

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: P963641

Luminaire Tested: **NAV-SB3A-827-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963641
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-SB3A-827-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12156.5 lumens
Efficiency: N/A
Efficacy: 143.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

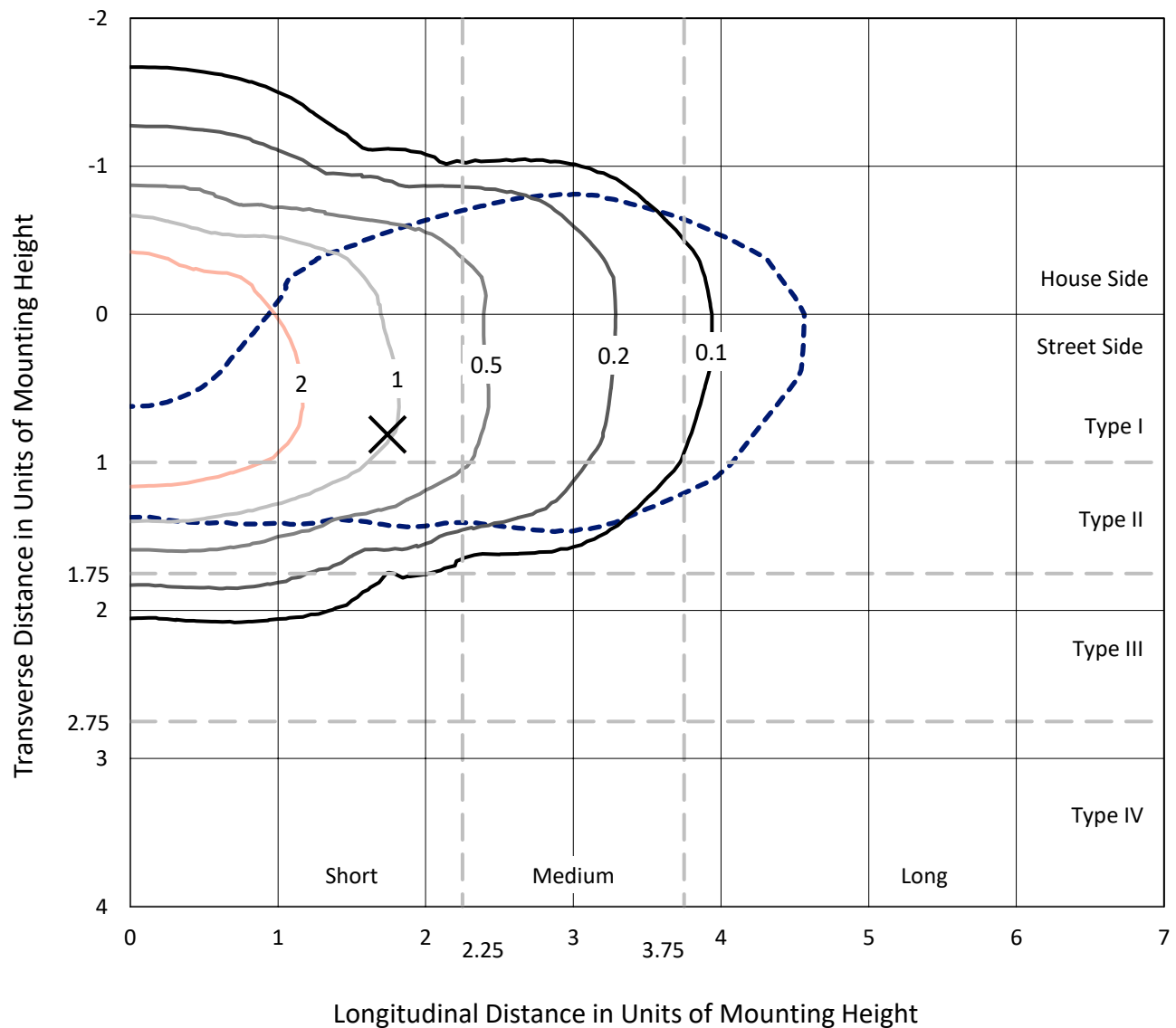
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963641
 CATALOG NUMBER: NAV-SB3A-827-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

