

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: P968412

Luminaire Tested: **NAV-SB5B-830-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-830-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22181 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 182.7
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



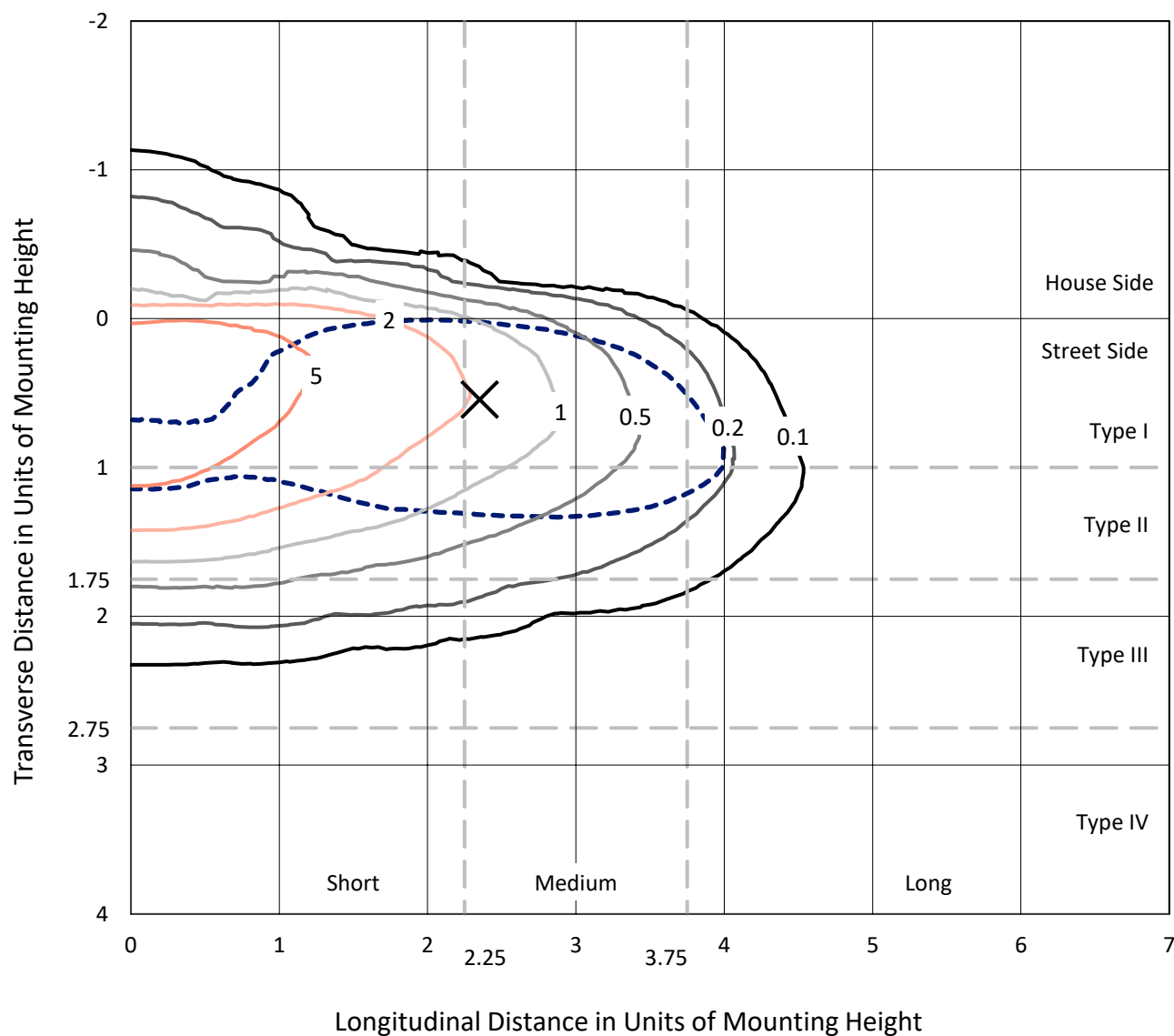
REPORT NUMBER: P968412

CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

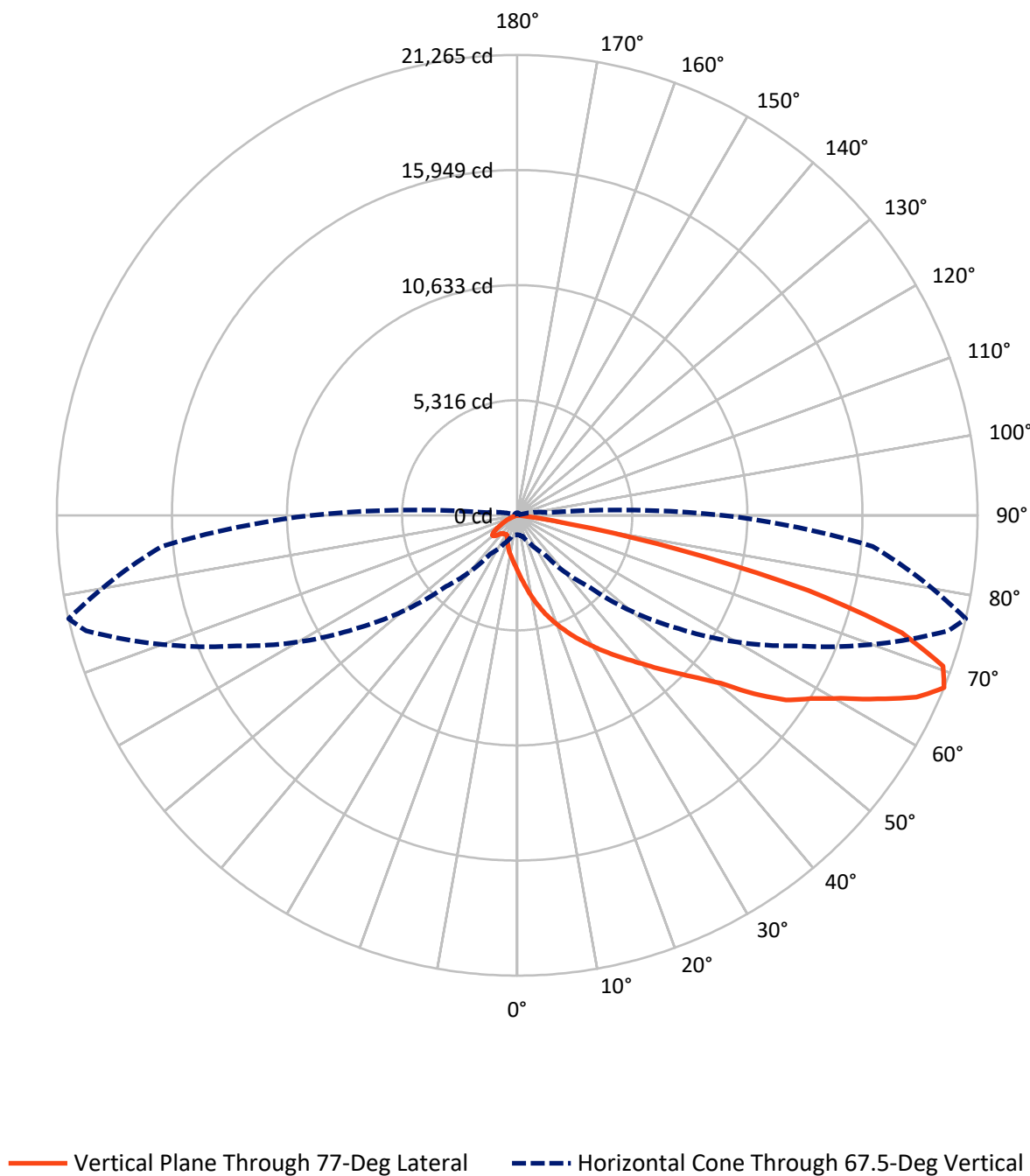
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
Type II - Medium - N/A

REPORT NUMBER: P968412
CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968412

CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

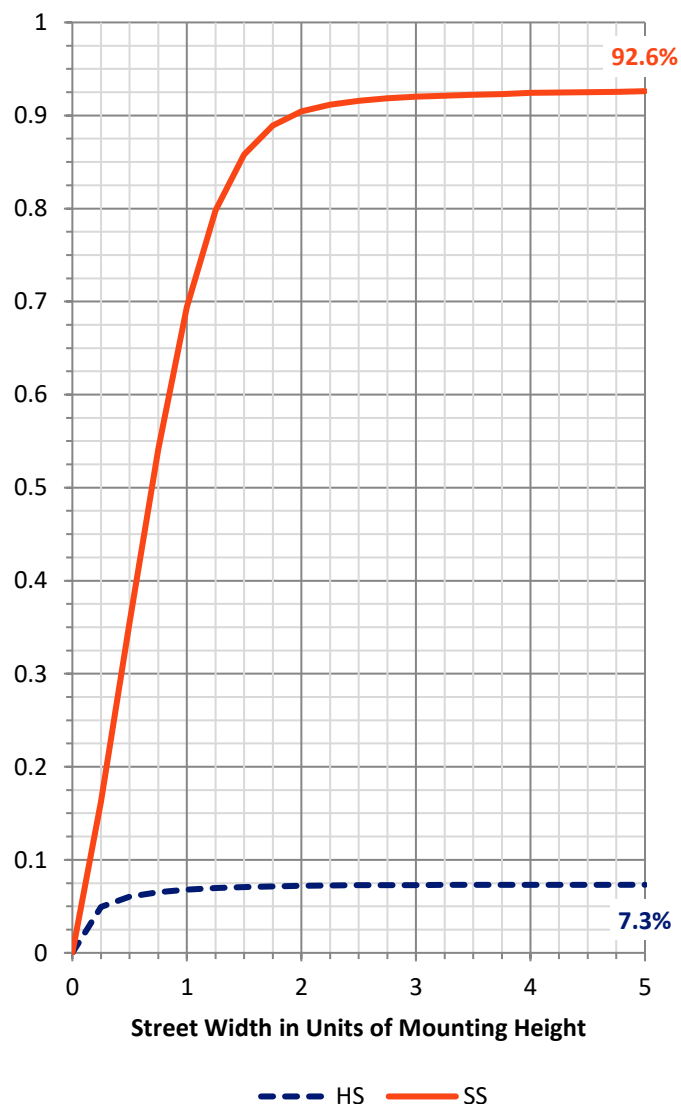
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1631.9	0.0	1631.9
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	20549.1	0.0	20549.1
	% Fixture	92.6	0.0	92.6
Total	Lumens	22181.0	0.0	22181.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.1	1.2
10°-20°	914.2	4.1
20°-30°	1764.2	8.0
30°-40°	3062.7	13.8
40°-50°	4446.9	20.0
50°-60°	5106.7	23.0
60°-70°	4433.6	20.0
70°-80°	2088.3	9.4
80°-90°	103.3	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°	22181.0	100.0
0°-180°	22181.0	100.0

