

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: P961449

Luminaire Tested: **NAV-SB2A-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9708.8 lumens
Efficiency: N/A
Efficacy: 169.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
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

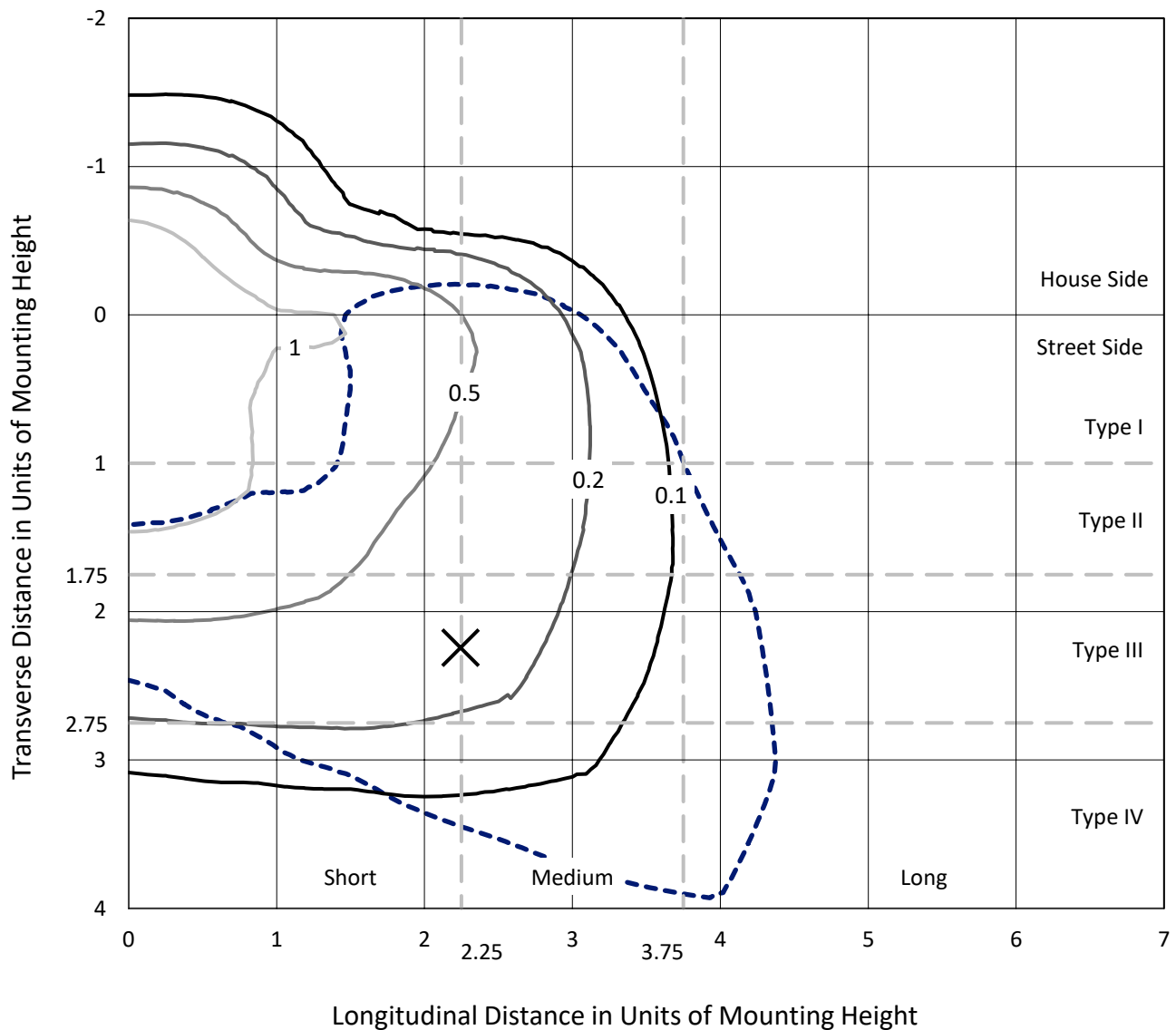


