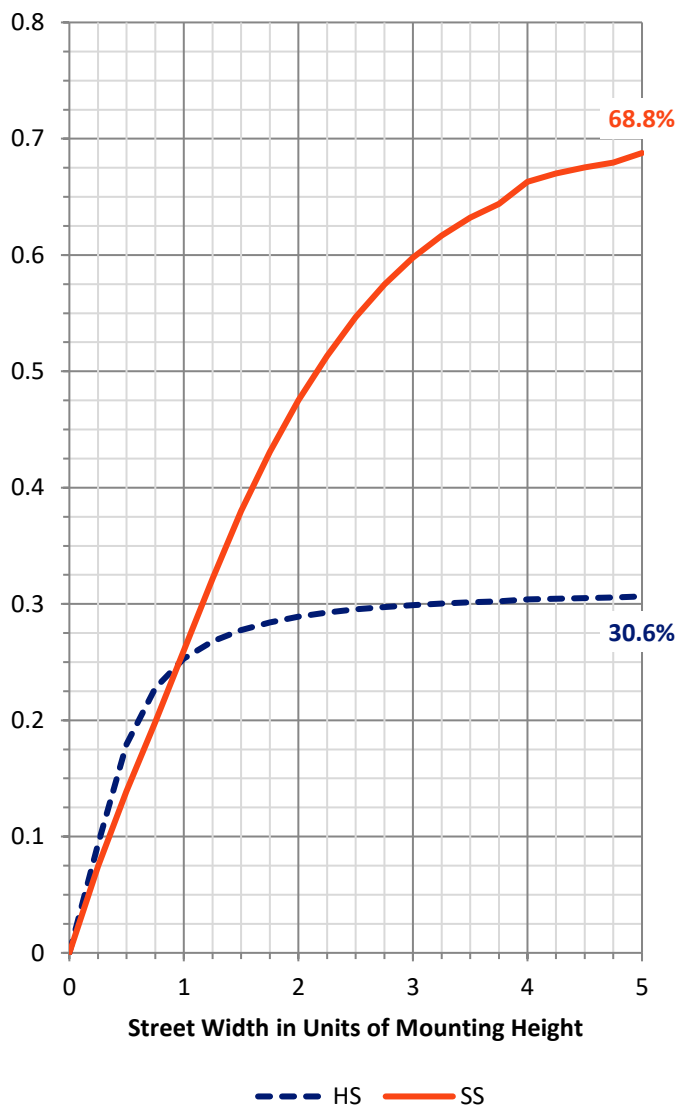
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2972.2	0.0	2972.2
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	6620.7	0.0	6620.7
	% Fixture	69.0	0.0	69.0
Total	Lumens	9593.0	0.0	9593.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	1.1
10°-20°	367.6	3.8
20°-30°	671.3	7.0
30°-40°	952.1	9.9
40°-50°	1285.6	13.4
50°-60°	1729.4	18.0
60°-70°	2195.0	22.9
70°-80°	1992.1	20.8
80°-90°	290.4	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°	9593.0	100.0
0°-180°	9593.0	100.0

Coefficient of Utilization



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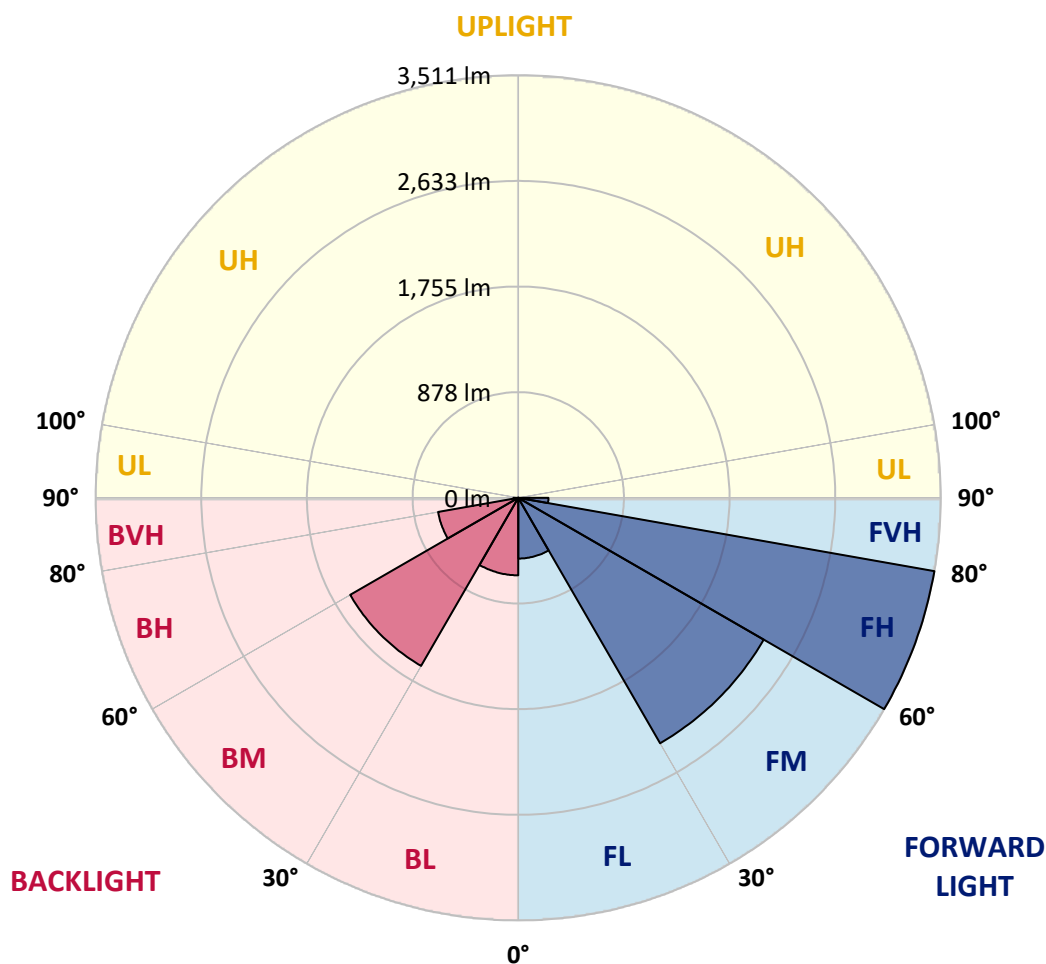
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	504.6	5.3			
FM	(30°-60°)	2354.9	24.5			
FH	(60°-80°)	3510.9	36.6			G2/5000
FVH	(80°-90°)	250.4	2.6			G3/500
BL	(0°-30°)	643.8	6.7	B2/1000		
BM	(30°-60°)	1612.2	16.8	B2/2500		
BH	(60°-80°)	676.3	7.0	B2/1000		G2/1000
BVH	(80°-90°)	40.0	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-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0
2.5°	1080.1	1086.3	1084.8	1082.7	1082.7	1083.2	1082.7	1086.3	1089.9	1093.4	1099.0
5°	1091.4	1097.5	1094.4	1091.9	1089.9	1089.4	1087.8	1087.3	1089.4	1093.9	1101.6
7.5°	1113.3	1119.4	1114.8	1110.2	1106.1	1104.1	1102.1	1099.0	1097.5	1100.0	1110.7
10°	1137.6	1143.8	1138.2	1130.1	1123.4	1120.8	1118.9	1115.8	1113.8	1115.3	1127.0
12.5°	1162.1	1168.2	1160.6	1149.3	1140.7	1139.2	1136.6	1135.6	1135.1	1134.6	1146.4
15°	1185.0	1190.1	1180.4	1167.2	1158.0	1155.5	1152.9	1154.5	1157.0	1160.1	1173.3
17.5°	1202.8	1207.9	1193.6	1176.4	1167.7	1166.7	1165.1	1170.2	1177.3	1185.0	1201.3
20°	1219.0	1224.2	1205.8	1182.4	1172.3	1172.3	1172.8	1183.5	1193.6	1204.8	1227.2