Coefficient of Utilization



REPORT NUMBER: P968412

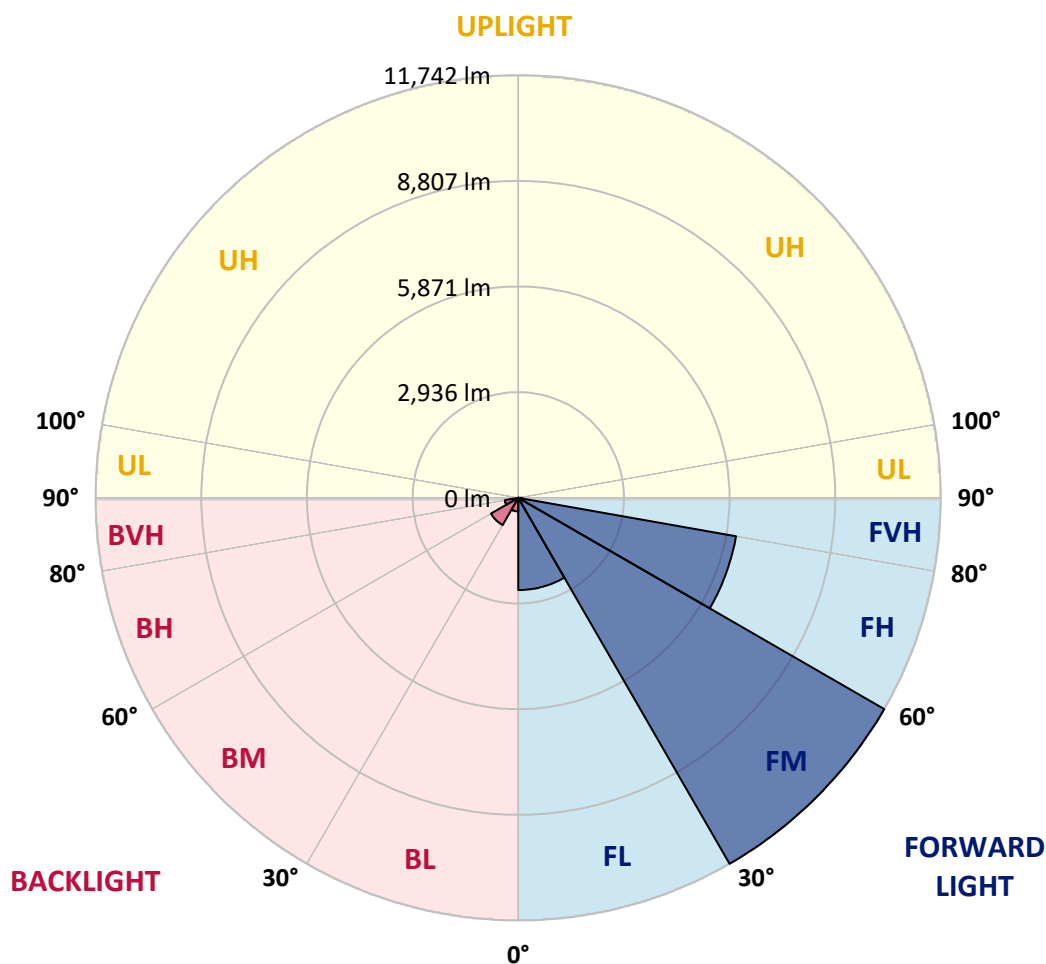
CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2561.7	11.5			
FM	(30°-60°)	11742.0	52.9			
FH	(60°-80°)	6144.1	27.7			G3/7500
FVH	(80°-90°)	101.4	0.5			G2/225
BL	(0°-30°)	377.8	1.7	B1/500		
BM	(30°-60°)	874.4	3.9	B1/1000		
BH	(60°-80°)	377.8	1.7	B1/500		G1/500
BVH	(80°-90°)	1.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium



REPORT NUMBER: P968412

CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8
2.5°	3541.3	3563.3	3531.6	3471.0	3380.1	3320.9	3176.3	3039.8	2888.3	2840.2	2688.7
5°	4316.7	4336.0	4300.2	4234.1	4112.8	3997.2	3807.1	3522.0	3225.8	3130.8	2862.2
7.5°	4891.1	4902.1	4888.3	4827.8	4712.0	4581.1	4369.1	4031.6	3592.2	3487.6	3075.7
10°	5304.3	5340.1	5335.9	5312.6	5235.4	5129.4	4903.5	4519.2	4002.6	3867.7	3316.7
12.5°	5578.4	5618.3	5641.7	5694.1	5690.0	5622.4	5424.1	5017.8	4411.7	4253.3	3588.1
15°	5658.3	5700.9	5790.5	5911.7	6019.1	6053.5	5914.5	5506.8	4862.2	4659.6	3866.3
17.5°	5612.8	5678.9	5786.3	5977.8	6213.3	6369.0	6353.9	5979.2	5271.3	5039.8	4139.1
20°	5713.3	5776.7	5860.7	6021.9	6296.0	6578.3	6691.3	6431.0	5677.6	5435.2	4425.5
22.5°	6269.8	6258.9	6267.1	6293.3	6457.2	6736.8	6969.6	6841.5	6079.8	5831.8	4728.5
25°	7151.3	7101.8	7017.8	6875.9	6834.6	6969.6	7212.0	7205.0	6504.0	6238.2	5038.5
27.5°	8162.4	8154.1	7957.2	7615.5	7422.7	7370.4	7486.1	7559.1	6924.1	6640.4	5349.8
30°	9130.7	9152.7	8886.9	8506.7	8152.7	7947.4	7842.8	7895.2	7351.1	7074.2	5670.7
32.5°	9973.7	9997.0	9707.8	9262.9	8824.8	8577.0	8356.5	8227.1	7816.6	7515.0	6023.3
35°	10685.7	10709.1	10377.2	9885.5	9418.5	9194.0	8944.7	8590.7	8285.0	8003.9	6415.9
37.5°	11322.0	11315.2	10870.3	10374.4	9915.7	9738.1	9607.2	9038.3	8767.0	8495.7	6851.1
40°	11698.1	11727.0	11346.9	10800.0	10355.2	10225.7	10217.4	9593.5	9323.5	9060.4	7327.6
42.5°	11808.3	11859.2	11583.7	11134.8	10731.1	10590.7	10806.9	10194.0	9970.9	9714.6	7866.3
45°	11610.0	11659.5	11534.2	11222.9	10987.4	10896.5	11313.8	10816.5	10662.3	10408.9	8473.7
47.5°	11031.5	11093.5	11123.7	11057.6	11054.8	11147.2	11768.3	11472.2	11483.2	11224.3	9177.4
50°	9911.6	10016.3	10294.6	10528.7	10890.9	11345.5	12210.5	12182.9	12408.9	12185.7	10094.8
52.5°	7875.9	8024.6	8983.3	9623.7	10437.8	11308.3	12696.7	13323.4	14032.8	13706.3	11388.2
55°	6329.1	6329.1	7108.7	8307.0	9553.5	11063.1	12908.8	14064.4	15138.7	15061.7	12298.7
57.5°	5159.6	5221.7	5718.9	6778.1	8273.9	10479.1	13039.6	14530.0	16030.0	15973.5	13188.4
60°	3184.5	3318.1	4257.4	5302.9	6818.0	9439.2	12957.0	15001.1	17111.2	17156.7	14260.0
62.5°	1793.3	1843.0	2261.7	3815.4	5301.5	8041.1	12324.8	15264.1	18494.1	18686.9	15364.6
65°	1238.3	1263.1	1424.2	2374.6	3674.8	6402.0	11089.3	15100.2	19879.8	20269.6	16301.3
67.5°	899.4	911.8	1012.4	1450.4	2180.4	4641.8	9152.7	14273.8	20613.9	21265.4	16480.4
70°	691.5	699.7	772.7	953.1	1287.8	2865.0	6647.2	12630.6	20082.2	20860.4	15563.0
72.5°	562.0	570.2	626.7	705.2	853.9	1694.2	4028.9	10257.4	17735.2	18575.4	13249.0
75°	473.9	484.8	535.8	586.8	669.4	1088.1	1889.8	7143.1	13337.2	13888.1	9213.3
77.5°	263.1	242.4	435.2	486.3	564.8	688.7	884.3	4203.7	7469.6	7622.4	4088.1
80°	163.9	169.4	345.7	391.1	433.9	347.1	405.0	1618.4	2589.5	2460.0	792.0
82.5°	9.6	22.0	265.9	282.4	297.6	148.7	152.9	549.6	623.9	573.0	140.5
85°	0.0	0.0	121.3	97.8	103.3	42.7	44.1	128.1	84.0	90.9	27.6
87.5°	0.0	0.0	0.0	2.8	0.0	4.1	8.3	11.1	4.1	5.5	9.6
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: P968412

