

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: P967887

Luminaire Tested: **NAV-SB5A-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967887
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-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 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: 15950 lumens
Efficiency: N/A
Efficacy: 112.6 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



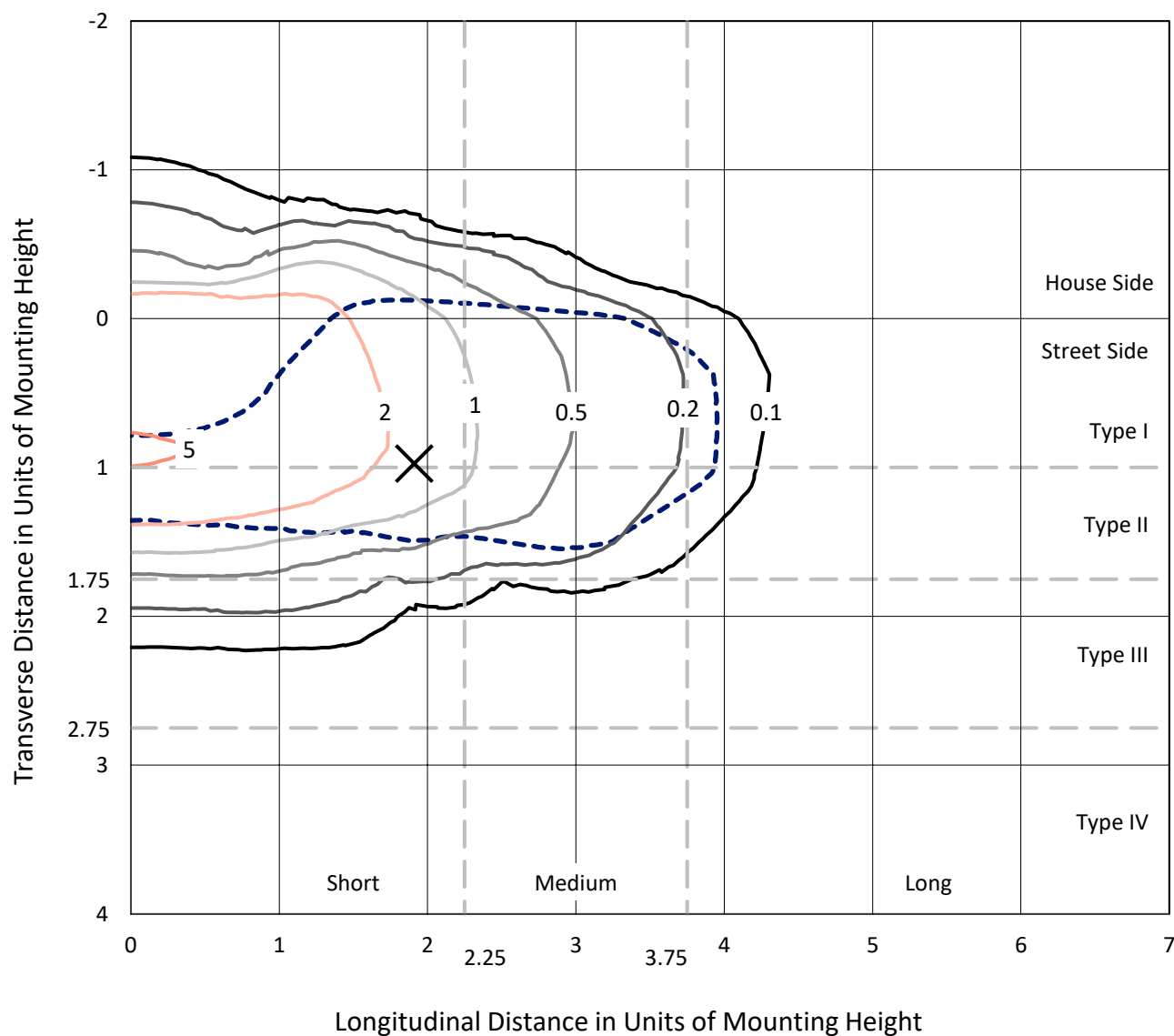
REPORT NUMBER: P967887

CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

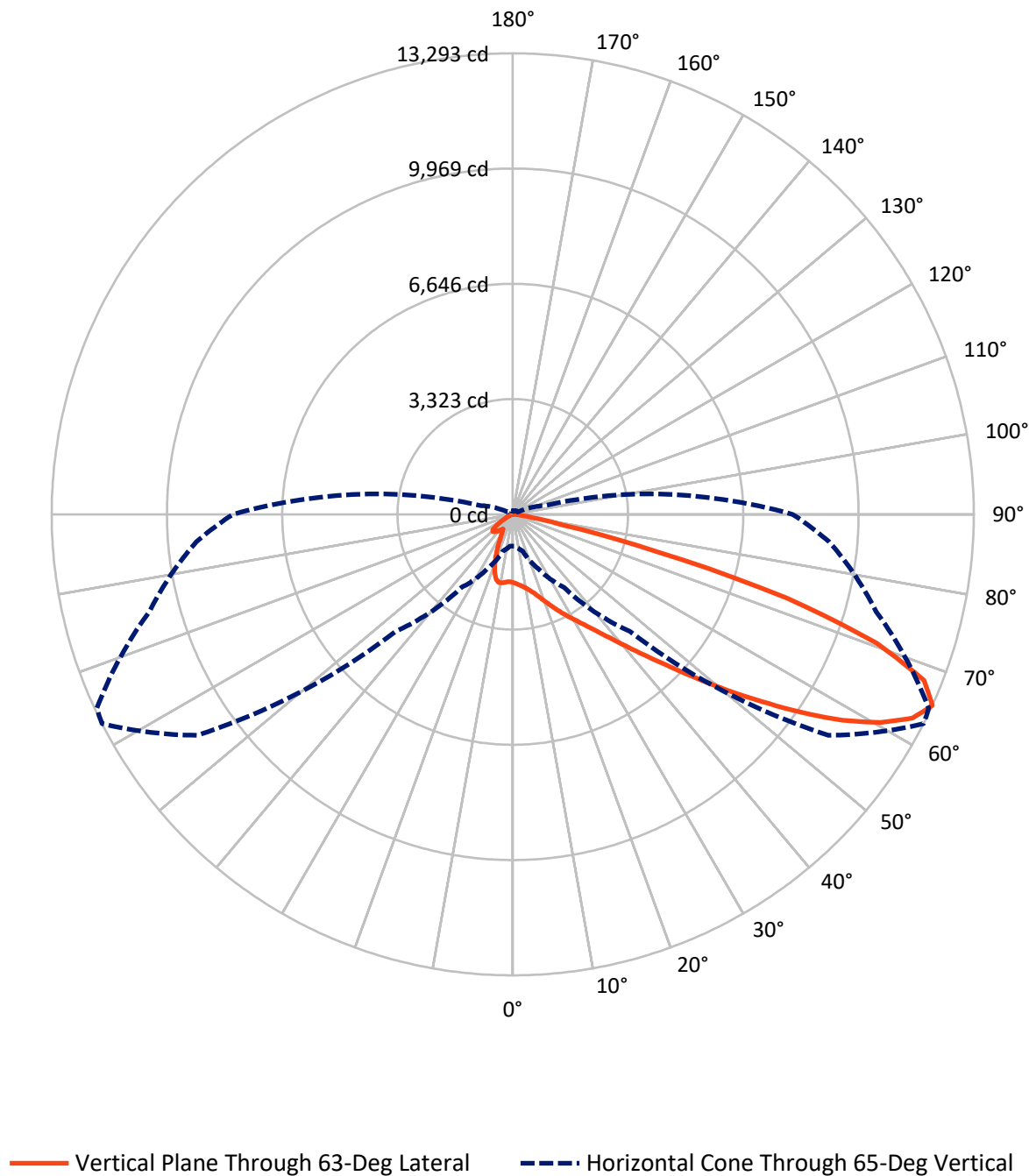


Based on 25 foot mounting height. Maximum calculated value = 5.4 fc

Type II - Short - N/A

REPORT NUMBER: P967887
CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967887

CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

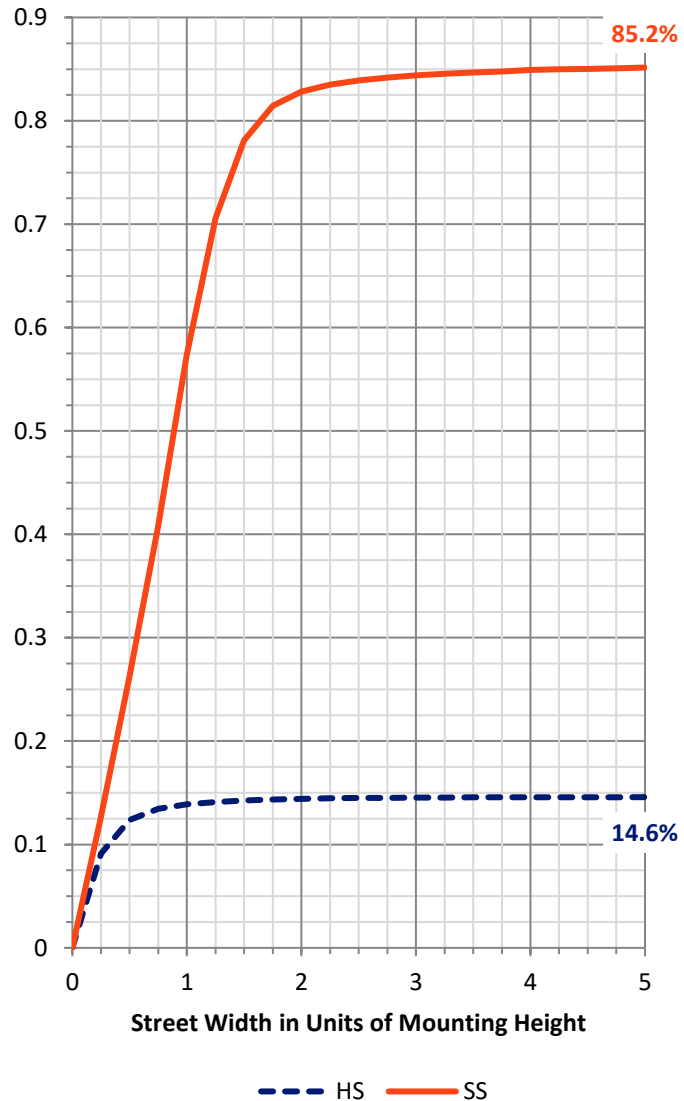
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2344.5	0.0	2344.5
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	13605.5	0.0	13605.5
	% Fixture	85.3	0.0	85.3
Total	Lumens	15950.0	0.0	15950.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	1.2
10°-20°	514.6	3.2
20°-30°	896.1	5.6
30°-40°	1615.1	10.1
40°-50°	3203.3	20.1
50°-60°	4363.4	27.4
60°-70°	3482.8	21.8
70°-80°	1576.0	9.9
80°-90°	113.3	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°	15950.0	100.0
0°-180°	15950.0	100.0