REPORT NUMBER: P961449

CATALOG NUMBER: NAV-SB2A-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

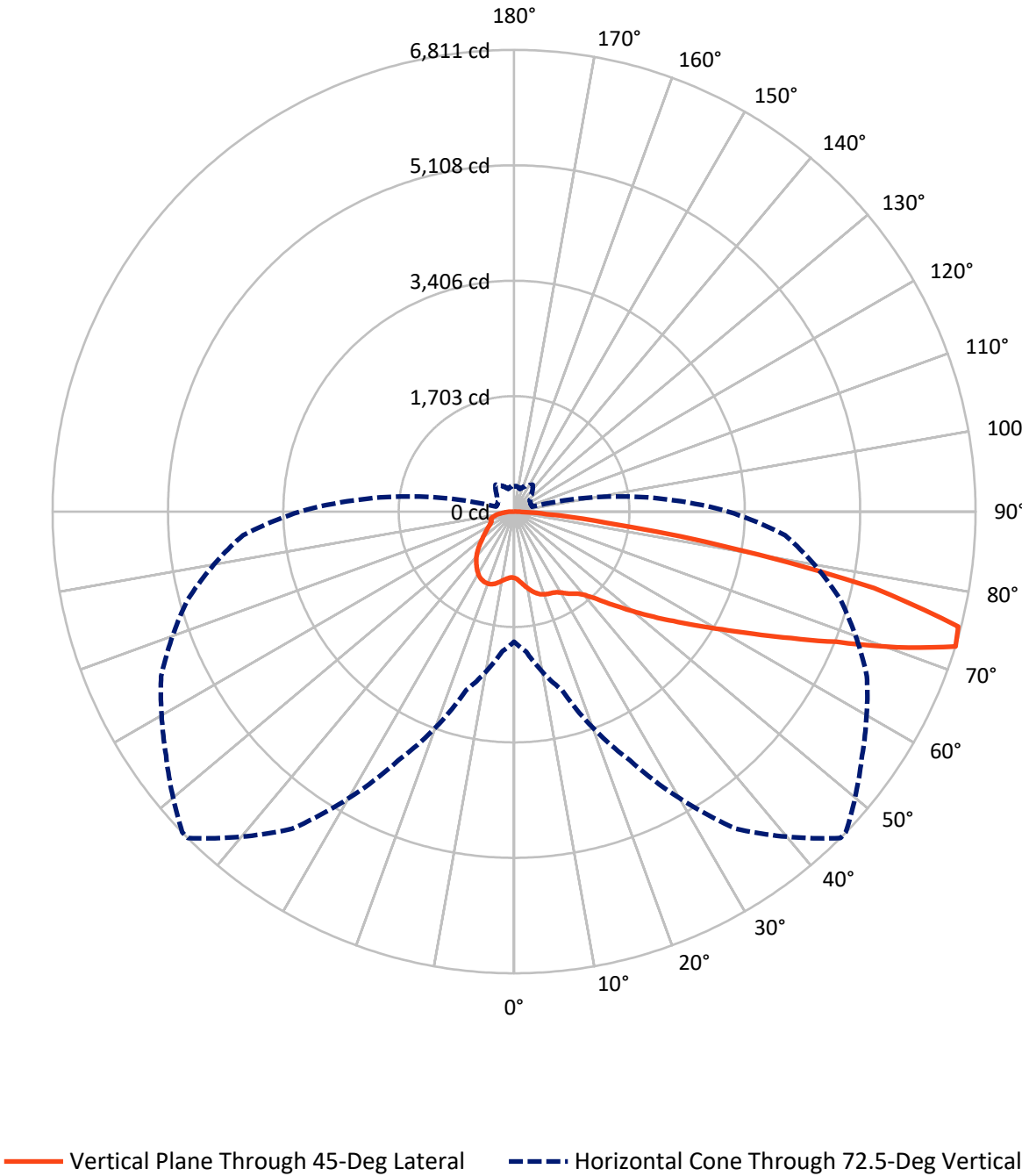
× Max cd
- - - 1/2 Max cd



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

REPORT NUMBER: P961449
CATALOG NUMBER: NAV-SB2A-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P961449

