

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: P967856

Luminaire Tested: **NAV-SB5A-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967856
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-SB5A-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA 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: 15435.5 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

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

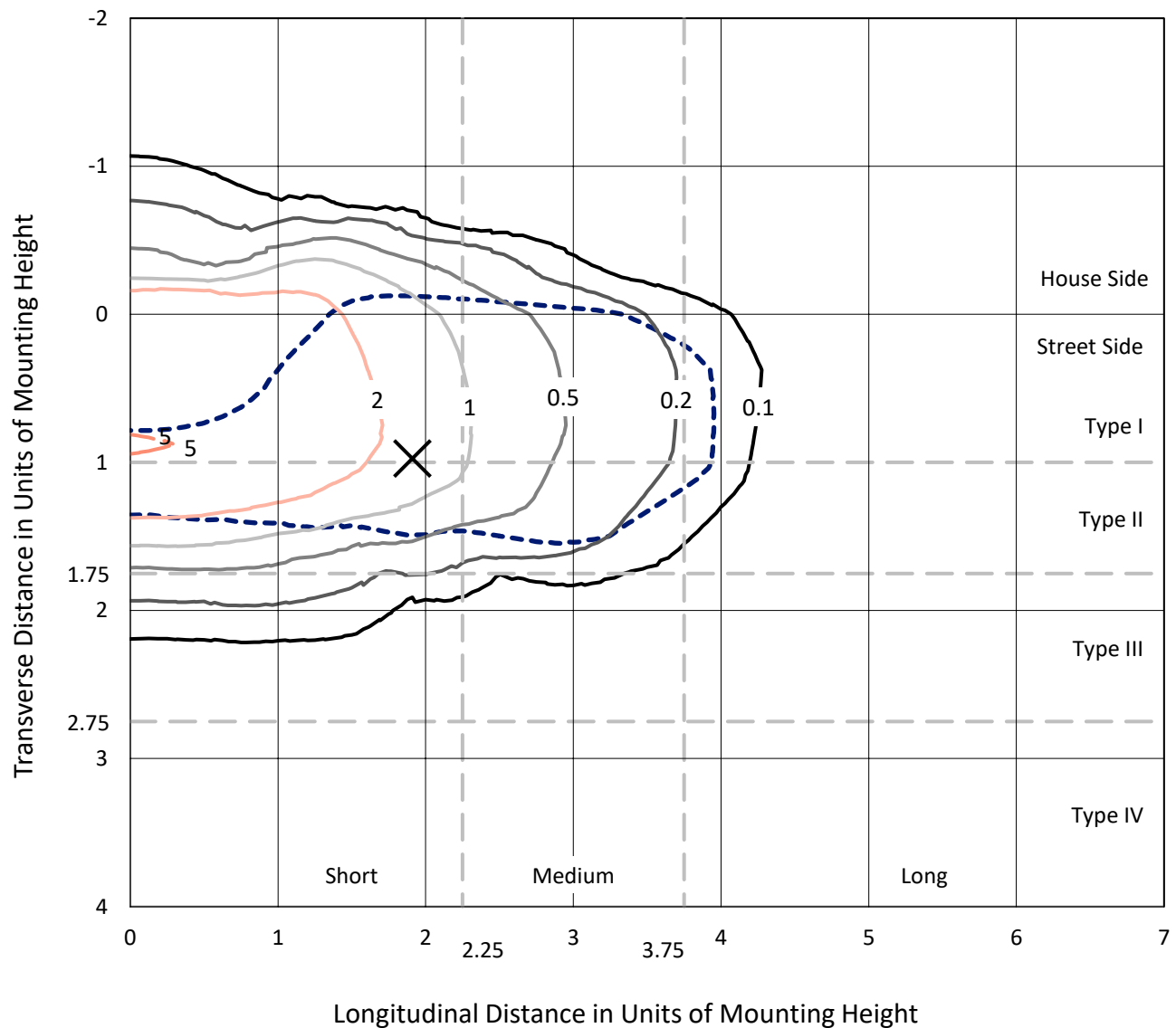


REPORT NUMBER: P967856

CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

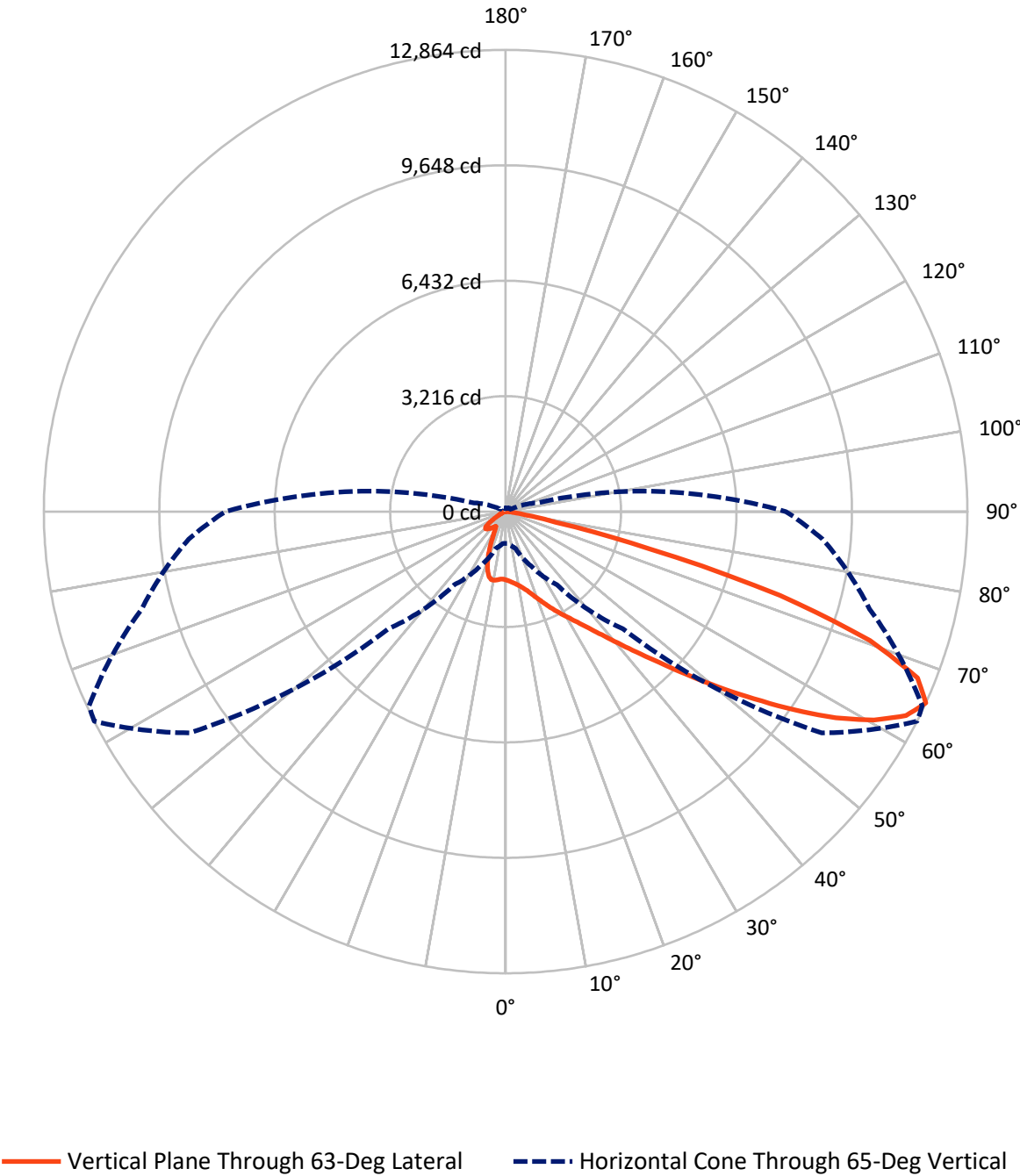
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
Type II - Short - N/A

REPORT NUMBER: P967856
CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967856

CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

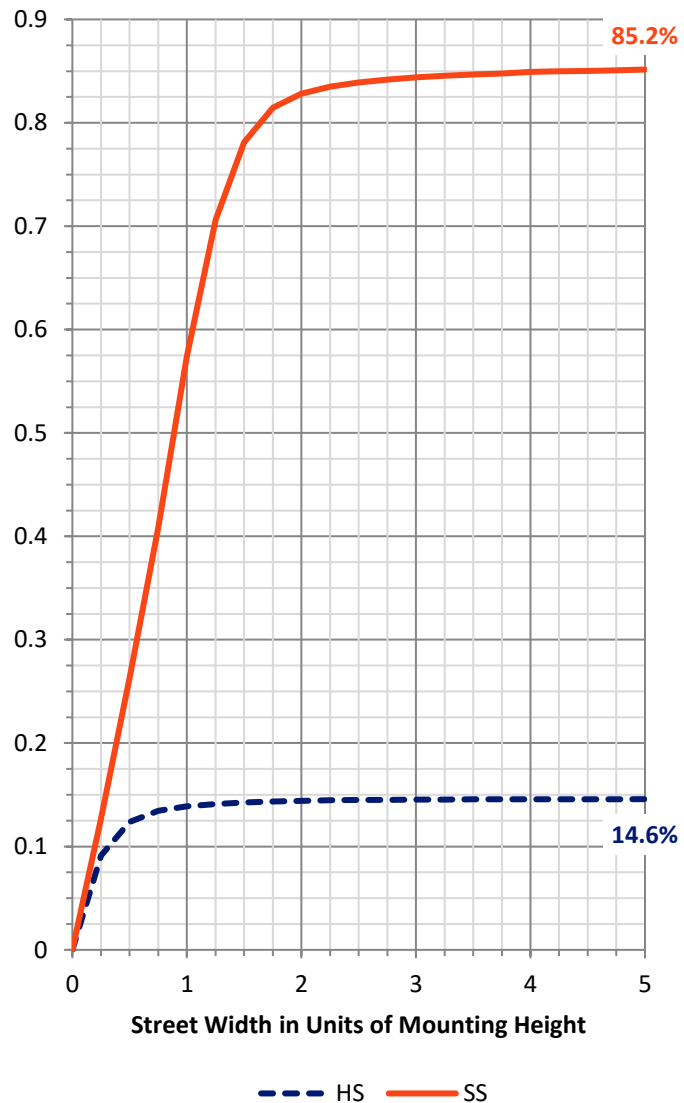
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2268.9	0.0	2268.9
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	13166.6	0.0	13166.6
	% Fixture	85.3	0.0	85.3
Total	Lumens	15435.5	0.0	15435.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.5	1.2
10°-20°	498.0	3.2
20°-30°	867.2	5.6
30°-40°	1563.0	10.1
40°-50°	3099.9	20.1
50°-60°	4222.6	27.4
60°-70°	3370.5	21.8
70°-80°	1525.2	9.9
80°-90°	109.6	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°	15435.5	100.0
0°-180°	15435.5	100.0