Coefficient of Utilization



REPORT NUMBER: P967887

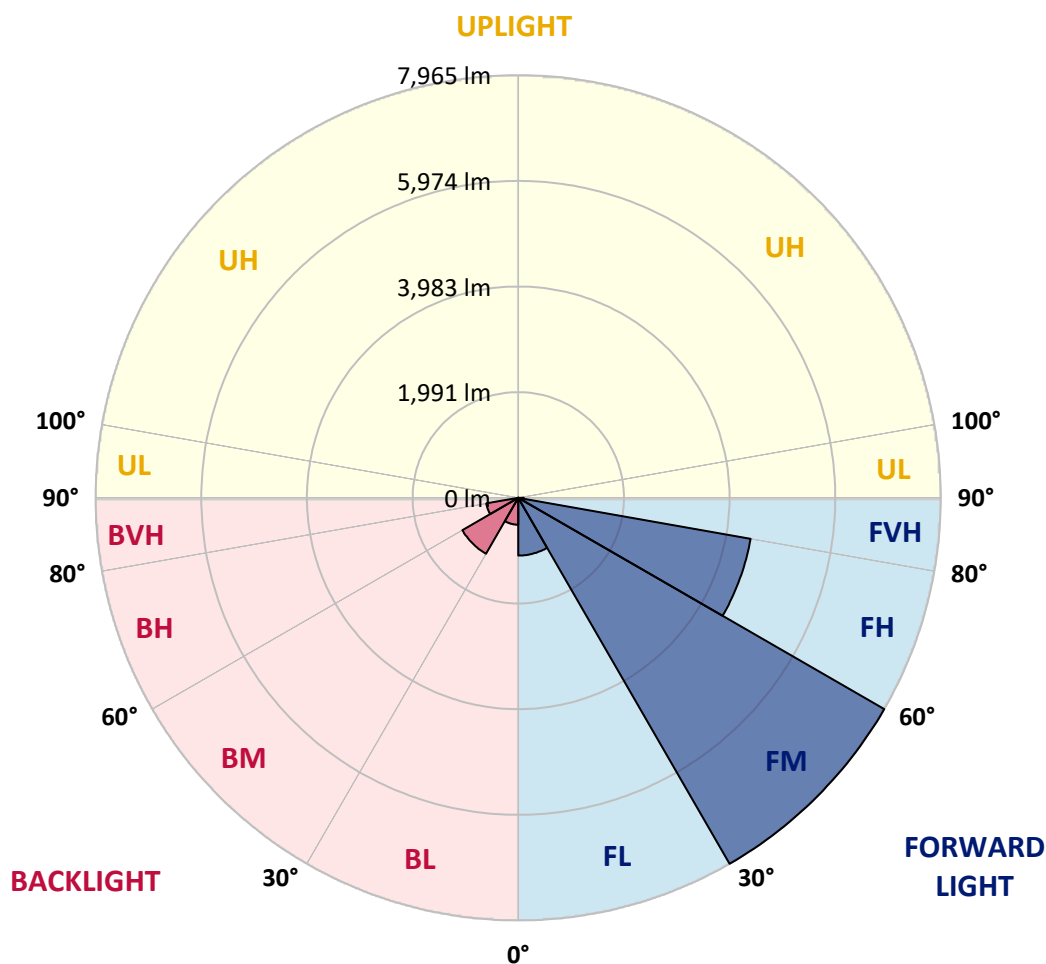
CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1088.8	6.8			
FM	(30°-60°)	7965.0	49.9			
FH	(60°-80°)	4446.8	27.9			G2/5000
FVH	(80°-90°)	104.9	0.7			G2/225
BL	(0°-30°)	507.4	3.2	B2/1000		
BM	(30°-60°)	1216.7	7.6	B2/2500		
BH	(60°-80°)	612.1	3.8	B2/1000		G2/1000
BVH	(80°-90°)	8.4	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: P967887

CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5
2.5°	2014.6	2009.1	2016.8	2013.5	2011.4	2007.0	2004.7	2002.5	1998.1	1994.9	1981.7
5°	2020.1	2016.8	2024.5	2031.0	2037.7	2044.3	2047.5	2051.9	2047.5	2038.7	2025.6
7.5°	1974.0	1971.8	1988.3	2008.1	2037.7	2062.9	2090.3	2105.7	2106.8	2103.5	2089.3
10°	1970.8	1965.2	1981.7	2005.8	2044.3	2089.3	2137.5	2170.4	2174.8	2189.1	2173.7
12.5°	2022.3	2016.8	2039.9	2066.2	2105.7	2152.9	2212.2	2258.2	2264.8	2284.5	2273.6
15°	2108.9	2101.4	2127.6	2161.6	2212.2	2265.9	2328.5	2370.1	2375.6	2399.7	2380.0
17.5°	2209.9	2202.2	2233.0	2269.1	2324.1	2397.6	2470.0	2516.1	2522.6	2538.0	2501.8
20°	2339.5	2329.5	2353.7	2386.6	2444.7	2532.6	2619.2	2685.1	2684.0	2684.0	2624.7
22.5°	2489.7	2474.4	2495.3	2521.6	2576.4	2682.8	2798.0	2875.9	2875.9	2845.3	2747.6
25°	2651.1	2635.7	2658.7	2682.8	2731.1	2851.9	2986.8	3083.4	3087.8	3035.1	2879.3
27.5°	2853.0	2833.2	2850.7	2879.3	2907.8	3030.7	3190.9	3302.9	3305.0	3223.8	3004.4
30°	3241.4	3185.4	3130.6	3099.8	3113.0	3234.8	3406.0	3530.0	3541.0	3429.0	3140.4
32.5°	3952.4	3941.4	3748.3	3496.0	3364.3	3454.2	3646.3	3795.5	3802.1	3658.3	3317.1
35°	5057.3	5044.2	4733.7	4253.1	3824.1	3748.3	3938.2	4114.9	4110.5	3948.0	3546.4
37.5°	6376.3	6364.2	5954.9	5312.0	4617.4	4192.8	4314.5	4500.0	4527.4	4314.5	3842.7
40°	7503.2	7458.3	7199.3	6579.4	5670.8	4930.1	4850.0	4972.9	5001.5	4749.0	4219.1
42.5°	8356.9	8318.5	8186.9	7799.5	6945.8	6020.8	5481.0	5528.1	5559.9	5257.1	4651.4
45°	8799.1	8790.4	8843.1	8806.8	8245.0	7359.5	6382.9	6186.5	6198.6	5820.1	5141.9
47.5°	8861.7	8857.3	9097.6	9437.8	9362.0	8869.4	7540.5	7007.3	6964.5	6455.3	5675.2
50°	8493.0	8484.2	8945.1	9582.6	10108.2	10137.9	8855.1	7932.3	7838.0	7112.6	6231.5
52.5°	7315.6	7313.4	8070.5	9131.6	10370.4	11248.2	10154.3	8948.4	8790.4	7808.3	6819.6
55°	5629.1	5669.7	6537.7	7791.8	9892.1	11782.7	11320.7	10076.4	9833.8	8508.3	7361.8
57.5°	3987.6	4046.8	4904.8	6021.9	8408.5	11466.7	12109.7	11206.6	10945.5	9206.2	7911.5
60°	2141.9	2194.5	3053.8	4387.0	6255.7	10288.1	12525.5	12187.6	11940.7	9869.0	8407.5
62.5°	1276.1	1293.7	1649.2	2832.1	4231.1	7859.9	12348.9	12934.8	12731.8	10425.4	8838.7
65°	916.2	919.5	1098.4	1729.3	2568.8	4775.4	11110.1	13292.5	13230.0	10844.5	9158.0
67.5°	771.4	769.2	843.8	1148.8	1750.2	2392.0	8515.0	12786.7	13052.2	11110.1	9339.0
70°	661.6	664.9	752.8	841.6	1315.7	1354.0	4233.4	11133.0	11699.2	11180.3	9328.0
72.5°	492.7	503.7	584.9	767.0	993.0	931.6	1461.5	8254.9	9278.7	10533.9	8844.1
75°	347.9	353.3	411.4	645.2	740.7	678.1	746.2	4267.4	5579.7	8076.1	7238.9
77.5°	267.7	277.6	311.6	451.0	729.7	476.2	456.4	1476.9	2269.1	4878.6	4963.0
80°	144.8	162.4	225.0	325.8	512.4	336.9	226.0	588.1	769.2	2281.2	1913.7
82.5°	74.6	83.4	156.9	234.8	291.9	294.1	111.9	244.7	317.1	704.5	262.3
85°	29.6	36.2	105.4	129.5	150.4	144.8	50.4	98.7	114.1	195.4	80.1
87.5°	6.6	11.0	38.4	29.6	28.5	30.7	12.1	23.1	21.9	23.1	14.2
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: P967887