CATALOG NUMBER: NAV-SB2A-740-U-T4W

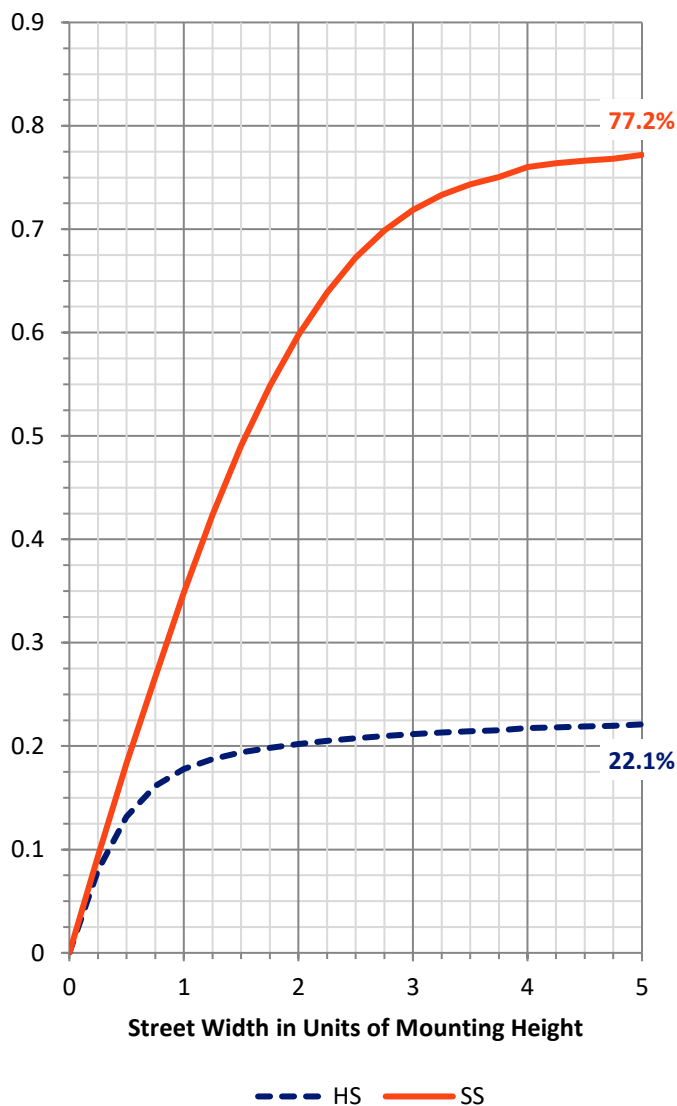
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2194.8	0.0	2194.8
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	7514.0	0.0	7514.0
	% Fixture	77.4	0.0	77.4
Total	Lumens	9708.8	0.0	9708.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	1.0
10°-20°	332.4	3.4
20°-30°	578.2	6.0
30°-40°	828.8	8.5
40°-50°	1167.1	12.0
50°-60°	1787.6	18.4
60°-70°	2589.6	26.7
70°-80°	2067.9	21.3
80°-90°	257.6	2.7
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°	9708.8	100.0
0°-180°	9708.8	100.0