Coefficient of Utilization



REPORT NUMBER: P967856

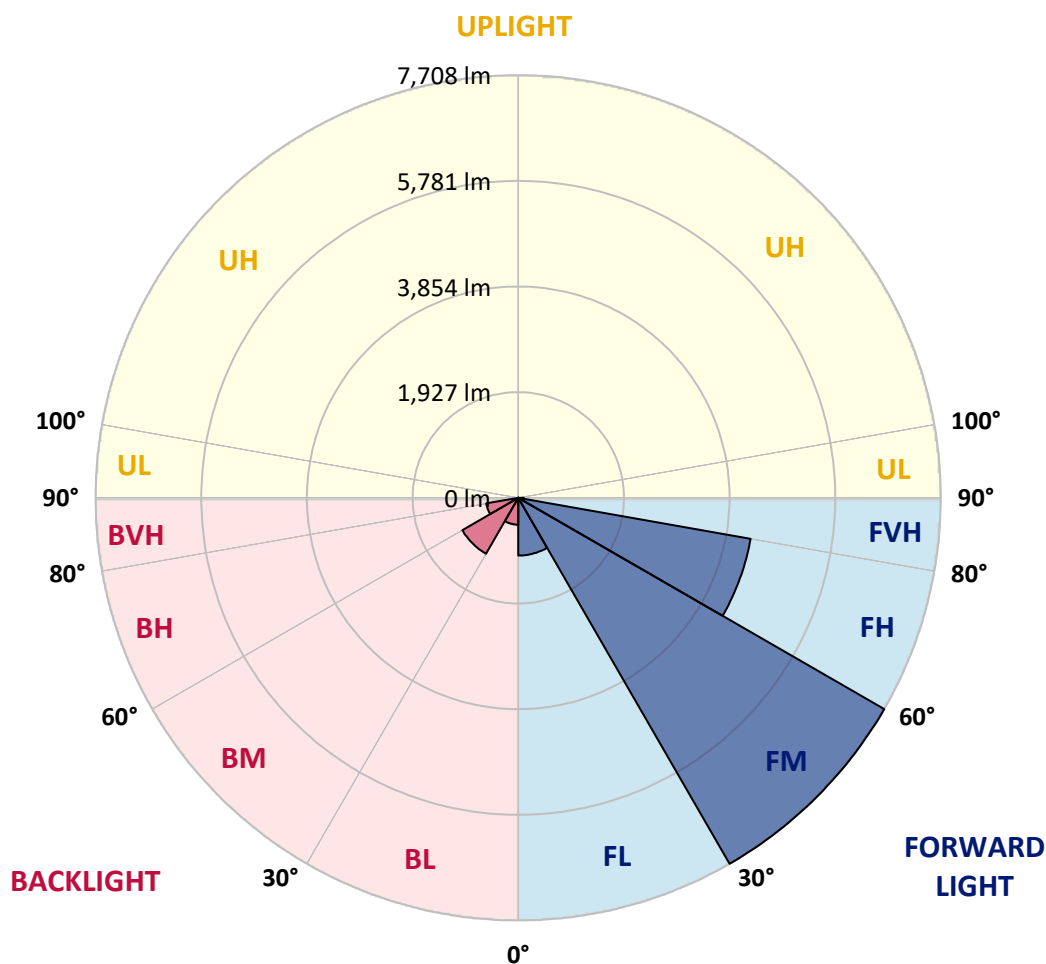
CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1053.7	6.8			
FM	(30°-60°)	7708.1	49.9			
FH	(60°-80°)	4303.3	27.9			G2/5000
FVH	(80°-90°)	101.5	0.7			G2/225
BL	(0°-30°)	491.0	3.2	B1/500		
BM	(30°-60°)	1177.4	7.6	B2/2500		
BH	(60°-80°)	592.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	8.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P967856

CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1
2.5°	1949.7	1944.3	1951.7	1948.5	1946.5	1942.2	1940.1	1938.0	1933.7	1930.5	1917.8
5°	1955.0	1951.7	1959.2	1965.5	1971.9	1978.2	1981.5	1985.7	1981.5	1973.0	1960.2
7.5°	1910.3	1908.2	1924.1	1943.3	1971.9	1996.4	2022.9	2037.8	2038.8	2035.6	2021.8
10°	1907.1	1901.9	1917.8	1941.1	1978.2	2021.8	2068.6	2100.4	2104.6	2118.5	2103.6
12.5°	1957.0	1951.7	1974.0	1999.6	2037.8	2083.4	2140.8	2185.4	2191.8	2210.8	2200.3
15°	2041.0	2033.5	2059.0	2091.9	2140.8	2192.8	2253.4	2293.6	2299.0	2322.3	2303.3
17.5°	2138.7	2131.2	2160.9	2196.0	2249.1	2320.2	2390.3	2434.9	2441.2	2456.1	2421.2
20°	2263.9	2254.4	2277.8	2309.6	2365.9	2450.9	2534.7	2598.5	2597.4	2597.4	2540.1
22.5°	2409.5	2394.6	2414.7	2440.2	2493.3	2596.3	2707.8	2783.2	2783.2	2753.5	2659.0
25°	2565.6	2550.6	2573.0	2596.3	2643.1	2759.8	2890.5	2983.9	2988.2	2937.1	2786.4
27.5°	2760.9	2741.8	2758.8	2786.4	2814.0	2932.9	3088.0	3196.3	3198.4	3119.8	2907.4
30°	3136.8	3082.7	3029.6	2999.9	3012.6	3130.5	3296.1	3416.1	3426.7	3318.4	3039.1
32.5°	3824.9	3814.3	3627.4	3383.2	3255.7	3342.8	3528.7	3673.1	3679.4	3540.4	3210.1
35°	4894.3	4881.5	4581.0	4115.9	3700.7	3627.4	3811.2	3982.1	3977.8	3820.7	3432.0
37.5°	6170.6	6158.9	5762.9	5140.6	4468.4	4057.5	4175.3	4354.8	4381.4	4175.3	3718.7
40°	7261.2	7217.6	6967.0	6367.1	5487.8	4771.1	4693.6	4812.5	4840.0	4595.9	4083.0
42.5°	8087.4	8050.1	7922.7	7547.9	6721.7	5826.6	5304.2	5349.8	5380.6	5087.5	4501.4
45°	8515.3	8506.8	8557.7	8522.8	7979.0	7122.1	6177.1	5986.9	5998.6	5632.3	4976.0
47.5°	8575.9	8571.6	8804.1	9133.3	9060.1	8583.2	7297.3	6781.2	6739.8	6247.1	5492.1
50°	8219.1	8210.6	8656.5	9273.5	9782.1	9810.8	8569.4	7676.4	7585.1	6883.2	6030.5
52.5°	7079.6	7077.5	7810.2	8837.0	10035.9	10885.4	9826.7	8659.7	8506.8	7556.4	6599.7
55°	5447.5	5486.8	6326.7	7540.5	9572.9	11402.6	10955.5	9751.3	9516.6	8233.9	7124.3
57.5°	3858.9	3916.2	4746.7	5827.6	8137.3	11096.8	11719.0	10845.1	10592.3	8909.3	7656.2
60°	2072.9	2123.8	2955.3	4245.4	6053.9	9956.2	12121.4	11794.4	11555.4	9550.6	8136.2
62.5°	1235.0	1251.9	1596.0	2740.7	4094.7	7606.3	11950.5	12517.5	12321.1	10089.0	8553.5
65°	886.7	889.9	1062.9	1673.5	2485.9	4621.3	10751.6	12863.7	12803.2	10494.7	8862.6
67.5°	746.5	744.4	816.6	1111.8	1693.7	2315.0	8240.3	12374.2	12631.2	10751.6	9037.7
70°	640.3	643.5	728.5	814.5	1273.3	1310.4	4096.7	10773.9	11321.8	10819.6	9027.1
72.5°	476.8	487.4	566.0	742.3	961.0	901.6	1414.4	7988.5	8979.3	10194.1	8558.9
75°	336.6	341.9	398.2	624.4	716.8	656.2	722.1	4129.7	5399.7	7815.5	7005.3
77.5°	259.1	268.7	301.6	436.4	706.1	460.8	441.8	1429.3	2196.0	4721.2	4802.9
80°	140.2	157.1	217.7	315.4	495.9	326.0	218.7	569.2	744.4	2207.6	1852.0
82.5°	72.2	80.7	151.8	227.2	282.5	284.5	108.3	236.8	306.9	681.7	253.8
85°	28.7	35.1	102.0	125.3	145.4	140.2	48.9	95.5	110.4	189.0	77.5
87.5°	6.4	10.7	37.2	28.7	27.6	29.7	11.7	22.3	21.2	22.3	13.8
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: P967856

