

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: P963027

Luminaire Tested: **NAV-SB2D-740-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963027
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-740-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16708.5 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 147.6
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



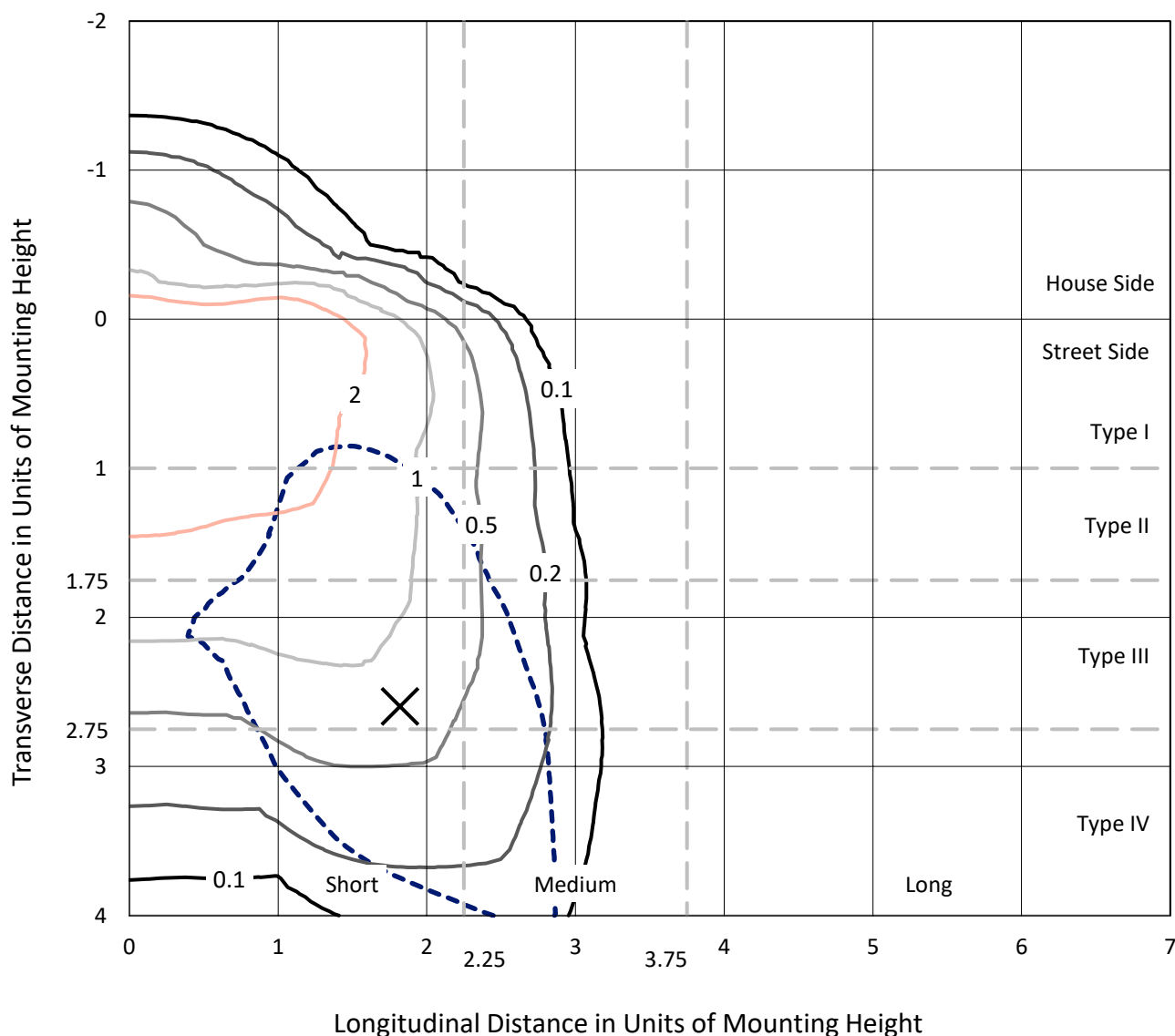
REPORT NUMBER: P963027

CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

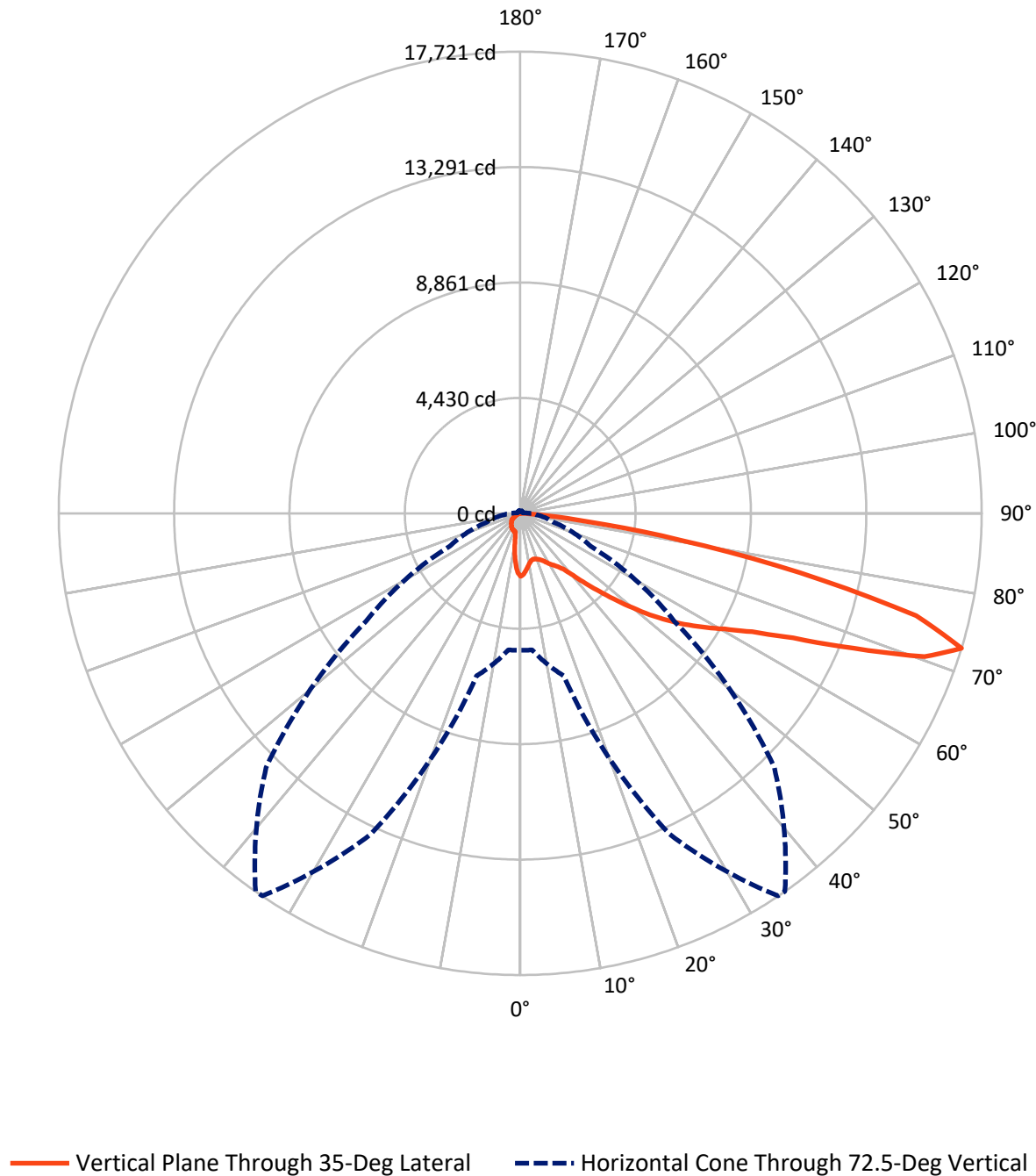


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc

Type IV - Short - N/A

REPORT NUMBER: P963027
CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P963027

CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

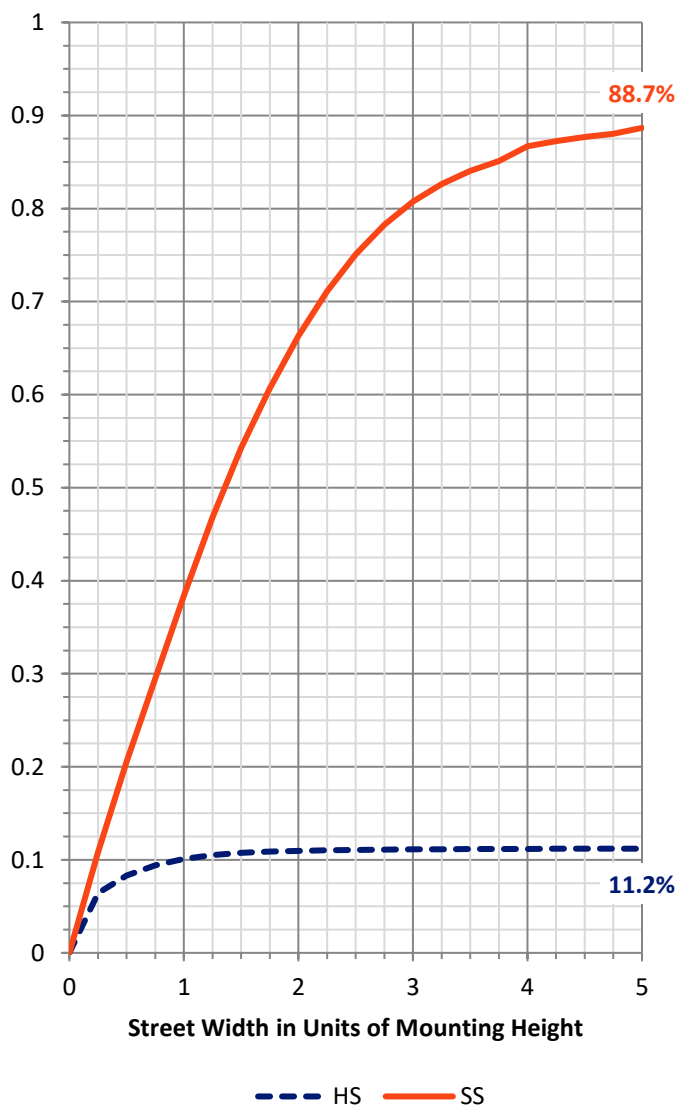
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1880.5	0.0	1880.5
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	14828.0	0.0	14828.0
	% Fixture	88.7	0.0	88.7
Total	Lumens	16708.5	0.0	16708.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.0	1.2
10°-20°	465.5	2.8
20°-30°	756.2	4.5
30°-40°	1261.8	7.6
40°-50°	2387.3	14.3
50°-60°	3793.4	22.7
60°-70°	4692.7	28.1
70°-80°	2917.0	17.5
80°-90°	235.7	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°	16708.5	100.0
0°-180°	16708.5	100.0

