

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: P960882

Luminaire Tested: **NAV-SB1D-735-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-735-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10573.9 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - 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



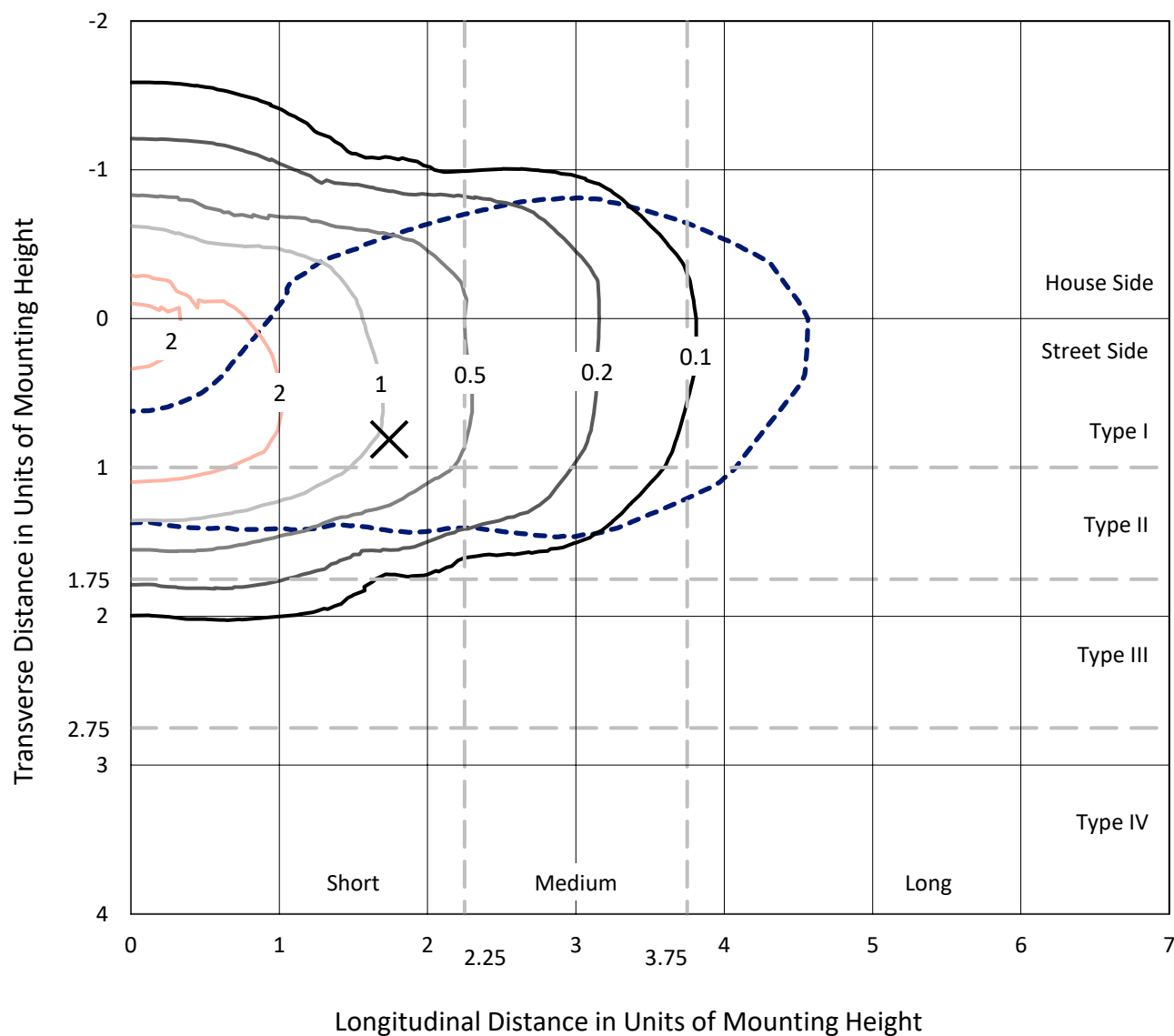
REPORT NUMBER: P960882

CATALOG NUMBER: NAV-SB1D-735-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

