

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: P970004

Luminaire Tested: **NAV-SB6A-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6A-830-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19298.7 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

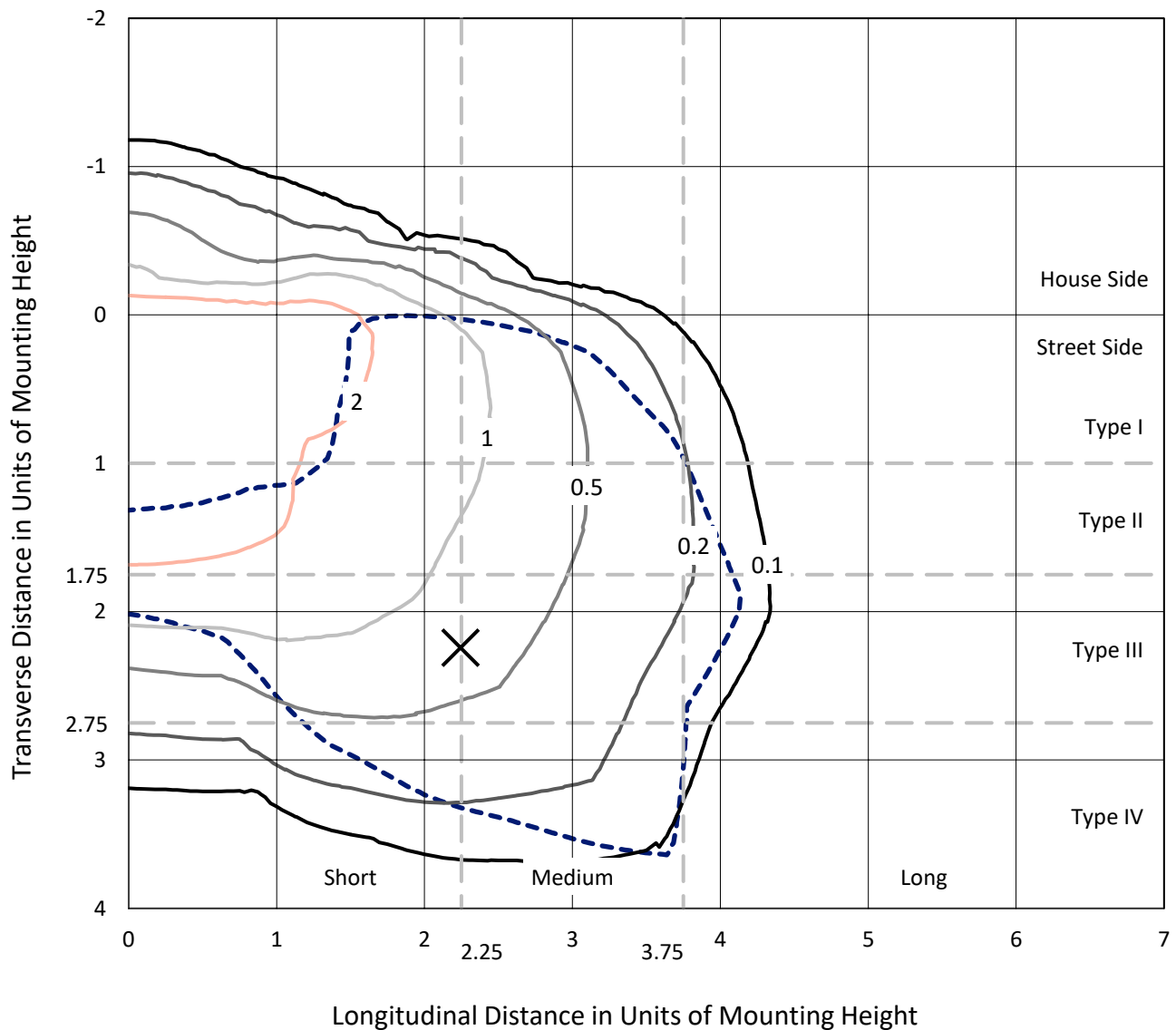
Input Watts (W): 170.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P970004
CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