Coefficient of Utilization



REPORT NUMBER: P963027

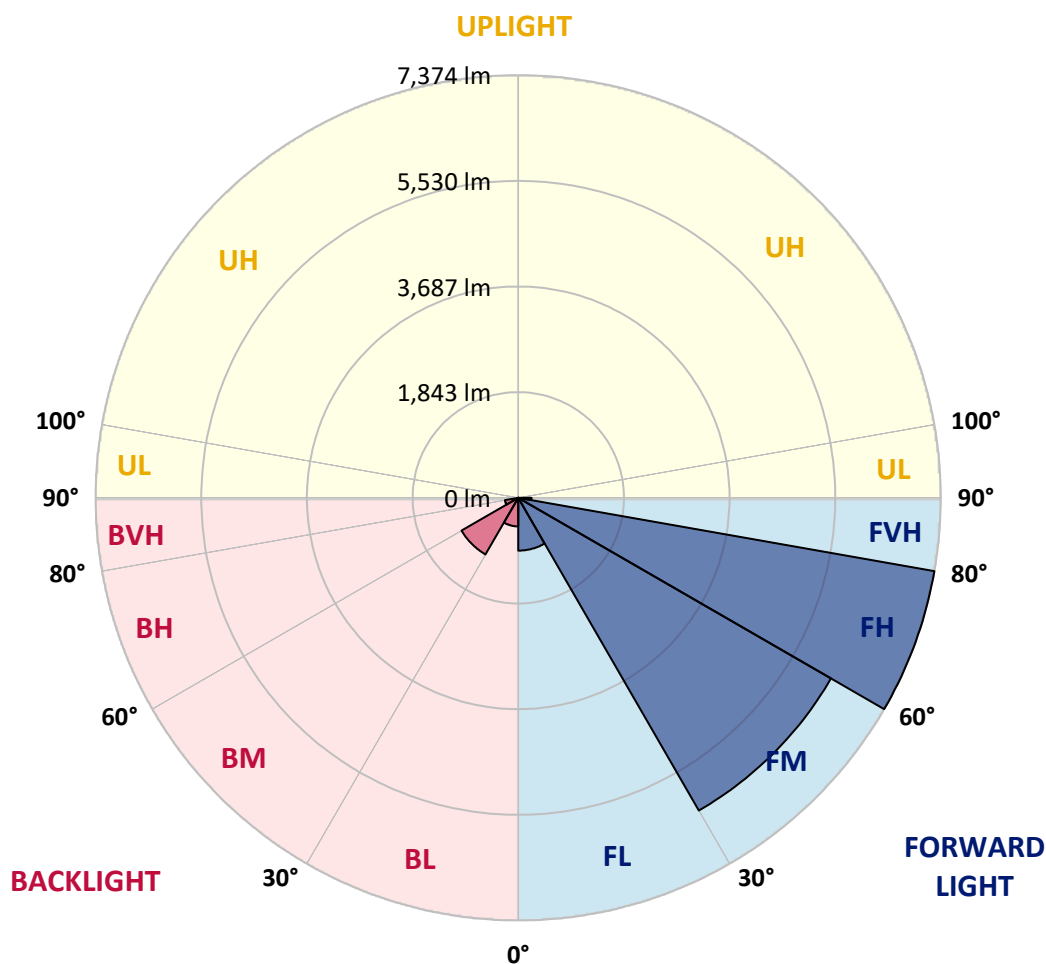
CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	921.1	5.5			
FM	(30°-60°)	6300.8	37.7			
FH	(60°-80°)	7373.7	44.1			G3/7500
FVH	(80°-90°)	232.5	1.4			G3/500
BL	(0°-30°)	499.7	3.0	B1/500		
BM	(30°-60°)	1141.6	6.8	B2/2500		
BH	(60°-80°)	236.0	1.4	B1/500		G1/500
BVH	(80°-90°)	3.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P963027

CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7
2.5°	2313.9	2333.5	2337.1	2343.3	2343.3	2350.6	2362.8	2380.0	2408.1	2422.9	2432.6
5°	2132.7	2147.4	2165.7	2180.5	2208.6	2212.3	2260.0	2306.6	2371.4	2420.4	2454.7
7.5°	1950.3	1967.4	1991.9	2027.4	2064.1	2075.1	2147.4	2225.8	2328.6	2420.4	2477.9
10°	1821.7	1823.0	1845.0	1880.5	1939.3	1952.7	2040.9	2152.3	2280.8	2405.7	2500.0
12.5°	1749.5	1758.1	1767.8	1794.8	1851.2	1859.7	1954.0	2085.0	2233.1	2397.2	2525.7
15°	1749.5	1755.6	1761.8	1775.2	1820.5	1827.9	1911.1	2042.1	2208.6	2400.9	2567.3
17.5°	1767.8	1777.7	1772.7	1788.6	1836.4	1841.3	1914.8	2029.8	2207.3	2424.1	2631.0
20°	1811.9	1819.3	1809.5	1819.3	1867.0	1876.8	1952.7	2053.1	2228.1	2464.5	2710.5
22.5°	1881.7	1885.4	1862.1	1869.5	1918.5	1930.7	2018.8	2119.2	2278.4	2529.4	2817.1
25°	1969.8	1977.2	1941.7	1950.3	1996.8	2011.5	2113.1	2218.4	2358.0	2618.8	2952.9
27.5°	2071.5	2075.1	2044.6	2043.3	2103.3	2124.1	2226.9	2340.8	2464.5	2731.3	3124.4
30°	2187.8	2198.8	2169.4	2164.5	2240.4	2257.6	2359.1	2491.4	2621.2	2900.3	3367.9
32.5°	2279.6	2288.2	2271.0	2283.3	2360.4	2373.9	2519.6	2704.5	2867.2	3140.3	3699.7
35°	2411.8	2416.7	2377.6	2399.6	2487.8	2522.0	2738.7	3003.1	3177.0	3441.4	4133.2
37.5°	2890.5	2890.5	2724.0	2615.1	2699.5	2730.2	3038.6	3379.0	3559.0	3845.5	4679.2
40°	3552.9	3541.9	3298.2	3075.4	3064.3	3124.4	3465.9	3852.8	4052.3	4330.3	5293.8
42.5°	4259.3	4242.2	3910.4	3690.0	3653.2	3674.1	3959.4	4436.8	4640.0	4921.6	5954.9
45°	4886.1	4881.2	4577.5	4281.3	4215.2	4281.3	4575.1	5120.0	5265.6	5561.9	6614.7
47.5°	5411.3	5411.3	5189.7	4996.3	4962.0	5001.2	5408.8	5877.8	5864.3	6243.8	7257.5
50°	6016.1	6011.2	5800.7	5717.3	5752.9	5808.0	6368.7	6676.0	6483.7	6913.5	7831.7
52.5°	6439.7	6469.1	6396.8	6383.4	6564.6	6660.0	7343.2	7457.1	7038.4	7548.9	8261.4
55°	6775.1	6809.5	6892.7	6987.0	7335.9	7460.8	8287.1	8197.7	7502.4	8099.9	8508.7
57.5°	7250.2	7201.2	7329.8	7515.8	8080.3	8230.9	9201.7	8896.8	7875.8	8546.7	8535.7
60°	7826.8	7834.2	7856.2	8091.2	8823.4	9016.8	10102.7	9557.9	8115.7	8820.9	8237.0
62.5°	8519.8	8530.8	8576.1	8937.3	9821.1	10003.6	11062.6	10099.1	8225.9	8743.8	7465.7
65°	8472.0	8518.6	9024.2	10259.4	11338.0	11518.0	12182.8	10478.6	8059.5	8038.7	6078.6
67.5°	7717.8	7793.8	8639.7	11838.7	13625.0	13825.8	13536.9	10553.3	7340.7	6251.2	3965.4
70°	6728.6	6755.6	7773.0	13259.0	16273.1	16476.4	14748.9	9731.8	5570.5	3486.7	1776.4
72.5°	5254.6	5260.7	6454.4	13588.3	17710.5	17721.4	13797.6	7224.5	2995.8	1339.4	617.0
75°	3753.7	3717.0	4322.9	11019.8	15581.4	15706.3	10343.9	3388.9	1144.7	632.9	307.3
77.5°	2012.7	2053.1	2446.1	6535.2	10763.8	10976.9	5644.0	976.9	582.7	430.9	203.3
80°	622.0	656.2	1002.7	2992.2	6096.9	6225.4	2092.3	434.6	406.4	307.3	133.5
82.5°	195.9	203.3	467.7	1257.4	2530.6	2589.4	606.0	246.1	277.9	203.3	78.3
85°	56.3	57.5	208.2	468.9	625.6	637.9	170.1	95.5	159.2	126.1	40.4
87.5°	6.1	19.6	78.3	78.3	55.0	53.9	18.3	20.8	45.3	15.9	7.4
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: P963027