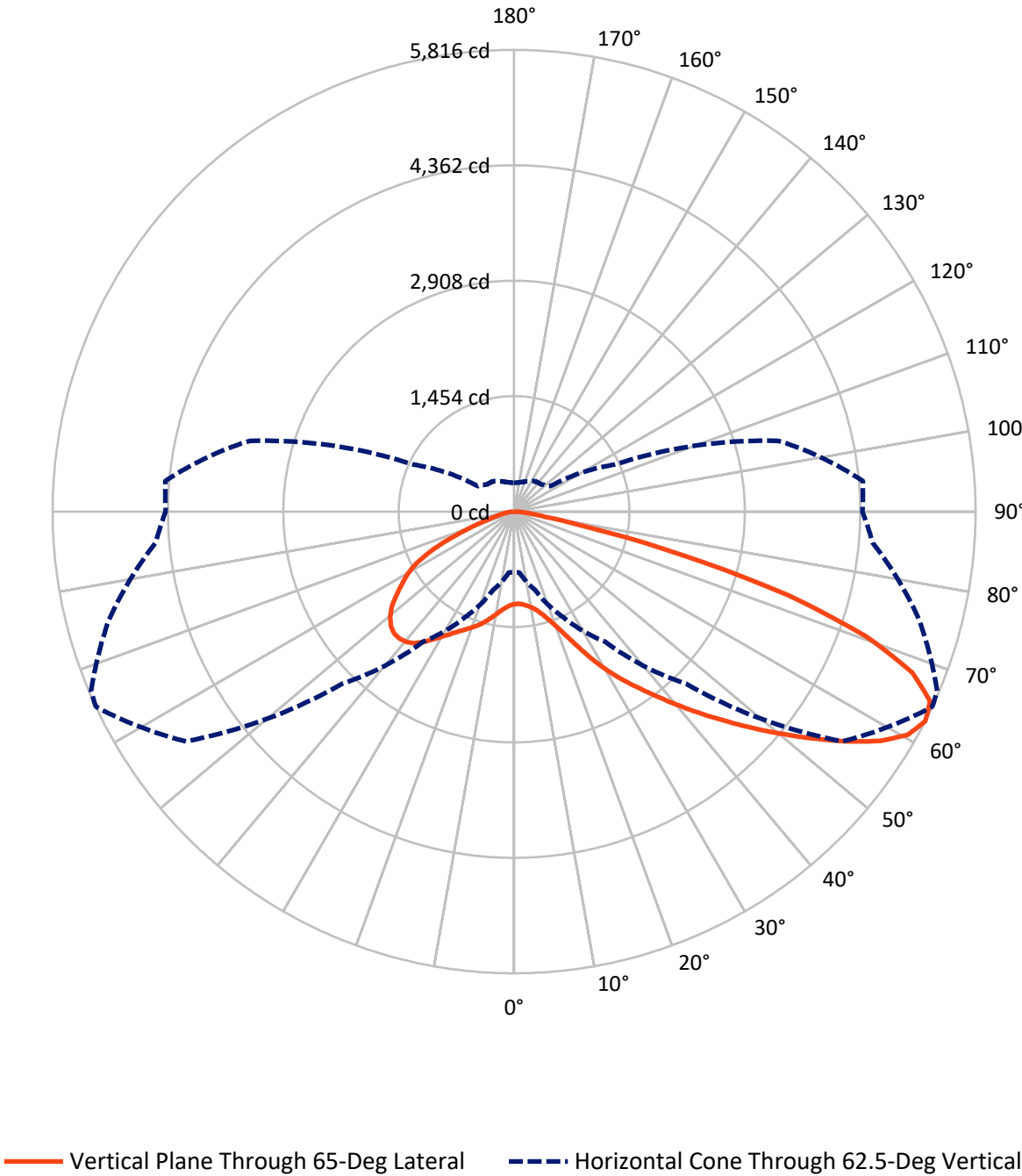
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type II - Short - N/A

REPORT NUMBER: P960882
CATALOG NUMBER: NAV-SB1D-735-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P960882

