

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: P961445

Luminaire Tested: **NAV-SB2A-740-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9734.4 lumens
Efficiency: N/A
Efficacy: 169.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

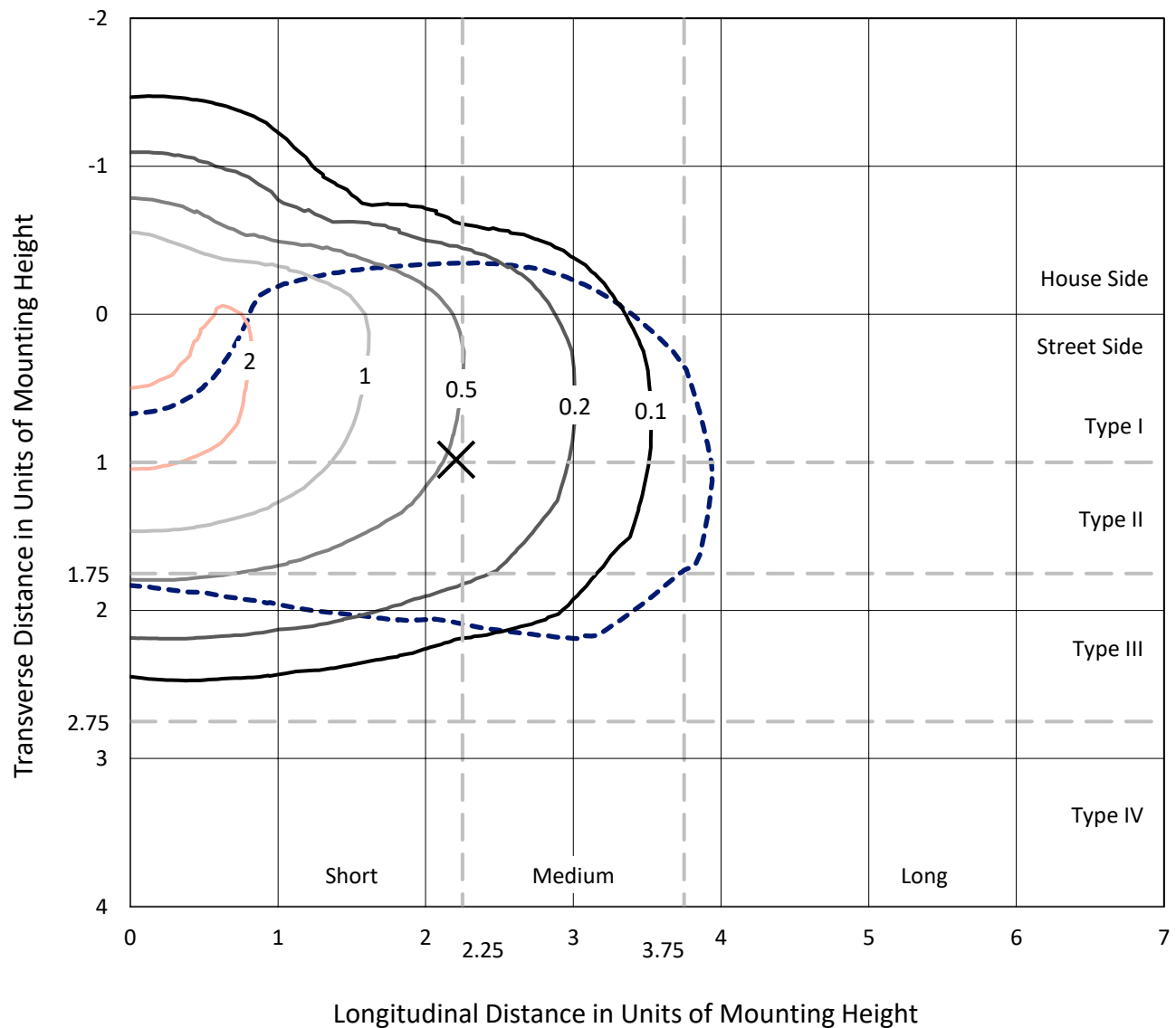
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961445
CATALOG NUMBER: NAV-SB2A-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

