

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: P966299

Luminaire Tested: **NAV-SB4B-830-U-SLL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966299
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-830-U-SLL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20711.1 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

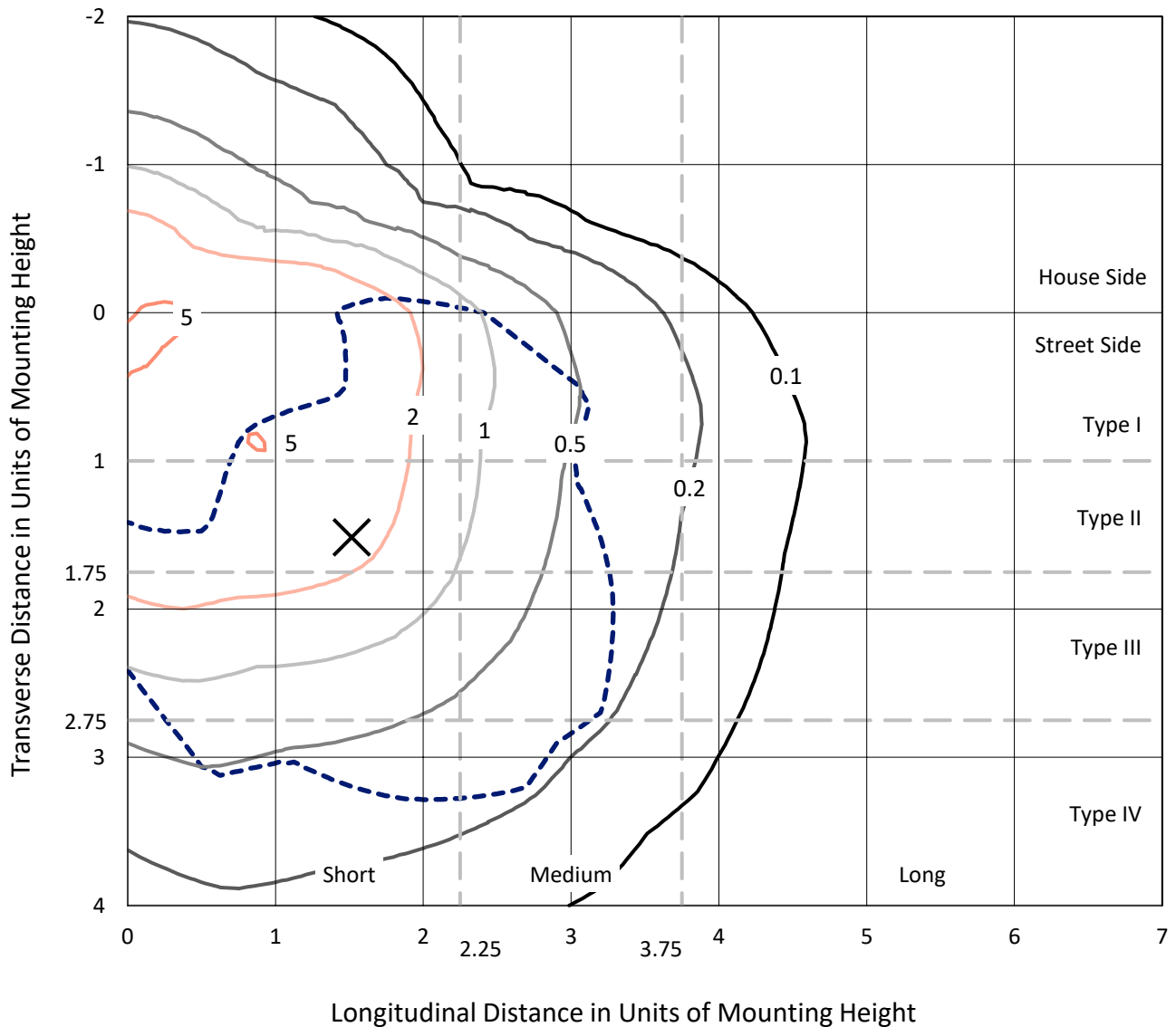
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

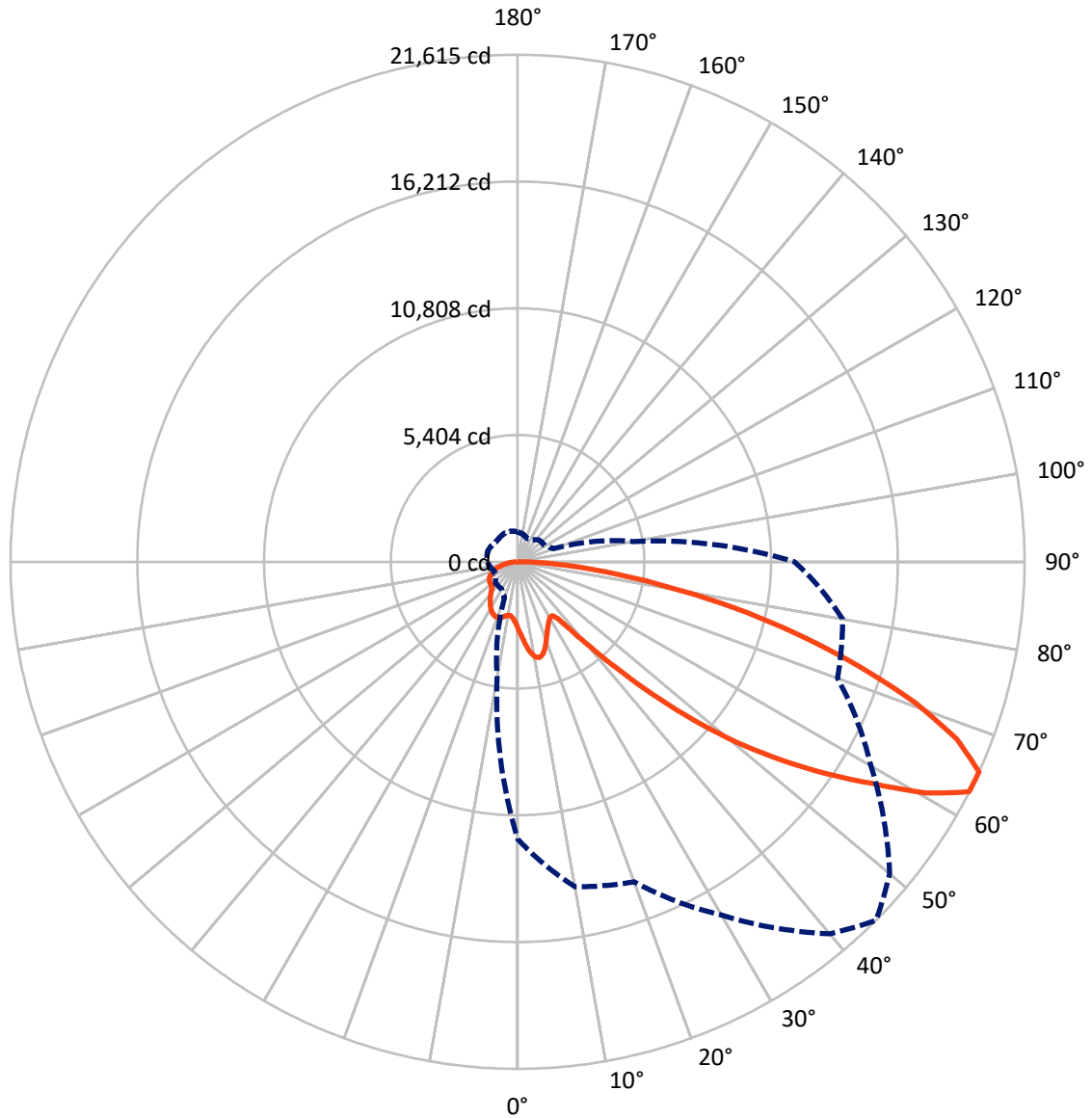
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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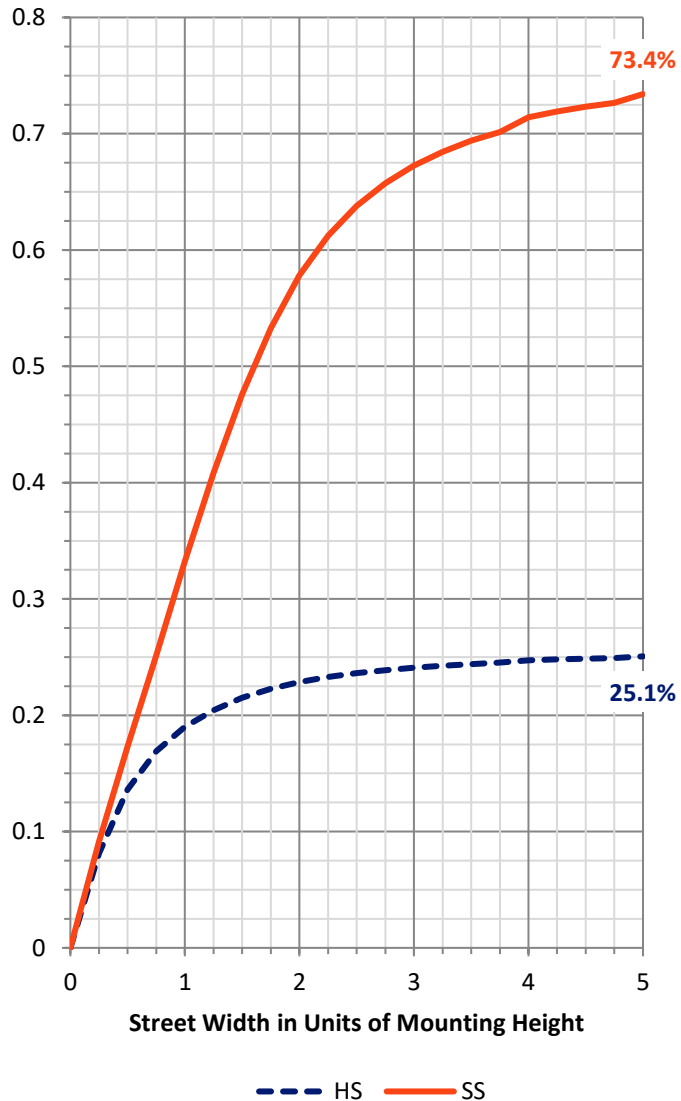
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5263.7	0.0	5263.7
	% Fixture	25.4	0.0	25.4
Street Side	Lumens	15447.4	0.0	15447.4
	% Fixture	74.6	0.0	74.6
Total	Lumens	20711.1	0.0	20711.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.5	1.4
10°-20°	886.9	4.3
20°-30°	1369.9	6.6
30°-40°	1736.0	8.4
40°-50°	2618.4	12.6
50°-60°	4230.4	20.4
60°-70°	5273.8	25.5
70°-80°	3458.3	16.7
80°-90°	855.0	4.1
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°	20711.1	100.0
0°-180°	20711.1	100.0

Coefficient of Utilization

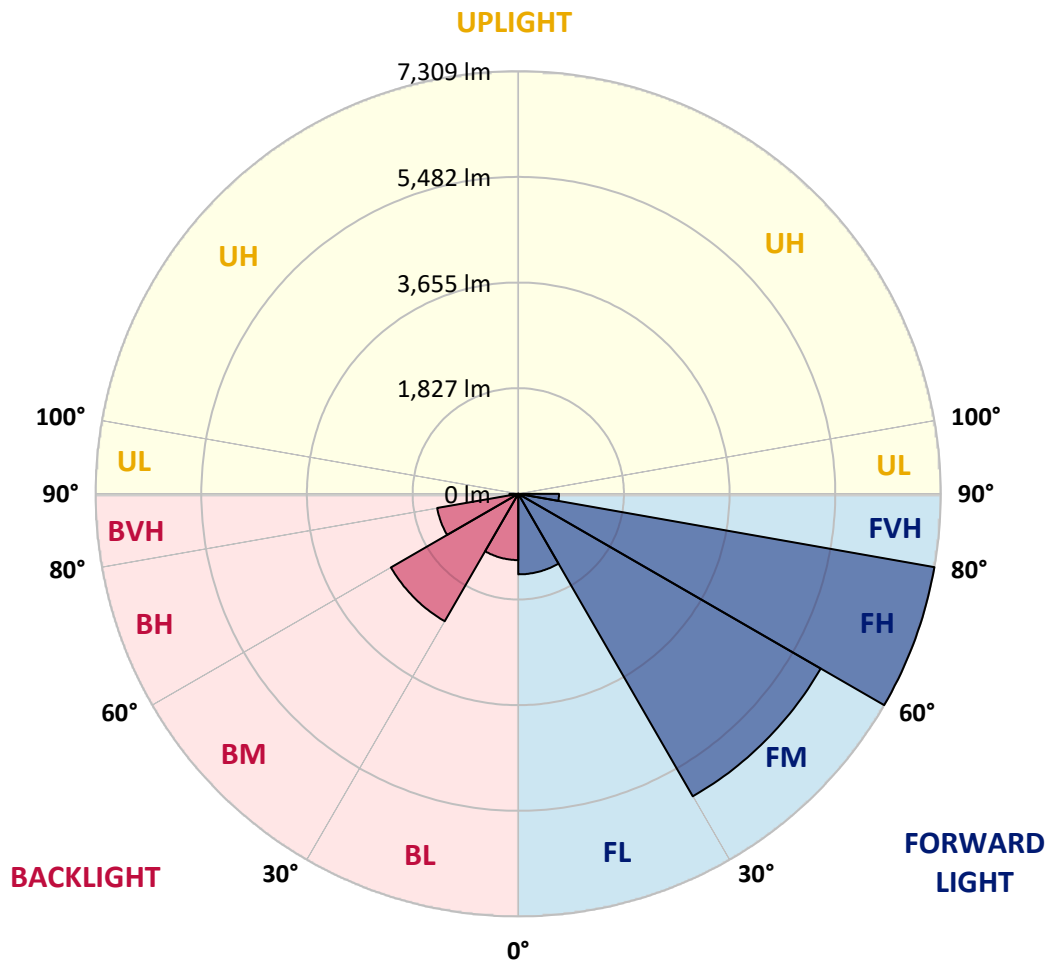


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1393.1	6.7			
FM (30°-60°)	6041.0	29.2			
FH (60°-80°)	7309.0	35.3			G3/7500
FVH (80°-90°)	704.3	3.4			G4/750
BL (0°-30°)	1146.2	5.5	B3/2500		