CATALOG NUMBER: NAV-SB1D-735-U-T2U

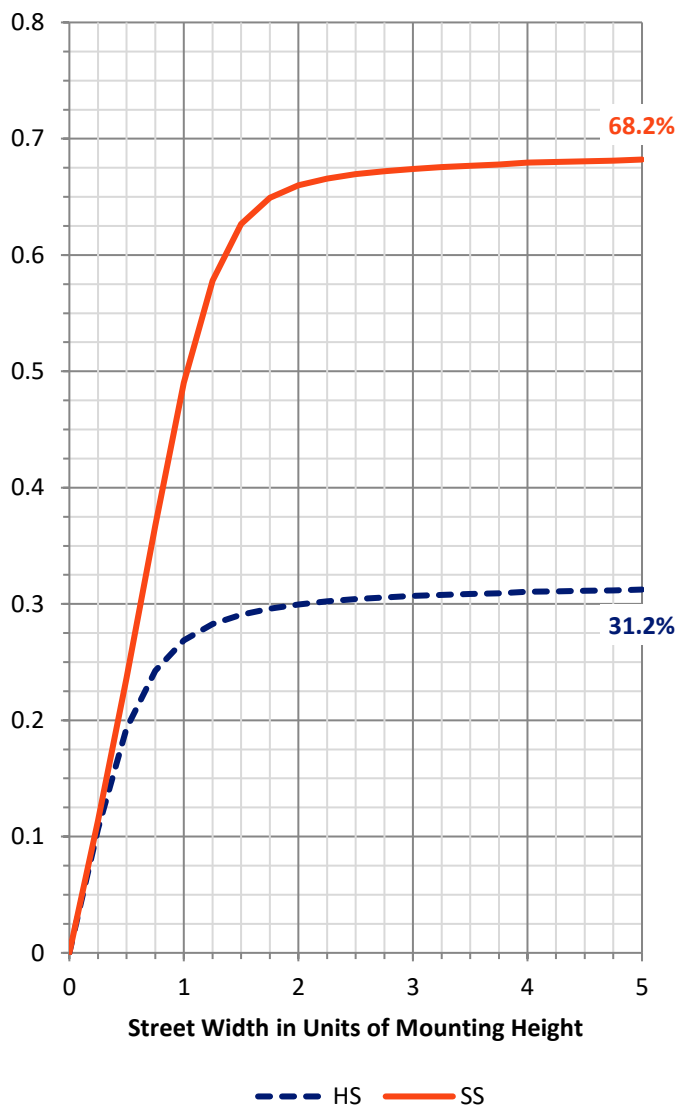
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3336.7	0.0	3336.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	7237.3	0.0	7237.3
	% Fixture	68.4	0.0	68.4
Total	Lumens	10573.9	0.0	10573.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	1.1
10°-20°	393.9	3.7
20°-30°	798.8	7.6
30°-40°	1382.2	13.1
40°-50°	2091.7	19.8
50°-60°	2452.4	23.2
60°-70°	2056.1	19.4
70°-80°	1135.1	10.7
80°-90°	147.4	1.4
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°	10573.9	100.0
0°-180°	10573.9	100.0