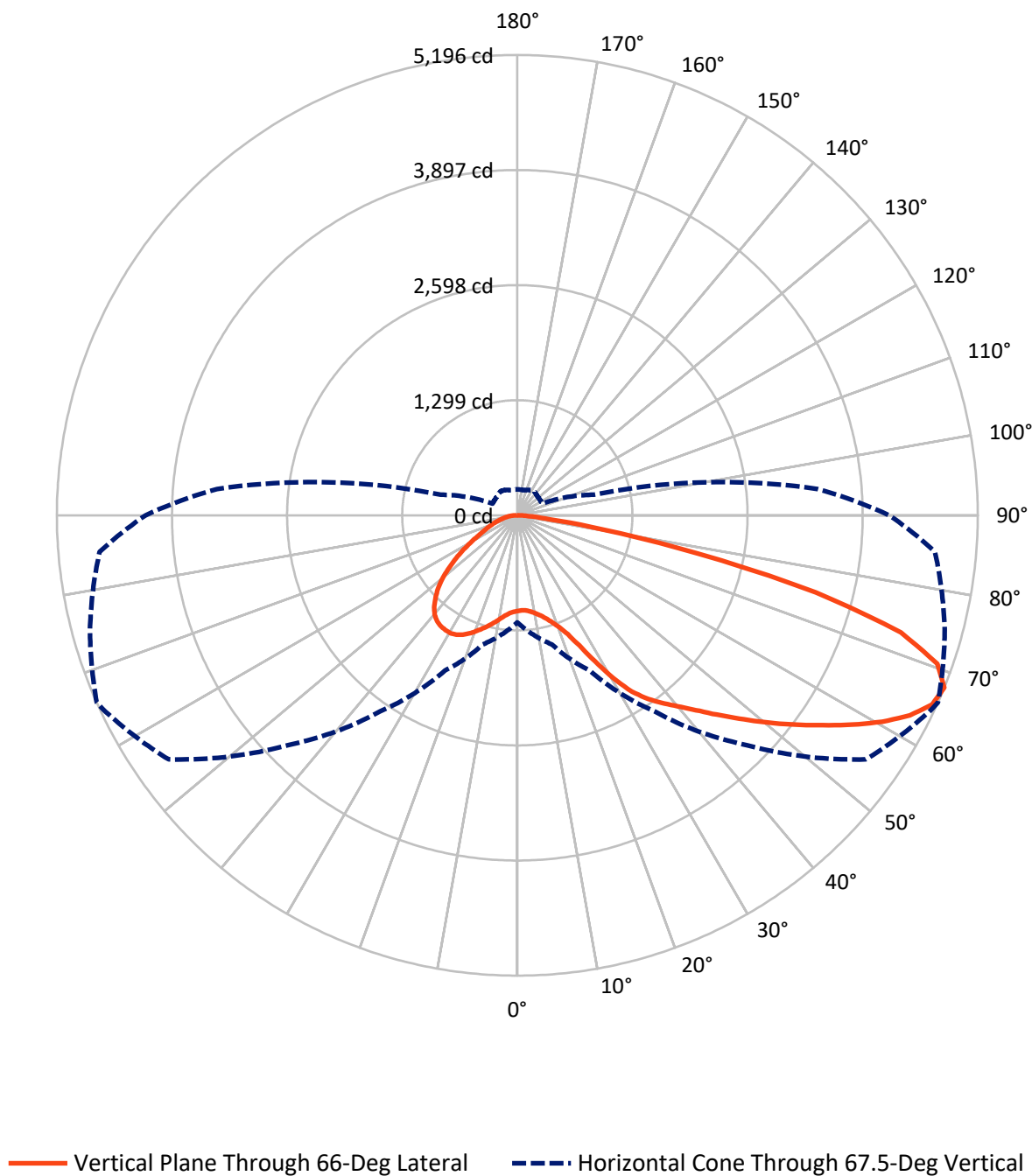
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
Type III - Short - N/A

REPORT NUMBER: P961445
CATALOG NUMBER: NAV-SB2A-740-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P961445