BM (30°-60°)	2543.8	12.3	B3/5000		
BH (60°-80°)	1423.1	6.9	B3/2500		G3/2500
BVH (80°-90°)	150.7	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	3062.7	3074.3	3086.0	3102.5	3119.0	3128.8	3138.7	3143.6	3148.5	3148.5	3148.5
5°	3293.3	3333.8	3374.5	3414.7	3455.1	3476.9	3498.7	3512.0	3525.3	3535.3	3525.3
7.5°	3525.0	3591.0	3656.9	3716.2	3775.6	3811.3	3847.0	3866.4	3885.6	3894.9	3885.6
10°	3702.6	3780.6	3858.6	3928.2	3997.8	4040.0	4082.0	4100.8	4119.5	4126.5	4119.5
12.5°	3811.3	3895.9	3980.4	4043.3	4106.0	4136.7	4167.2	4177.5	4187.8	4188.9	4187.8
15°	3877.5	3950.5	4023.3	4062.8	4102.4	4103.4	4104.5	4093.5	4082.7	4069.8	4082.7
17.5°	3914.6	3963.9	4013.2	4013.9	4014.6	3970.3	3926.1	3885.5	3844.9	3816.2	3844.9
20°	3955.6	3972.7	3990.0	3938.0	3886.2	3788.5	3690.7	3619.6	3548.4	3504.8	3548.4
22.5°	4003.1	3980.6	3958.0	3850.5	3743.0	3599.3	3455.6	3366.6	3277.6	3229.4	3277.6
25°	4064.3	3993.3	3922.3	3759.0	3595.7	3421.1	3246.6	3153.1	3059.7	3014.1	3059.7
27.5°	4147.4	4020.4	3893.3	3677.0	3460.8	3267.4	3074.0	2981.9	2890.0	2846.8	2890.0
30°	4259.4	4070.0	3880.8	3614.5	3348.3	3146.7	2945.2	2859.9	2774.6	2734.3	2774.6
32.5°	4391.6	4132.3	3873.1	3571.8	3270.7	3081.3	2891.9	2824.9	2757.8	2728.9	2757.8
35°	4552.2	4234.9	3917.7	3603.8	3290.0	3158.4	3026.9	3011.3	2995.7	2993.3	2995.7
37.5°	4822.7	4449.4	4076.1	3790.9	3505.6	3497.1	3488.6	3560.0	3631.6	3668.7	3631.6
40°	5231.5	4825.5	4419.5	4207.3	3995.2	4145.0	4294.6	4468.5	4642.2	4728.7	4642.2