CATALOG NUMBER: NAV-SB5A-827-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1	1905.1
2.5°	1916.7	1912.4	1900.8	1888.0	1873.2	1864.7	1859.4	1858.3	1850.8	1845.5	1850.8
5°	1948.5	1944.3	1922.0	1895.4	1866.8	1844.5	1823.3	1804.1	1776.5	1771.2	1769.2
7.5°	2012.3	2000.6	1964.5	1928.4	1874.2	1809.4	1730.9	1640.6	1559.9	1535.4	1523.8
10°	2090.9	2074.9	2029.3	1965.5	1845.5	1669.3	1479.2	1303.0	1162.8	1123.5	1108.6
12.5°	2180.1	2166.2	2105.8	1987.9	1725.6	1406.0	1115.0	896.3	760.3	726.3	716.8
15°	2286.3	2266.1	2182.2	1953.9	1511.1	1068.3	765.6	636.1	587.2	580.9	574.5
17.5°	2398.8	2365.9	2250.2	1831.8	1222.2	759.2	591.4	554.3	533.1	526.7	523.5
20°	2501.8	2459.4	2290.5	1647.0	913.3	591.4	529.9	505.4	486.4	478.9	474.7
22.5°	2604.8	2544.3	2290.5	1395.3	684.9	524.6	486.4	464.0	441.8	432.1	426.9
25°	2712.0	2631.4	2250.2	1115.0	551.1	481.0	445.0	420.6	401.4	389.7	385.5
27.5°	2816.1	2704.7	2157.7	849.5	490.6	442.8	406.7	383.3	365.3	356.8	356.8
30°	2914.9	2776.8	2028.2	644.5	451.3	405.6	371.7	351.5	333.4	324.9	326.0
32.5°	3048.7	2868.2	1890.2	528.8	417.3	370.6	339.8	320.7	304.7	298.4	298.4
35°	3234.5	3003.0	1771.2	519.3	388.7	341.9	311.1	293.0	277.2	271.8	271.8
37.5°	3497.8	3220.8	1708.6	583.0	365.3	316.4	287.8	268.7	253.8	249.6	248.5
40°	3822.8	3516.0	1742.6	646.7	349.3	294.2	266.5	247.4	234.7	229.4	228.3
42.5°	4208.2	3880.1	1930.5	695.6	338.8	275.0	246.3	225.1	216.6	214.5	214.5
45°	4651.0	4280.5	2218.3	747.5	321.7	257.0	226.2	210.2	203.9	202.8	201.7
47.5°	5154.4	4720.1	2551.7	812.3	304.7	240.0	210.2	199.7	194.3	192.2	192.2
50°	5653.5	5162.9	2894.7	848.5	291.0	224.1	197.5	189.0	184.8	183.7	183.7
52.5°	6175.9	5618.4	3171.9	814.5	279.3	211.4	186.9	180.5	176.3	175.2	175.2
55°	6674.0	5986.9	3219.6	691.3	255.9	198.5	175.2	172.0	166.8	166.8	165.6
57.5°	7102.9	6171.7	2882.0	507.6	232.6	179.5	163.5	160.3	156.1	155.1	154.0
60°	7497.0	6118.6	2224.7	341.9	207.0	160.3	148.6	146.6	142.3	136.9	135.9
62.5°	7718.9	5885.0	1521.7	223.0	181.6	140.2	131.7	130.6	121.1	110.4	108.3
65°	7802.8	5405.0	949.4	162.5	151.8	120.0	113.7	111.5	97.7	86.0	85.0
67.5°	7729.5	4615.0	478.9	128.5	120.0	99.8	93.5	93.5	83.8	73.3	72.2
70°	7436.4	3459.7	201.7	103.0	92.4	76.5	76.5	80.7	71.1	59.4	58.4
72.5°	6800.4	2327.7	107.2	78.6	69.0	54.1	62.6	65.8	56.3	44.6	44.6
75°	5406.1	1419.7	74.3	58.4	43.6	38.2	47.8	49.9	38.2	29.7	28.7
77.5°	3697.5	815.5	49.9	37.2	27.6	22.3	32.9	30.7	20.2	13.8	14.9
80°	1623.6	339.8	28.7	17.0	10.7	8.5	11.7	8.5	6.4	4.2	4.2
82.5°	190.0	79.6	10.7	6.4	4.2	2.2	1.0	0.0	0.0	0.0	0.0
85°	39.3	9.5	5.3	2.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	2.2	1.0	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)