CATALOG NUMBER: NAV-SB2A-740-U-T3

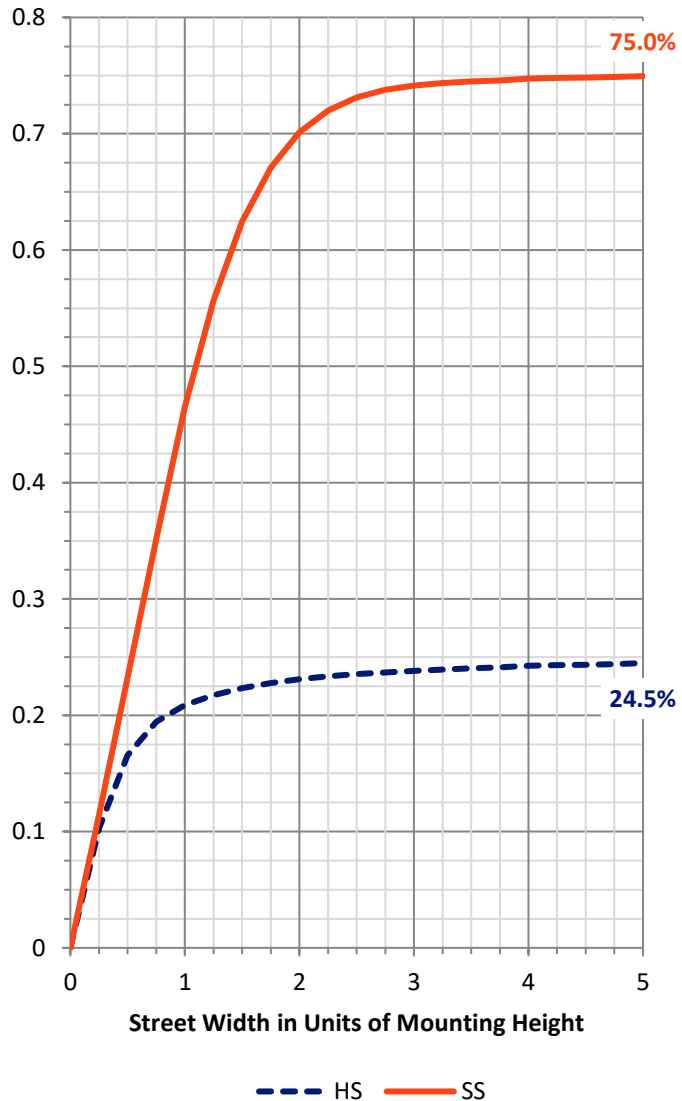
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2420.4	0.0	2420.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	7314.0	0.0	7314.0
	% Fixture	75.1	0.0	75.1
Total	Lumens	9734.4	0.0	9734.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.0	1.1
10°-20°	353.7	3.6
20°-30°	681.7	7.0
30°-40°	1195.2	12.3
40°-50°	1776.9	18.3
50°-60°	2252.4	23.1
60°-70°	2203.9	22.6
70°-80°	1051.3	10.8
80°-90°	112.3	1.2
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°	9734.4	100.0
0°-180°	9734.4	100.0