42.5°	5773.5	5370.7	4967.9	4845.7	4723.5	5050.1	5376.6	5692.6	6008.7	6194.3	6008.7
45°	6442.8	6081.0	5719.1	5665.2	5611.3	6134.4	6657.6	7176.9	7696.4	8011.7	7696.4
47.5°	7280.0	6928.0	6575.9	6564.9	6554.1	7308.8	8063.3	8823.5	9583.8	10030.1	9583.8
50°	8377.2	7942.4	7507.6	7509.5	7511.4	8484.0	9456.6	10460.2	11463.8	12070.5	11463.8
52.5°	9636.7	9110.2	8583.8	8530.6	8477.3	9639.0	10800.8	12042.5	13284.1	14011.4	13284.1
55°	10977.6	10457.5	9937.3	9729.7	9522.2	10815.3	12108.2	13588.4	15068.7	15933.7	15068.7
57.5°	12197.3	11914.0	11630.7	11214.3	10798.2	12103.8	13409.5	15086.2	16762.6	17835.3	16762.6
60°	12934.4	13374.4	13814.4	13297.5	12780.6	14016.3	15251.8	17046.9	18842.0	20001.3	18842.0
62.5°	12560.1	13762.4	14964.6	14906.4	14847.9	15979.9	17111.9	18819.7	20527.5	21599.0	20527.5
65°	11811.0	12939.3	14067.7	14291.0	14514.1	15952.5	17391.1	19047.2	20703.2	21615.4	20703.2
67.5°	10807.2	11880.4	12953.5	13058.2	13162.8	14661.5	16160.1	17823.3	19486.6	20201.3	19486.6
70°	9601.2	10768.4	11935.8	11982.7	12029.5	13369.8	14710.0	16141.3	17572.5	17969.7	17572.5
72.5°	8164.1	9503.6	10843.3	10876.9	10910.4	11959.1	13007.7	14079.6	15151.4	15191.6	15151.4
75°	6346.2	7732.6	9118.9	9243.4	9367.9	10183.7	10999.5	11754.1	12508.7	12306.6	12508.7
77.5°	4534.2	5828.4	7122.6	7300.8	7478.9	8099.1	8719.3	9254.4	9789.8	9442.2	9789.8
80°	2967.6	4056.4	5145.1	5366.5	5588.0	6056.3	6524.5	6805.6	7086.5	6527.6	7086.5