Coefficient of Utilization



REPORT NUMBER: P960882

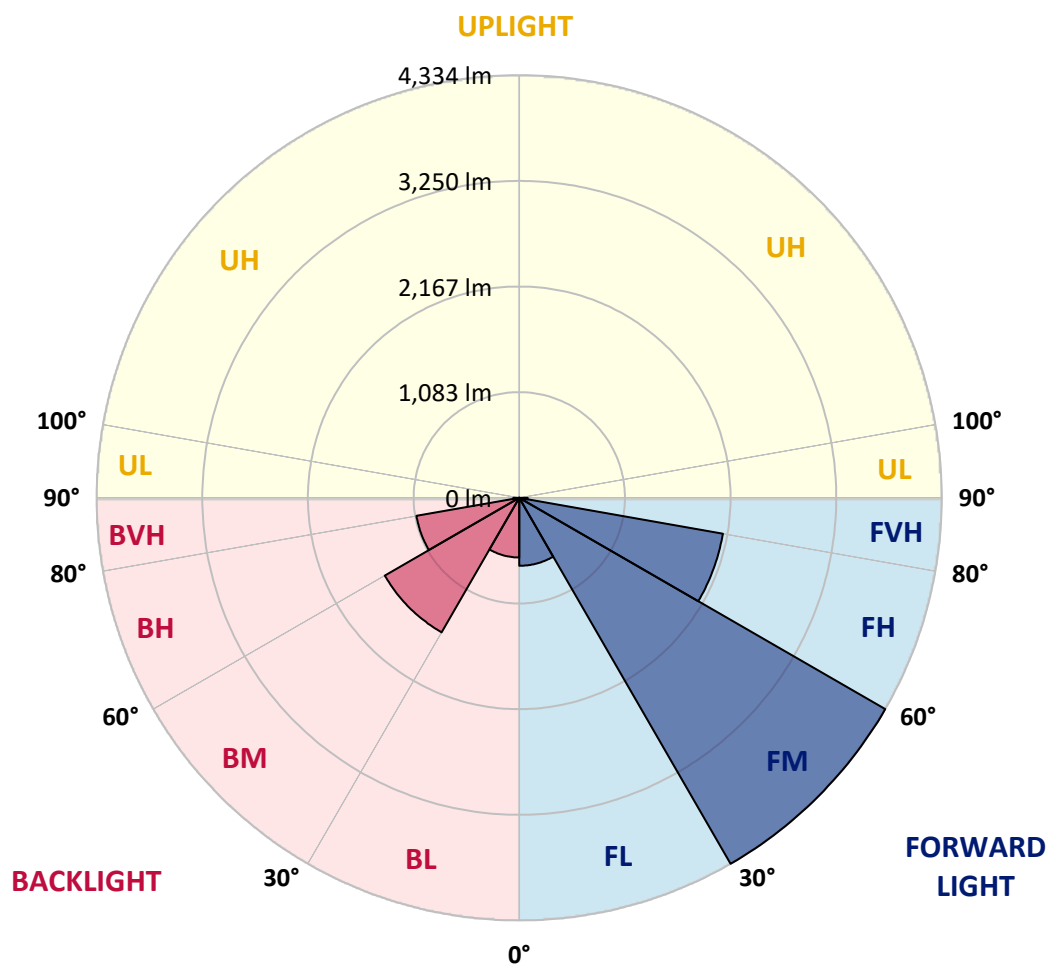
CATALOG NUMBER: NAV-SB1D-735-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	697.0	6.6			
FM	(30°-60°)	4333.5	41.0			
FH	(60°-80°)	2120.8	20.1			G2/5000
FVH	(80°-90°)	85.9	0.8			G1/100
BL	(0°-30°)	611.9	5.8	B2/1000		
BM	(30°-60°)	1592.9	15.1	B2/2500		
BH	(60°-80°)	1070.4	10.1	B3/2500		G3/2500
BVH	(80°-90°)	61.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



