

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: P961970

Luminaire Tested: **NAV-SB2B-740-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10167 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 73.9
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

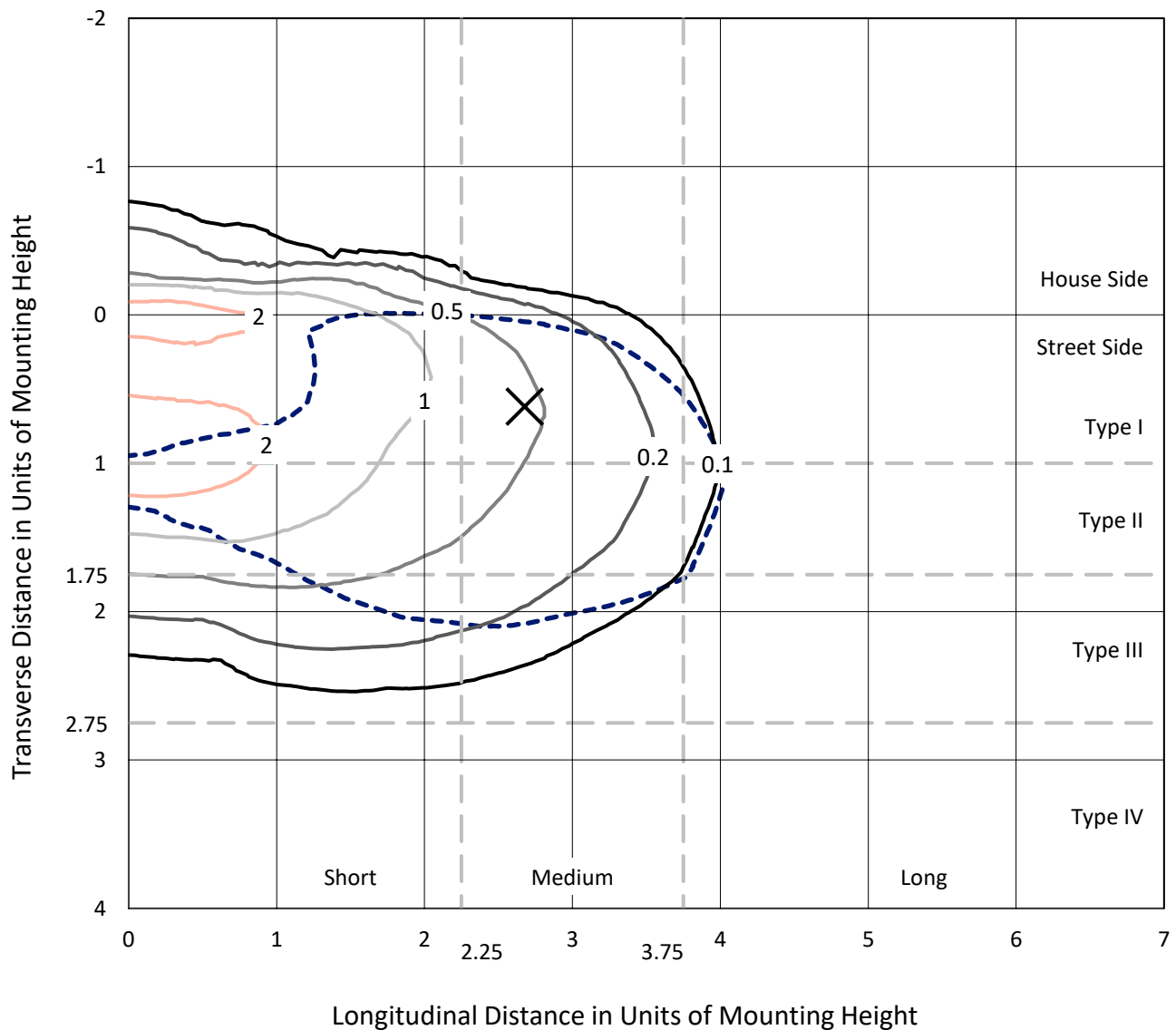