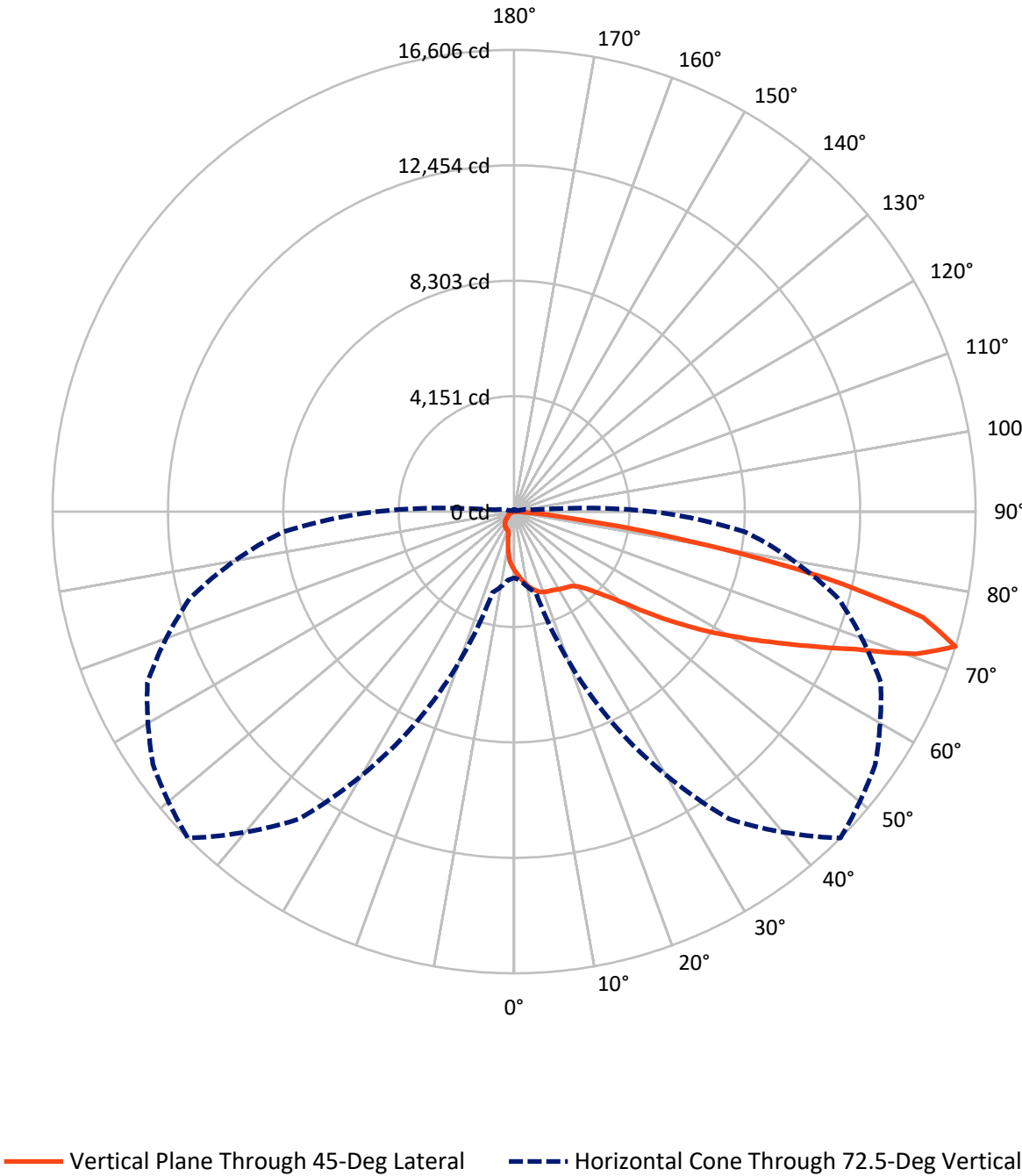
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type IV - Short - N/A

REPORT NUMBER: P970004
CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P970004

CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

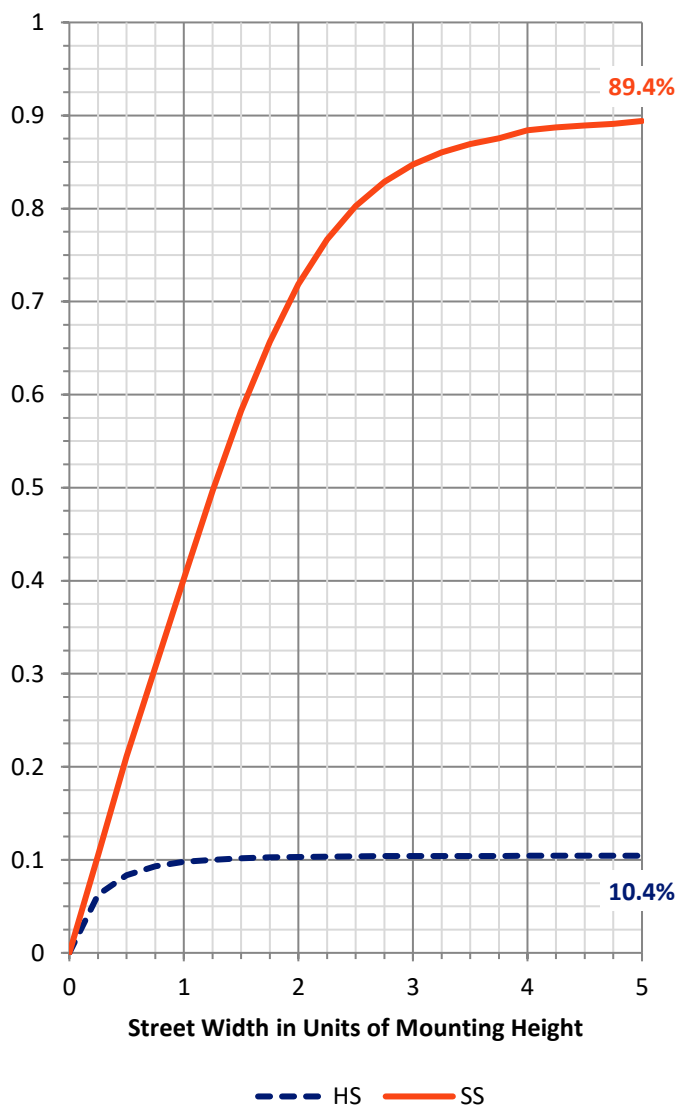
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2027.8	0.0	2027.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	17270.9	0.0	17270.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	19298.7	0.0	19298.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.2	1.0
10°-20°	582.2	3.0
20°-30°	956.0	5.0
30°-40°	1355.9	7.0
40°-50°	2241.1	11.6
50°-60°	4025.9	20.9
60°-70°	5590.2	29.0
70°-80°	4055.0	21.0
80°-90°	293.2	1.5
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°	19298.7	100.0
0°-180°	19298.7	100.0

