

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: P969352

Luminaire Tested: **NAV-SB5D-740-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969352
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55094.8 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
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

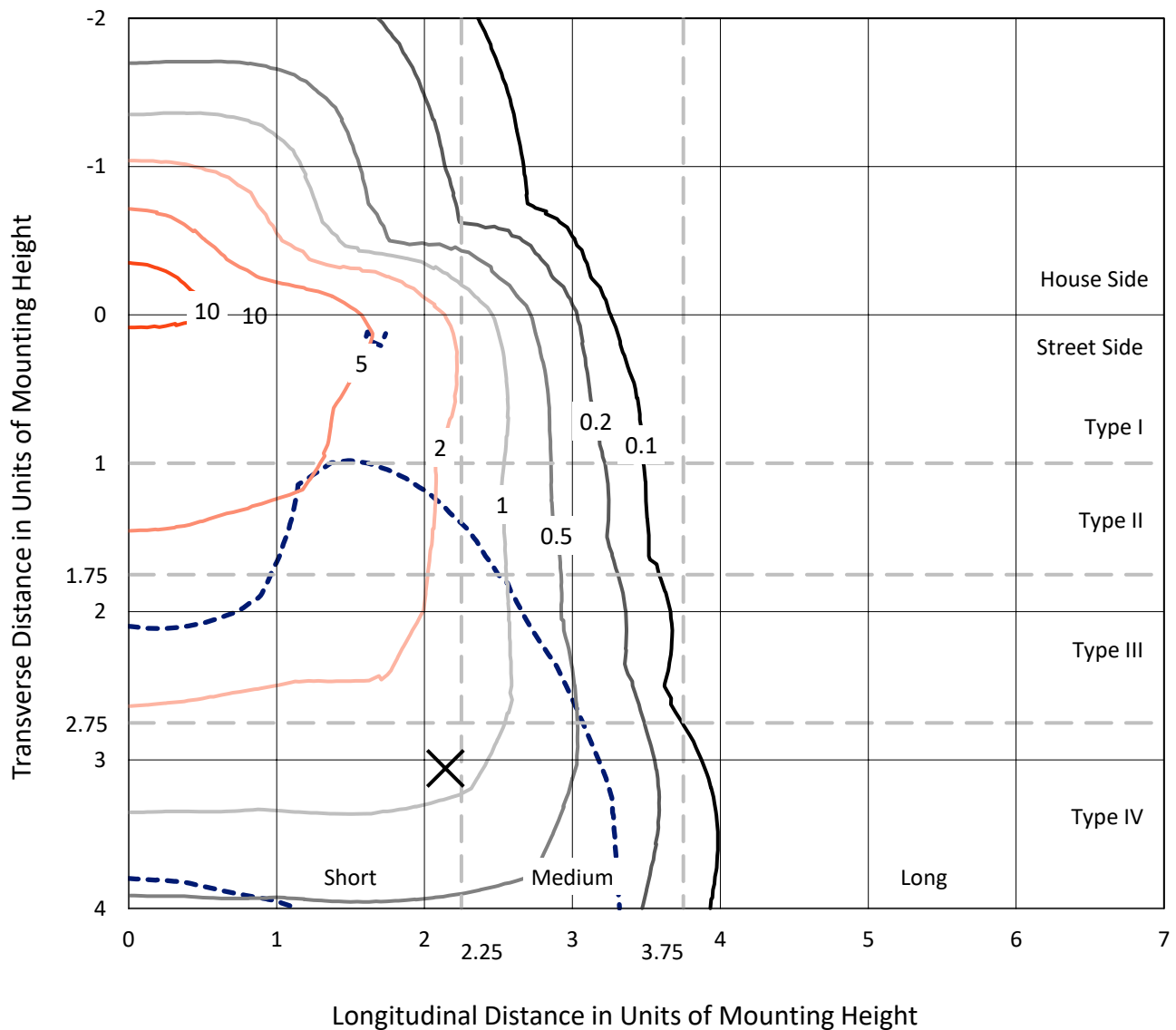


REPORT NUMBER: P969352

CATALOG NUMBER: NAV-SB5D-740-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