22.5°	1242.0	1246.1	1223.6	1191.6	1176.8	1177.8	1181.9	1192.6	1205.3	1220.6	1251.6
25°	1276.0	1279.1	1251.6	1208.9	1192.1	1195.1	1198.7	1203.9	1216.1	1233.8	1275.5
27.5°	1331.1	1333.5	1297.4	1239.4	1214.0	1219.0	1224.2	1220.6	1226.2	1241.5	1294.9
30°	1408.4	1409.9	1364.1	1287.3	1251.1	1253.7	1254.7	1239.9	1229.3	1241.5	1308.6
32.5°	1500.0	1499.5	1444.9	1345.3	1293.3	1290.8	1282.2	1253.2	1228.3	1238.9	1320.8
35°	1641.8	1636.3	1566.1	1426.7	1341.2	1325.4	1305.0	1267.9	1233.3	1236.4	1331.5
37.5°	1877.0	1859.7	1762.5	1559.9	1412.4	1372.3	1342.2	1291.8	1244.6	1235.3	1344.3
40°	2142.0	2120.2	2013.3	1742.6	1519.3	1454.7	1406.3	1325.9	1262.8	1239.9	1363.0
42.5°	2456.5	2425.5	2310.5	1957.9	1654.7	1561.0	1488.2	1369.2	1289.8	1254.7	1388.5
45°	2842.6	2801.4	2638.7	2200.6	1825.0	1700.4	1603.2	1434.8	1331.1	1283.2	1426.7
47.5°	3233.0	3243.1	3011.6	2478.3	2029.6	1872.4	1747.2	1533.5	1391.0	1329.0	1488.2
50°	3647.6	3654.7	3382.5	2786.2	2261.6	2066.7	1909.1	1643.9	1474.5	1394.1	1580.3
52.5°	3971.2	3972.2	3719.3	3108.2	2503.3	2280.4	2083.5	1770.1	1571.1	1480.6	1702.9
55°	4173.7	4171.1	3955.4	3413.0	2781.1	2504.8	2276.8	1913.6	1689.2	1582.4	1857.1
57.5°	4320.7	4313.1	4118.2	3675.0	3077.3	2769.9	2495.7	2076.4	1828.6	1703.4	2060.1
60°	4376.6	4372.1	4228.6	3901.5	3388.5	3063.0	2748.0	2258.6	1986.9	1846.4	2321.1
62.5°	4398.1	4406.7	4337.0	4120.8	3721.9	3387.6	3025.3	2476.3	2164.9	2008.2	2596.4
65°	4473.3	4489.1	4474.8	4407.7	4098.4	3767.7	3393.2	2735.3	2359.3	2181.7	2883.8
67.5°	4622.4	4638.2	4644.3	4751.2	4558.3	4241.3	3852.2	3057.9	2586.7	2361.8	3100.1
70°	4618.9	4614.2	4722.2	5024.3	5134.3	4897.1	4470.8	3454.8	2857.9	2511.5	3127.6