Coefficient of Utilization



REPORT NUMBER: P961445

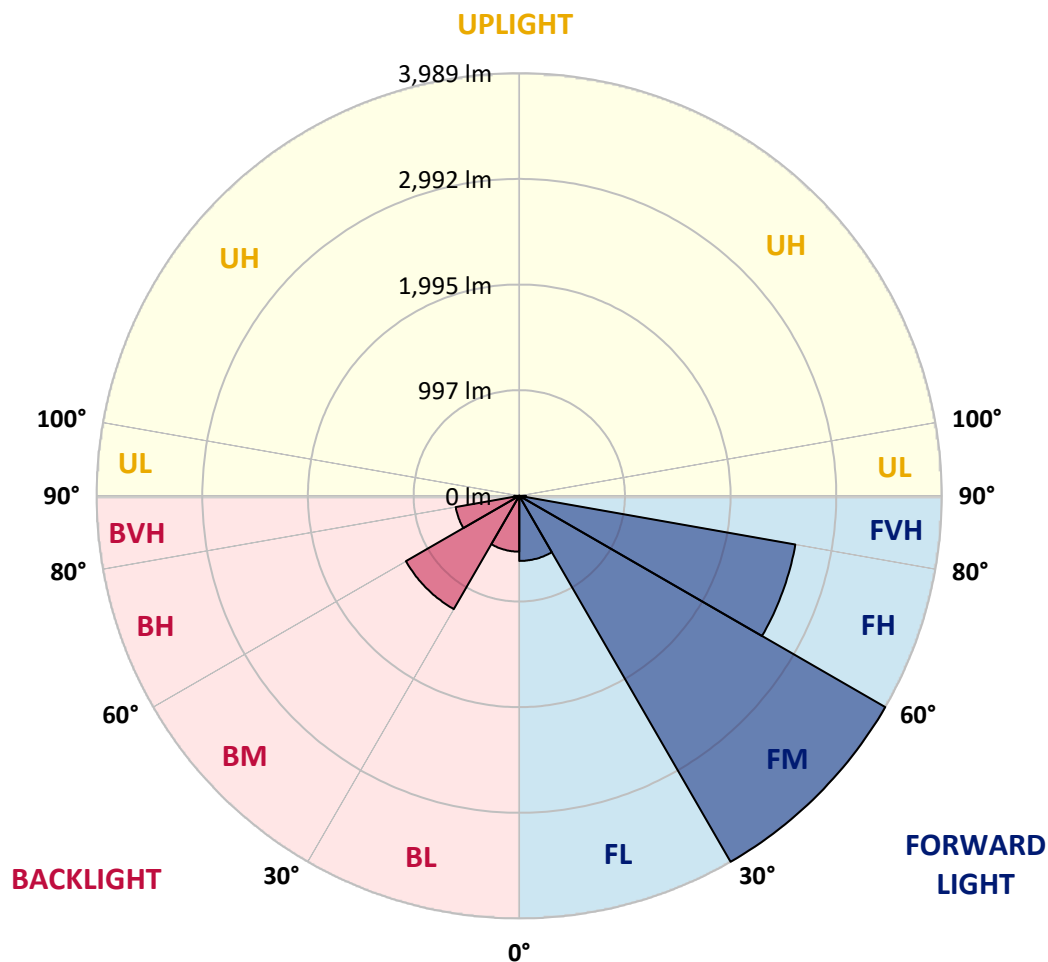
CATALOG NUMBER: NAV-SB2A-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	615.1	6.3			
FM	(30°-60°)	3989.1	41.0			
FH	(60°-80°)	2646.1	27.2			G2/5000
FVH	(80°-90°)	63.7	0.7			G1/100
BL	(0°-30°)	527.3	5.4	B2/1000		
BM	(30°-60°)	1235.4	12.7	B2/2500		
BH	(60°-80°)	609.1	6.3	B2/1000		G2/1000
BVH	(80°-90°)	48.6	0.5			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 III Short