CATALOG NUMBER: NAV-SB5A-830-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5	1968.5
2.5°	1980.6	1976.2	1964.1	1951.0	1935.6	1926.8	1921.4	1920.2	1912.5	1907.1	1912.5
5°	2013.5	2009.1	1986.0	1958.7	1929.0	1906.0	1884.1	1864.3	1835.8	1830.2	1828.1
7.5°	2079.3	2067.3	2030.0	1992.7	1936.7	1869.8	1788.6	1695.4	1611.9	1586.7	1574.6
10°	2160.6	2144.1	2096.9	2031.0	1907.1	1725.0	1528.5	1346.3	1201.5	1160.9	1145.5
12.5°	2252.7	2238.5	2176.0	2054.1	1783.1	1452.8	1152.2	926.1	785.7	750.5	740.7
15°	2362.4	2341.6	2254.9	2019.0	1561.5	1103.8	791.1	657.2	606.8	600.2	593.7
17.5°	2478.8	2444.7	2325.1	1892.9	1263.0	784.5	611.2	572.8	550.8	544.3	541.0
20°	2585.3	2541.3	2366.8	1701.9	943.7	611.2	547.6	522.3	502.6	494.9	490.5
22.5°	2691.6	2629.1	2366.8	1441.9	707.8	542.0	502.6	479.5	456.4	446.6	441.2
25°	2802.5	2719.1	2325.1	1152.2	569.5	497.0	459.7	434.5	414.8	402.7	398.3
27.5°	2910.0	2794.8	2229.7	877.8	507.0	457.6	420.2	396.2	377.5	368.7	368.7
30°	3012.1	2869.4	2095.8	666.0	466.4	419.1	384.1	363.2	344.5	335.8	336.9
32.5°	3150.3	2963.8	1953.1	546.4	431.2	382.9	351.2	331.4	314.9	308.3	308.3
35°	3342.3	3103.1	1830.2	536.6	401.6	353.3	321.5	302.9	286.4	281.0	281.0
37.5°	3614.5	3328.1	1765.6	602.4	377.5	327.0	297.4	277.6	262.3	257.9	256.8
40°	3950.2	3633.1	1800.6	668.2	361.0	303.9	275.4	255.6	242.5	237.0	236.0
42.5°	4348.6	4009.5	1994.9	718.7	350.0	284.2	254.6	232.7	223.9	221.6	221.6
45°	4806.1	4423.2	2292.2	772.4	332.5	265.6	233.7	217.3	210.6	209.6	208.5
47.5°	5326.2	4877.5	2636.8	839.5	314.9	247.9	217.3	206.3	200.8	198.6	198.6
50°	5842.0	5335.0	2991.3	876.7	300.6	231.5	204.1	195.4	191.0	189.8	189.8
52.5°	6381.9	5805.7	3277.6	841.6	288.5	218.3	193.1	186.5	182.1	181.0	181.0
55°	6896.4	6186.5	3326.9	714.3	264.4	205.2	181.0	177.7	172.3	172.3	171.2
57.5°	7339.7	6377.4	2978.0	524.5	240.3	185.4	169.0	165.6	161.3	160.2	159.1
60°	7746.8	6322.6	2298.8	353.3	214.0	165.6	153.6	151.4	147.1	141.6	140.4
62.5°	7976.1	6081.1	1572.5	230.4	187.7	144.8	136.0	135.0	125.0	114.1	111.9
65°	8062.9	5585.2	980.9	167.9	156.9	124.0	117.4	115.2	101.0	88.9	87.7
67.5°	7987.1	4768.8	494.9	132.7	124.0	103.1	96.6	96.6	86.7	75.7	74.6
70°	7684.3	3575.0	208.5	106.4	95.4	79.0	79.0	83.4	73.5	61.4	60.4
72.5°	7027.0	2405.3	110.8	81.2	71.3	56.0	64.8	68.1	58.1	46.1	46.1
75°	5586.2	1467.1	76.8	60.4	45.0	39.5	49.4	51.6	39.5	30.7	29.6
77.5°	3820.8	842.8	51.6	38.4	28.5	23.1	34.0	31.8	20.8	14.2	15.4
80°	1677.7	351.2	29.6	17.5	11.0	8.8	12.1	8.8	6.6	4.4	4.4
82.5°	196.4	82.3	11.0	6.6	4.4	2.2	1.1	0.0	0.0	0.0	0.0
85°	40.6	9.8	5.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	2.2	1.1	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)