72.5°	4204.2	4167.5	4422.5	5021.4	5613.6	5582.0	5226.4	3966.5	3092.0	2529.7	2713.9
75°	3154.0	3056.3	3506.6	4525.3	5693.5	5970.7	5706.7	4284.1	3036.5	2235.1	1888.7
77.5°	1348.8	1250.6	1781.3	3349.9	5095.6	5581.5	5266.0	3737.7	2423.9	1478.0	927.5
80°	353.1	352.6	538.3	1518.7	3465.4	4121.7	3616.0	2413.8	1385.0	528.2	255.9
82.5°	146.1	142.5	197.9	590.7	1693.3	2313.0	1887.6	1076.7	500.2	143.0	85.0
85°	54.4	53.9	96.1	204.1	597.4	954.0	690.4	275.2	124.6	69.7	38.1
87.5°	15.3	14.8	20.9	70.7	145.5	220.8	118.1	45.3	35.2	27.5	11.2
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°	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0	1097.0
2.5°	1100.5	1103.1	1107.6	1111.2	1115.8	1120.8	1128.0	1132.6	1137.1	1140.2	1138.2
5°	1105.2	1110.7	1122.4	1134.2	1147.9	1160.6	1175.4	1186.0	1194.6	1197.2	1198.2
7.5°	1115.3	1124.4	1144.3	1164.1	1186.0	1206.8	1228.3	1246.6	1261.3	1266.9	1267.4
10°	1133.1	1145.3	1173.3	1201.3	1230.3	1262.3	1289.8	1316.3	1337.1	1345.7	1346.2
12.5°	1155.5	1170.8	1207.3	1246.1	1286.3	1330.6	1366.1	1398.7	1424.6	1436.3	1436.3
15°	1184.5	1204.4	1251.1	1303.1	1362.0	1423.6	1468.9	1505.0	1534.0	1548.3	1547.2
17.5°	1216.1	1242.5	1301.5	1379.9	1464.3	1545.2	1598.2	1624.6	1654.7	1668.4	1667.9
20°	1246.6	1279.1	1363.6	1477.5	1590.0	1676.0	1718.7	1725.9	1727.8	1729.4	1733.5
22.5°	1278.1	1321.8	1441.5	1600.6	1721.3	1780.8	1786.9	1756.3	1713.6	1693.8	1699.3
25°	1312.7	1370.7	1543.1	1736.6	1834.2	1841.3	1794.6	1720.3	1639.4	1602.2	1607.8
27.5°	1346.2	1427.2	1665.3	1866.3	1915.6	1853.0	1752.3	1647.0	1549.3	1510.1	1514.6
30°	1379.9	1491.8	1800.1	1979.7	1952.7	1824.1	1685.6	1568.1	1470.0	1428.7	1433.3
32.5°	1414.0	1567.1	1955.3	2061.7	1946.2	1762.5	1602.7	1479.6	1393.1	1349.8	1355.5