REPORT NUMBER: P961445

CATALOG NUMBER: NAV-SB2A-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1068.5	1074.6	1073.1	1070.5	1070.0	1071.0	1072.6	1074.1	1073.6	1076.0	1080.1
5°	1065.4	1071.5	1071.0	1071.0	1073.1	1077.1	1079.6	1082.2	1079.6	1082.7	1088.3
7.5°	1067.4	1072.0	1074.1	1076.0	1081.2	1088.9	1095.0	1100.6	1097.6	1101.2	1108.3
10°	1093.5	1097.1	1099.1	1099.1	1102.7	1111.4	1117.6	1127.7	1125.2	1130.8	1140.0
12.5°	1141.0	1144.6	1144.6	1142.6	1145.1	1150.8	1152.8	1164.1	1159.5	1168.7	1177.8
15°	1199.4	1206.5	1200.9	1197.3	1198.3	1204.0	1203.5	1212.2	1207.6	1215.2	1223.4
17.5°	1263.8	1273.0	1263.8	1263.3	1261.3	1267.4	1267.9	1275.6	1267.4	1273.0	1278.6
20°	1340.0	1352.8	1345.1	1347.7	1343.1	1345.6	1348.2	1359.5	1346.6	1350.7	1349.2
22.5°	1447.4	1462.8	1454.6	1464.3	1461.2	1459.2	1458.7	1478.6	1458.7	1460.2	1445.4
25°	1603.9	1622.4	1608.0	1621.3	1621.3	1627.9	1635.6	1661.2	1627.9	1618.3	1579.8
27.5°	1835.1	1853.5	1825.4	1833.5	1831.0	1847.4	1839.2	1902.6	1866.8	1850.9	1773.8
30°	2113.3	2146.0	2092.8	2090.8	2088.2	2114.4	2126.2	2168.1	2131.7	2115.9	2022.8
32.5°	2414.1	2448.3	2384.9	2366.5	2356.8	2372.7	2362.9	2396.7	2371.6	2347.0	2231.9
35°	2732.1	2766.0	2705.6	2669.8	2630.9	2597.7	2562.9	2571.6	2548.0	2510.7	2391.5
37.5°	3032.9	3094.8	3030.8	2992.5	2920.9	2856.0	2758.8	2718.4	2696.4	2662.1	2541.9
40°	3339.2	3374.6	3326.0	3293.2	3215.5	3113.7	2958.3	2872.9	2843.1	2809.9	2708.2
42.5°	3564.8	3598.6	3572.5	3550.0	3489.1	3371.0	3170.0	3063.1	3020.2	2982.7	2896.3
45°	3743.8	3768.9	3752.5	3760.7	3734.6	3620.1	3389.4	3267.2	3222.7	3177.2	3109.1
47.5°	3816.0	3842.5	3868.7	3917.2	3961.7	3877.4	3625.2	3488.1	3441.0	3394.5	3327.6
50°	3807.8	3834.8	3910.6	4013.9	4152.0	4123.9	3873.8	3723.4	3679.9	3626.8	3564.8
52.5°	3742.3	3773.0	3870.2	4042.0	4262.0	4308.5	4127.0	3966.3	3925.4	3862.0	3800.1
55°	3570.5	3588.8	3734.6	3978.1	4288.0	4437.3	4375.0	4225.2	4184.2	4095.7	4028.2
57.5°	3251.8	3278.4	3490.6	3805.7	4222.6	4524.9	4592.8	4497.2	4457.8	4330.4	4259.9
60°	2836.0	2878.4	3121.4	3516.3	4055.8	4524.3	4790.7	4764.7	4731.9	4561.7	4488.0
62.5°	2365.5	2414.6	2648.3	3107.1	3764.3	4395.9	4914.6	4988.7	4971.9	4775.0	4680.8
65°	1816.7	1850.4	2083.1	2577.7	3310.6	4120.3	4928.9	5141.6	5144.7	4937.0	4781.5
67.5°	1209.6	1306.8	1508.8	1934.3	2703.0	3669.7	4803.0	5166.7	5196.3	4992.8	4730.9
70°	590.2	718.1	916.0	1257.2	1934.3	2978.6	4474.2	4961.1	5027.1	4830.1	4429.2
72.5°	245.0	286.4	394.3	620.4	1110.4	2010.0	3813.4	4403.6	4525.9	4279.8	3723.9
75°	165.2	179.0	225.5	318.2	505.8	991.2	2750.1	3283.5	3480.4	3232.3	2642.1
77.5°	127.3	136.0	164.2	222.5	300.7	374.9	1472.0	1978.8	2080.5	1926.2	1374.8
80°	100.2	106.9	122.8	162.2	213.3	200.5	501.7	896.6	955.4	801.4	441.9
82.5°	86.9	89.5	87.9	110.0	141.7	117.2	164.7	330.9	365.2	265.0	144.2
85°	62.9	70.1	73.2	68.1	75.1	59.3	67.5	117.2	128.8	115.1	81.3
87.5°	25.5	37.8	46.5	44.0	27.6	16.9	21.0	34.2	39.4	42.9	26.5
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: P961445

