

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: P961027

Luminaire Tested: **NAV-SB1D-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961027
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

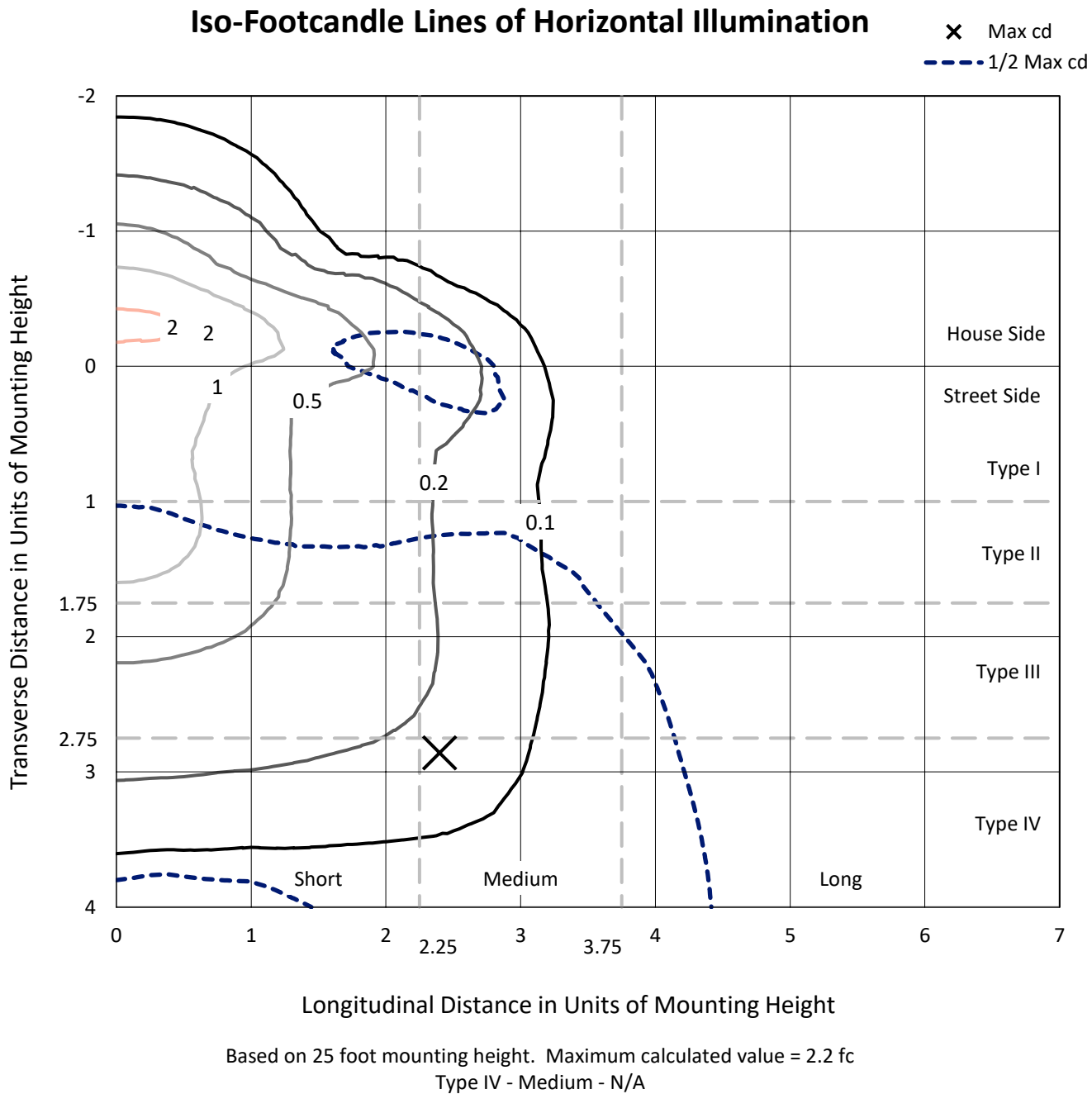
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9293.6 lumens
Efficiency: N/A
Efficacy: 116.8 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

