

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: P968250

Luminaire Tested: **NAV-SB5B-735-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968250
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28900.9 lumens
Efficiency: N/A
Efficacy: 158.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

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



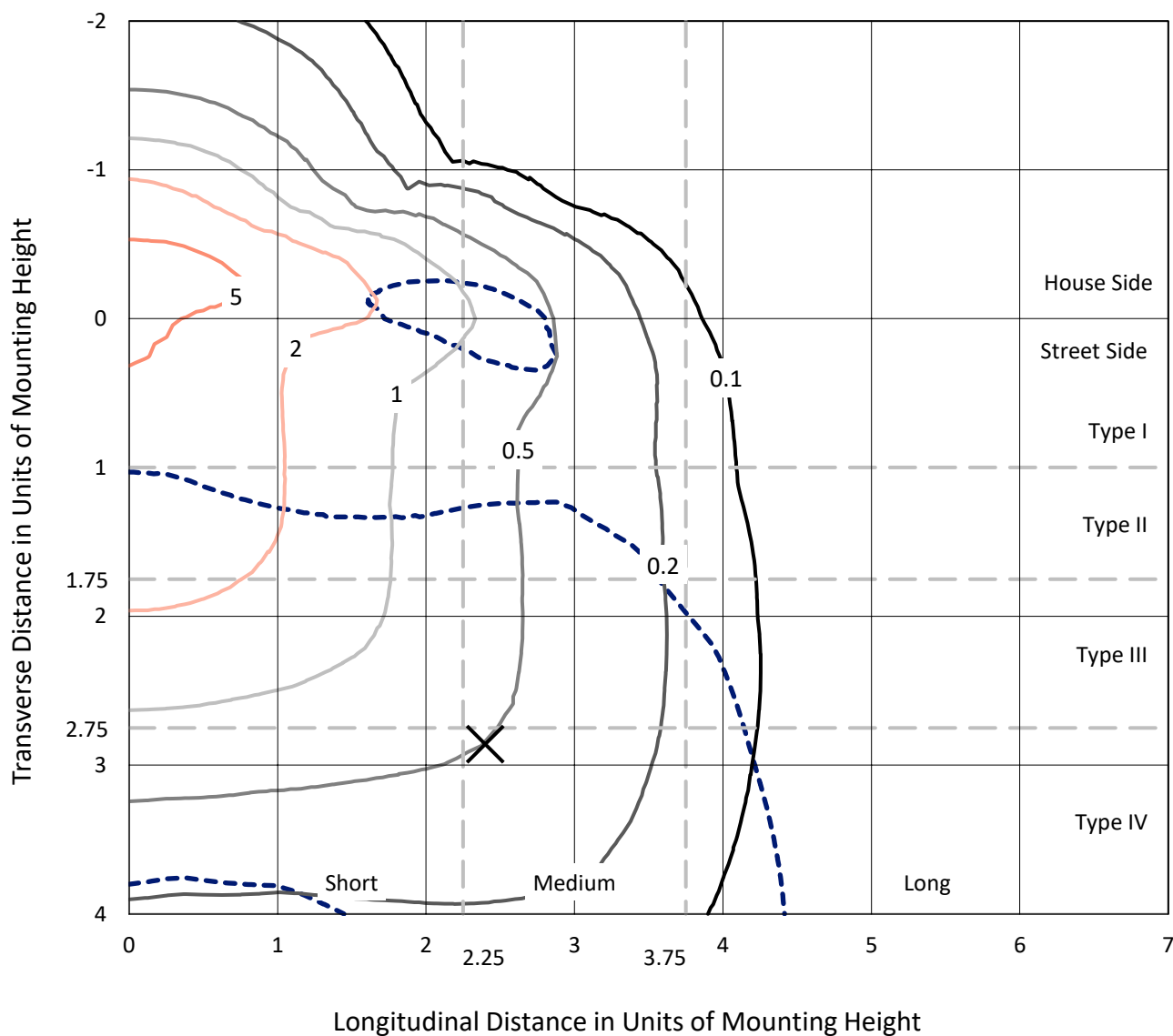
REPORT NUMBER: P968250

CATALOG NUMBER: NAV-SB5B-735-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