82.5°	1725.1	2469.4	3213.9	3461.1	3708.6	4031.0	4353.4	4470.6	4587.8	4148.5	4587.8
85°	759.0	1154.0	1549.1	1759.5	1969.8	2234.8	2499.6	2566.1	2632.7	2280.7	2632.7
87.5°	234.9	367.8	500.5	617.9	735.2	867.8	1000.2	1005.8	1011.5	849.1	1011.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	3143.6	3138.7	3128.8	3119.0	3102.5	3086.0	3074.3	3062.7	3039.2	3015.8	2990.6
5°	3512.0	3498.7	3476.9	3455.1	3414.7	3374.5	3333.8	3293.3	3241.4	3189.5	3137.6
7.5°	3866.4	3847.0	3811.3	3775.6	3716.2	3656.9	3591.0	3525.0	3439.3	3353.7	3274.6
10°	4100.8	4082.0	4040.0	3997.8	3928.2	3858.6	3780.6	3702.6	3594.3	3485.9	3381.4
12.5°	4177.5	4167.2	4136.7	4106.0	4043.3	3980.4	3895.9	3811.3	3692.3	3573.4	3455.0
15°	4093.5	4104.5	4103.4	4102.4	4062.8	4023.3	3950.5	3877.5	3753.3	3629.3	3500.8
17.5°	3885.5	3926.1	3970.3	4014.6	4013.9	4013.2	3963.9	3914.6	3788.8	3663.0	3522.8
20°	3619.6	3690.7	3788.5	3886.2	3938.0	3990.0	3972.7	3955.6	3824.9	3694.0	3539.9
22.5°	3366.6	3455.6	3599.3	3743.0	3850.5	3958.0	3980.6	4003.1	3869.6	3735.9	3563.1
25°	3153.1	3246.6	3421.1	3595.7	3759.0	3922.3	3993.3	4064.3	3933.3	3802.5	3605.1
27.5°	2981.9	3074.0	3267.4	3460.8	3677.0	3893.3	4020.4	4147.4	4022.5	3897.7	3670.6
30°	2859.9	2945.2	3146.7	3348.3	3614.5	3880.8	4070.0	4259.4	4138.7	4018.2	3755.6
32.5°	2824.9	2891.9	3081.3	3270.7	3571.8	3873.1	4132.3	4391.6	4272.2	4152.8	3844.2
