

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: P967735

Luminaire Tested: **NAV-SB5A-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18215.3 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 141.7
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

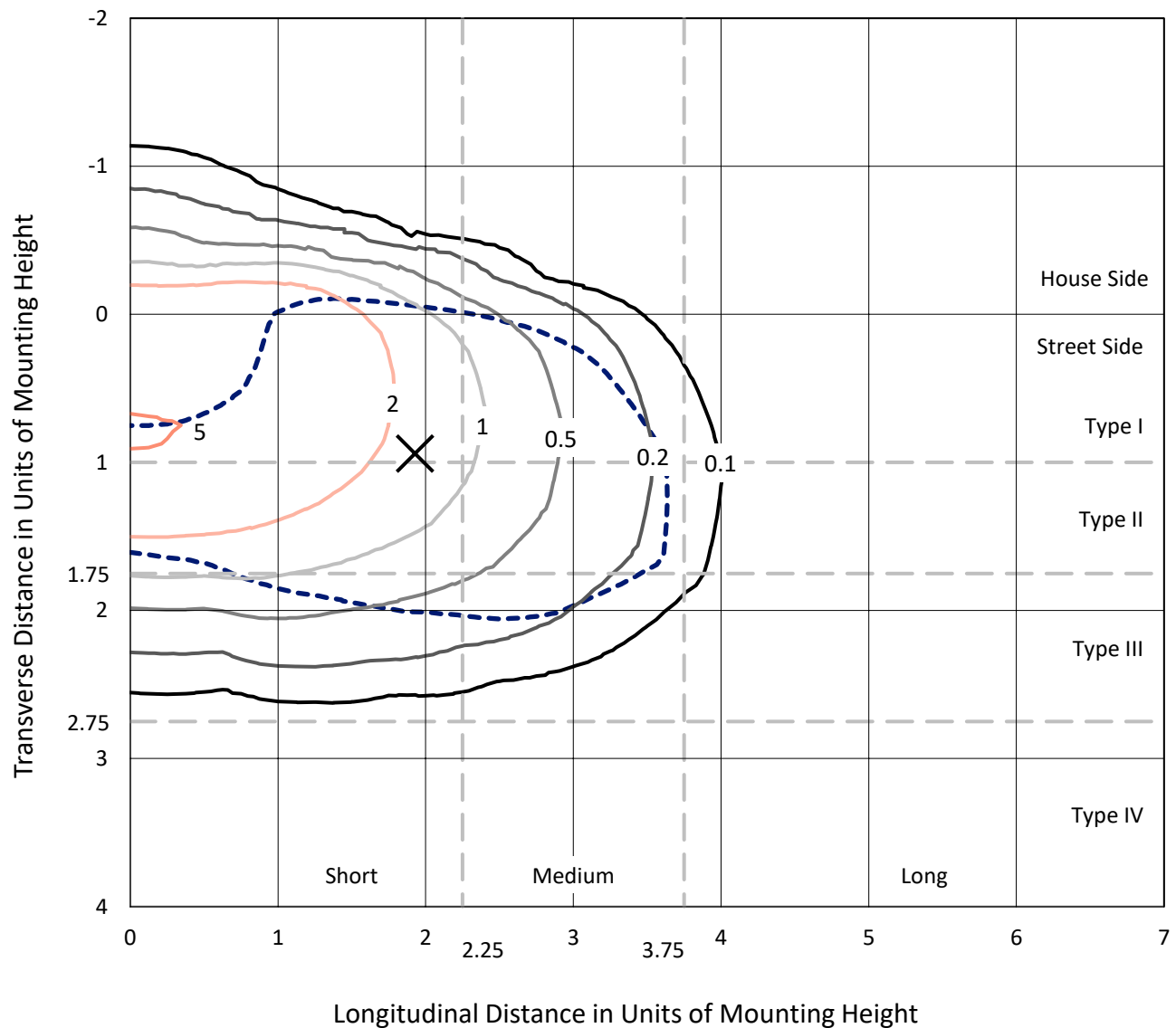


REPORT NUMBER: P967735

CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