Coefficient of Utilization



REPORT NUMBER: P961449

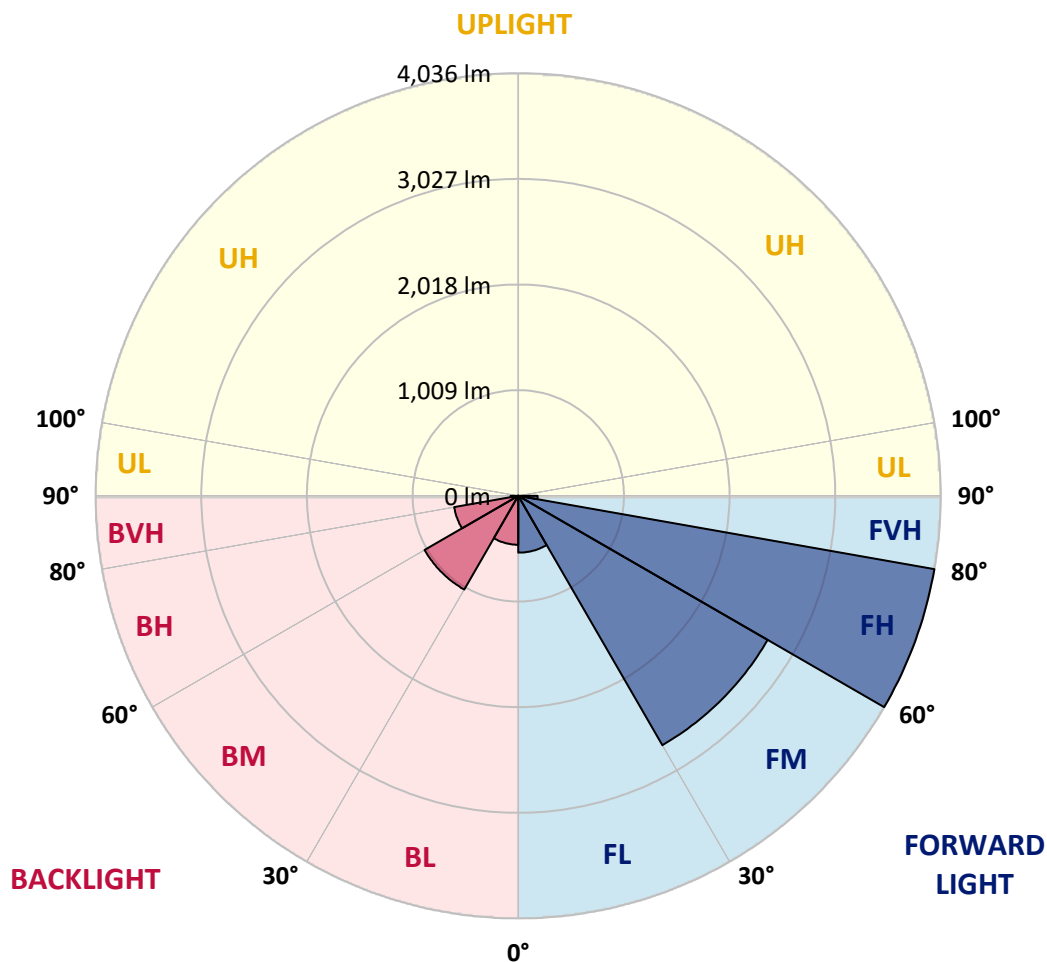
CATALOG NUMBER: NAV-SB2A-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	542.9	5.6			
FM	(30°-60°)	2750.0	28.3			
FH	(60°-80°)	4036.2	41.6			G2/5000
FVH	(80°-90°)	184.8	1.9			G2/225
BL	(0°-30°)	467.3	4.8	B1/500		
BM	(30°-60°)	1033.5	10.6	B2/2500		
BH	(60°-80°)	621.3	6.4	B2/1000		G2/1000
BVH	(80°-90°)	72.8	0.7			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 Short