Coefficient of Utilization



REPORT NUMBER: P970004

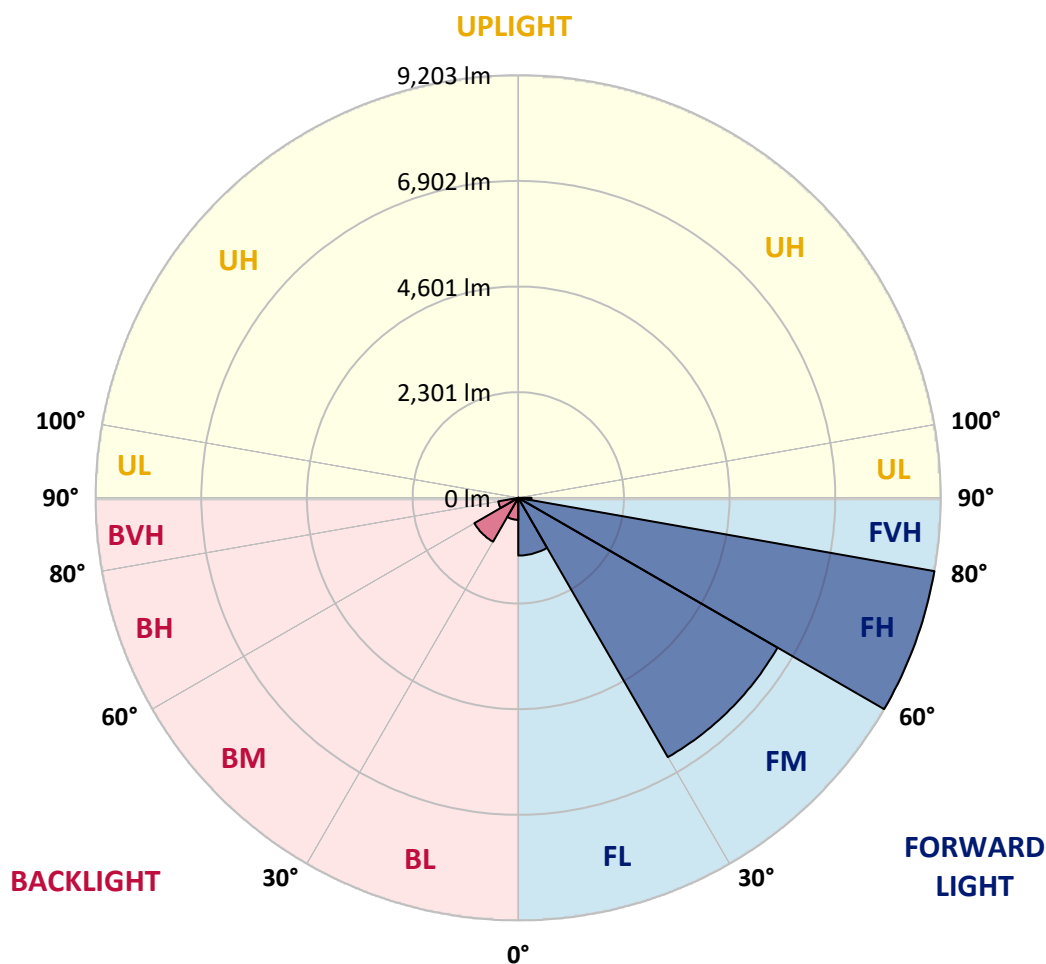
CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1257.1	6.5			
FM	(30°-60°)	6520.1	33.8			
FH	(60°-80°)	9203.0	47.7			G4/12000
FVH	(80°-90°)	290.7	1.5			G3/500
BL	(0°-30°)	480.3	2.5	B1/500		
BM	(30°-60°)	1102.8	5.7	B2/2500		
BH	(60°-80°)	442.2	2.3	B1/500		G1/500
BVH	(80°-90°)	2.5	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-G4