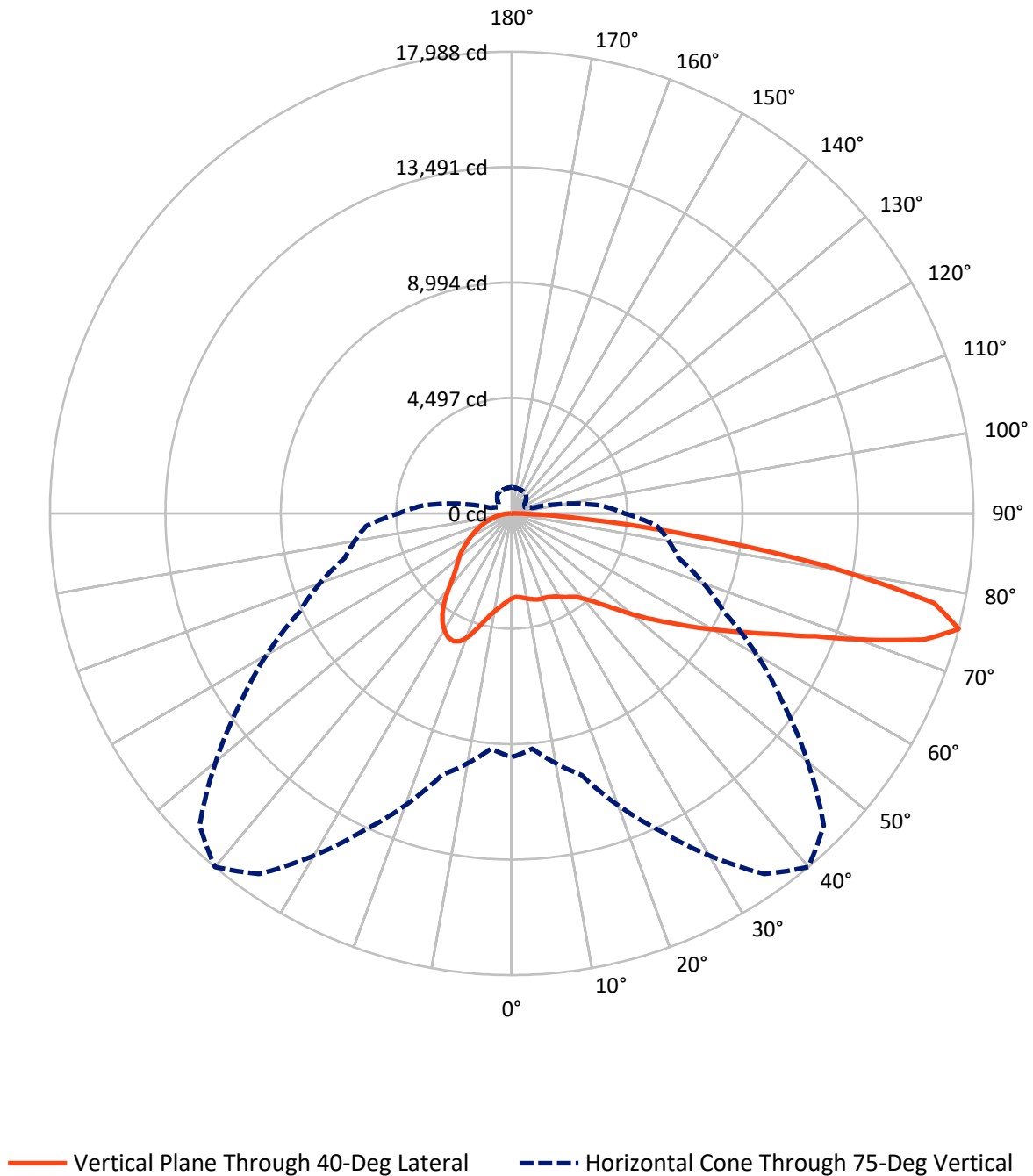
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
Type IV - Medium - N/A

REPORT NUMBER: P968250
CATALOG NUMBER: NAV-SB5B-735-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P968250