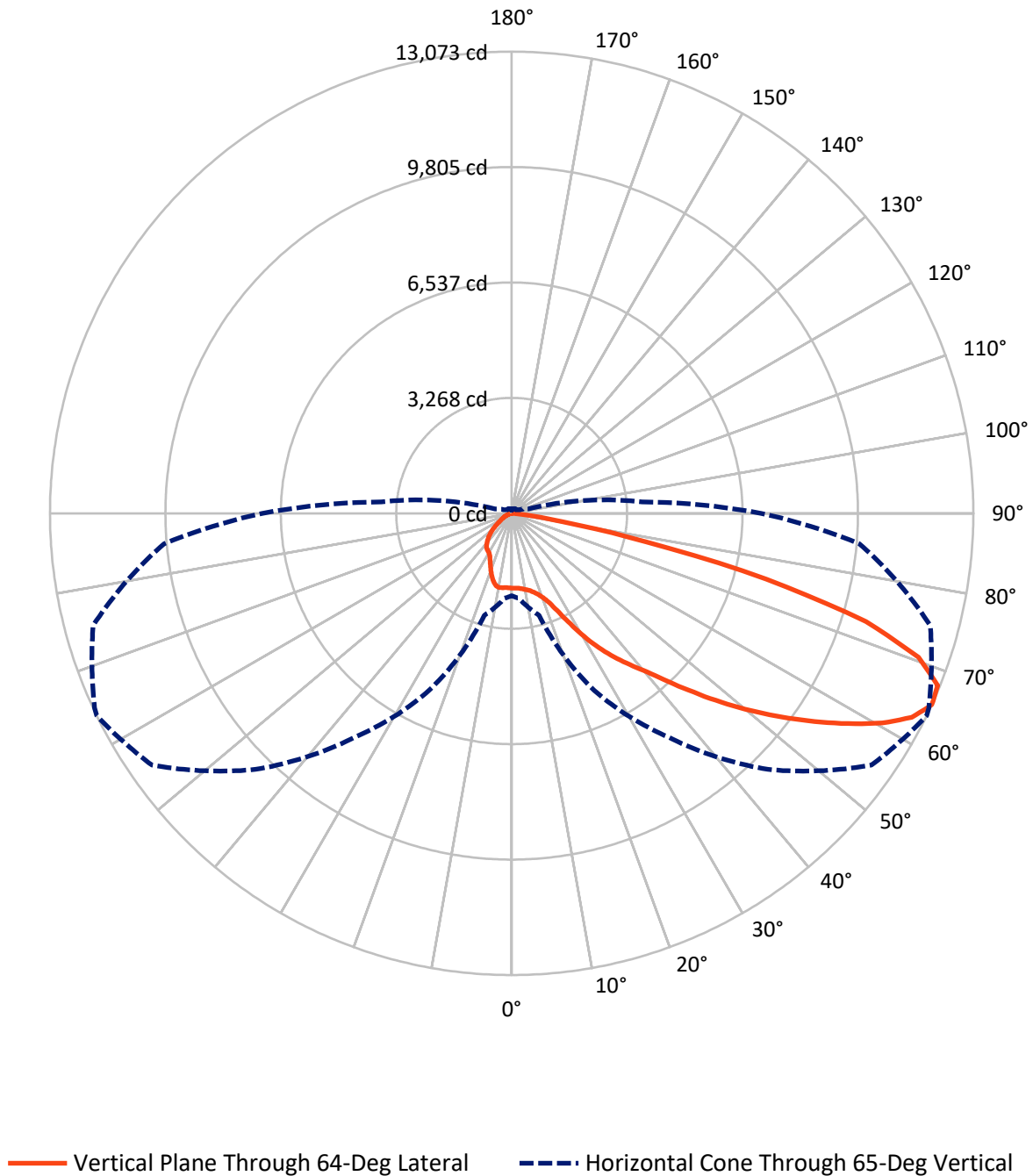


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type III - Short - N/A

REPORT NUMBER: P967735

CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967735

CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

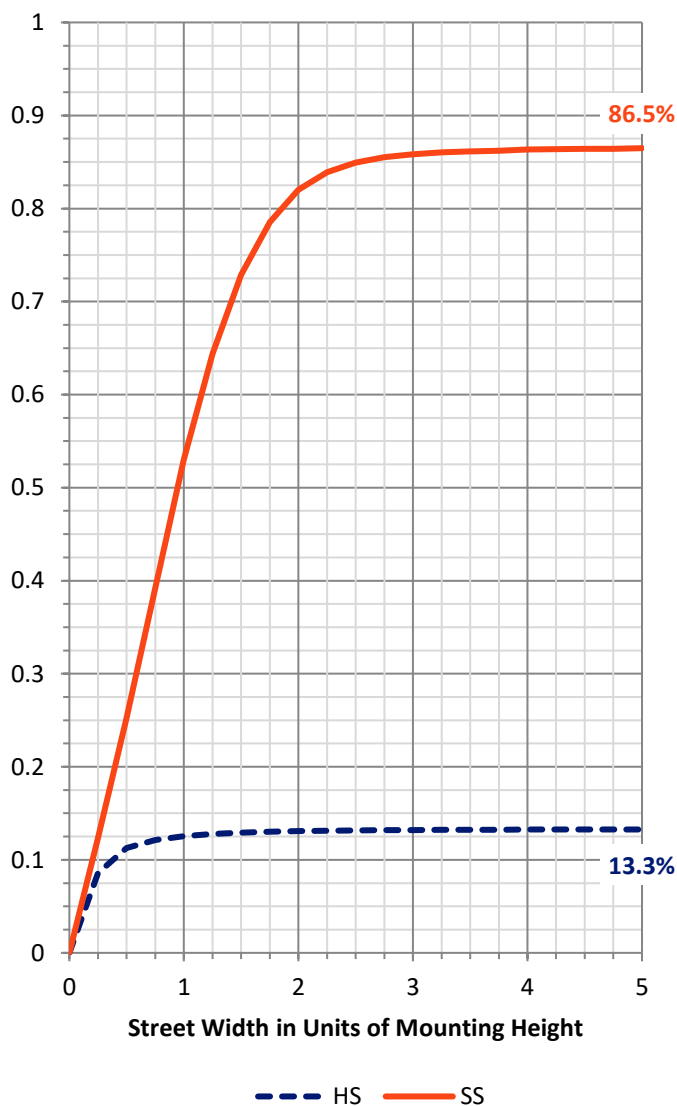
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2435.9	0.0	2435.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	15779.3	0.0	15779.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	18215.3	0.0	18215.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	1.1
10°-20°	530.2	2.9
20°-30°	1004.6	5.5
30°-40°	2032.8	11.2
40°-50°	3462.9	19.0
50°-60°	4709.4	25.9
60°-70°	4422.3	24.3
70°-80°	1771.8	9.7
80°-90°	85.8	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°	18215.3	100.0
0°-180°	18215.3	100.0