Type IV Short



REPORT NUMBER: P970004

CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2
2.5°	2309.1	2313.1	2310.5	2294.7	2268.3	2253.9	2246.0	2219.6	2202.5	2172.2	2140.6
5°	2521.3	2537.1	2527.9	2496.2	2446.2	2410.6	2400.0	2346.0	2297.3	2240.6	2174.8
7.5°	2746.5	2754.4	2737.3	2696.5	2629.2	2568.6	2559.4	2484.4	2406.6	2319.7	2230.1
10°	2941.4	2950.7	2924.3	2865.1	2788.6	2713.6	2700.4	2617.4	2525.2	2418.5	2303.9
12.5°	3104.8	3114.1	3079.8	3008.7	2924.3	2846.6	2833.4	2746.5	2645.1	2526.5	2384.3
15°	3228.6	3245.8	3199.6	3123.3	3032.4	2954.7	2948.0	2862.4	2763.6	2631.9	2480.4
17.5°	3301.1	3318.2	3274.8	3182.5	3104.8	3038.9	3031.0	2959.9	2867.6	2741.3	2574.0
20°	3312.9	3328.7	3282.7	3202.3	3137.7	3085.0	3081.0	3029.7	2962.6	2841.3	2675.4
22.5°	3277.3	3297.1	3255.0	3190.4	3145.6	3117.9	3112.7	3083.7	3045.5	2942.8	2770.2
25°	3240.4	3256.3	3224.6	3168.1	3144.3	3141.7	3145.6	3140.4	3132.5	3045.5	2880.9
27.5°	3237.9	3255.0	3219.4	3165.4	3152.2	3179.9	3183.9	3208.9	3215.4	3139.1	2987.6
30°	3260.2	3272.1	3237.9	3181.2	3174.6	3237.9	3239.2	3284.0	3294.5	3218.1	3092.9
32.5°	3309.0	3322.1	3287.9	3204.9	3195.6	3284.0	3287.9	3347.1	3364.3	3302.3	3203.6
35°	3423.6	3439.4	3399.8	3270.8	3237.9	3327.5	3339.2	3409.0	3443.4	3391.9	3318.2
37.5°	3709.5	3663.4	3609.3	3403.8	3334.0	3395.9	3415.7	3497.3	3558.0	3498.6	3455.2
40°	4419.4	4274.6	4105.9	3630.3	3502.6	3542.1	3558.0	3639.6	3722.6	3664.7	3643.6
42.5°	5485.1	5313.8	5042.5	4152.1	3756.8	3776.6	3788.5	3859.6	3976.8	3930.8	3936.0
45°	6434.8	6372.9	6096.3	5042.5	4232.4	4135.0	4149.4	4186.3	4358.8	4341.7	4375.9
47.5°	7164.6	7129.1	6915.7	6064.7	5035.9	4573.5	4614.3	4631.5	4880.4	4941.1	5033.3
50°	7725.7	7712.6	7521.6	6973.6	6085.7	5220.3	5234.8	5198.0	5570.8	5720.9	5896.1
52.5°	8255.3	8300.1	8159.1	7818.0	7206.8	6067.3	6064.7	5890.8	6394.1	6620.6	6919.6
55°	8733.5	8749.3	8763.8	8679.5	8334.4	7031.6	7006.6	6722.1	7349.0	7583.5	7907.6
57.5°	9182.7	9189.2	9318.4	9490.9	9508.0	8067.0	8020.8	7679.7	8392.3	8559.6	8758.5
60°	9484.3	9514.7	9787.3	10266.8	10476.2	9135.2	9110.2	8762.4	9454.0	9531.8	9494.9
62.5°	9049.6	9234.0	9921.7	10872.7	11390.4	10319.5	10307.6	9980.9	10571.0	10507.9	10191.7
65°	7325.4	7637.5	8846.8	11282.4	12287.5	11642.1	11659.2	11311.4	11718.4	11512.9	10758.1
67.5°	5124.2	5453.5	6884.0	11315.3	13289.9	13195.0	13293.8	12748.5	12936.8	12475.8	10892.5
70°	3543.4	3713.4	4644.7	10606.6	14071.1	15334.3	15331.6	14513.7	14148.8	12914.5	10207.5
72.5°	2382.9	2471.2	3016.6	8414.7	13496.7	16605.5	16529.0	15862.5	14557.2	12078.0	8339.6
75°	1005.1	1069.6	1396.3	4728.9	10677.7	15192.0	14985.2	14018.3	12934.3	9510.7	5203.2
77.5°	318.8	346.4	550.6	1692.7	5881.6	11419.4	11200.7	8754.5	8668.9	4771.2	1902.1
80°	151.5	176.5	309.5	679.7	2314.4	6210.9	6180.6	3971.6	3729.2	1288.3	382.0
82.5°	65.9	77.7	171.3	363.6	1035.4	2215.6	2260.4	1351.6	1118.4	488.7	117.3
85°	21.1	27.7	79.0	167.3	437.4	550.6	544.1	321.4	450.5	266.1	40.8
87.5°	0.0	0.0	26.3	38.2	44.8	31.6	35.6	27.7	125.2	73.8	14.5
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: P970004