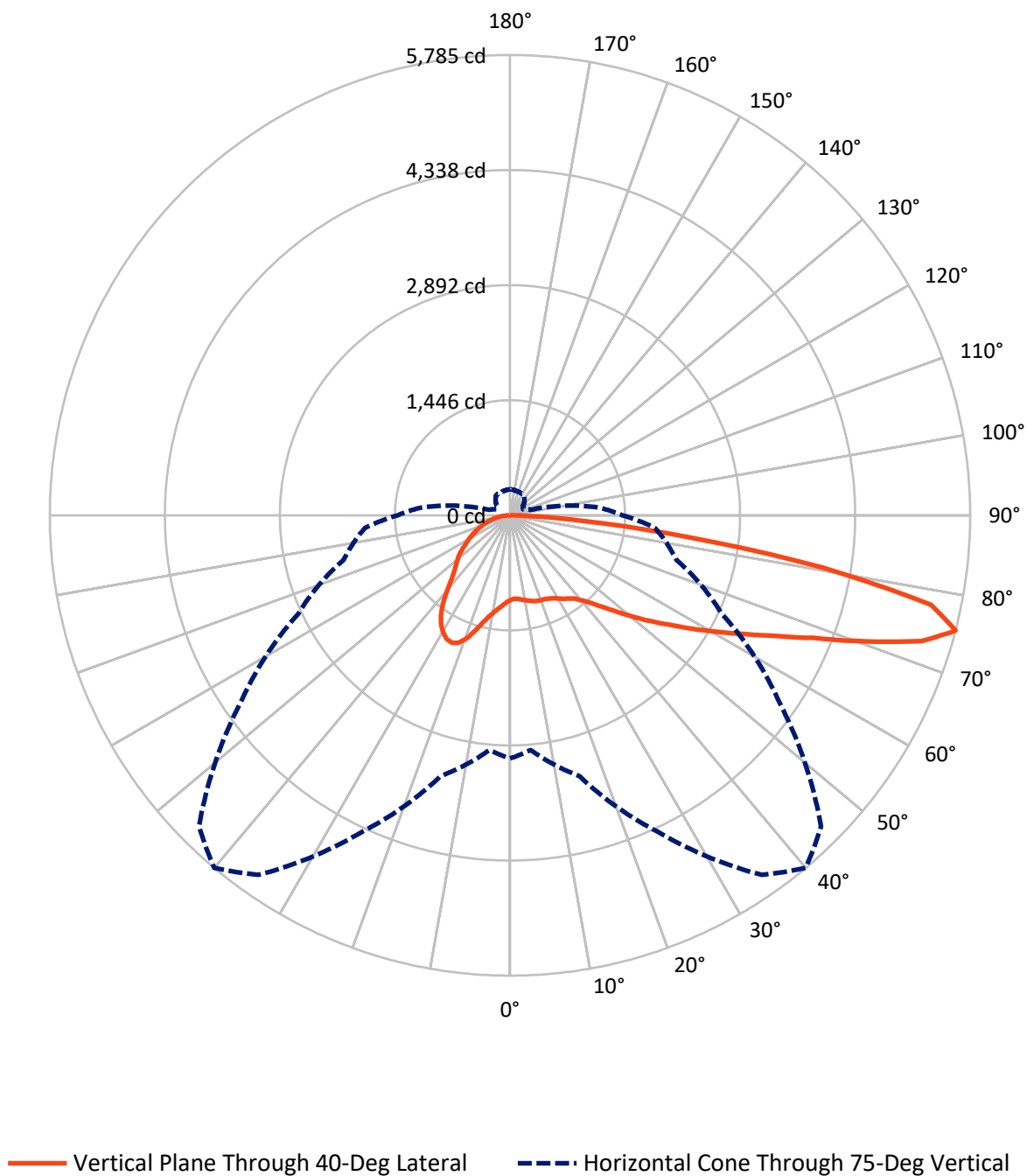


REPORT NUMBER: P961027
CATALOG NUMBER: NAV-SB1D-830-U-SL4



REPORT NUMBER: P961027
CATALOG NUMBER: NAV-SB1D-830-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P961027