Coefficient of Utilization



REPORT NUMBER: P967735

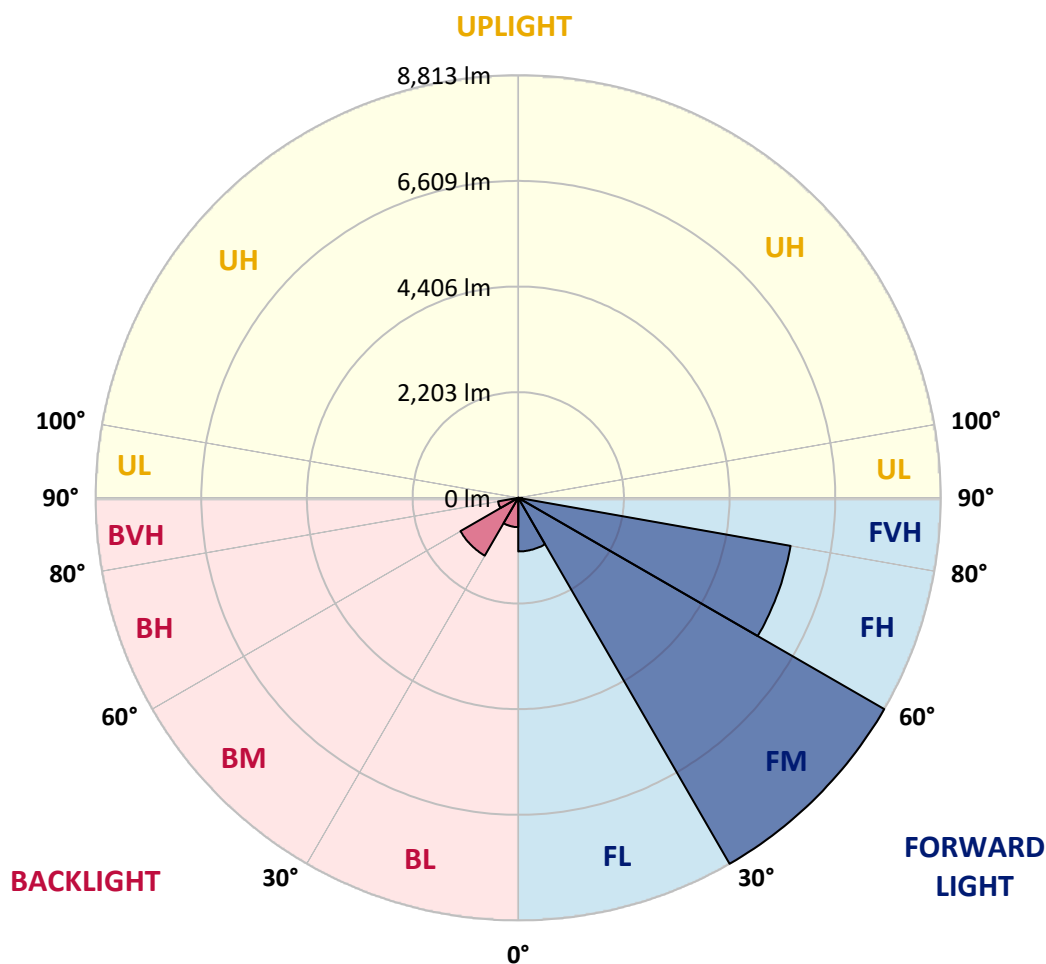
CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1118.6	6.1			
FM	(30°-60°)	8812.5	48.4			
FH	(60°-80°)	5766.5	31.7			G3/7500
FVH	(80°-90°)	81.6	0.4			G1/100
BL	(0°-30°)	611.6	3.4	B2/1000		
BM	(30°-60°)	1392.6	7.6	B2/2500		
BH	(60°-80°)	427.5	2.3	B1/500		G1/500
BVH	(80°-90°)	4.2	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 III Short