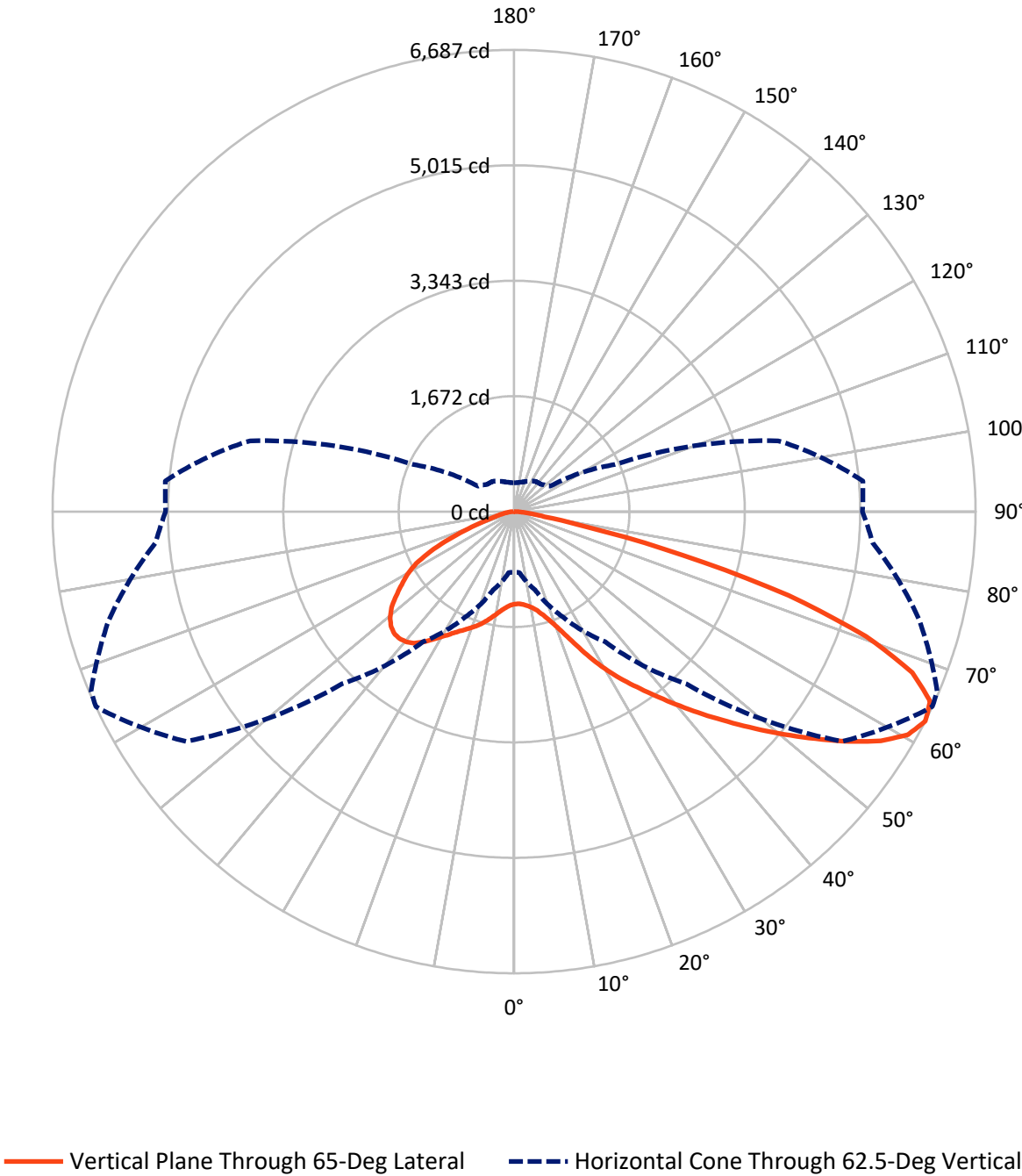
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - N/A

REPORT NUMBER: P963641
CATALOG NUMBER: NAV-SB3A-827-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P963641