CATALOG NUMBER: NAV-SB2A-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6	1079.6
2.5°	1080.7	1084.2	1086.8	1089.9	1091.9	1095.0	1101.2	1104.7	1105.3	1107.8	1107.3
5°	1090.4	1095.5	1101.2	1109.4	1118.6	1126.2	1138.0	1146.2	1149.2	1151.8	1151.3
7.5°	1111.4	1118.6	1128.7	1143.1	1156.4	1166.7	1180.9	1190.6	1200.4	1204.0	1204.5
10°	1142.6	1152.8	1167.7	1187.1	1201.4	1214.7	1229.5	1237.7	1247.4	1251.5	1253.6
12.5°	1181.4	1192.2	1211.7	1238.7	1252.0	1261.3	1266.4	1264.3	1266.4	1270.0	1271.0
15°	1226.0	1237.7	1259.7	1288.8	1298.1	1289.9	1278.6	1268.4	1266.9	1267.9	1271.5
17.5°	1278.6	1287.3	1312.9	1337.4	1330.8	1297.0	1272.5	1256.1	1247.9	1245.4	1249.0
20°	1352.3	1352.3	1373.3	1388.6	1344.1	1286.8	1248.4	1221.9	1205.0	1197.8	1196.3
22.5°	1441.8	1433.6	1446.9	1436.1	1341.5	1258.2	1205.0	1159.0	1133.3	1123.2	1121.7
25°	1555.3	1545.6	1542.0	1475.6	1323.2	1212.7	1126.2	1070.5	1048.0	1042.3	1043.3
27.5°	1726.7	1702.1	1655.6	1497.0	1289.3	1141.0	1034.1	982.5	969.8	970.3	971.8
30°	1954.8	1905.7	1791.6	1500.6	1234.1	1039.8	940.0	903.2	897.1	899.6	908.4
32.5°	2166.0	2119.5	1930.7	1484.2	1149.2	940.5	855.7	831.1	821.9	825.0	829.0
35°	2331.7	2319.0	2059.6	1461.2	1044.9	847.5	779.9	759.0	741.1	737.0	740.0
37.5°	2488.2	2483.1	2156.3	1429.0	941.6	781.5	719.1	691.5	665.4	651.1	651.6
40°	2660.1	2655.0	2219.7	1379.3	850.0	724.3	664.4	628.0	595.8	569.8	572.4
42.5°	2853.4	2823.3	2249.9	1308.3	772.3	675.7	619.9	570.8	528.3	504.3	505.8
45°	3064.6	2996.6	2249.4	1217.8	706.8	631.1	572.4	502.8	463.4	440.9	439.8
47.5°	3288.6	3162.3	2221.8	1117.6	643.4	582.0	498.7	445.5	419.4	405.6	402.5
50°	3519.8	3317.3	2174.7	1002.4	578.4	526.2	452.6	416.4	396.4	383.6	378.9
52.5°	3737.2	3457.9	2118.0	872.1	512.5	472.1	432.1	404.1	383.0	368.8	362.6
55°	3939.2	3579.1	2037.6	738.5	458.8	435.7	422.5	398.9	374.9	358.0	351.4
57.5°	4118.8	3657.9	1899.0	613.3	420.5	410.7	412.3	390.2	362.6	348.3	339.1
60°	4268.1	3715.7	1693.9	497.1	389.2	386.1	396.4	373.9	341.6	325.3	318.2
62.5°	4357.6	3714.7	1442.3	407.1	362.6	363.7	375.4	353.4	320.7	305.3	300.7
65°	4349.9	3623.7	1166.1	348.3	337.0	338.0	353.4	330.9	303.3	294.1	293.6
67.5°	4195.9	3401.7	894.5	310.0	308.9	313.5	331.4	315.6	292.5	291.5	293.0
70°	3779.1	2940.8	644.4	279.2	279.7	286.4	310.0	305.9	286.9	288.9	288.4
72.5°	3030.3	2242.2	432.7	247.0	247.5	258.3	289.5	298.2	281.3	308.4	312.5
75°	2018.2	1398.3	278.2	212.8	213.3	227.0	271.6	283.3	266.0	307.4	310.0
77.5°	969.8	628.5	201.5	179.0	179.0	191.8	234.7	253.7	226.5	238.8	218.9
80°	335.0	236.3	158.6	144.2	141.1	149.9	197.9	220.0	195.4	180.0	168.8
82.5°	131.9	122.8	127.3	112.0	101.8	107.4	154.0	181.5	143.7	129.9	129.4
85°	75.6	79.7	90.0	74.2	58.8	66.0	113.1	130.4	108.4	95.6	97.7
87.5°	20.5	28.1	41.4	38.3	26.5	28.1	53.7	72.2	62.4	48.1	49.6
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)