35°	3011.3	3026.9	3158.4	3290.0	3603.8	3917.7	4234.9	4552.2	4437.9	4323.6	3945.2
37.5°	3560.0	3488.6	3497.1	3505.6	3790.9	4076.1	4449.4	4822.7	4677.0	4531.1	4058.3
40°	4468.5	4294.6	4145.0	3995.2	4207.3	4419.5	4825.5	5231.5	5019.0	4806.5	4201.9
42.5°	5692.6	5376.6	5050.1	4723.5	4845.7	4967.9	5370.7	5773.5	5466.8	5160.3	4389.8
45°	7176.9	6657.6	6134.4	5611.3	5665.2	5719.1	6081.0	6442.8	6029.3	5615.6	4637.0
47.5°	8823.5	8063.3	7308.8	6554.1	6564.9	6575.9	6928.0	7280.0	6697.9	6115.6	4900.3
50°	10460.2	9456.6	8484.0	7511.4	7509.5	7507.6	7942.4	8377.2	7499.5	6621.8	5144.7
52.5°	12042.5	10800.8	9639.0	8477.3	8530.6	8583.8	9110.2	9636.7	8341.8	7046.7	5303.3
55°	13588.4	12108.2	10815.3	9522.2	9729.7	9937.3	10457.5	10977.6	9088.4	7199.1	5268.4
57.5°	15086.2	13409.5	12103.8	10798.2	11214.3	11630.7	11914.0	12197.3	9617.5	7037.8	5022.3
60°	17046.9	15251.8	14016.3	12780.6	13297.5	13814.4	13374.4	12934.4	9749.7	6564.9	4564.3
62.5°	18819.7	17111.9	15979.9	14847.9	14906.4	14964.6	13762.4	12560.1	9192.9	5825.8	3944.9
65°	19047.2	17391.1	15952.5	14514.1	14291.0	14067.7	12939.3	11811.0	8405.1	4999.2	3313.1
67.5°	17823.3	16160.1	14661.5	13162.8	13058.2	12953.5	11880.4	10807.2	7467.5	4127.9	2694.1
70°	16141.3	14710.0	13369.8	12029.5	11982.7	11935.8	10768.4	9601.2	6444.5	3287.8	2121.2
72.5°	14079.6	13007.7	11959.1	10910.4	10876.9	10843.3	9503.6	8164.1	5335.5	2506.9	1621.7
75°	11754.1	10999.5	10183.7	9367.9	9243.4	9118.9	7732.6	6346.2	4064.2	1782.2	1177.0