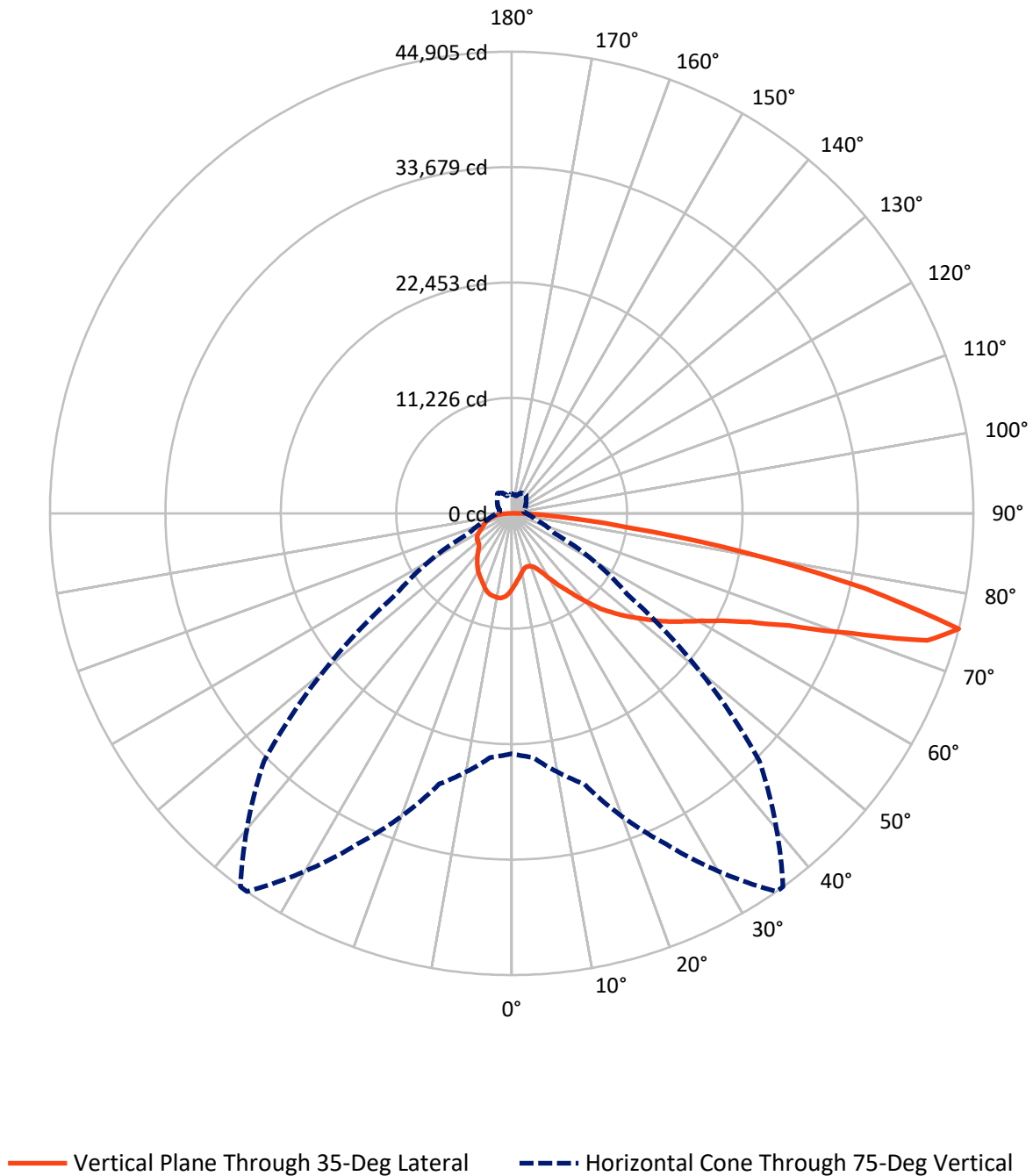
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc
Type IV - Short - N/A

REPORT NUMBER: P969352
CATALOG NUMBER: NAV-SB5D-740-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P969352

