

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: P961966

Luminaire Tested: **NAV-SB2B-740-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961966
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-740-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9332.6 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
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

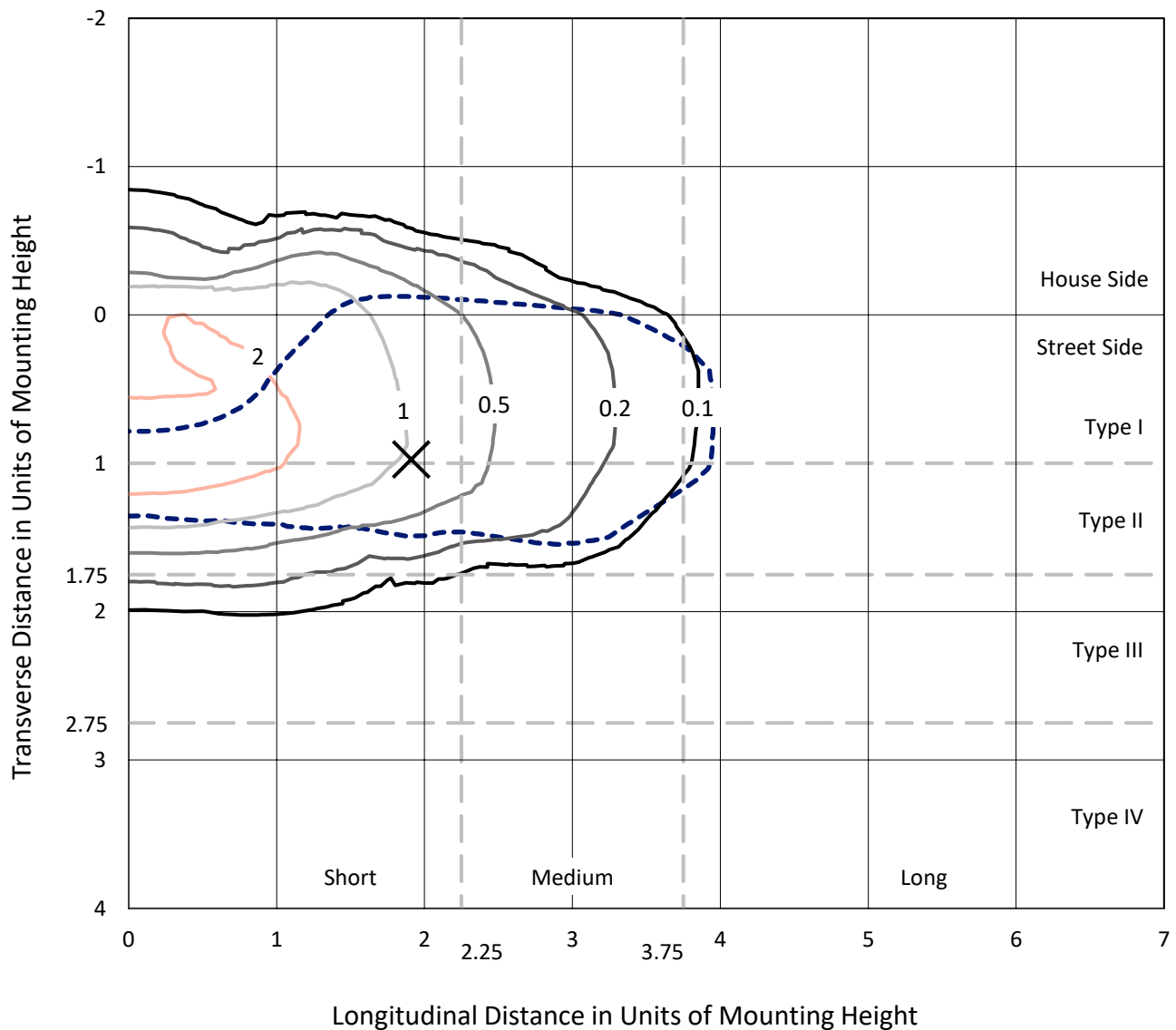


REPORT NUMBER: P961966

CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

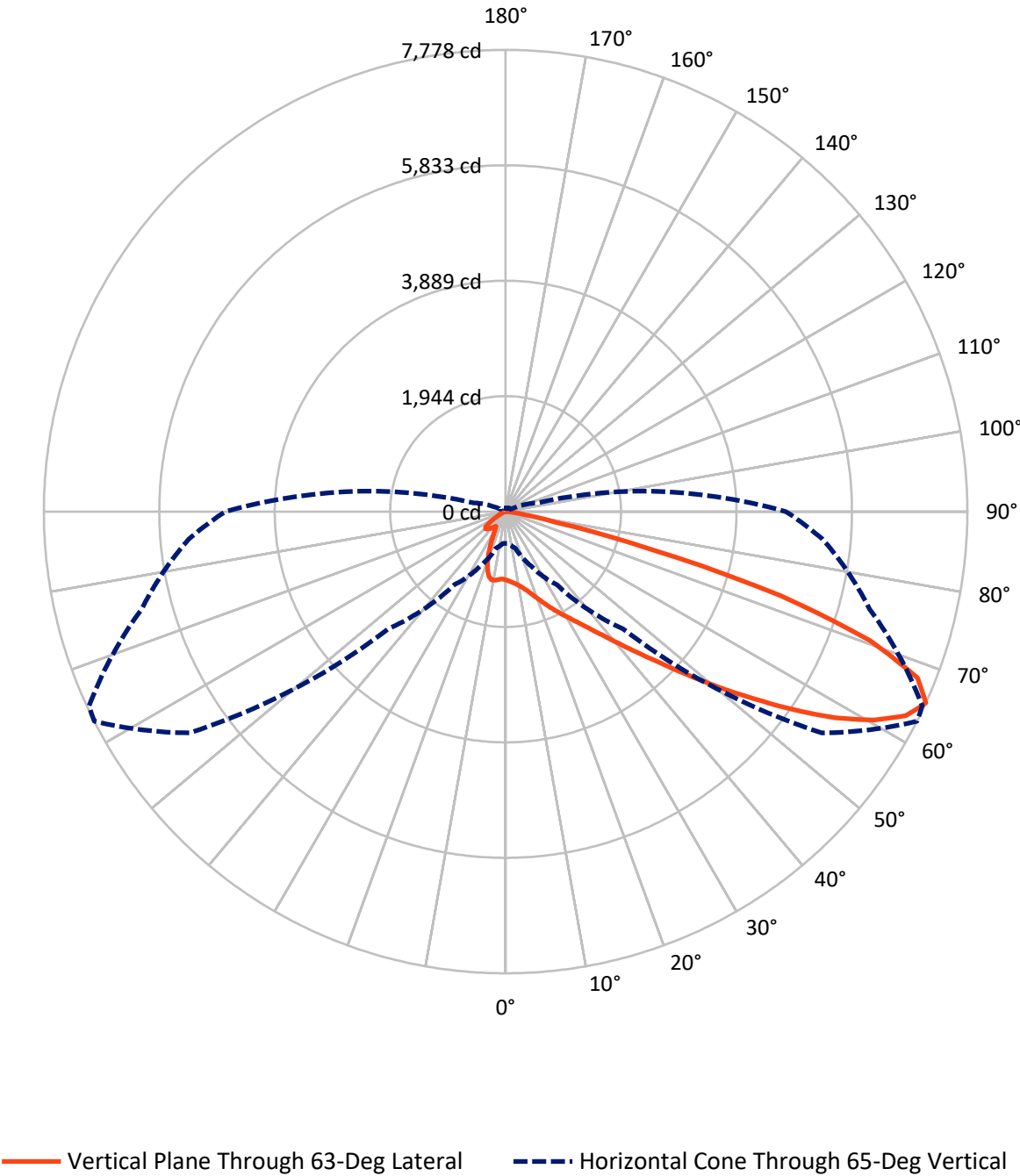
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type II - Short - N/A

REPORT NUMBER: P961966
CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961966

CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

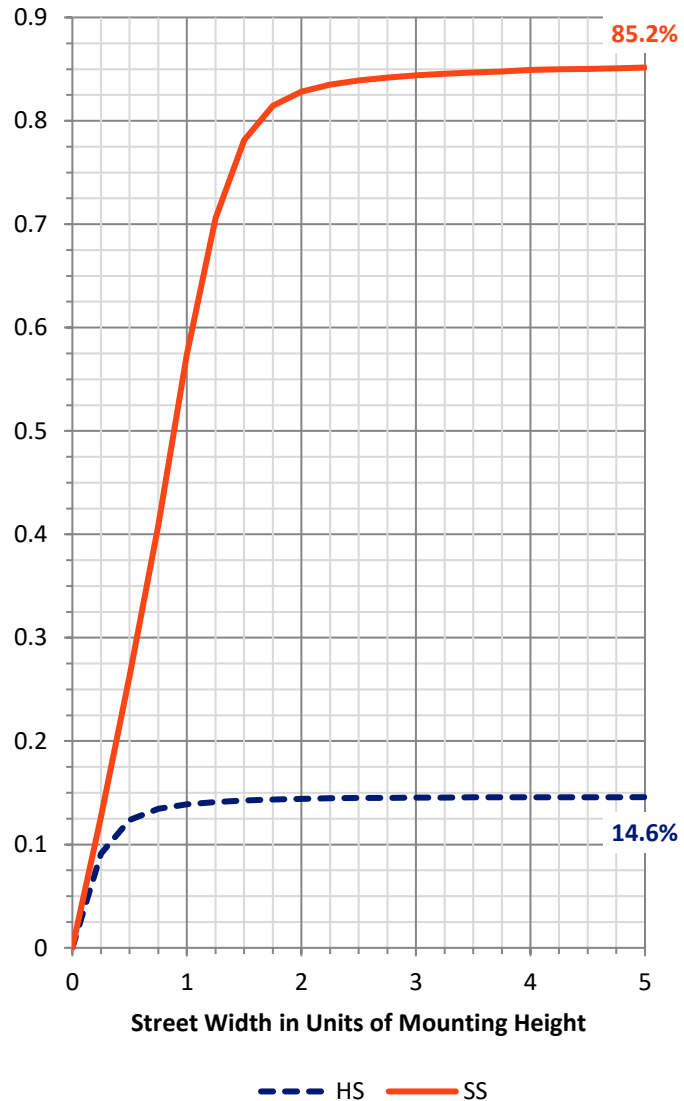
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1371.8	0.0	1371.8
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	7960.8	0.0	7960.8
	% Fixture	85.3	0.0	85.3
Total	Lumens	9332.6	0.0	9332.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	1.2
10°-20°	301.1	3.2
20°-30°	524.3	5.6
30°-40°	945.0	10.1
40°-50°	1874.3	20.1
50°-60°	2553.1	27.4
60°-70°	2037.9	21.8
70°-80°	922.2	9.9
80°-90°	66.3	0.7
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°	9332.6	100.0
0°-180°	9332.6	100.0