CATALOG NUMBER: NAV-SB5B-735-U-SL4

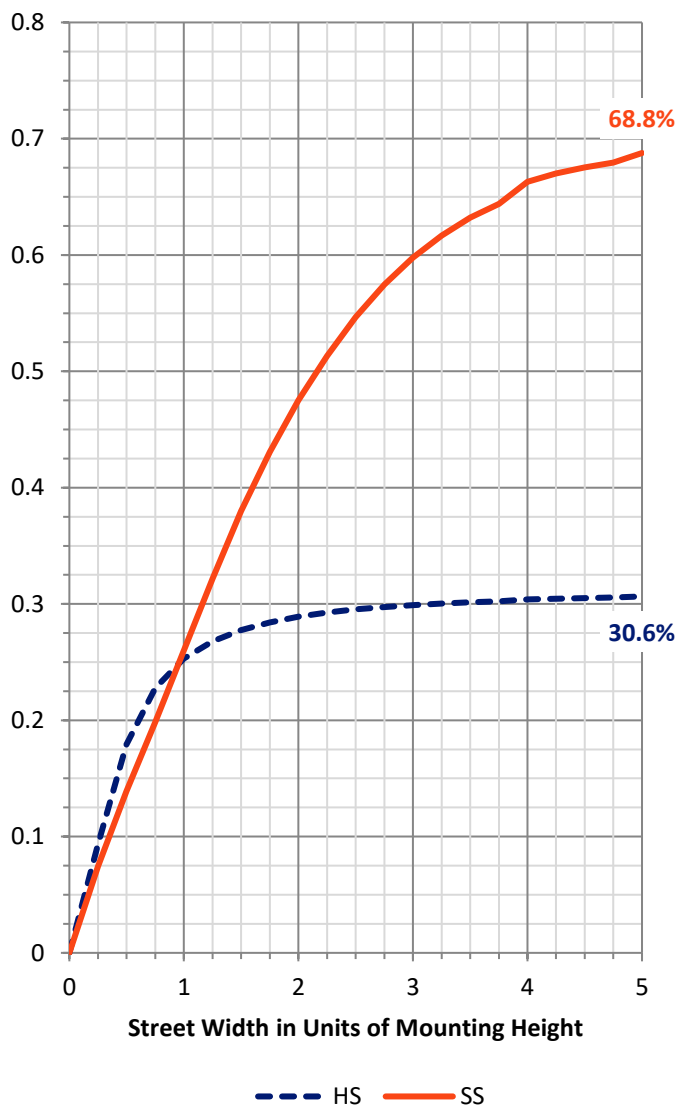
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8954.5	0.0	8954.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	19946.4	0.0	19946.4
	% Fixture	69.0	0.0	69.0
Total	Lumens	28900.9	0.0	28900.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.9	1.1
10°-20°	1107.6	3.8
20°-30°	2022.4	7.0
30°-40°	2868.3	9.9
40°-50°	3873.0	13.4
50°-60°	5210.2	18.0
60°-70°	6613.0	22.9
70°-80°	6001.7	20.8
80°-90°	874.9	3.0
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°	28900.9	100.0
0°-180°	28900.9	100.0