CATALOG NUMBER: NAV-SB5D-740-U-T4FT

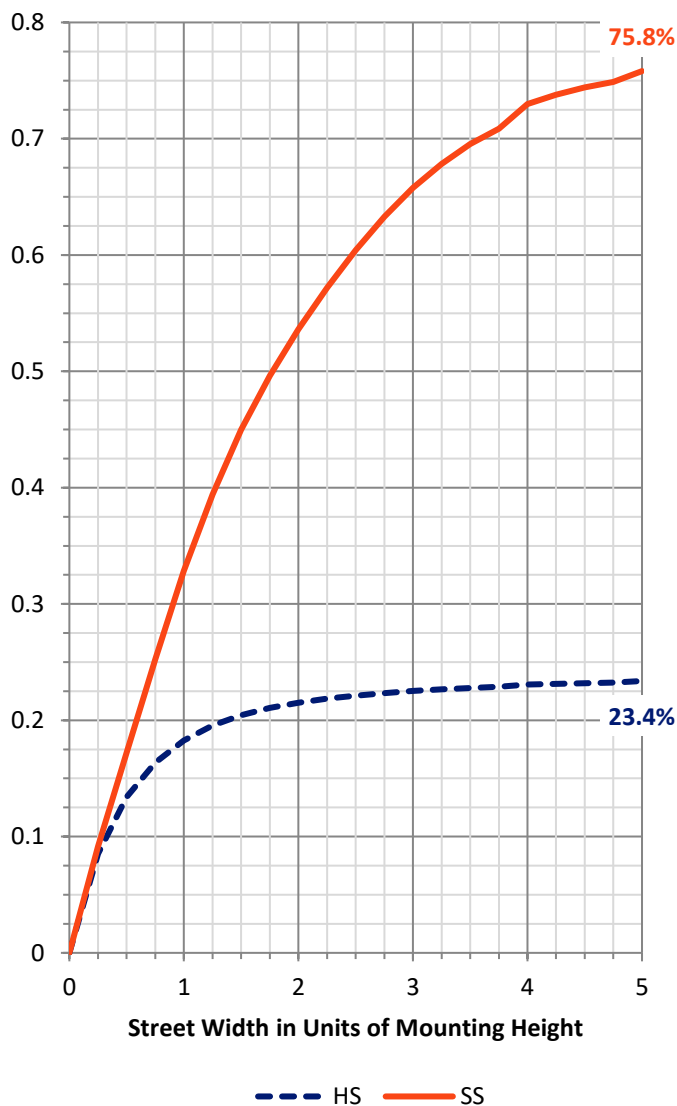
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13111.2	0.0	13111.2
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	41983.6	0.0	41983.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	55094.8	0.0	55094.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	695.1	1.3
10°-20°	2005.0	3.6
20°-30°	3366.9	6.1
30°-40°	5232.7	9.5
40°-50°	7766.7	14.1
50°-60°	10722.4	19.5
60°-70°	13008.8	23.6
70°-80°	10750.8	19.5
80°-90°	1546.3	2.8
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°	55094.8	100.0
0°-180°	55094.8	100.0