CATALOG NUMBER: NAV-SB1D-830-U-SL4

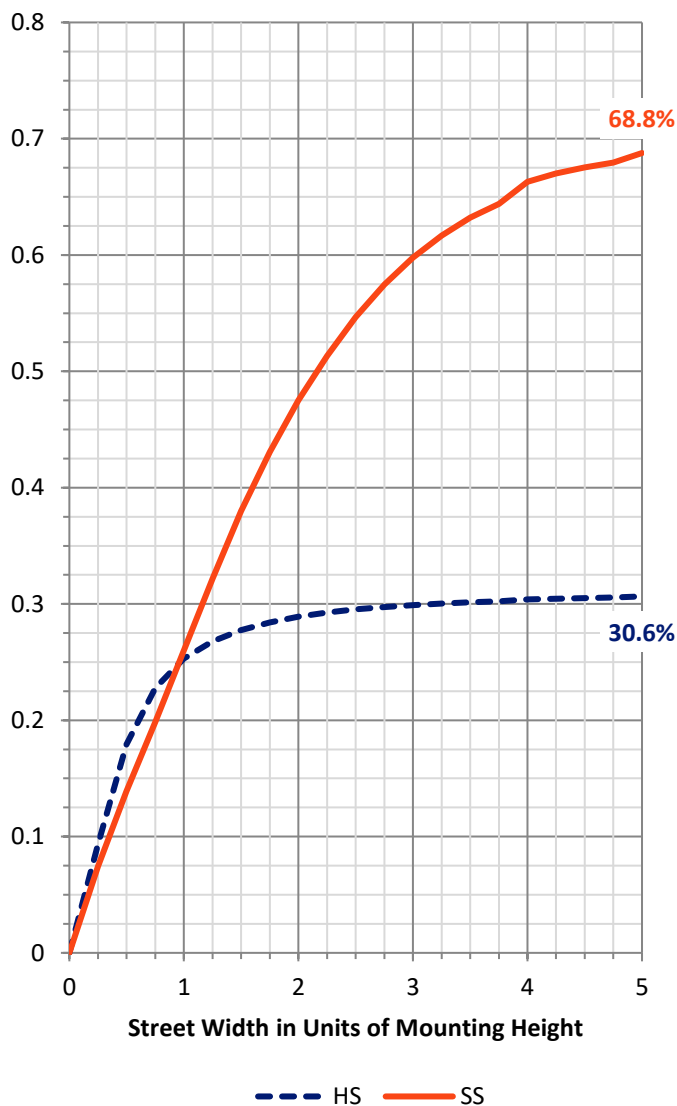
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2879.5	0.0	2879.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	6414.2	0.0	6414.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	9293.6	0.0	9293.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.1	1.1
10°-20°	356.2	3.8
20°-30°	650.3	7.0
30°-40°	922.3	9.9
40°-50°	1245.4	13.4
50°-60°	1675.5	18.0
60°-70°	2126.5	22.9
70°-80°	1930.0	20.8
80°-90°	281.3	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°	9293.6	100.0
0°-180°	9293.6	100.0