CATALOG NUMBER: NAV-SB3A-827-U-T2U

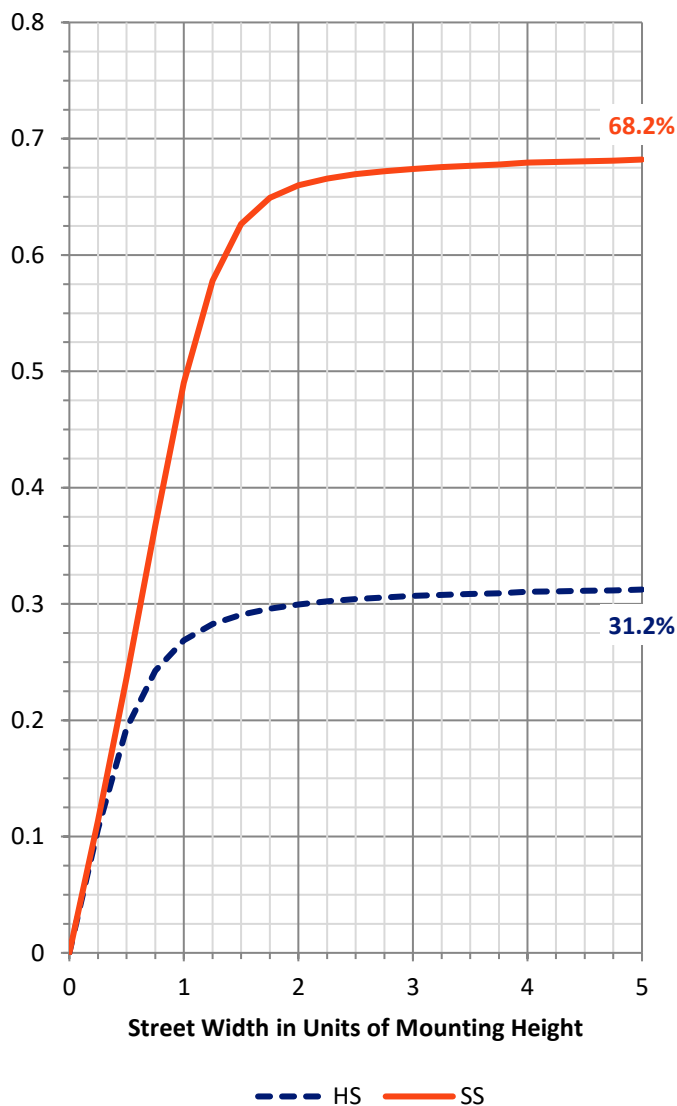
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3836.1	0.0	3836.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	8320.4	0.0	8320.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	12156.5	0.0	12156.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	1.1
10°-20°	452.9	3.7
20°-30°	918.3	7.6
30°-40°	1589.1	13.1
40°-50°	2404.8	19.8
50°-60°	2819.5	23.2
60°-70°	2363.8	19.4
70°-80°	1305.0	10.7
80°-90°	169.5	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°	12156.5	100.0
0°-180°	12156.5	100.0