77.5°	9254.4	8719.3	8099.1	7478.9	7300.8	7122.6	5828.4	4534.2	2844.6	1155.0	797.6
80°	6805.6	6524.5	6056.3	5588.0	5366.5	5145.1	4056.4	2967.6	1832.7	697.8	513.8
82.5°	4470.6	4353.4	4031.0	3708.6	3461.1	3213.9	2469.4	1725.1	1060.7	396.5	316.0
85°	2566.1	2499.6	2234.8	1969.8	1759.5	1549.1	1154.0	759.0	477.1	195.4	168.9
87.5°	1005.8	1000.2	867.8	735.2	617.9	500.5	367.8	234.9	156.3	77.6	70.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	2965.7	2940.6	2915.5	2891.4	2867.4	2844.2	2818.2	2797.2	2776.4	2757.5	2738.7
5°	3086.0	3033.9	2981.8	2933.2	2884.6	2838.6	2793.3	2753.8	2714.1	2680.9	2647.8
7.5°	3195.4	3118.5	3041.4	2973.5	2905.7	2843.0	2784.3	2731.7	2679.1	2635.4	2591.7
10°	3276.9	3183.3	3089.7	3009.5	2929.0	2851.8	2788.7	2733.2	2677.7	2633.9	2590.3
12.5°	3336.5	3226.1	3115.7	3024.9	2934.1	2852.9	2794.1	2748.7	2703.4	2674.4	2645.5
15°	3372.4	3245.3	3118.2	3013.0	2907.8	2817.9	2770.9	2749.2	2727.5	2731.4	2735.4
17.5°	3382.6	3235.0	3087.5	2961.0	2834.6	2728.9	2699.8	2707.8	2715.7	2763.4	2811.1
20°	3385.9	3207.1	3028.3	2871.5	2714.8	2591.7	2584.0	2621.2	2658.3	2741.1	2823.9
22.5°	3390.2	3172.8	2955.3	2766.6	2577.8	2437.6	2452.6	2507.6	2562.5	2656.9	2751.6
25°	3407.5	3138.9	2870.4	2649.3	2428.3	2284.6	2325.0	2388.5	2451.8	2536.7	2621.7
27.5°	3443.6	3116.2	2788.9	2542.1	2295.2	2164.4	2213.6	2274.8	2336.0	2405.8	2475.5
30°	3493.0	3105.6	2718.1	2452.4	2186.8	2077.0	2115.5	2164.1	2212.8	2270.7	2328.6