Coefficient of Utilization



REPORT NUMBER: P961027

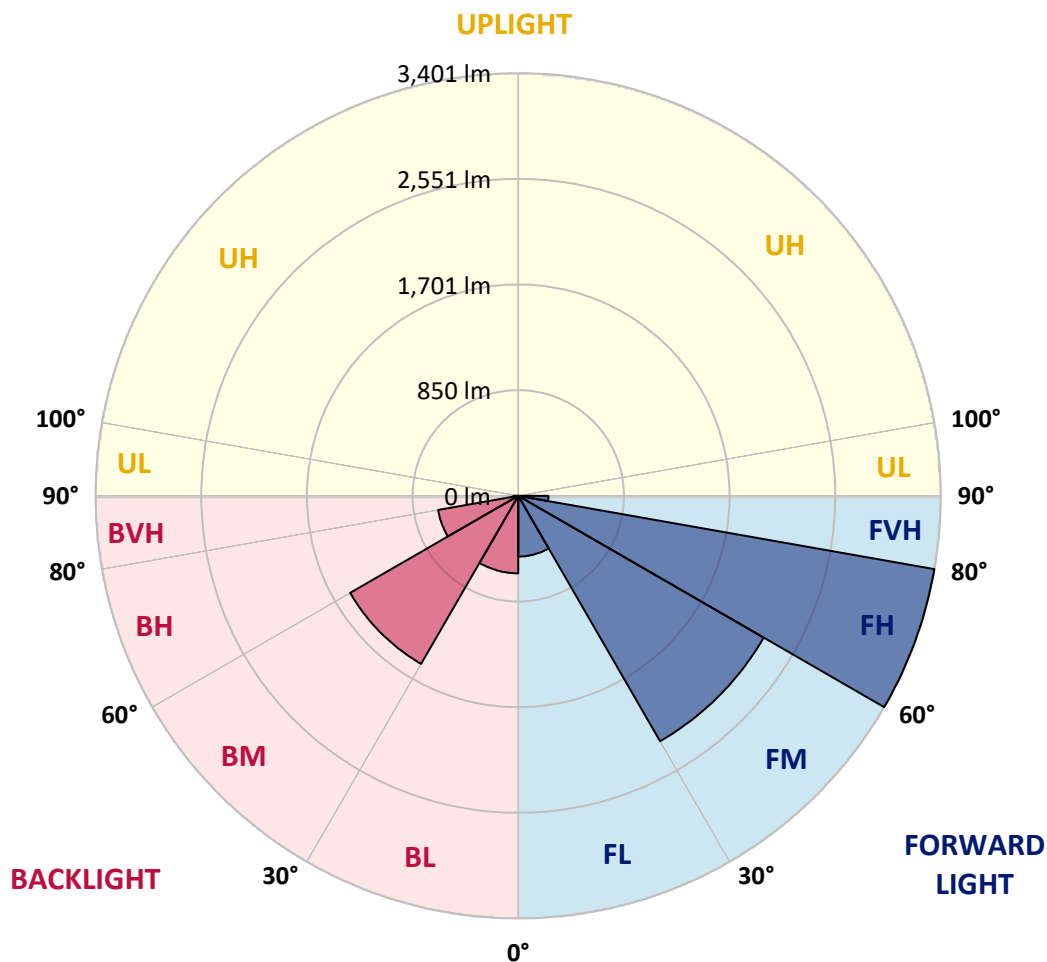
CATALOG NUMBER: NAV-SB1D-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	488.9	5.3			
FM	(30°-60°)	2281.4	24.5			
FH	(60°-80°)	3401.3	36.6			G2/5000
FVH	(80°-90°)	242.6	2.6			G3/500
BL	(0°-30°)	623.7	6.7	B2/1000		
BM	(30°-60°)	1561.9	16.8	B2/2500		
BH	(60°-80°)	655.2	7.0	B2/1000		G2/1000
BVH	(80°-90°)	38.7	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