Coefficient of Utilization



REPORT NUMBER: P963641

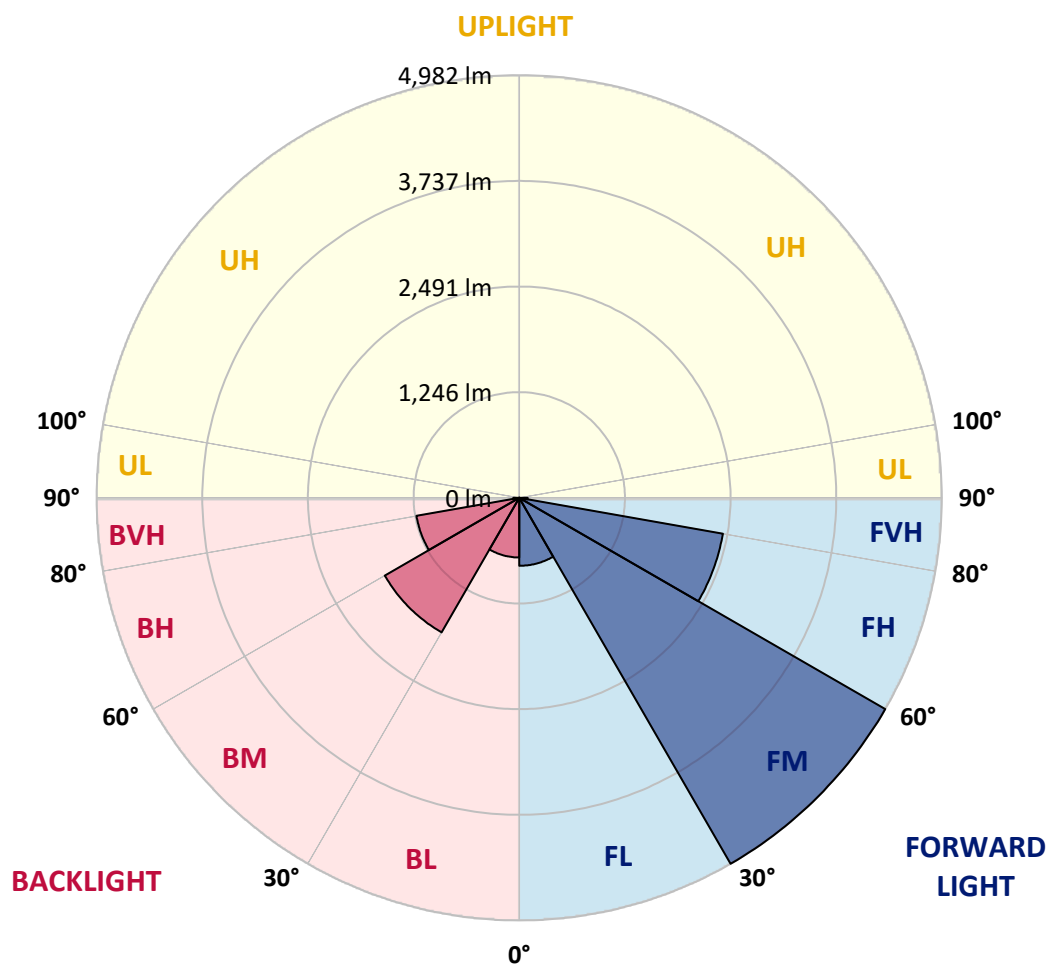
CATALOG NUMBER: NAV-SB3A-827-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	801.3	6.6			
FM	(30°-60°)	4982.1	41.0			
FH	(60°-80°)	2438.2	20.1			G2/5000
FVH	(80°-90°)	98.8	0.8			G1/100
BL	(0°-30°)	703.5	5.8	B2/1000		
BM	(30°-60°)	1831.3	15.1	B2/2500		
BH	(60°-80°)	1230.6	10.1	B3/2500		G3/2500
BVH	(80°-90°)	70.7	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: P963641