REPORT NUMBER: P961449

CATALOG NUMBER: NAV-SB2A-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4
2.5°	1017.8	1024.5	1018.3	1012.7	1010.1	1003.5	1003.0	998.9	996.3	989.1	987.1
5°	1088.9	1097.6	1087.3	1076.0	1065.9	1049.5	1047.4	1035.7	1022.4	1007.1	998.4
7.5°	1169.2	1176.8	1165.1	1148.2	1130.3	1103.2	1102.7	1081.2	1060.3	1034.1	1019.4
10°	1239.2	1249.5	1233.6	1210.6	1188.1	1157.4	1153.8	1129.2	1102.7	1069.0	1046.4
12.5°	1301.1	1308.3	1292.9	1264.8	1238.7	1208.1	1203.5	1176.3	1146.7	1108.3	1079.6
15°	1350.2	1359.5	1339.0	1308.8	1281.1	1251.0	1246.9	1222.4	1192.7	1152.3	1115.5
17.5°	1382.4	1390.1	1369.2	1335.4	1308.8	1283.7	1280.6	1260.2	1234.1	1193.2	1153.8
20°	1394.7	1402.9	1380.9	1346.6	1322.1	1302.7	1301.1	1286.3	1268.4	1231.0	1191.2
22.5°	1407.0	1414.7	1386.0	1350.2	1328.7	1316.5	1316.0	1306.3	1299.1	1268.4	1229.5
25°	1456.6	1458.7	1420.3	1368.7	1337.9	1327.2	1326.7	1326.1	1329.2	1305.2	1271.0
27.5°	1499.6	1499.1	1466.4	1417.8	1370.2	1347.7	1347.2	1352.3	1362.0	1342.0	1313.9
30°	1562.5	1556.9	1518.0	1467.4	1423.9	1389.1	1386.0	1381.4	1389.1	1373.3	1356.9
32.5°	1696.0	1678.0	1615.2	1525.1	1468.4	1441.8	1437.7	1409.1	1412.1	1402.4	1394.2
35°	1887.2	1863.8	1779.8	1634.6	1523.7	1485.7	1483.7	1447.4	1441.3	1432.5	1435.6
37.5°	2114.9	2085.7	1988.0	1793.1	1618.8	1536.9	1533.8	1501.1	1476.0	1466.9	1484.2
40°	2343.5	2306.7	2225.8	1986.4	1758.9	1622.4	1612.6	1563.0	1534.3	1519.0	1555.8
42.5°	2565.5	2534.7	2465.7	2203.3	1931.7	1747.1	1725.6	1640.7	1619.3	1604.9	1671.5
45°	2761.9	2734.2	2683.6	2435.0	2134.3	1917.0	1895.9	1757.4	1750.7	1750.7	1846.8
47.5°	2921.5	2915.3	2861.6	2671.4	2373.2	2110.3	2074.0	1919.5	1937.4	1965.0	2095.9
50°	3098.4	3081.5	3024.2	2904.0	2653.9	2331.7	2302.0	2118.5	2185.4	2261.1	2456.0
52.5°	3261.0	3270.3	3206.3	3146.4	2971.1	2578.7	2526.5	2353.2	2497.9	2623.3	2877.9
55°	3428.2	3428.7	3410.9	3402.7	3303.5	2851.9	2794.6	2635.5	2865.7	3021.2	3370.0
57.5°	3585.2	3586.3	3612.9	3685.0	3689.1	3166.9	3102.0	2982.2	3274.3	3432.8	3877.3
60°	3725.4	3732.5	3805.2	3973.9	4028.1	3527.9	3466.7	3391.9	3696.8	3856.4	4410.8
62.5°	3772.5	3798.5	3960.2	4200.0	4363.2	3971.0	3910.6	3866.1	4140.7	4289.0	4856.8
65°	3692.7	3752.5	4065.0	4386.7	4707.9	4497.2	4437.3	4388.7	4602.0	4741.6	5223.0
67.5°	3496.8	3574.0	4058.9	4582.6	5126.2	5130.3	5074.6	4960.6	5096.6	5150.3	5342.1
70°	2980.7	3096.3	3701.4	4655.8	5606.5	5996.2	5942.5	5649.0	5590.1	5330.3	5006.6
72.5°	1920.5	2075.9	2725.5	4053.8	5713.5	6811.0	6807.9	6270.4	5746.2	4980.5	4015.4
75°	700.7	795.8	1266.4	2544.5	4795.9	6769.6	6789.5	6164.0	5245.4	3847.1	2501.5
77.5°	255.2	279.2	413.3	977.8	2949.5	5431.6	5473.1	4927.8	3733.6	1930.7	991.2
80°	134.0	147.3	211.8	379.5	1263.8	3225.7	3290.7	2928.5	1754.8	581.5	297.1
82.5°	74.2	80.3	118.7	206.1	569.3	1379.3	1418.3	1156.9	617.4	246.5	122.8
85°	39.9	42.4	55.8	112.5	278.2	478.2	488.9	345.7	246.0	144.7	59.3
87.5°	11.8	14.3	18.4	35.8	109.0	107.4	110.0	68.6	97.2	73.2	19.5
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: P961449