CATALOG NUMBER: NAV-SB5B-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8	2557.8
2.5°	2592.2	2495.8	2300.2	2108.7	1953.1	1808.5	1705.2	1607.4	1557.8	1555.0	1552.3
5°	2670.7	2468.3	2077.1	1731.3	1453.1	1230.0	1085.4	982.1	929.8	911.8	909.1
7.5°	2780.9	2476.5	1881.5	1400.8	1073.0	881.5	798.9	765.8	754.8	742.4	739.6
10°	2920.0	2495.8	1706.6	1128.1	845.7	749.3	716.3	702.4	694.2	685.9	683.2
12.5°	3075.7	2513.7	1533.0	936.6	743.7	694.2	670.8	654.3	643.2	633.6	630.9
15°	3227.2	2524.8	1352.6	803.0	691.5	651.5	626.7	608.8	593.7	582.6	581.3
17.5°	3377.4	2539.8	1183.2	723.1	648.7	608.8	584.0	562.0	549.6	537.2	535.8
20°	3544.0	2537.2	1023.4	666.7	606.1	566.1	540.0	519.3	506.9	493.1	491.7
22.5°	3698.3	2523.3	882.9	618.5	562.0	523.4	494.5	473.9	461.5	450.4	449.1
25°	3875.9	2512.4	765.8	574.4	520.7	482.1	450.4	431.1	417.4	407.7	406.3
27.5°	4046.7	2495.8	680.4	534.4	480.7	443.5	413.2	391.1	378.7	371.9	371.9
30°	4214.8	2491.7	648.7	495.9	444.8	407.7	377.4	356.7	347.1	344.3	343.0
32.5°	4417.2	2502.7	662.6	482.1	411.8	374.6	345.7	330.6	320.9	320.9	320.9
35°	4633.5	2500.0	683.2	494.5	389.8	341.6	319.6	310.0	300.2	300.2	300.2
37.5°	4904.8	2504.1	699.7	515.2	381.5	314.1	301.7	289.3	283.7	283.7	283.7
40°	5309.8	2640.4	691.5	533.0	378.7	294.8	270.0	265.9	261.7	261.7	261.7
42.5°	5805.7	2936.6	702.4	534.4	377.4	281.0	247.9	256.1	246.5	245.2	243.8
45°	6348.3	3260.2	772.7	505.5	376.1	274.1	236.9	246.5	231.4	231.4	231.4
47.5°	6886.9	3581.1	844.3	464.2	371.9	272.8	227.2	221.7	217.6	219.0	219.0
50°	7629.3	3842.9	871.9	407.7	362.2	270.0	209.4	210.7	208.0	210.7	210.7
52.5°	8437.8	3898.0	838.9	344.3	334.7	261.7	197.0	202.4	201.1	203.9	203.9
55°	8942.0	3838.7	692.8	286.5	292.0	228.7	184.6	195.6	195.6	195.6	195.6
57.5°	9462.6	3586.7	491.7	232.8	242.4	187.4	173.5	188.7	187.4	185.9	185.9
60°	9837.2	3179.0	323.7	191.5	192.8	154.3	161.1	177.6	176.3	169.4	169.4
62.5°	10116.9	2728.5	208.0	162.6	147.4	139.1	147.4	161.1	155.6	140.5	137.8
65°	10085.2	2104.6	159.8	139.1	121.3	121.3	128.1	140.5	123.9	99.2	96.5
67.5°	9497.0	1424.2	132.2	117.1	101.9	100.6	106.1	117.1	106.1	84.0	81.3
70°	8446.1	931.1	106.1	90.9	81.3	74.4	85.4	100.6	89.5	67.4	64.8
72.5°	6855.2	567.4	79.8	66.1	59.2	48.2	67.4	82.6	71.6	49.6	46.8
75°	4435.2	289.3	55.1	42.7	31.7	28.9	49.6	62.0	49.6	30.3	26.1
77.5°	1696.9	121.3	30.3	19.3	16.5	13.7	27.6	37.2	20.7	6.9	5.5
80°	326.5	50.9	15.2	9.6	8.3	5.5	4.1	2.8	0.0	0.0	0.0
82.5°	56.5	16.5	5.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	0.0	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)