REPORT NUMBER: P961027

CATALOG NUMBER: NAV-SB1D-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7
2.5°	1046.5	1052.4	1050.9	1049.0	1049.0	1049.4	1049.0	1052.4	1055.9	1059.3	1064.7
5°	1057.3	1063.2	1060.3	1057.8	1055.9	1055.3	1053.9	1053.4	1055.3	1059.7	1067.2
7.5°	1078.5	1084.4	1080.0	1075.5	1071.6	1069.7	1067.6	1064.7	1063.2	1065.7	1076.0
10°	1102.2	1108.1	1102.7	1094.8	1088.3	1085.9	1083.9	1081.0	1079.0	1080.5	1091.8
12.5°	1125.9	1131.7	1124.3	1113.6	1105.2	1103.6	1101.2	1100.2	1099.7	1099.2	1110.6
15°	1148.0	1152.9	1143.6	1130.8	1121.9	1119.4	1116.9	1118.5	1120.9	1123.9	1136.7
17.5°	1165.3	1170.2	1156.4	1139.6	1131.3	1130.3	1128.8	1133.8	1140.6	1148.0	1163.8
20°	1181.0	1185.9	1168.2	1145.5	1135.7	1135.7	1136.2	1146.6	1156.4	1167.3	1188.9
22.5°	1203.2	1207.1	1185.5	1154.5	1140.1	1141.1	1145.0	1155.4	1167.8	1182.5	1212.6
25°	1236.3	1239.2	1212.6	1171.2	1155.0	1157.8	1161.3	1166.2	1178.1	1195.4	1235.7
27.5°	1289.4	1291.9	1257.0	1200.8	1176.1	1181.0	1185.9	1182.5	1188.0	1202.7	1254.5
30°	1364.4	1365.9	1321.5	1247.1	1212.1	1214.5	1215.5	1201.3	1190.9	1202.7	1267.8
32.5°	1453.1	1452.6	1399.9	1303.3	1253.1	1250.5	1242.2	1214.1	1189.9	1200.3	1279.6
35°	1590.7	1585.3	1517.2	1382.1	1299.4	1284.0	1264.3	1228.4	1194.8	1197.8	1290.0
37.5°	1818.4	1801.6	1707.4	1511.3	1368.4	1329.4	1300.3	1251.5	1205.7	1196.8	1302.3
40°	2075.2	2054.0	1950.5	1688.3	1471.9	1409.3	1362.4	1284.5	1223.4	1201.3	1320.5
42.5°	2379.8	2349.8	2238.4	1896.8	1603.0	1512.3	1441.8	1326.5	1249.6	1215.5	1345.2
45°	2754.0	2714.0	2556.4	2131.9	1768.1	1647.4	1553.2	1390.0	1289.4	1243.1	1382.1
47.5°	3132.0	3141.9	2917.7	2401.1	1966.3	1813.9	1692.7	1485.6	1347.7	1287.5	1441.8
50°	3533.8	3540.7	3276.9	2699.2	2191.0	2002.2	1849.4	1592.6	1428.5	1350.6	1531.0
52.5°	3847.2	3848.3	3603.3	3011.2	2425.1	2209.3	2018.5	1714.9	1522.1	1434.4	1649.8
55°	4043.4	4041.0	3832.0	3306.5	2694.3	2426.7	2205.8	1853.9	1636.5	1533.0	1799.2
57.5°	4185.9	4178.5	3989.7	3560.4	2981.2	2683.4	2417.8	2011.7	1771.6	1650.4	1995.9
60°	4240.1	4235.7	4096.7	3779.8	3282.9	2967.4	2662.2	2188.1	1924.8	1788.8	2248.7
62.5°	4260.8	4269.2	4201.7	3992.2	3605.7	3281.8	2930.9	2399.0	2097.4	1945.6	2515.4
65°	4333.8	4349.1	4335.2	4270.2	3970.5	3650.1	3287.3	2649.9	2285.6	2113.7	2793.8
67.5°	4478.2	4493.5	4499.4	4603.0	4416.1	4109.0	3731.9	2962.5	2506.0	2288.1	3003.4
70°	4474.7	4470.3	4574.8	4867.6	4974.1	4744.4	4331.3	3346.9	2768.7	2433.0	3030.0
72.5°	4073.0	4037.6	4284.5	4864.6	5438.4	5407.9	5063.3	3842.8	2995.5	2450.8	2629.2
75°	3055.6	2961.0	3397.3	4384.0	5515.8	5784.5	5528.6	4150.4	2941.7	2165.4	1829.7
77.5°	1306.8	1211.7	1725.7	3245.5	4936.6	5407.4	5101.7	3621.0	2348.3	1431.9	898.6
80°	342.0	341.6	521.5	1471.4	3357.3	3993.2	3503.2	2338.4	1341.7	511.7	247.9
82.5°	141.4	138.1	191.8	572.3	1640.4	2240.9	1828.7	1043.0	484.5	138.5	82.3
85°	52.8	52.3	93.2	197.6	578.7	924.2	668.9	266.7	120.7	67.5	37.0
87.5°	14.8	14.2	20.2	68.5	140.9	213.9	114.4	43.9	34.0	26.6	10.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P961027