CATALOG NUMBER: NAV-SB2D-740-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7	2421.7
2.5°	2426.5	2427.7	2411.8	2384.9	2355.6	2331.1	2300.4	2275.9	2258.8	2253.9	2262.5
5°	2443.7	2435.1	2389.8	2307.8	2209.8	2125.3	2031.0	1956.4	1907.4	1886.6	1894.0
7.5°	2469.3	2444.9	2345.7	2184.1	1996.8	1830.3	1661.3	1530.3	1447.1	1405.5	1411.6
10°	2491.4	2442.5	2272.2	2005.4	1718.9	1466.7	1239.0	1081.1	992.9	951.3	952.5
12.5°	2512.2	2441.2	2176.8	1793.5	1405.5	1097.0	885.2	806.8	782.3	773.8	771.3
15°	2551.4	2444.9	2056.8	1551.1	1093.3	828.8	751.7	750.5	755.4	753.0	751.7
17.5°	2605.2	2448.5	1920.8	1294.1	843.6	730.9	727.2	738.2	745.6	741.9	740.7
20°	2675.0	2463.3	1776.4	1039.5	724.8	706.4	714.9	724.8	730.9	724.8	723.5
22.5°	2773.0	2489.0	1618.5	835.0	686.9	691.7	699.0	710.1	716.2	707.7	706.4
25°	2893.0	2529.4	1463.0	726.0	668.5	674.6	685.6	697.8	705.2	696.6	695.4
27.5°	3048.5	2594.3	1319.8	701.5	650.1	653.7	669.6	688.1	697.8	686.9	686.9
30°	3273.7	2700.8	1196.1	712.6	639.1	630.5	652.5	678.2	689.3	679.5	678.2
32.5°	3572.4	2851.3	1120.2	729.7	634.2	603.5	624.4	657.4	675.8	669.6	669.6
35°	3964.2	3080.3	1090.8	749.3	630.5	575.4	590.1	625.6	657.4	663.6	663.6
37.5°	4439.3	3398.6	1099.4	757.8	619.5	552.2	559.4	590.1	631.7	651.3	656.2
40°	4979.1	3769.5	1148.4	749.3	607.2	532.6	533.8	557.1	593.8	623.2	632.9
42.5°	5536.2	4202.9	1239.0	717.4	596.2	515.5	511.8	527.7	552.2	573.0	581.5
45°	6066.3	4648.6	1328.3	673.3	582.7	498.3	489.7	495.8	500.7	509.3	514.2
47.5°	6529.0	4962.0	1302.7	632.9	564.4	478.7	464.0	461.6	446.9	445.7	444.4
50°	6848.6	5030.6	1156.9	592.6	537.5	456.6	433.4	418.7	393.0	380.8	382.0
52.5°	6950.2	4760.0	945.2	552.2	493.4	427.3	394.2	370.9	339.2	328.1	326.9
55°	6815.5	4229.9	755.4	503.2	432.1	388.1	351.4	320.7	295.1	281.6	281.6
57.5°	6486.2	3555.3	597.5	445.7	367.3	344.0	307.3	276.6	254.6	241.2	238.7
60°	5940.2	2823.2	472.5	377.1	313.4	296.2	258.3	238.7	219.1	203.3	199.6
62.5°	5111.4	2015.2	370.9	298.7	262.0	242.4	220.4	205.7	182.4	160.4	156.7
65°	3988.7	1232.9	286.5	219.1	210.5	200.8	187.3	173.8	145.7	123.6	120.0
67.5°	2515.9	583.9	204.5	165.2	166.5	161.6	155.5	144.4	123.6	104.0	101.6
70°	1107.9	282.8	134.7	126.1	123.6	123.6	128.5	124.8	105.3	86.9	83.2
72.5°	377.1	151.8	100.3	95.5	89.4	88.1	107.7	104.0	84.5	67.3	63.7
75°	197.1	101.6	73.5	68.6	53.9	64.9	85.7	80.8	60.0	44.1	40.4
77.5°	128.5	72.3	50.2	44.1	30.6	42.8	63.7	56.3	35.5	22.0	19.6
80°	80.8	47.8	29.4	20.8	14.7	23.3	34.2	24.5	13.4	4.9	3.7
82.5°	42.8	24.5	11.0	7.4	6.1	7.4	8.6	6.1	2.5	0.0	0.0
85°	17.1	8.6	3.7	2.5	1.2	0.0	2.5	1.2	0.0	0.0	0.0
87.5°	6.1	1.2	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)