Coefficient of Utilization



REPORT NUMBER: P968250

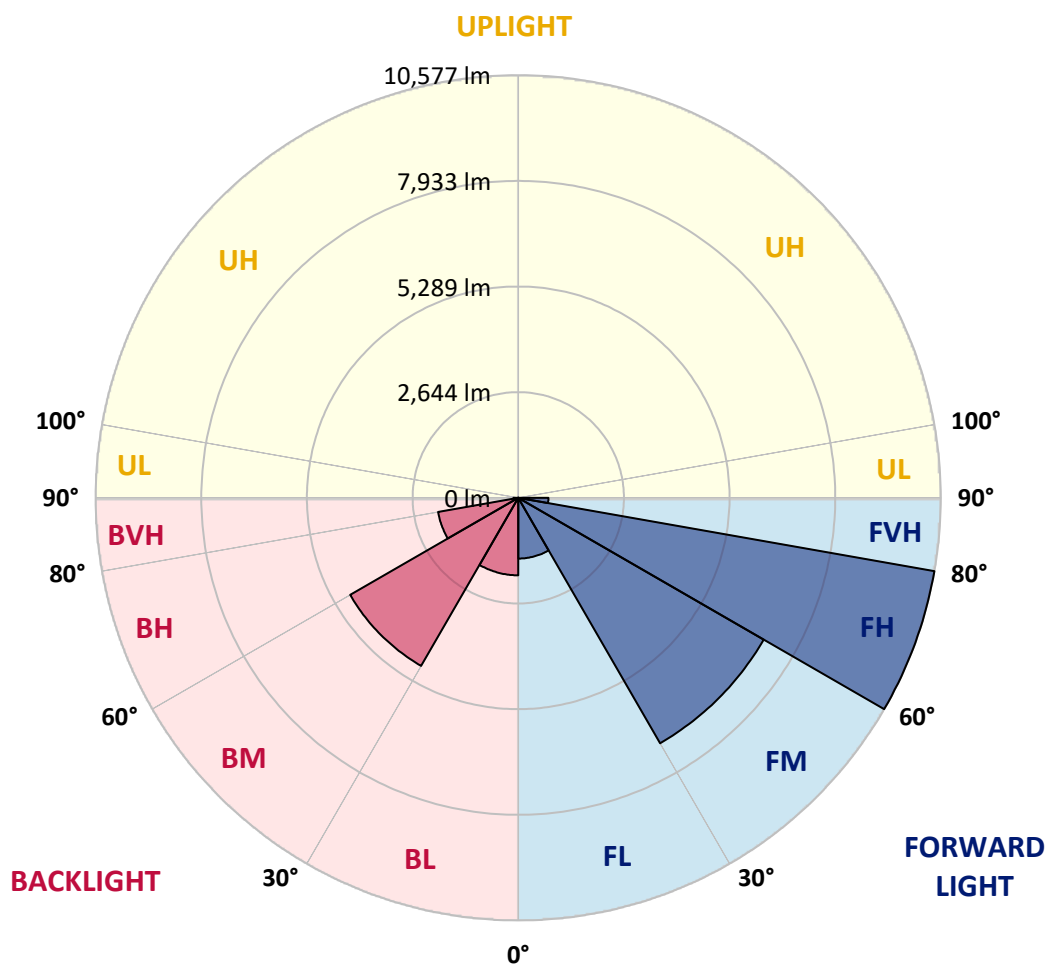
CATALOG NUMBER: NAV-SB5B-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1520.2	5.3			
FM	(30°-60°)	7094.5	24.5			
FH	(60°-80°)	10577.3	36.6			G4/12000
FVH	(80°-90°)	754.4	2.6			G5
BL	(0°-30°)	1939.6	6.7	B3/2500		
BM	(30°-60°)	4857.0	16.8	B3/5000		
BH	(60°-80°)	2037.4	7.0	B3/2500		G3/2500
BVH	(80°-90°)	120.4	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium



REPORT NUMBER: P968250

CATALOG NUMBER: NAV-SB5B-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9
2.5°	3254.3	3272.6	3268.1	3262.0	3262.0	3263.5	3262.0	3272.6	3283.4	3294.1	3311.0
5°	3288.0	3306.3	3297.2	3289.5	3283.4	3281.8	3277.2	3275.7	3281.8	3295.7	3318.6
7.5°	3353.9	3372.4	3358.5	3344.7	3332.5	3326.3	3320.2	3311.0	3306.3	3314.0	3346.2
10°	3427.5	3445.8	3429.0	3404.5	3384.6	3376.9	3370.8	3361.6	3355.4	3360.1	3395.3
12.5°	3501.1	3519.4	3496.5	3462.8	3436.7	3432.1	3424.4	3421.3	3419.8	3418.3	3453.5
15°	3570.1	3585.3	3556.2	3516.4	3488.8	3481.1	3473.5	3478.0	3485.7	3494.9	3534.8
17.5°	3623.7	3639.1	3596.1	3543.9	3517.9	3514.8	3510.2	3525.6	3547.0	3570.1	3619.1
20°	3672.8	3688.1	3632.9	3562.4	3531.7	3531.7	3533.3	3565.5	3596.1	3629.8	3697.3
22.5°	3741.8	3754.0	3686.5	3590.0	3545.5	3548.6	3560.8	3593.0	3631.4	3677.4	3770.9
25°	3844.5	3853.6	3770.9	3642.1	3591.5	3600.7	3611.4	3626.8	3663.6	3717.2	3842.9
27.5°	4010.0	4017.6	3908.8	3734.1	3657.4	3672.8	3688.1	3677.4	3694.2	3740.2	3901.2
30°	4243.0	4247.6	4109.6	3878.2	3769.3	3777.0	3780.0	3735.6	3703.4	3740.2	3942.6
32.5°	4518.9	4517.4	4353.4	4052.8	3896.5	3888.8	3862.8	3775.5	3700.4	3732.5	3979.4
35°	4946.5	4929.7	4718.2	4298.1	4040.7	3993.1	3931.8	3819.9	3715.6	3724.8	4011.5
37.5°	5654.7	5602.6	5309.8	4699.7	4255.2	4134.1	4043.7	3891.9	3749.3	3721.8	4049.9
40°	6453.4	6387.5	6065.5	5250.0	4577.1	4382.5	4236.8	3994.6	3804.6	3735.6	4106.6
42.5°	7400.7	7307.1	6960.8	5898.5	4984.9	4702.8	4483.7	4124.9	3885.8	3780.0	4183.2
45°	8564.1	8440.0	7949.4	6629.6	5498.4	5122.8	4830.1	4322.6	4010.0	3865.9	4298.1
47.5°	9739.9	9770.5	9073.0	7466.6	6114.6	5641.0	5263.9	4620.1	4190.8	4003.9	4483.7
50°	10989.1	11010.6	10190.4	8393.9	6813.6	6226.5	5751.3	4952.7	4442.2	4200.0	4761.1
52.5°	11964.0	11967.1	11205.2	9364.3	7541.7	6870.3	6277.1	5332.9	4733.4	4460.6	5130.5
55°	12574.1	12566.4	11916.4	10282.5	8378.7	7546.3	6859.6	5765.1	5089.1	4767.2	5595.0
57.5°	13017.1	12994.1	12407.0	11071.8	9270.7	8344.9	7518.7	6255.6	5509.1	5132.1	6206.6
60°	13185.7	13171.9	12739.6	11754.0	10208.9	9227.9	8279.0	6804.4	5985.8	5562.8	6993.0
62.5°	13250.1	13276.1	13066.2	12414.7	11212.9	10205.8	9114.4	7460.5	6522.4	6050.3	7822.2
65°	13476.9	13524.5	13481.5	13279.2	12347.3	11350.8	10222.6	8240.7	7107.9	6572.9	8688.3
67.5°	13926.1	13973.6	13992.0	14313.9	13733.0	12778.0	11605.4	9212.5	7793.1	7115.6	9339.7
70°	13915.3	13901.6	14226.5	15137.0	15468.2	14753.8	13469.3	10408.2	8610.1	7566.2	9422.5
72.5°	12666.0	12555.7	13323.7	15127.9	16912.1	16817.1	15745.5	11950.2	9315.2	7621.4	8176.3
75°	9502.3	9207.9	10564.5	13633.3	17152.8	17988.1	17192.6	12906.7	9148.1	6733.8	5690.0
77.5°	4063.6	3767.8	5366.6	10092.4	15351.6	16815.5	15865.2	11260.4	7302.6	4453.0	2794.5
80°	1063.8	1062.3	1621.8	4575.6	10440.3	12417.8	10894.1	7271.9	4172.5	1591.1	771.0
82.5°	439.9	429.2	596.2	1779.6	5101.4	6968.4	5686.9	3243.5	1506.9	430.7	255.9
85°	164.0	162.5	289.7	614.7	1799.6	2874.1	2080.1	829.3	375.6	210.0	115.0
87.5°	46.0	44.5	62.8	213.1	438.4	665.2	355.7	136.4	105.8	82.8	33.7
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: P968250