Coefficient of Utilization



REPORT NUMBER: P969352

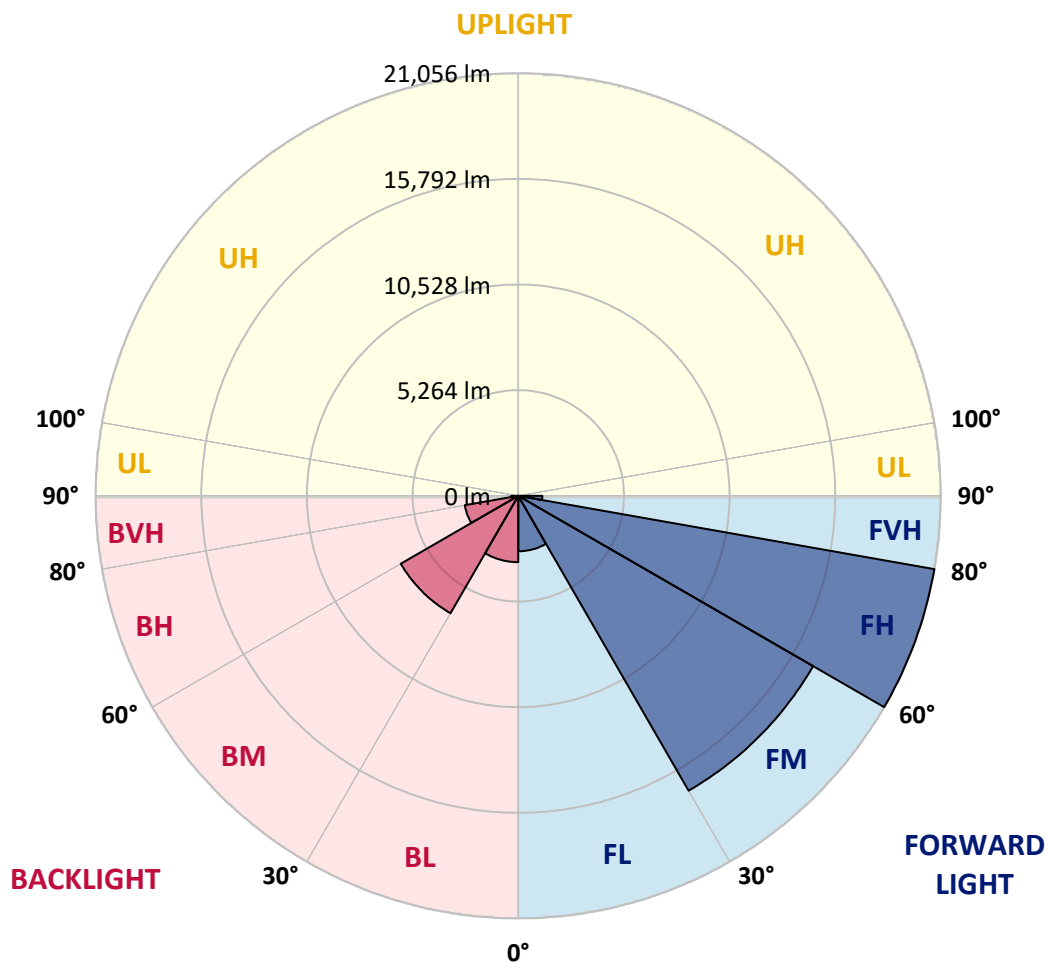
CATALOG NUMBER: NAV-SB5D-740-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2762.9	5.0			
FM	(30°-60°)	16966.2	30.8			
FH	(60°-80°)	21056.4	38.2			G5
FVH	(80°-90°)	1198.1	2.2			G5
BL	(0°-30°)	3304.2	6.0	B4/5000		
BM	(30°-60°)	6755.7	12.3	B4/8500		
BH	(60°-80°)	2703.1	4.9	B4/5000		G4/5000
BVH	(80°-90°)	348.2	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