Coefficient of Utilization



REPORT NUMBER: P961966

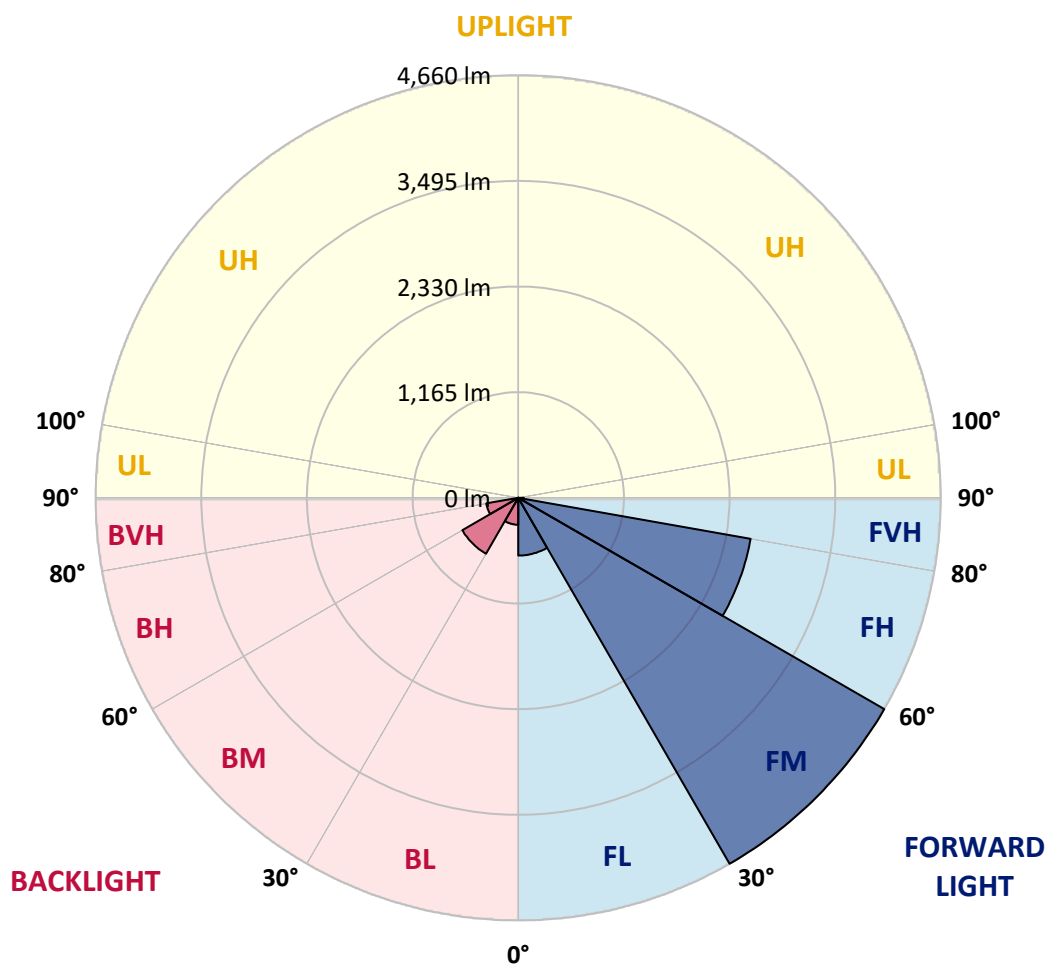
CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	637.1	6.8			
FM	(30°-60°)	4660.5	49.9			
FH	(60°-80°)	2601.9	27.9			G2/5000
FVH	(80°-90°)	61.4	0.7			G1/100
BL	(0°-30°)	296.9	3.2	B1/500		
BM	(30°-60°)	711.9	7.6	B1/1000		
BH	(60°-80°)	358.1	3.8	B1/500		G1/500
BVH	(80°-90°)	4.9	0.1			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 II Short