REPORT NUMBER: P967735

CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7
2.5°	2111.3	2126.0	2122.3	2118.7	2117.4	2119.8	2121.0	2119.8	2119.8	2119.8	2121.0
5°	2071.0	2083.2	2083.2	2091.7	2104.0	2118.7	2129.6	2132.1	2134.5	2138.1	2136.9
7.5°	1994.0	2003.9	2011.2	2039.2	2069.8	2108.8	2141.8	2159.0	2161.3	2174.8	2179.7
10°	1941.6	1953.8	1966.0	1995.3	2039.2	2097.9	2154.0	2195.5	2201.7	2233.4	2248.0
12.5°	1939.1	1951.3	1967.2	1999.0	2050.2	2112.5	2180.9	2240.8	2251.7	2298.2	2328.7
15°	1964.7	1979.4	1994.0	2033.2	2088.1	2163.8	2237.1	2311.6	2322.5	2388.5	2421.5
17.5°	2017.3	2036.8	2047.8	2086.9	2145.5	2229.8	2326.2	2411.7	2421.5	2498.4	2540.0
20°	2121.0	2144.3	2147.9	2179.7	2237.1	2327.5	2442.3	2548.5	2560.7	2648.6	2695.0
22.5°	2336.0	2369.0	2339.7	2355.6	2406.8	2497.2	2621.7	2756.0	2773.1	2873.3	2914.8
25°	2714.5	2760.9	2685.2	2658.3	2680.4	2774.4	2930.7	3100.4	3119.9	3200.6	3221.3
27.5°	3458.1	3398.4	3283.6	3171.2	3105.2	3159.0	3334.8	3544.9	3569.3	3647.5	3623.1
30°	4275.1	4222.6	4067.5	3818.4	3662.1	3653.5	3816.0	4050.4	4078.5	4153.0	4078.5
32.5°	5093.2	5043.2	4874.7	4568.2	4297.1	4162.7	4275.1	4535.2	4549.9	4597.4	4487.6
35°	5898.0	5846.7	5678.2	5364.3	5031.0	4725.7	4703.7	4996.8	5001.7	5051.7	4888.1
37.5°	6707.6	6664.9	6485.3	6177.6	5849.2	5427.8	5223.9	5433.9	5440.1	5488.9	5319.1
40°	7285.2	7303.4	7180.1	6942.0	6659.9	6199.6	5807.5	5899.2	5862.6	5944.4	5843.0
42.5°	7780.9	7817.6	7710.0	7590.4	7426.7	7021.4	6530.5	6514.6	6456.0	6499.9	6395.0
45°	8209.5	8240.1	8143.6	8115.5	8111.8	7827.3	7320.6	7225.3	7143.5	7134.9	7009.2
47.5°	8367.1	8425.7	8467.2	8561.2	8744.4	8624.7	8137.5	7989.8	7898.1	7831.0	7631.9
50°	8426.8	8489.2	8630.8	8904.4	9337.9	9389.1	8950.7	8784.7	8672.3	8550.2	8257.2
52.5°	8346.3	8457.4	8647.9	9108.3	9737.1	10002.2	9731.0	9585.7	9457.5	9258.4	8823.7
55°	7871.3	7982.4	8371.9	9105.8	9936.1	10431.9	10468.5	10403.9	10259.7	9946.0	9281.7
57.5°	6870.0	7034.8	7651.5	8795.6	9932.6	10802.0	11191.5	11237.9	11076.7	10627.3	9641.9
60°	5482.8	5706.3	6458.4	8108.2	9626.0	11002.2	11825.2	12057.3	11886.3	11298.9	9933.7
62.5°	3825.7	4084.6	4796.5	7031.2	8925.1	10858.1	12288.0	12716.7	12587.2	11899.7	10046.0
65°	2333.5	2416.5	2990.5	5532.8	7733.3	10254.9	12430.9	13073.2	13030.4	12267.3	9880.0
67.5°	1554.5	1624.1	1788.9	3794.0	6003.0	9049.6	12089.0	13010.9	13023.1	12207.4	9271.8
70°	936.5	996.4	1103.9	2206.5	3890.5	7163.0	11030.3	12217.2	12288.0	11407.6	8119.1
72.5°	385.9	426.2	523.9	1000.1	2014.8	4546.2	8783.4	10489.3	10654.2	9591.8	6231.3
75°	218.5	239.3	307.7	501.8	874.3	2118.7	5320.4	7446.3	7689.3	6611.0	3748.8
77.5°	145.3	155.1	199.1	324.8	492.1	722.9	2273.8	3879.4	4343.4	3610.9	1622.9
80°	97.7	106.2	136.7	217.4	319.9	310.2	724.2	1437.3	1768.1	1240.7	395.6
82.5°	65.9	67.1	97.7	142.9	202.7	150.2	213.7	446.9	561.7	359.1	150.2
85°	37.8	36.6	72.1	83.0	90.4	62.3	64.7	134.3	175.9	151.4	85.5
87.5°	4.9	7.3	28.1	21.9	12.2	13.4	13.4	23.2	34.2	36.6	18.3
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: P967735