CATALOG NUMBER: NAV-SB1D-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7
2.5°	1066.2	1068.7	1073.1	1076.6	1081.0	1085.9	1092.9	1097.3	1101.7	1104.6	1102.7
5°	1070.6	1076.0	1087.4	1098.7	1112.0	1124.3	1138.7	1149.0	1157.4	1159.9	1160.8
7.5°	1080.5	1089.4	1108.5	1127.8	1149.0	1169.2	1189.9	1207.7	1222.0	1227.3	1227.8
10°	1097.8	1109.6	1136.7	1163.8	1191.9	1222.9	1249.6	1275.2	1295.4	1303.8	1304.3
12.5°	1119.4	1134.3	1169.7	1207.1	1246.1	1289.0	1323.5	1355.0	1380.2	1391.5	1391.5
15°	1147.5	1166.8	1212.1	1262.4	1319.6	1379.2	1423.1	1458.1	1486.1	1500.0	1499.0
17.5°	1178.1	1203.8	1260.9	1336.8	1418.6	1497.0	1548.3	1573.9	1603.0	1616.3	1615.8
20°	1207.7	1239.2	1321.0	1431.4	1540.4	1623.7	1665.1	1672.0	1673.9	1675.5	1679.4
22.5°	1238.2	1280.6	1396.5	1550.7	1667.6	1725.3	1731.1	1701.6	1660.2	1640.9	1646.4
25°	1271.7	1327.9	1495.1	1682.3	1776.9	1783.9	1738.5	1666.5	1588.2	1552.3	1557.6
27.5°	1304.3	1382.6	1613.4	1808.0	1855.9	1795.2	1697.6	1595.6	1500.9	1463.0	1467.4
30°	1336.8	1445.2	1743.9	1918.0	1891.8	1767.1	1633.0	1519.2	1424.0	1384.2	1388.6
32.5°	1369.8	1518.2	1894.3	1997.3	1885.4	1707.4	1552.7	1433.5	1349.6	1307.7	1313.1
35°	1407.3	1607.9	2036.8	2040.7	1842.5	1619.7	1446.7	1330.9	1258.0	1224.5	1231.8
37.5°	1456.1	1721.8	2162.4	2051.5	1767.6	1491.1	1315.1	1209.6	1149.5	1134.3	1145.0
40°	1516.7	1858.8	2258.6	2034.3	1656.7	1334.9	1171.2	1086.9	1052.9	1056.4	1068.2
42.5°	1595.6	2012.1	2326.1	1989.9	1502.4	1173.6	1045.0	1007.6	1023.8	1037.6	1050.4
45°	1698.1	2171.4	2368.1	1914.5	1327.9	1037.1	970.6	979.5	991.8	993.2	1003.1
47.5°	1829.2	2332.5	2395.6	1800.6	1149.9	941.0	923.2	925.3	922.7	912.4	920.2
50°	1992.9	2489.3	2420.2	1649.8	998.7	880.9	857.2	850.3	816.3	782.8	787.2
52.5°	2179.3	2633.2	2430.6	1462.5	880.9	830.6	792.1	748.8	685.2	674.9	678.2
55°	2386.2	2766.3	2404.0	1232.4	781.8	766.0	707.9	655.6	648.7	639.8	641.3
57.5°	2633.7	2909.8	2349.8	975.5	680.2	690.5	633.9	639.8	627.5	613.7	611.2
60°	2904.3	3058.1	2254.6	741.4	575.2	596.4	614.7	614.2	610.7	599.4	595.4
62.5°	3147.8	3155.7	2067.3	567.8	483.1	523.5	573.3	572.8	569.8	563.4	561.0
65°	3292.7	3140.9	1754.8	447.1	407.1	463.3	517.1	521.0	521.5	521.0	521.0
67.5°	3267.1	2967.9	1325.9	355.9	344.6	402.2	461.4	466.8	470.8	471.7	472.7
70°	2977.2	2587.8	864.6	283.9	288.8	348.5	408.7	414.1	417.5	421.5	423.4
72.5°	2320.7	1902.7	494.9	229.7	240.1	302.2	356.4	362.7	364.8	372.2	375.2
75°	1414.2	1118.9	267.1	180.9	197.2	258.3	304.6	312.0	315.5	324.3	325.3
77.5°	672.3	484.5	152.3	140.9	158.8	210.9	257.3	265.7	256.4	261.3	257.3
80°	227.2	179.9	96.1	107.4	121.3	164.6	206.0	214.4	194.7	193.7	191.8
82.5°	79.3	73.0	61.1	71.4	78.4	117.8	155.8	166.6	144.9	144.4	137.6
85°	31.1	29.6	34.0	38.9	46.8	72.5	102.5	107.9	89.2	72.0	70.9
87.5°	6.5	6.9	8.4	8.9	14.2	25.1	37.0	45.3	36.0	30.5	28.1
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)