REPORT NUMBER: P961966

CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8
2.5°	1178.8	1175.6	1180.1	1178.1	1176.9	1174.3	1173.0	1171.7	1169.1	1167.3	1159.5
5°	1182.0	1180.1	1184.6	1188.4	1192.3	1196.1	1198.0	1200.6	1198.0	1192.9	1185.2
7.5°	1155.1	1153.7	1163.4	1175.0	1192.3	1207.0	1223.1	1232.0	1232.8	1230.8	1222.4
10°	1153.1	1149.8	1159.5	1173.6	1196.1	1222.4	1250.7	1270.0	1272.5	1280.8	1271.9
12.5°	1183.3	1180.1	1193.5	1209.0	1232.0	1259.7	1294.4	1321.3	1325.2	1336.7	1330.3
15°	1234.0	1229.5	1245.0	1264.8	1294.4	1325.8	1362.4	1386.8	1390.0	1404.1	1392.6
17.5°	1293.0	1288.5	1306.6	1327.8	1359.9	1402.8	1445.2	1472.2	1476.1	1485.0	1463.9
20°	1368.8	1363.0	1377.2	1396.5	1430.5	1481.8	1532.6	1571.1	1570.4	1570.4	1535.8
22.5°	1456.8	1447.8	1460.0	1475.4	1507.5	1569.8	1637.2	1682.7	1682.7	1664.8	1607.7
25°	1551.1	1542.2	1555.6	1569.8	1598.1	1668.7	1747.6	1804.1	1806.7	1775.9	1684.7
27.5°	1669.3	1657.7	1668.0	1684.7	1701.4	1773.4	1867.0	1932.5	1933.9	1886.3	1757.9
30°	1896.6	1863.9	1831.8	1813.7	1821.4	1892.8	1992.9	2065.5	2071.8	2006.3	1837.5
32.5°	2312.6	2306.2	2193.2	2045.6	1968.5	2021.2	2133.5	2220.9	2224.7	2140.6	1940.9
35°	2959.2	2951.5	2769.8	2488.6	2237.5	2193.2	2304.3	2407.6	2405.1	2310.0	2075.1
37.5°	3730.9	3723.8	3484.4	3108.1	2701.7	2453.2	2524.5	2633.0	2649.1	2524.5	2248.4
40°	4390.3	4363.9	4212.4	3849.7	3318.0	2884.7	2837.8	2909.8	2926.4	2778.8	2468.6
42.5°	4889.8	4867.3	4790.2	4563.6	4064.1	3522.9	3207.0	3234.6	3253.2	3076.0	2721.6
45°	5148.6	5143.3	5174.2	5153.0	4824.3	4306.1	3734.8	3619.8	3626.9	3405.4	3008.6
47.5°	5185.2	5182.6	5323.1	5522.2	5477.9	5189.6	4412.1	4100.1	4075.0	3777.1	3320.6
50°	4969.4	4964.3	5234.0	5607.0	5914.5	5931.8	5181.3	4641.3	4586.1	4161.7	3646.1
52.5°	4280.5	4279.2	4722.2	5343.0	6067.9	6581.5	5941.4	5235.8	5143.3	4568.7	3990.3
55°	3293.6	3317.4	3825.3	4559.1	5788.0	6894.3	6624.0	5895.9	5753.9	4978.4	4307.5
57.5°	2333.2	2367.9	2869.9	3523.5	4920.0	6709.3	7085.6	6557.1	6404.4	5386.7	4629.1
60°	1253.3	1284.1	1786.8	2566.9	3660.3	6019.8	7328.9	7131.1	6986.7	5774.5	4919.3
62.5°	746.7	757.0	965.0	1657.1	2475.7	4599.0	7225.5	7568.4	7449.6	6100.1	5171.6
65°	536.1	538.0	642.7	1011.9	1503.1	2794.1	6500.7	7777.7	7741.1	6345.3	5358.5
67.5°	451.3	450.1	493.7	672.2	1024.1	1399.6	4982.2	7481.7	7637.1	6500.7	5464.4
70°	387.1	389.1	440.4	492.4	769.8	792.3	2477.0	6514.2	6845.5	6541.8	5458.0
72.5°	288.2	294.7	342.2	448.7	581.1	545.1	855.2	4830.1	5429.1	6163.6	5174.8
75°	203.6	206.7	240.8	377.5	433.4	396.8	436.5	2496.9	3264.8	4725.5	4235.5
77.5°	156.6	162.5	182.3	263.8	426.9	278.6	267.1	864.2	1327.8	2854.5	2903.9
80°	84.8	95.0	131.6	190.6	299.8	197.1	132.2	344.1	450.1	1334.8	1119.7
82.5°	43.7	48.8	91.8	137.4	170.8	172.1	65.5	143.2	185.5	412.2	153.4
85°	17.3	21.2	61.6	75.7	87.9	84.8	29.5	57.8	66.7	114.3	46.8
87.5°	3.9	6.5	22.4	17.3	16.7	17.9	7.1	13.5	12.8	13.5	8.3
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: P961966