REPORT NUMBER: P961970

CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

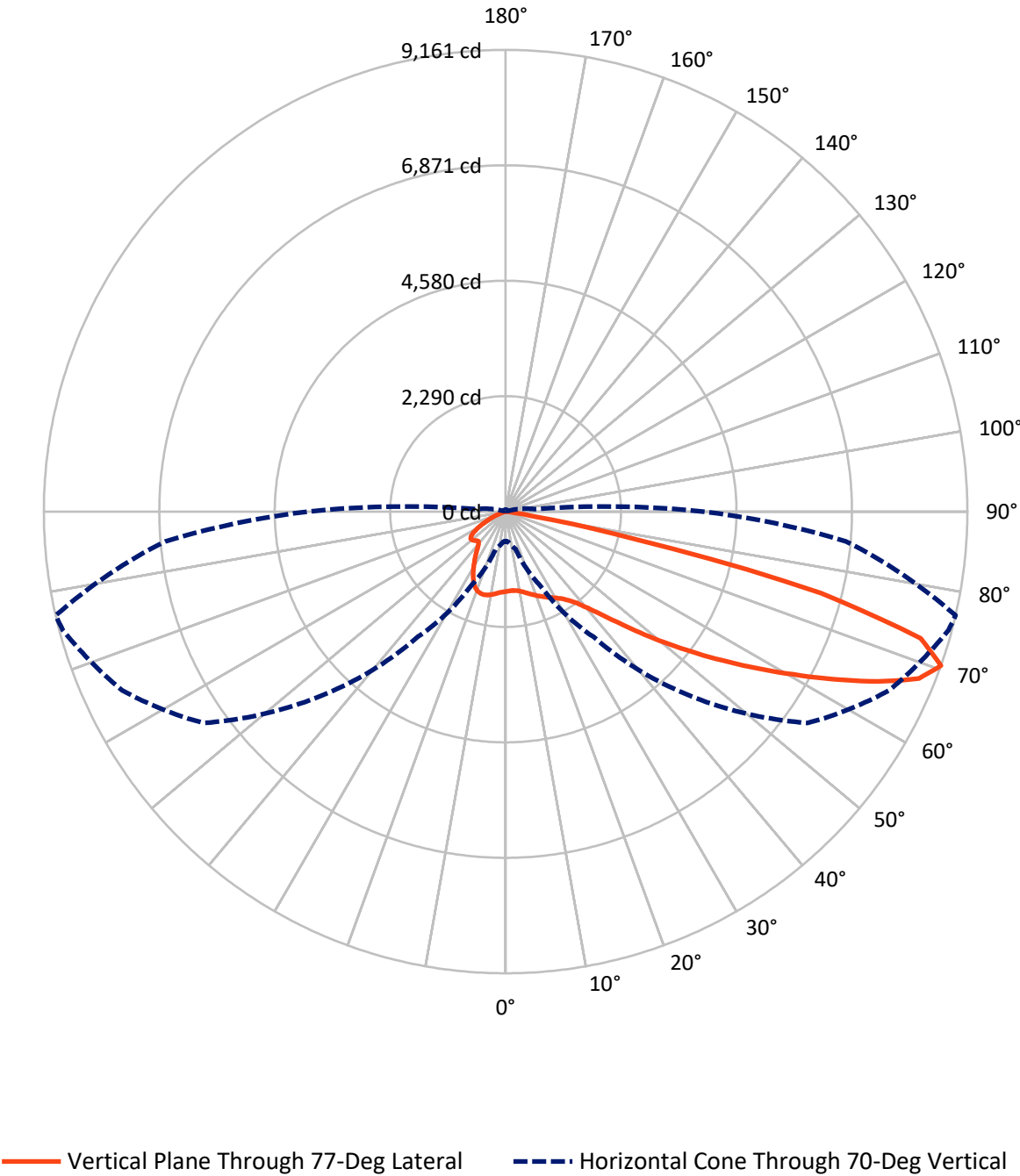
× Max cd
- - - 1/2 Max cd



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

REPORT NUMBER: P961970
CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961970

CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

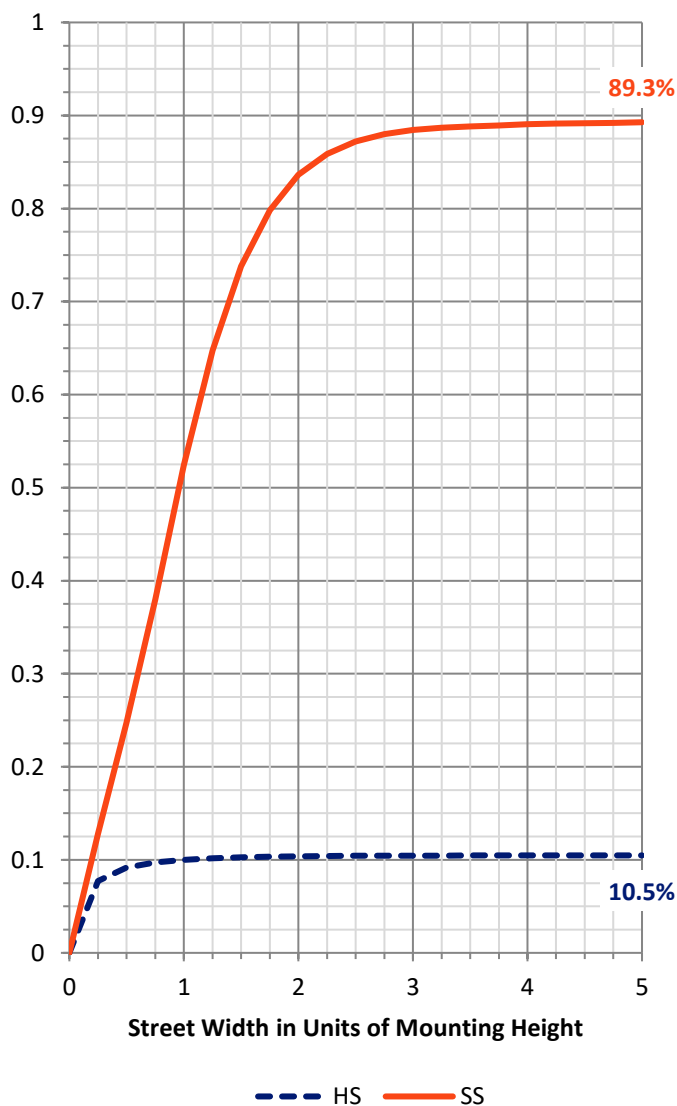
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1071.7	0.0	1071.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	9095.2	0.0	9095.2
	% Fixture	89.5	0.0	89.5
Total	Lumens	10167.0	0.0	10167.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	1.3
10°-20°	324.5	3.2
20°-30°	501.8	4.9
30°-40°	910.6	9.0
40°-50°	1718.9	16.9
50°-60°	2483.7	24.4
60°-70°	2643.8	26.0
70°-80°	1401.0	13.8
80°-90°	46.0	0.5
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°	10167.0	100.0
0°-180°	10167.0	100.0