CATALOG NUMBER: NAV-SB5A-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7	2118.7
2.5°	2121.0	2119.8	2116.2	2112.5	2104.0	2099.1	2101.6	2099.1	2097.9	2099.1	2104.0
5°	2136.9	2133.2	2123.5	2111.3	2094.2	2073.5	2060.0	2040.5	2022.1	2011.2	2013.6
7.5°	2179.7	2176.0	2162.5	2128.4	2073.5	1986.8	1907.4	1837.7	1785.2	1754.7	1755.9
10°	2248.0	2242.0	2221.2	2145.5	2001.4	1812.1	1654.6	1524.0	1438.5	1398.2	1394.5
12.5°	2328.7	2321.3	2284.7	2129.6	1864.7	1569.2	1351.8	1206.4	1127.1	1091.6	1088.0
15°	2423.9	2414.2	2342.1	2053.9	1665.6	1300.5	1101.5	992.7	941.5	909.7	910.9
17.5°	2542.3	2525.3	2384.9	1940.3	1449.5	1095.3	947.6	865.8	820.6	790.1	787.6
20°	2696.2	2668.1	2419.0	1804.8	1250.4	965.9	843.8	775.4	741.2	714.3	709.5
22.5°	2911.1	2870.8	2460.5	1658.2	1110.0	876.8	766.9	716.8	688.7	658.2	653.3
25°	3177.3	3129.7	2511.9	1522.7	1013.5	799.8	710.7	669.1	636.2	600.8	597.2
27.5°	3549.8	3464.3	2572.9	1411.6	930.5	733.9	659.4	612.9	575.1	545.8	539.8
30°	3964.9	3824.5	2626.6	1344.5	854.7	672.8	592.2	545.8	510.4	489.6	486.0
32.5°	4358.1	4167.6	2662.0	1315.2	786.4	603.2	519.0	468.9	442.1	435.9	439.6
35°	4729.3	4477.8	2658.3	1287.1	725.3	533.6	446.9	395.6	374.8	378.5	378.5
37.5°	5156.8	4808.7	2632.7	1243.1	675.3	470.2	384.7	339.5	321.1	322.4	327.3
40°	5653.7	5190.9	2616.8	1160.1	620.3	411.5	333.3	296.7	283.3	278.4	277.2
42.5°	6183.7	5560.9	2619.3	1066.0	552.0	359.1	298.0	267.4	255.2	251.5	250.3
45°	6716.1	5913.8	2623.0	968.3	479.9	318.7	272.3	246.6	239.3	234.4	234.4
47.5°	7216.7	6214.3	2554.6	863.4	409.1	288.2	251.5	234.4	228.4	222.2	222.2
50°	7683.2	6414.4	2389.7	741.2	352.9	263.7	235.6	223.4	217.4	211.3	211.3
52.5°	8045.9	6446.2	2117.4	615.4	313.9	245.5	225.9	214.9	207.6	201.5	200.3
55°	8207.1	6247.2	1730.3	498.3	283.3	229.6	216.2	205.1	196.6	190.4	189.3
57.5°	8165.6	5828.4	1349.3	400.6	254.0	213.7	204.0	196.6	186.9	177.0	175.9
60°	7961.7	5267.9	1017.2	333.3	227.1	196.6	190.4	184.4	171.0	156.3	153.9
62.5°	7608.8	4563.3	725.3	275.9	197.8	177.0	174.7	169.7	150.2	123.3	120.8
65°	7069.0	3707.3	488.4	229.6	169.7	155.1	156.3	147.8	122.1	91.5	89.2
67.5°	6280.2	2710.8	312.6	188.1	141.7	129.5	130.7	125.8	103.8	78.1	74.5
70°	5275.2	1795.1	204.0	142.9	113.6	100.1	107.4	108.6	87.9	63.4	61.1
72.5°	3867.2	1060.0	142.9	106.2	83.0	69.6	87.9	90.4	70.8	47.7	45.2
75°	2204.1	503.1	107.4	77.0	51.2	48.9	68.4	68.4	48.9	31.8	29.3
77.5°	925.6	210.0	75.7	50.0	29.3	28.1	46.4	42.7	24.4	14.7	14.7
80°	267.4	94.0	40.3	24.4	12.2	11.0	18.3	13.4	6.1	2.5	2.5
82.5°	105.1	41.5	15.9	9.7	4.9	4.9	2.5	0.0	0.0	0.0	0.0
85°	62.3	17.1	7.3	3.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.9	3.7	2.5	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)