35°	1452.6	1659.7	2102.4	2106.4	1901.9	1671.9	1493.3	1373.7	1298.5	1263.8	1271.5
37.5°	1503.0	1777.2	2232.1	2117.6	1824.6	1539.1	1357.5	1248.6	1186.5	1170.8	1181.9
40°	1565.6	1918.7	2331.4	2099.8	1710.1	1377.8	1208.9	1121.9	1086.8	1090.4	1102.6
42.5°	1647.0	2077.0	2401.1	2054.0	1550.8	1211.4	1078.6	1040.0	1056.8	1071.0	1084.2
45°	1752.9	2241.3	2444.3	1976.2	1370.7	1070.5	1001.8	1011.0	1023.7	1025.2	1035.5
47.5°	1888.2	2407.6	2472.7	1858.6	1187.1	971.3	952.9	955.0	952.4	941.8	950.0
50°	2057.1	2569.5	2498.2	1702.9	1030.8	909.2	884.8	877.7	842.6	808.0	812.5
52.5°	2249.4	2718.0	2508.9	1509.6	909.2	857.3	817.6	772.8	707.2	696.6	700.1
55°	2463.1	2855.3	2481.4	1272.0	807.0	790.7	730.6	676.7	669.5	660.4	661.9
57.5°	2718.5	3003.5	2425.5	1007.0	702.1	712.8	654.4	660.4	647.7	633.4	630.9
60°	2997.8	3156.6	2327.3	765.3	593.8	615.6	634.5	634.0	630.4	618.7	614.6
62.5°	3249.1	3257.3	2133.9	586.1	498.7	540.4	591.7	591.2	588.1	581.6	579.0
65°	3398.8	3242.1	1811.3	461.5	420.2	478.3	533.7	537.8	538.3	537.8	537.8
67.5°	3372.4	3063.5	1368.7	367.4	355.7	415.2	476.2	481.9	486.0	486.9	487.9
70°	3073.2	2671.1	892.5	293.0	298.2	359.7	421.8	427.4	430.9	435.0	437.1
72.5°	2395.4	1964.0	510.9	237.1	247.7	311.9	367.9	374.4	376.5	384.2	387.2
75°	1459.7	1155.0	275.7	186.8	203.6	266.6	314.5	322.1	325.6	334.8	335.8
77.5°	694.0	500.2	157.2	145.5	163.8	217.8	265.6	274.3	264.6	269.7	265.6
80°	234.5	185.7	99.2	110.9	125.2	169.9	212.7	221.3	201.0	200.0	197.9
82.5°	81.9	75.3	63.1	73.8	80.9	121.6	160.8	172.0	149.5	149.0	142.0
85°	32.1	30.5	35.2	40.2	48.4	74.8	105.8	111.4	92.0	74.3	73.3
87.5°	6.7	7.1	8.6	9.1	14.8	25.9	38.1	46.8	37.1	31.6	29.0
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)