CATALOG NUMBER: NAV-SB2A-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4	979.4
2.5°	984.0	982.5	976.8	974.4	971.3	970.8	973.3	973.9	974.4	974.8	976.8
5°	993.2	988.1	983.0	979.9	980.9	981.4	986.6	990.1	992.7	994.8	995.8
7.5°	1011.2	1007.1	998.4	997.8	999.4	1004.0	1010.6	1018.8	1023.5	1026.9	1028.0
10°	1037.7	1030.0	1019.9	1021.4	1024.5	1031.0	1044.9	1051.5	1059.2	1065.9	1064.4
12.5°	1064.9	1058.2	1046.4	1047.4	1052.6	1064.4	1077.6	1085.8	1090.9	1096.0	1098.1
15°	1100.1	1088.3	1075.5	1075.5	1084.8	1097.6	1103.7	1110.4	1113.5	1119.1	1121.1
17.5°	1136.4	1121.1	1104.2	1103.2	1114.5	1120.6	1124.2	1125.1	1126.2	1132.3	1134.4
20°	1172.8	1155.9	1131.8	1129.8	1132.3	1131.3	1130.8	1129.8	1131.3	1139.0	1142.1
22.5°	1208.6	1189.1	1155.9	1146.7	1139.5	1129.8	1129.2	1128.7	1129.8	1137.4	1142.6
25°	1250.5	1226.9	1182.4	1154.9	1130.8	1117.6	1119.1	1119.6	1120.6	1126.7	1134.9
27.5°	1296.0	1270.0	1207.0	1152.3	1108.8	1099.6	1097.1	1098.6	1102.2	1111.9	1121.7
30°	1341.5	1310.9	1229.5	1142.1	1081.2	1068.5	1060.3	1063.8	1075.0	1084.8	1095.5
32.5°	1382.9	1352.3	1247.4	1119.6	1045.9	1025.9	1015.3	1019.9	1031.0	1034.6	1047.4
35°	1431.5	1396.8	1255.1	1083.7	1007.6	976.8	962.6	955.9	961.6	958.0	969.2
37.5°	1485.7	1449.5	1254.1	1036.7	962.6	927.2	907.3	882.2	870.5	858.2	865.9
40°	1566.1	1513.9	1241.8	979.9	906.8	874.6	838.8	796.3	769.8	745.7	747.2
42.5°	1675.5	1603.4	1219.3	917.6	843.9	813.7	765.2	715.6	673.6	633.7	630.1
45°	1838.6	1720.6	1191.2	851.1	775.8	746.2	693.5	637.8	590.2	539.0	532.9
47.5°	2074.0	1878.0	1164.6	775.3	704.3	677.1	629.6	577.9	521.7	472.1	466.5
50°	2397.2	2104.1	1140.0	701.7	633.7	613.3	575.3	522.8	466.0	426.0	423.5
52.5°	2808.4	2411.5	1129.8	630.6	567.7	560.1	529.8	480.7	427.0	393.3	390.7
55°	3280.4	2779.2	1129.8	562.6	509.9	512.5	491.5	446.0	399.4	369.3	366.2
57.5°	3762.3	3151.6	1109.4	499.7	460.8	471.6	458.3	418.4	376.4	345.2	340.1
60°	4206.2	3463.6	1026.4	442.4	417.4	434.2	425.5	391.2	340.1	314.1	310.0
62.5°	4547.3	3639.5	866.9	396.9	381.5	401.0	396.4	355.5	333.4	322.8	319.2
65°	4718.2	3610.9	662.9	356.5	351.4	381.5	371.9	370.3	352.9	340.6	336.5
67.5°	4613.3	3364.4	480.7	326.8	333.9	363.7	401.0	407.1	374.8	350.9	346.8
70°	4153.5	2918.4	358.0	298.7	312.0	364.2	457.3	426.0	367.8	339.6	335.0
72.5°	3159.8	2176.2	277.7	269.1	283.3	366.7	482.3	417.4	347.3	375.4	372.4
75°	1807.0	1194.7	223.0	232.7	247.5	342.7	469.6	394.8	331.4	344.7	344.7
77.5°	688.9	459.3	184.1	196.9	199.0	299.2	449.1	393.3	315.6	307.9	280.7
80°	238.8	179.5	152.4	156.5	154.0	266.0	430.6	342.1	258.3	231.1	223.6
82.5°	97.7	89.5	120.7	115.6	109.5	206.6	347.8	279.7	211.3	186.7	184.6
85°	42.4	56.8	79.7	70.1	63.4	143.2	278.7	236.8	178.5	154.0	153.4
87.5°	8.7	21.5	33.7	31.7	32.7	95.6	197.9	168.3	126.3	94.6	74.2
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)