REPORT NUMBER: P960882

CATALOG NUMBER: NAV-SB1D-735-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2
2.5°	1157.5	1154.3	1157.0	1157.0	1158.0	1157.5	1161.3	1162.5	1164.1	1167.4	1167.4
5°	1145.9	1145.4	1150.4	1154.8	1159.2	1163.0	1168.0	1175.1	1176.2	1180.0	1184.9
7.5°	1142.2	1138.9	1146.6	1152.0	1162.5	1171.8	1184.9	1197.0	1201.9	1203.6	1212.9
10°	1171.8	1166.2	1173.4	1176.7	1185.5	1194.8	1210.2	1229.4	1234.8	1241.5	1251.8
12.5°	1222.2	1216.3	1226.6	1231.5	1239.8	1248.0	1258.5	1277.1	1279.8	1291.9	1301.8
15°	1291.4	1284.2	1290.8	1296.8	1310.6	1318.3	1328.7	1346.7	1346.7	1356.1	1363.2
17.5°	1385.2	1375.9	1380.8	1383.0	1391.7	1403.3	1420.9	1436.7	1444.9	1441.7	1431.8
20°	1525.1	1513.5	1513.5	1502.5	1499.3	1508.6	1531.7	1553.6	1562.4	1545.4	1521.2
22.5°	1735.2	1718.7	1709.4	1672.1	1657.3	1658.3	1681.4	1708.3	1715.4	1685.3	1631.0
25°	2002.3	1976.5	1963.9	1909.1	1875.6	1846.5	1864.7	1899.2	1909.1	1871.8	1784.0
27.5°	2269.5	2271.2	2259.1	2193.3	2137.8	2084.6	2075.3	2111.5	2122.0	2079.7	1971.1
30°	2644.2	2605.2	2582.2	2503.2	2424.2	2349.6	2311.2	2326.0	2328.8	2278.3	2152.1
32.5°	2967.3	2957.4	2908.0	2838.9	2737.5	2620.6	2556.5	2532.8	2528.5	2456.6	2306.8
35°	3335.5	3329.9	3277.8	3195.5	3085.8	2923.4	2807.7	2740.2	2734.7	2633.7	2459.9
37.5°	3709.6	3709.6	3658.5	3568.5	3455.0	3252.0	3075.9	2968.9	2951.4	2819.8	2615.7
40°	4008.0	3989.9	3999.2	3961.3	3831.3	3615.7	3373.8	3218.6	3194.9	3037.0	2781.3
42.5°	4177.5	4171.4	4227.4	4269.6	4216.4	4044.1	3701.9	3489.0	3456.1	3276.2	2972.2
45°	4215.3	4208.8	4308.6	4463.3	4537.9	4467.2	4058.5	3773.7	3733.7	3526.3	3176.9
47.5°	4128.1	4115.0	4261.4	4505.6	4744.7	4869.3	4444.6	4082.6	4024.5	3769.8	3387.0
50°	3865.9	3853.3	4074.9	4399.1	4814.4	5142.4	4863.7	4410.1	4321.2	4031.0	3599.3
52.5°	3295.9	3301.9	3649.2	4094.7	4722.8	5312.5	5224.7	4755.2	4648.2	4298.1	3798.4
55°	2567.4	2580.5	3007.4	3497.8	4356.4	5286.7	5471.0	5110.6	5004.3	4549.5	4004.2
57.5°	1838.3	1896.5	2296.4	2781.8	3652.5	4878.1	5524.9	5448.6	5345.5	4823.8	4205.5
60°	1191.6	1201.9	1613.4	2102.7	2781.3	4151.7	5415.7	5704.7	5624.1	5103.5	4373.9
62.5°	763.6	770.8	1021.5	1470.8	2001.8	3071.5	5048.1	5816.2	5791.5	5288.4	4535.7
65°	561.2	555.8	686.2	972.1	1348.4	1894.3	4334.4	5762.3	5811.1	5404.1	4669.6
67.5°	468.5	460.8	525.0	673.1	993.5	1075.7	3207.0	5412.9	5591.8	5391.0	4767.8
70°	426.8	420.2	459.2	499.8	775.1	720.3	1616.7	4705.8	4981.2	5241.2	4751.9
72.5°	361.5	350.0	403.2	443.8	602.9	552.5	668.2	3614.7	3950.3	4761.2	4528.0
75°	280.3	272.6	318.2	390.6	453.2	431.2	422.4	2194.9	2561.4	3682.1	3961.3
77.5°	222.2	211.8	253.5	304.4	407.6	325.3	307.8	945.3	1308.4	2350.7	2964.0
80°	167.3	158.0	192.6	240.9	313.2	245.2	199.2	385.7	493.2	1190.9	1490.6
82.5°	119.0	110.8	134.4	176.6	210.6	220.0	122.4	216.2	243.0	459.2	333.0
85°	76.3	71.3	90.0	110.8	133.9	141.6	74.6	113.1	124.0	189.2	138.8
87.5°	41.7	34.0	48.3	51.6	62.0	56.5	35.7	41.1	44.5	68.6	58.7
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: P960882