32.5°	3535.5	3092.5	2649.3	2375.2	2101.0	2012.5	2029.6	2058.4	2087.1	2133.3	2179.7
35°	3566.8	3067.8	2569.1	2299.3	2029.4	1955.7	1948.5	1956.4	1964.4	1999.7	2034.9
37.5°	3585.4	3025.6	2465.6	2209.8	1954.1	1889.5	1863.6	1854.7	1846.0	1871.3	1896.7
40°	3597.1	2967.3	2337.6	2103.2	1868.8	1810.3	1770.4	1750.6	1730.8	1749.1	1767.3
42.5°	3619.3	2907.2	2195.3	1985.5	1775.7	1721.8	1671.5	1645.3	1619.1	1634.0	1648.9
45°	3658.3	2851.3	2044.5	1860.5	1676.4	1621.8	1573.2	1547.5	1522.1	1534.5	1547.2
47.5°	3685.1	2805.2	1925.4	1761.6	1597.8	1527.2	1485.4	1464.0	1442.6	1454.4	1466.1
50°	3667.6	2755.0	1842.3	1695.9	1549.4	1456.7	1408.1	1389.1	1370.2	1388.6	1407.0
52.5°	3559.9	2670.0	1780.2	1652.6	1525.1	1418.5	1350.5	1331.8	1313.0	1340.7	1368.3
55°	3337.6	2529.3	1721.0	1621.2	1521.5	1422.4	1319.9	1290.2	1260.6	1299.8	1339.0
57.5°	3006.9	2330.8	1654.6	1584.0	1513.6	1426.2	1301.5	1258.3	1215.0	1257.2	1299.4
60°	2563.6	2073.2	1582.7	1527.2	1471.8	1414.2	1284.3	1228.3	1172.1	1209.1	1246.1
62.5°	2064.1	1764.7	1465.3	1428.4	1391.7	1384.7	1264.2	1194.0	1124.0	1147.5	1171.0
65°	1627.0	1487.3	1347.5	1330.1	1312.7	1313.6	1221.8	1147.3	1072.7	1081.7	1090.7
67.5°	1260.2	1220.6	1180.8	1190.5	1200.2	1197.7	1146.2	1084.1	1022.0	1019.2	1016.4
70°	954.6	966.0	977.2	1022.2	1067.1	1067.1	1050.2	1006.0	962.0	952.1	942.3
72.5°	736.4	770.6	804.9	868.7	932.4	943.1	943.3	913.1	882.8	868.4	854.0