CATALOG NUMBER: NAV-SB3A-827-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6
2.5°	1330.8	1327.0	1330.1	1330.1	1331.4	1330.8	1335.2	1336.4	1338.3	1342.1	1342.1
5°	1317.5	1316.9	1322.6	1327.6	1332.7	1337.1	1342.7	1350.9	1352.2	1356.6	1362.3
7.5°	1313.1	1309.3	1318.1	1324.5	1336.4	1347.2	1362.3	1376.2	1381.8	1383.7	1394.5
10°	1347.2	1340.9	1349.1	1352.8	1362.9	1373.6	1391.3	1413.4	1419.7	1427.2	1439.2
12.5°	1405.2	1398.2	1410.2	1415.9	1425.4	1434.8	1446.8	1468.2	1471.4	1485.3	1496.6
15°	1484.6	1476.4	1484.0	1491.0	1506.7	1515.6	1527.6	1548.4	1548.4	1559.0	1567.2
17.5°	1592.5	1581.8	1587.4	1590.0	1600.0	1613.4	1633.5	1651.8	1661.2	1657.4	1646.2
20°	1753.4	1740.0	1740.0	1727.4	1723.6	1734.4	1760.8	1786.2	1796.2	1776.6	1749.0
22.5°	1994.9	1976.0	1965.2	1922.4	1905.4	1906.6	1933.0	1964.0	1972.2	1937.5	1875.0
25°	2302.0	2272.4	2257.9	2194.8	2156.3	2122.9	2143.7	2183.5	2194.8	2151.9	2051.0
27.5°	2609.1	2611.1	2597.2	2521.5	2457.8	2396.7	2385.9	2427.5	2439.5	2390.9	2266.1
30°	3039.9	2995.2	2968.7	2877.9	2787.1	2701.3	2657.1	2674.1	2677.3	2619.3	2474.2
32.5°	3411.4	3400.0	3343.3	3263.8	3147.2	3012.8	2939.0	2911.9	2906.9	2824.3	2652.1
35°	3834.6	3828.3	3768.4	3673.8	3547.6	3361.0	3227.9	3150.3	3144.0	3028.0	2828.1
37.5°	4264.7	4264.7	4206.1	4102.7	3972.1	3738.8	3536.2	3413.4	3393.2	3241.8	3007.1
40°	4607.9	4587.1	4597.7	4554.3	4404.7	4156.9	3878.8	3700.2	3673.2	3491.6	3197.6
42.5°	4802.7	4795.8	4860.1	4908.7	4847.5	4649.5	4255.9	4011.2	3973.4	3766.5	3417.1
45°	4846.2	4838.7	4953.5	5131.4	5217.1	5135.8	4665.9	4338.5	4292.5	4054.1	3652.4
47.5°	4746.0	4730.8	4899.2	5179.8	5454.8	5598.0	5109.8	4693.6	4626.7	4334.1	3893.9
50°	4444.5	4429.9	4684.8	5057.6	5535.0	5912.1	5591.7	5070.2	4968.0	4634.3	4138.0
52.5°	3789.2	3796.2	4195.3	4707.5	5429.6	6107.7	6006.7	5466.8	5343.8	4941.5	4366.9
55°	2951.7	2966.8	3457.4	4021.3	5008.4	6078.0	6289.9	5875.5	5753.2	5230.4	4603.5
57.5°	2113.4	2180.3	2640.1	3198.2	4199.1	5608.1	6351.7	6264.1	6145.5	5545.7	4834.9
60°	1369.9	1381.8	1854.8	2417.5	3197.6	4773.1	6226.3	6558.6	6465.9	5867.3	5028.5
62.5°	877.9	886.1	1174.3	1690.8	2301.4	3531.2	5803.7	6686.6	6658.2	6079.9	5214.6
65°	645.2	638.9	789.0	1117.6	1550.2	2177.8	4983.1	6624.8	6681.0	6212.9	5368.4
67.5°	538.6	529.8	603.6	773.9	1142.2	1236.8	3687.0	6223.1	6428.7	6197.9	5481.4
70°	490.7	483.1	527.9	574.5	891.1	828.1	1858.6	5410.1	5726.7	6025.7	5463.0
72.5°	415.6	402.4	463.6	510.2	693.1	635.1	768.1	4155.7	4541.7	5473.8	5205.8
75°	322.3	313.4	365.8	449.1	520.9	495.7	485.6	2523.4	2944.7	4233.2	4554.3
77.5°	255.4	243.4	291.4	350.0	468.6	374.0	353.8	1086.7	1504.2	2702.5	3407.6
80°	192.4	181.6	221.4	276.9	360.1	281.9	229.0	443.4	567.0	1369.2	1713.6
82.5°	136.8	127.4	154.6	203.1	242.2	252.9	140.6	248.5	279.4	527.9	382.8
85°	87.6	82.0	103.4	127.4	153.9	162.8	85.8	130.0	142.6	217.6	159.6
87.5°	48.0	39.1	55.5	59.2	71.2	65.0	41.0	47.3	51.0	78.8	67.4
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: P963641