CATALOG NUMBER: NAV-SB1D-735-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2	1165.2
2.5°	1169.6	1171.3	1176.7	1178.3	1182.2	1187.2	1190.4	1193.7	1193.7	1197.0	1197.0
5°	1185.5	1189.3	1200.9	1206.9	1216.8	1226.6	1232.7	1239.8	1244.1	1246.4	1247.5
7.5°	1216.3	1222.2	1238.7	1249.2	1266.2	1279.8	1289.1	1299.1	1301.2	1307.3	1305.1
10°	1257.9	1265.1	1283.7	1303.5	1323.8	1340.7	1349.5	1356.7	1359.4	1360.5	1357.7
12.5°	1305.6	1316.1	1340.2	1364.4	1385.7	1400.6	1402.7	1401.1	1393.4	1386.8	1386.8
15°	1364.4	1373.7	1400.6	1426.9	1447.7	1450.5	1436.7	1427.9	1418.6	1417.0	1417.0
17.5°	1434.6	1439.5	1464.2	1489.9	1491.6	1482.3	1462.0	1453.8	1444.9	1438.9	1439.5
20°	1516.3	1514.6	1532.2	1543.1	1531.7	1503.2	1472.4	1458.7	1450.0	1442.8	1443.3
22.5°	1614.0	1601.4	1599.1	1596.4	1565.7	1505.8	1464.2	1446.6	1432.9	1423.0	1426.3
25°	1756.0	1707.8	1674.3	1655.7	1586.5	1491.1	1437.9	1398.9	1373.1	1356.1	1362.7
27.5°	1933.8	1852.6	1768.1	1722.5	1586.5	1460.9	1374.2	1311.1	1268.8	1251.3	1260.1
30°	2103.3	2018.2	1893.7	1803.2	1582.7	1411.5	1271.6	1183.9	1134.5	1116.9	1127.3
32.5°	2248.1	2155.4	2027.0	1891.5	1573.4	1331.4	1144.3	1047.2	999.5	978.7	989.1
35°	2382.5	2283.8	2160.9	1988.6	1548.7	1214.0	1004.5	930.4	877.2	843.7	854.7
37.5°	2520.2	2402.8	2287.6	2076.4	1504.2	1076.9	897.0	833.8	771.3	726.3	738.4
40°	2669.9	2529.5	2423.1	2128.5	1431.3	946.3	813.5	755.9	689.6	641.9	651.2
42.5°	2845.0	2681.5	2574.0	2155.4	1331.4	853.6	759.2	702.7	640.2	601.3	609.0
45°	3027.6	2848.8	2711.6	2154.9	1220.1	810.3	741.7	685.7	616.6	576.0	582.6
47.5°	3219.1	3023.9	2830.7	2119.7	1123.5	816.3	731.8	648.9	572.8	533.2	538.7
50°	3411.1	3215.2	2946.0	2053.9	1082.4	803.1	695.1	597.4	507.5	471.8	474.0
52.5°	3601.4	3418.8	3045.2	1960.1	1040.7	754.3	647.9	530.4	480.5	455.9	455.9
55°	3792.9	3620.1	3153.3	1823.5	936.4	697.2	568.9	505.2	459.2	436.6	434.5
57.5°	3984.9	3852.8	3255.9	1686.9	805.3	627.0	525.5	474.6	437.8	418.6	415.3
60°	4184.7	4118.8	3361.7	1561.3	675.9	537.1	493.7	449.9	412.6	391.1	389.5
62.5°	4390.4	4411.7	3444.6	1399.4	556.8	482.2	465.2	420.2	384.0	363.7	363.2
65°	4597.7	4694.3	3498.8	1175.1	451.5	430.1	434.5	387.9	351.1	333.5	333.0
67.5°	4754.1	4897.8	3483.6	889.3	370.3	380.7	396.1	353.8	319.3	305.6	306.1
70°	4771.6	4873.7	3332.1	609.0	310.0	332.4	353.3	320.4	284.7	274.8	275.4
72.5°	4537.9	4544.5	2910.3	397.7	262.2	291.8	308.3	286.4	251.8	241.9	241.4
75°	3925.1	3758.4	2136.7	262.2	219.5	250.7	266.1	250.7	217.2	219.5	211.8
77.5°	2973.9	2661.7	1297.4	186.5	183.3	210.6	231.5	220.6	192.0	215.6	189.8
80°	1532.2	1440.0	578.7	139.3	144.8	168.4	190.3	176.1	152.0	144.8	132.2
82.5°	351.1	408.2	228.2	99.8	104.8	121.3	145.3	132.2	109.2	92.1	91.0
85°	122.9	134.4	101.0	62.5	61.4	75.7	98.7	88.4	74.1	59.2	62.5
87.5°	38.9	51.0	37.8	25.2	26.3	34.0	45.5	41.7	34.5	22.4	23.6
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)