REPORT NUMBER: P969352

CATALOG NUMBER: NAV-SB5D-740-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8
2.5°	6769.9	6811.6	6829.5	6820.6	6865.2	6859.3	6921.8	6999.2	7106.4	7210.7	7362.6
5°	6248.7	6293.4	6332.0	6367.8	6454.2	6481.0	6579.3	6728.2	6924.8	7124.4	7374.5
7.5°	5763.2	5801.9	5861.5	5927.1	6072.9	6099.8	6263.6	6495.9	6769.9	7061.7	7407.3
10°	5367.1	5405.7	5468.4	5542.8	5724.5	5757.2	5965.7	6275.5	6632.9	7002.2	7443.0
12.5°	5197.3	5209.3	5244.9	5319.4	5477.3	5498.1	5727.5	6081.9	6498.9	6957.5	7496.6
15°	5188.3	5212.2	5215.2	5253.9	5384.9	5393.9	5605.3	5956.8	6415.5	6948.6	7577.0
17.5°	5277.7	5295.6	5268.8	5292.6	5402.8	5417.7	5584.5	5897.2	6388.6	6987.3	7714.0
20°	5516.0	5530.9	5450.4	5417.7	5498.1	5510.0	5673.9	5936.0	6415.5	7067.8	7901.7
22.5°	6022.3	6031.3	5834.7	5700.6	5706.6	5712.5	5855.5	6093.8	6519.7	7213.6	8139.9
25°	6811.6	6805.6	6492.9	6233.7	6084.9	6052.1	6147.4	6350.0	6695.4	7407.3	8446.7
27.5°	7734.9	7690.3	7377.5	6990.3	6665.7	6618.0	6597.1	6683.5	6945.6	7663.4	8822.0
30°	8777.4	8735.7	8399.1	7892.7	7443.0	7365.5	7169.1	7124.4	7317.9	8011.9	9343.3
32.5°	9921.1	9894.2	9492.1	8878.7	8277.0	8187.6	7857.0	7737.8	7889.7	8539.1	10070.0
35°	10880.1	10856.3	10522.6	9891.2	9155.6	9045.4	8708.8	8574.8	8652.2	9215.2	11020.1
37.5°	11746.8	11734.9	11448.9	10951.6	10192.1	10058.0	9679.8	9635.1	9620.2	10105.7	12172.7
40°	12550.9	12521.2	12223.3	11961.2	11398.3	11276.2	10942.6	10903.9	10790.7	11201.7	13477.2
42.5°	13441.5	13364.1	12932.2	12810.0	12658.2	12557.0	12357.4	12363.3	12113.1	12437.8	14859.2
45°	14168.3	14123.6	13679.8	13608.3	13772.1	13730.4	13903.2	13947.8	13462.4	13733.4	16294.8
47.5°	14948.6	14906.9	14531.6	14481.0	14924.7	14936.7	15547.2	15562.2	14778.9	15079.6	17733.4
50°	15910.6	15851.0	15478.7	15541.3	16038.7	16083.4	17200.2	17098.9	15991.0	16446.7	19160.0
52.5°	16545.0	16580.7	16500.3	16601.6	17280.7	17322.4	18826.5	18567.4	17191.3	17795.9	20559.9
55°	17012.6	17084.1	17334.3	17566.6	18591.1	18632.9	20360.3	19964.2	18186.1	19046.9	21876.4
57.5°	17614.2	17512.9	17980.6	18433.3	19836.1	19946.3	21852.5	21310.5	19067.7	20125.1	22778.8
60°	18478.0	18406.5	18769.9	19440.0	21230.0	21405.8	23431.1	22522.6	19714.0	20979.8	22954.5
62.5°	20229.3	20050.5	20107.1	20699.9	22987.3	23219.6	25212.1	23580.0	20035.7	21313.4	22013.3
65°	22847.2	22540.5	22254.6	22665.6	25462.3	25691.6	27222.6	24411.0	19916.6	20667.1	19514.5
67.5°	26144.4	25840.6	25489.1	25876.3	29107.8	29289.6	29703.6	24878.6	18978.4	18177.1	15097.5
70°	28863.7	28750.4	29170.5	30763.8	34930.7	34936.6	32884.5	24491.4	16408.0	12887.5	8735.7
72.5°	28503.3	28434.7	30647.7	35574.0	42269.5	42111.6	35895.7	21560.7	11052.9	5813.8	3273.2
75°	23383.4	23827.1	27255.4	35487.7	44905.4	44884.4	34052.0	13706.6	4571.8	2409.6	1691.8
77.5°	12539.0	13242.0	17694.7	26200.9	35055.7	35582.9	23940.4	4795.3	1962.8	1542.8	1170.6
80°	4089.3	4702.9	7052.8	13340.3	22778.8	22680.5	10260.6	1882.3	1343.3	1093.1	810.2
82.5°	1736.5	1807.9	3151.2	6299.3	11690.2	11508.5	3267.3	1081.2	944.1	747.5	500.4
85°	679.1	759.5	1390.9	2912.8	5063.3	4953.1	1179.5	536.1	604.6	488.4	297.9
87.5°	223.3	271.0	497.4	997.7	1575.5	1518.9	288.9	184.7	262.1	223.3	107.2
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: P969352