CATALOG NUMBER: NAV-SB3A-827-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6	1339.6
2.5°	1344.6	1346.5	1352.8	1354.7	1359.1	1364.8	1368.6	1372.4	1372.4	1376.2	1376.2
5°	1362.9	1367.4	1380.6	1387.5	1398.9	1410.2	1417.2	1425.4	1430.4	1432.9	1434.2
7.5°	1398.2	1405.2	1424.1	1436.1	1455.6	1471.4	1482.1	1493.5	1496.0	1503.0	1500.4
10°	1446.2	1454.4	1475.8	1498.6	1521.8	1541.4	1551.5	1559.7	1562.8	1564.1	1561.0
12.5°	1501.0	1513.0	1540.8	1568.6	1593.2	1610.2	1612.7	1610.8	1602.0	1594.4	1594.4
15°	1568.6	1579.2	1610.2	1640.4	1664.4	1667.6	1651.8	1641.7	1631.0	1629.0	1629.0
17.5°	1649.2	1655.0	1683.4	1713.0	1714.8	1704.2	1680.8	1671.4	1661.2	1654.4	1655.0
20°	1743.2	1741.4	1761.6	1774.2	1760.8	1728.2	1692.8	1677.0	1667.0	1658.8	1659.4
22.5°	1855.5	1841.0	1838.4	1835.4	1800.0	1731.2	1683.4	1663.2	1647.4	1636.0	1639.8
25°	2018.8	1963.4	1924.8	1903.4	1824.0	1714.2	1653.0	1608.2	1578.6	1559.0	1566.6
27.5°	2223.2	2129.8	2032.7	1980.4	1824.0	1679.6	1579.9	1507.4	1458.8	1438.6	1448.7
30°	2418.1	2320.3	2177.2	2073.1	1819.6	1622.8	1462.0	1361.0	1304.3	1284.1	1296.1
32.5°	2584.5	2478.0	2330.4	2174.6	1808.8	1530.7	1315.6	1204.0	1149.1	1125.1	1137.1
35°	2739.1	2625.5	2484.3	2286.3	1780.4	1395.7	1154.8	1069.7	1008.5	970.0	982.7
37.5°	2897.4	2762.5	2629.9	2387.2	1729.4	1238.1	1031.1	958.7	886.7	835.1	848.9
40°	3069.6	2908.1	2785.7	2447.1	1645.4	1087.9	935.3	869.1	792.7	737.9	748.7
42.5°	3270.8	3082.8	2959.2	2478.0	1530.7	981.3	872.9	807.9	736.1	691.3	700.1
45°	3480.8	3275.2	3117.5	2477.3	1402.7	931.5	852.7	788.3	708.9	662.3	669.8
47.5°	3700.9	3476.4	3254.4	2437.0	1291.7	938.5	841.3	746.1	658.5	613.1	619.3
50°	3921.6	3696.5	3386.8	2361.3	1244.4	923.3	799.1	686.9	583.4	542.4	544.9
52.5°	4140.5	3930.5	3501.0	2253.5	1196.4	867.3	744.9	609.9	552.5	524.1	524.1
55°	4360.7	4161.9	3625.2	2096.4	1076.6	801.7	654.1	580.9	527.9	502.0	499.5
57.5°	4581.3	4429.3	3743.2	1939.4	925.9	720.9	604.2	545.5	503.3	481.2	477.4
60°	4810.9	4735.3	3864.9	1795.0	777.1	617.5	567.6	517.2	474.3	449.7	447.8
62.5°	5047.4	5072.0	3960.1	1608.9	640.1	554.4	534.8	483.1	441.5	418.2	417.5
65°	5285.8	5396.8	4022.6	1350.9	519.1	494.5	499.5	445.9	403.6	383.5	382.8
67.5°	5465.6	5630.8	4004.9	1022.3	425.7	437.7	455.4	406.8	367.1	351.3	351.9
70°	5485.8	5603.1	3830.8	700.1	356.4	382.2	406.2	368.3	327.3	316.0	316.6
72.5°	5217.1	5224.6	3345.8	457.3	301.5	335.5	354.4	329.2	289.5	278.2	277.5
75°	4512.7	4320.9	2456.5	301.5	252.3	288.2	305.9	288.2	249.8	252.3	243.4
77.5°	3419.0	3060.1	1491.6	214.4	210.6	242.2	266.2	253.6	220.8	247.8	218.2
80°	1761.6	1655.6	665.4	160.2	166.5	193.6	218.8	202.4	174.7	166.5	152.0
82.5°	403.6	469.2	262.4	114.8	120.4	139.4	167.2	152.0	125.5	106.0	104.7
85°	141.2	154.6	116.0	71.9	70.6	87.0	113.6	101.6	85.2	68.2	71.9
87.5°	44.8	58.6	43.6	29.0	30.2	39.1	52.4	48.0	39.8	25.8	27.2
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)