Coefficient of Utilization



REPORT NUMBER: P961970

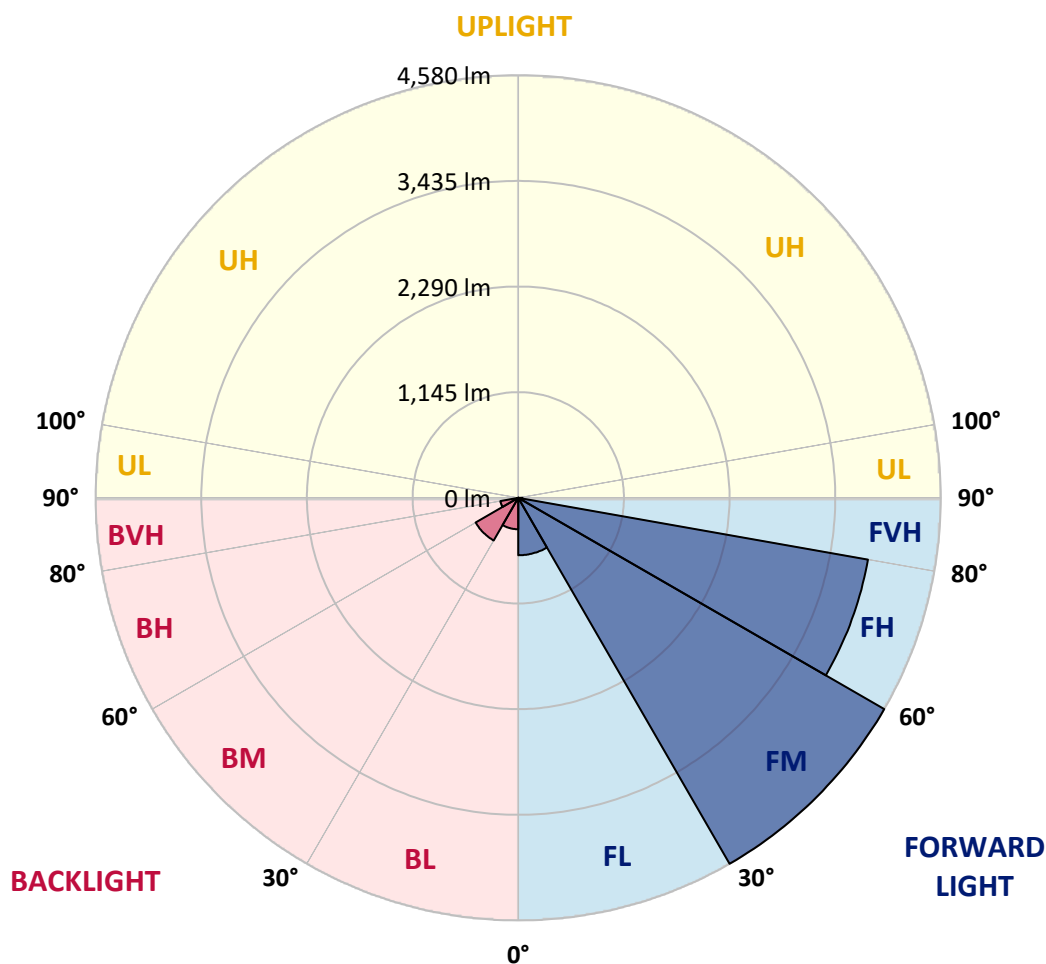
CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	622.5	6.1			
FM	(30°-60°)	4579.7	45.0			
FH	(60°-80°)	3848.3	37.9			G2/5000
FVH	(80°-90°)	44.8	0.4			G1/100
BL	(0°-30°)	340.5	3.3	B1/500		
BM	(30°-60°)	533.5	5.2	B1/1000		
BH	(60°-80°)	196.5	1.9	B1/500		G1/500
BVH	(80°-90°)	1.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium



REPORT NUMBER: P961970

CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9
2.5°	1488.9	1502.4	1500.5	1509.4	1512.7	1525.5	1538.3	1555.6	1574.9	1574.3	1587.1
5°	1404.8	1418.3	1421.5	1433.7	1449.1	1469.0	1495.4	1530.0	1566.0	1571.7	1597.5
7.5°	1305.3	1319.4	1327.8	1352.2	1380.4	1421.5	1464.5	1515.3	1574.9	1583.3	1632.7
10°	1205.8	1218.6	1229.5	1264.2	1309.1	1370.1	1440.1	1513.3	1593.6	1605.8	1675.8
12.5°	1144.1	1156.3	1168.5	1198.7	1254.6	1329.0	1424.0	1522.3	1624.4	1641.7	1734.2
15°	1122.3	1133.2	1142.9	1169.8	1221.8	1306.6	1420.9	1540.9	1663.6	1686.6	1804.8
17.5°	1125.6	1131.3	1137.8	1158.2	1209.0	1296.3	1426.6	1573.1	1709.8	1730.3	1875.4
20°	1144.1	1147.4	1148.0	1162.1	1207.0	1295.0	1438.2	1603.8	1753.5	1781.0	1945.4
22.5°	1167.9	1169.2	1167.9	1177.5	1219.2	1304.6	1453.6	1641.1	1802.3	1827.9	2016.1
25°	1279.0	1254.6	1223.7	1205.1	1239.8	1323.3	1476.7	1691.1	1855.6	1880.6	2084.7
27.5°	1623.7	1553.8	1443.3	1319.4	1282.2	1350.2	1508.8	1741.9	1909.5	1931.9	2158.5
30°	2183.7	2091.8	1904.3	1625.0	1418.3	1406.7	1550.5	1792.6	1966.6	1991.0	2237.6
32.5°	2744.7	2722.3	2505.9	2119.4	1724.6	1532.6	1619.9	1861.3	2042.3	2061.6	2344.2
35°	3312.3	3266.8	3089.6	2707.5	2196.5	1788.7	1735.4	1951.2	2141.8	2163.7	2499.5
37.5°	3747.0	3719.4	3609.6	3295.0	2756.3	2184.3	1933.3	2090.5	2286.4	2310.8	2698.5
40°	4131.0	4118.1	4080.8	3873.5	3382.3	2701.8	2240.8	2306.2	2486.6	2515.6	2942.5
42.5°	4432.7	4462.8	4484.1	4426.3	4027.5	3292.4	2654.2	2609.3	2766.0	2795.5	3253.2
45°	4741.5	4751.8	4837.2	4920.7	4668.4	3910.1	3120.4	2964.3	3113.3	3149.9	3625.6
47.5°	4939.9	4981.0	5131.3	5278.3	5207.0	4522.6	3621.1	3383.6	3515.9	3584.5	4043.0
50°	4954.7	5032.3	5239.1	5495.3	5599.4	5105.6	4165.6	3861.3	4001.9	4077.7	4488.6
52.5°	4708.7	4829.5	5149.9	5524.9	5811.2	5599.4	4728.7	4338.9	4519.4	4618.2	4950.9
55°	3610.3	3768.2	4814.1	5364.3	5819.5	5973.6	5277.0	4836.6	5096.0	5207.7	5450.3
57.5°	3145.4	3225.1	3784.9	5085.6	5664.8	6124.5	5772.7	5310.4	5723.2	5861.9	5922.2
60°	2617.0	2721.7	3174.3	4629.8	5454.8	6139.2	6210.6	5921.6	6403.2	6559.2	6355.0
62.5°	1778.5	1892.2	2342.2	3846.5	5167.8	6132.3	6569.4	6550.9	7158.9	7326.4	6721.6
65°	1101.8	1173.0	1469.6	3140.9	4766.6	6140.0	6945.1	7314.9	7956.3	8126.4	7005.4
67.5°	870.6	903.3	1058.1	2411.5	4075.1	5966.5	7320.0	8033.3	8706.9	8841.6	7092.1
70°	584.9	604.9	769.8	1616.7	3031.7	5166.6	7313.0	8394.1	9093.4	9160.7	6776.2
72.5°	308.2	323.6	450.1	748.7	1831.2	3672.6	6164.3	7962.7	8708.8	8607.3	5792.0
75°	154.1	179.8	303.1	380.1	782.0	2048.2	3827.9	6277.9	6854.5	6461.6	3716.1
77.5°	116.8	141.2	250.4	250.4	272.2	689.5	1621.1	3424.0	3158.2	2629.8	1090.8
80°	74.5	96.4	218.9	189.4	113.7	175.3	422.5	959.2	671.0	510.4	198.4
82.5°	43.7	62.9	182.3	125.2	63.6	64.9	119.4	204.2	174.0	135.5	61.0
85°	17.3	41.1	125.2	49.4	25.0	16.1	36.0	43.7	36.0	27.0	15.4
87.5°	0.0	9.6	21.8	0.0	1.9	1.3	2.6	3.2	3.2	2.6	5.1
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: P961970