CATALOG NUMBER: NAV-SB2B-740-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8	1151.8
2.5°	1158.9	1156.3	1149.2	1141.5	1132.5	1127.4	1124.2	1123.6	1119.1	1115.9	1119.1
5°	1178.1	1175.6	1162.1	1146.1	1128.7	1115.2	1102.4	1090.8	1074.1	1070.9	1069.7
7.5°	1216.7	1209.6	1187.8	1165.9	1133.2	1094.1	1046.5	992.0	943.2	928.3	921.4
10°	1264.1	1254.6	1226.9	1188.4	1115.9	1009.3	894.3	787.8	703.0	679.3	670.2
12.5°	1318.1	1309.7	1273.2	1201.9	1043.3	850.0	674.1	541.9	459.7	439.1	433.4
15°	1382.3	1370.1	1319.4	1181.3	913.6	645.9	462.9	384.6	355.1	351.2	347.4
17.5°	1450.4	1430.5	1360.5	1107.5	739.0	459.1	357.6	335.2	322.3	318.5	316.5
20°	1512.7	1487.0	1384.9	995.8	552.2	357.6	320.4	305.7	294.1	289.6	287.0
22.5°	1574.9	1538.3	1384.9	843.7	414.1	317.1	294.1	280.5	267.1	261.3	258.1
25°	1639.8	1591.0	1360.5	674.1	333.2	290.9	269.1	254.2	242.7	235.6	233.1
27.5°	1702.7	1635.3	1304.6	513.6	296.6	267.7	245.9	231.8	220.9	215.8	215.8
30°	1762.4	1679.0	1226.3	389.7	272.9	245.3	224.7	212.5	201.6	196.5	197.1
32.5°	1843.3	1734.2	1142.9	319.7	252.4	224.1	205.4	193.9	184.3	180.4	180.4
35°	1955.7	1815.7	1070.9	314.0	235.0	206.7	188.1	177.2	167.6	164.4	164.4
37.5°	2114.9	1947.3	1033.0	352.5	220.9	191.4	173.9	162.5	153.4	150.9	150.3
40°	2311.4	2125.8	1053.6	391.0	211.3	177.8	161.1	149.5	141.9	138.7	138.1
42.5°	2544.5	2346.0	1167.3	420.6	204.8	166.3	148.9	136.1	131.0	129.7	129.7
45°	2812.2	2588.0	1341.2	452.0	194.5	155.4	136.7	127.1	123.3	122.6	122.0
47.5°	3116.5	2853.9	1542.8	491.2	184.3	145.1	127.1	120.7	117.5	116.2	116.2
50°	3418.3	3121.6	1750.2	513.0	175.9	135.5	119.4	114.3	111.7	111.1	111.1
52.5°	3734.1	3397.1	1917.8	492.4	168.8	127.7	113.0	109.2	106.6	106.0	106.0
55°	4035.2	3619.8	1946.7	418.0	154.8	120.0	106.0	104.0	100.8	100.8	100.1
57.5°	4294.6	3731.5	1742.5	306.9	140.6	108.5	98.9	97.0	94.4	93.8	93.1
60°	4532.9	3699.4	1345.1	206.7	125.2	97.0	89.9	88.6	86.0	82.8	82.2
62.5°	4667.0	3558.2	920.0	134.8	109.8	84.8	79.6	78.9	73.2	66.7	65.5
65°	4717.8	3268.0	574.0	98.2	91.8	72.6	68.7	67.4	59.0	52.0	51.4
67.5°	4673.4	2790.4	289.6	77.7	72.6	60.4	56.5	56.5	50.7	44.3	43.7
70°	4496.3	2091.8	122.0	62.3	55.9	46.2	46.2	48.8	43.0	36.0	35.4
72.5°	4111.6	1407.3	64.9	47.6	41.7	32.7	37.9	39.8	34.0	27.0	27.0
75°	3268.6	858.4	44.9	35.4	26.3	23.1	28.9	30.1	23.1	17.9	17.3
77.5°	2235.6	493.1	30.1	22.4	16.7	13.5	19.9	18.7	12.2	8.3	9.0
80°	981.6	205.4	17.3	10.2	6.5	5.1	7.1	5.1	3.9	2.6	2.6
82.5°	114.9	48.2	6.5	3.9	2.6	1.3	0.6	0.0	0.0	0.0	0.0
85°	23.8	5.7	3.2	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	1.3	0.6	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)