CATALOG NUMBER: NAV-SB5D-740-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8	7341.8
2.5°	7404.3	7452.0	7508.5	7592.0	7663.4	7723.0	7785.5	7824.2	7839.1	7883.8	7880.8
5°	7457.9	7562.1	7702.2	7839.1	7973.2	8053.6	8125.1	8160.8	8193.5	8217.4	8223.4
7.5°	7547.3	7681.2	7901.7	8080.4	8193.5	8259.1	8306.7	8294.8	8306.7	8312.8	8321.7
10°	7624.7	7812.3	8074.4	8244.2	8330.6	8333.6	8321.7	8279.9	8259.1	8262.1	8268.1
12.5°	7717.0	7925.5	8208.5	8351.4	8375.3	8309.8	8259.1	8187.6	8160.8	8148.9	8142.9
15°	7842.2	8080.4	8354.4	8408.0	8348.4	8265.1	8178.7	8062.5	8003.0	7955.3	7970.2
17.5°	7994.0	8256.2	8467.6	8428.9	8300.8	8163.8	8023.8	7848.1	7725.9	7675.3	7678.3
20°	8205.5	8440.8	8553.9	8384.2	8190.6	7982.1	7743.9	7529.3	7416.2	7365.5	7359.6
22.5°	8461.6	8688.0	8637.4	8306.7	8032.7	7699.2	7401.3	7243.5	7186.9	7151.1	7157.1
25°	8768.4	8962.0	8696.9	8193.5	7773.6	7323.8	7094.5	7043.9	7017.2	6990.3	6990.3
27.5°	9167.5	9271.7	8741.6	8026.8	7368.5	6924.8	6841.4	6850.3	6841.4	6796.7	6805.6
30°	9694.7	9673.8	8783.3	7755.8	6903.9	6564.4	6570.4	6609.1	6615.0	6585.2	6600.2
32.5°	10388.7	10177.2	8804.1	7404.3	6460.2	6248.7	6254.7	6296.4	6326.1	6275.5	6299.3
35°	11228.6	10763.9	8771.3	6963.5	6117.6	5947.9	5903.2	5915.1	5924.0	5876.4	5909.1
37.5°	12208.5	11422.2	8625.5	6475.0	5834.7	5653.0	5557.7	5477.3	5429.6	5384.9	5414.8
40°	13283.7	12140.0	8357.3	5998.5	5519.0	5340.2	5197.3	5045.4	4884.5	4825.0	4851.8
42.5°	14409.4	12878.6	8032.7	5542.8	5155.6	5009.7	4857.8	4637.4	4396.1	4274.0	4288.9
45°	15577.0	13635.1	7714.0	5093.0	4783.3	4720.7	4545.1	4280.0	4017.9	3863.0	3851.0
47.5°	16720.7	14349.9	7246.4	4640.4	4434.9	4503.3	4366.3	4122.1	3830.2	3586.0	3559.2
50°	17813.8	15020.0	6481.0	4181.7	4151.9	4437.8	4306.7	3955.3	3621.7	3309.0	3282.2
52.5°	18897.9	15562.2	5501.1	3764.7	4000.0	4419.9	4229.4	3842.1	3434.1	3106.5	3070.7
55°	19818.3	15842.1	4556.9	3407.3	3779.6	4268.0	4137.0	3708.1	3169.0	2820.5	2790.8
57.5°	20342.5	15615.8	3770.7	3055.8	3475.8	4017.9	3979.2	3422.2	2853.3	2585.3	2549.5
60°	20116.1	14698.4	3127.3	2749.0	3186.9	3746.8	3705.2	3139.3	2612.0	2358.9	2323.2
62.5°	18868.2	12950.1	2618.1	2481.0	2924.8	3469.8	3431.1	2921.8	2427.4	2183.1	2144.4
65°	16354.4	10534.6	2221.9	2257.7	2659.7	3136.3	3192.9	2740.1	2281.4	2043.1	2004.5
67.5°	12473.5	7630.6	1912.1	2064.0	2400.5	2808.6	2972.4	2609.0	2159.4	1932.9	1897.3
70°	7109.4	4333.6	1650.0	1876.4	2171.3	2504.8	2802.7	2504.8	2028.3	1840.7	1816.8
72.5°	2695.4	1989.5	1426.7	1688.8	1950.9	2248.6	2615.1	2341.0	1876.4	1736.5	1712.6
75°	1438.6	1212.2	1200.3	1468.3	1697.7	1998.5	2379.7	2180.2	1763.2	1834.6	1894.3
77.5°	979.9	857.8	1003.7	1256.9	1420.6	1721.5	2129.5	1935.9	1528.0	1521.9	1402.8
80°	679.1	607.6	816.1	1012.7	1099.0	1447.5	1858.5	1661.9	1245.0	1161.5	1110.9
82.5°	408.1	396.2	610.6	756.6	777.4	1116.9	1539.9	1393.9	1018.6	887.5	893.5
85°	223.3	235.3	390.2	443.8	452.7	780.3	1206.2	1078.2	783.3	658.3	664.2
87.5°	62.5	80.5	143.0	175.7	217.4	405.1	717.8	640.3	393.2	274.0	274.0
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)