CATALOG NUMBER: NAV-SB2B-740-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9	1585.9
2.5°	1593.0	1594.2	1598.1	1598.7	1589.7	1578.2	1573.7	1571.7	1564.0	1563.4	1564.7
5°	1612.2	1618.0	1612.2	1595.5	1555.6	1499.8	1457.4	1422.8	1391.3	1381.7	1376.0
7.5°	1650.8	1656.5	1639.2	1573.7	1473.5	1362.4	1262.3	1191.7	1128.1	1104.3	1094.7
10°	1705.9	1713.6	1659.1	1526.8	1349.6	1171.1	1001.6	882.2	789.0	751.2	735.1
12.5°	1775.3	1778.5	1669.9	1455.5	1188.4	933.6	693.4	565.7	482.8	452.0	442.4
15°	1851.7	1847.2	1671.3	1358.5	968.8	660.0	452.6	371.8	338.4	328.1	328.1
17.5°	1931.9	1913.3	1645.5	1218.6	728.1	451.4	335.8	316.5	310.8	308.2	307.5
20°	2010.9	1969.1	1598.7	1035.7	522.6	337.1	304.9	299.2	296.0	294.7	293.5
22.5°	2082.8	2011.6	1518.4	823.1	379.5	297.9	288.2	283.1	277.4	274.8	274.2
25°	2152.8	2036.0	1405.5	624.7	303.7	278.7	270.9	261.3	253.6	250.4	249.1
27.5°	2220.9	2051.3	1264.2	462.3	270.9	260.7	246.5	233.1	227.2	226.0	224.7
30°	2293.4	2056.5	1103.7	344.8	251.0	238.2	217.6	202.2	199.1	199.7	199.7
32.5°	2382.0	2064.1	941.9	282.5	234.3	211.3	186.9	170.8	168.2	170.8	170.1
35°	2488.0	2079.6	785.9	260.0	219.6	183.6	157.3	143.8	141.2	143.2	142.6
37.5°	2631.8	2104.6	640.1	255.5	207.4	160.5	132.2	121.4	121.4	122.0	121.4
40°	2823.1	2171.5	509.8	252.4	201.0	143.2	111.7	107.2	109.2	110.4	110.4
42.5°	3056.1	2313.3	421.8	248.5	193.9	135.5	101.5	99.5	102.7	104.0	104.0
45°	3317.5	2493.1	391.0	242.0	187.5	140.6	97.0	94.4	98.2	98.9	99.5
47.5°	3587.8	2669.0	387.1	235.0	181.0	148.3	95.6	89.9	94.4	95.0	95.6
50°	3861.3	2783.9	391.0	224.1	170.8	148.3	96.4	85.4	89.3	91.1	91.8
52.5°	4136.7	2836.6	388.5	200.3	152.8	139.3	96.4	81.6	85.4	86.7	86.7
55°	4403.8	2826.3	349.3	165.0	129.7	123.3	93.8	78.3	80.9	81.6	81.6
57.5°	4615.1	2683.1	276.8	128.4	105.3	102.7	85.4	74.5	76.4	75.7	75.7
60°	4725.5	2368.6	197.7	98.9	82.8	80.9	75.1	69.4	70.6	67.4	66.7
62.5°	4726.8	1952.5	132.2	78.3	66.1	64.2	64.2	62.3	61.0	54.5	52.7
65°	4625.9	1490.9	87.9	62.3	53.3	50.1	53.9	53.3	48.8	39.8	38.5
67.5°	4397.4	977.2	66.7	48.8	41.1	39.2	43.0	44.9	41.7	33.4	32.7
70°	3927.4	568.9	55.2	37.9	30.9	28.9	34.6	38.5	34.6	27.0	25.7
72.5°	3262.3	306.9	44.9	28.3	21.2	19.3	27.6	31.5	27.6	19.9	19.3
75°	2116.8	164.4	34.6	18.7	10.9	12.2	20.5	23.2	19.3	12.8	11.6
77.5°	710.7	72.6	21.8	9.0	5.1	5.1	12.2	14.1	9.0	4.5	3.9
80°	158.6	30.1	9.0	3.9	1.9	1.9	2.6	2.6	1.3	0.0	0.0
82.5°	52.0	12.2	3.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.9	4.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)