CATALOG NUMBER: NAV-SB6A-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2	2114.2
2.5°	2124.7	2103.7	2066.8	2032.6	2002.2	1972.0	1953.5	1927.2	1924.5	1924.5	1931.1
5°	2139.3	2105.0	2039.1	1969.3	1889.0	1812.6	1736.1	1662.3	1638.7	1621.6	1629.4
7.5°	2181.4	2127.4	2023.4	1890.3	1737.5	1570.2	1452.9	1326.5	1277.8	1251.4	1255.3
10°	2242.0	2168.2	2010.1	1777.0	1529.3	1301.4	1134.2	997.1	944.4	922.1	922.1
12.5°	2309.1	2218.3	1986.4	1636.0	1301.4	1028.8	865.4	802.2	794.3	794.3	794.3
15°	2389.5	2278.9	1945.6	1470.1	1063.0	814.1	756.1	758.7	766.7	771.9	771.9
17.5°	2472.5	2343.5	1881.1	1284.3	852.3	732.4	733.7	737.7	744.3	749.5	749.5
20°	2562.1	2407.9	1795.4	1086.7	731.1	708.7	712.7	716.6	721.9	724.5	725.8
22.5°	2658.2	2468.5	1694.0	893.1	690.2	688.9	690.2	694.2	700.8	700.8	703.5
25°	2761.0	2535.7	1578.1	752.1	669.2	669.2	671.8	674.4	679.7	679.7	681.0
27.5°	2866.4	2597.7	1455.6	678.3	650.8	649.4	649.4	653.3	656.0	657.3	658.7
30°	2982.3	2670.1	1333.1	662.6	636.2	629.7	625.7	628.3	631.0	632.3	634.9
32.5°	3100.8	2739.9	1223.7	669.2	621.8	609.9	596.8	594.1	594.1	599.3	603.3
35°	3232.5	2816.3	1139.4	691.6	613.9	580.9	559.9	548.0	549.3	557.2	561.2
37.5°	3390.6	2908.5	1077.5	711.3	608.5	548.0	513.7	499.3	490.1	499.3	496.6
40°	3597.4	3044.2	1032.7	727.1	602.0	509.7	463.7	439.9	422.8	428.1	425.5
42.5°	3901.8	3257.6	1015.6	728.5	587.5	465.0	412.3	380.7	355.7	357.0	351.7
45°	4328.6	3594.8	1103.8	711.3	555.9	416.3	358.3	316.1	300.3	296.4	291.1
47.5°	4913.4	4086.2	1308.0	675.8	509.7	368.8	305.7	270.1	258.2	251.6	247.6
50°	5697.2	4717.2	1534.6	636.2	463.7	324.0	262.1	239.7	231.9	225.3	224.0
52.5°	6606.1	5357.4	1720.4	596.8	417.6	284.5	234.5	221.3	214.7	209.4	208.2
55°	7440.0	5798.6	1709.8	554.5	372.8	252.9	214.7	206.8	199.0	193.6	191.0
57.5°	7958.9	5860.5	1409.5	508.5	321.4	227.9	196.3	191.0	181.7	175.2	173.8
60°	8197.3	5507.5	988.0	447.8	270.1	204.2	176.5	173.8	162.1	152.8	150.2
62.5°	8240.8	4851.5	658.7	372.8	225.3	181.7	156.7	152.8	137.0	121.2	113.3
65°	8064.3	3913.6	455.8	291.1	192.3	158.1	134.4	126.5	109.4	93.5	88.3
67.5°	7505.8	2747.8	317.4	209.4	163.4	125.2	106.7	104.0	90.9	77.7	73.8
70°	6482.3	1566.2	212.1	156.7	129.0	85.6	84.3	86.9	73.8	63.2	57.9
72.5°	4970.0	716.6	131.7	114.6	88.3	57.9	67.1	68.5	56.7	47.5	42.1
75°	2925.7	306.9	83.0	73.8	44.8	38.2	48.8	50.0	38.2	30.3	26.3
77.5°	995.9	115.9	52.7	43.5	22.3	21.1	31.6	31.6	21.1	11.9	9.2
80°	226.5	43.5	26.3	17.1	10.6	9.2	10.6	9.2	5.2	1.3	0.0
82.5°	64.6	17.1	10.6	6.6	4.0	4.0	1.3	0.0	0.0	0.0	0.0
85°	18.4	7.9	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.9	1.3	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)