CATALOG NUMBER: NAV-SB5B-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9	3304.9
2.5°	3315.6	3323.3	3337.1	3347.8	3361.6	3376.9	3398.4	3412.1	3426.0	3435.2	3429.0
5°	3329.4	3346.2	3381.5	3416.7	3458.1	3496.5	3541.0	3573.2	3599.2	3606.9	3609.9
7.5°	3360.1	3387.6	3447.4	3507.2	3573.2	3636.0	3700.4	3755.5	3800.0	3816.8	3818.3
10°	3413.7	3450.5	3534.8	3619.1	3706.5	3803.1	3885.8	3965.5	4028.4	4054.4	4055.9
12.5°	3481.1	3527.1	3637.5	3754.0	3875.1	4008.5	4115.8	4213.9	4292.0	4327.2	4327.2
15°	3568.5	3628.3	3769.3	3925.6	4103.5	4288.9	4425.3	4534.2	4621.6	4664.5	4661.4
17.5°	3663.6	3743.3	3921.0	4157.1	4411.6	4655.3	4814.7	4894.5	4984.9	5026.3	5024.8
20°	3755.5	3853.6	4108.1	4451.5	4790.2	5049.3	5178.0	5199.5	5205.6	5210.2	5222.5
22.5°	3850.5	3982.4	4342.6	4822.4	5185.7	5365.1	5383.4	5291.5	5162.7	5102.9	5119.8
25°	3954.8	4129.5	4649.2	5231.7	5526.0	5547.4	5406.5	5182.6	4938.9	4827.0	4843.8
27.5°	4055.9	4299.7	5017.1	5622.5	5771.3	5582.7	5279.2	4961.9	4667.5	4549.6	4563.3
30°	4157.1	4494.3	5423.3	5964.4	5883.1	5495.3	5078.4	4724.3	4428.4	4304.3	4318.1
32.5°	4259.8	4721.3	5890.8	6211.2	5863.2	5309.8	4828.6	4457.5	4197.0	4066.7	4083.6
35°	4376.3	5000.2	6333.8	6346.1	5729.9	5037.0	4498.9	4138.7	3911.9	3807.7	3830.6
37.5°	4528.0	5354.3	6724.7	6379.8	5496.9	4636.9	4089.6	3761.6	3574.7	3527.1	3560.8
40°	4716.6	5780.4	7023.6	6326.1	5152.0	4151.0	3642.1	3379.9	3274.2	3284.9	3321.7
42.5°	4961.9	6257.1	7233.6	6188.1	4672.2	3649.7	3249.7	3133.2	3183.8	3226.7	3266.6
45°	5280.7	6752.3	7363.9	5953.6	4129.5	3225.2	3018.2	3045.8	3084.1	3088.7	3119.4
47.5°	5688.4	7253.5	7449.7	5599.6	3576.1	2926.3	2871.0	2877.2	2869.5	2837.3	2861.9
50°	6197.4	7741.0	7526.4	5130.5	3105.5	2739.2	2665.6	2644.2	2538.4	2434.2	2448.0
52.5°	6776.8	8188.5	7558.6	4548.0	2739.2	2582.9	2463.3	2328.4	2130.7	2098.5	2109.2
55°	7420.6	8602.4	7475.7	3832.2	2431.1	2382.1	2201.2	2038.7	2017.2	1989.6	1994.2
57.5°	8190.1	9048.5	7307.1	3033.6	2115.4	2147.6	1971.3	1989.6	1951.3	1908.4	1900.8
60°	9031.7	9509.8	7011.3	2305.4	1788.8	1854.7	1911.5	1910.0	1899.2	1864.0	1851.7
62.5°	9788.9	9813.3	6428.8	1765.9	1502.2	1627.9	1782.7	1781.1	1772.0	1752.0	1744.4
65°	10239.5	9767.4	5457.0	1390.3	1266.2	1440.8	1608.0	1620.2	1621.8	1620.2	1620.2
67.5°	10159.8	9229.4	4123.4	1106.7	1071.4	1250.8	1434.8	1451.6	1463.9	1467.0	1470.1
70°	9258.5	8047.6	2688.7	882.9	898.3	1083.7	1270.8	1287.6	1298.4	1310.6	1316.7
72.5°	7216.7	5916.8	1539.0	714.3	746.5	939.6	1108.2	1128.2	1134.4	1157.3	1166.6
75°	4397.8	3479.6	830.8	562.5	613.2	803.2	947.3	970.3	981.0	1008.6	1011.7
77.5°	2090.8	1506.9	473.7	438.4	493.5	656.1	800.1	826.3	797.0	812.4	800.1
80°	706.6	559.4	298.9	334.2	377.1	512.0	640.7	666.8	605.5	602.4	596.2
82.5°	246.8	226.8	190.0	222.2	243.7	366.3	484.4	518.1	450.7	449.2	427.6
85°	96.6	91.9	105.8	121.1	145.7	225.3	318.9	335.7	277.5	223.8	220.7
87.5°	19.9	21.4	26.0	27.6	44.5	78.2	115.0	141.0	111.9	95.0	87.3
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)