75°	571.7	602.8	633.9	705.3	776.8	826.2	822.0	798.8	775.4	761.6	747.7
77.5°	440.2	461.2	482.5	551.9	621.3	702.7	700.5	681.8	663.2	649.1	635.2
80°	330.0	338.8	347.5	406.3	465.0	562.3	561.9	546.3	530.5	518.9	507.1
82.5°	235.9	237.4	239.1	282.4	325.6	408.8	413.3	405.7	398.0	389.7	381.4
85°	142.6	141.9	140.9	172.7	204.4	266.1	272.1	263.9	255.7	246.4	237.2
87.5°	62.5	61.7	61.0	73.9	86.9	112.5	120.2	117.0	113.7	111.9	110.2
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: P966299

CATALOG NUMBER: NAV-SB4B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	2722.2	2705.7	2689.1	2672.6	2659.8	2646.9	2636.5	2626.2	2618.1	2610.0	2602.5
5°	2618.5	2589.1	2562.6	2536.0	2515.6	2495.0	2480.7	2466.4	2456.2	2446.1	2438.3
7.5°	2554.8	2517.9	2485.3	2452.9	2428.5	2404.2	2387.2	2370.2	2358.5	2346.8	2339.9
10°	2550.6	2510.8	2474.2	2437.6	2408.5	2379.3	2360.4	2341.1	2330.0	2319.1	2313.1
12.5°	2614.3	2583.3	2545.4	2507.6	2470.4	2433.2	2408.6	2384.0	2371.7	2359.4	2354.4
15°	2727.3	2719.2	2686.3	2653.4	2600.5	2547.6	2510.2	2472.9	2455.7	2438.7	2432.1
17.5°	2836.4	2861.6	2835.0	2808.6	2738.6	2668.5	2613.4	2558.4	2533.0	2507.6	2499.3
20°	2877.0	2930.0	2917.7	2905.4	2825.2	2745.3	2677.7	2610.3	2577.8	2545.3	2534.8
22.5°	2820.5	2889.5	2897.0	2904.2	2827.8	2751.2	2681.7	2612.1	2577.9	2543.6	2532.2
25°	2689.6	2757.5	2782.9	2808.1	2745.4	2682.7	2620.8	2559.2	2529.5	2499.9	2489.1
27.5°	2529.9	2584.3	2612.5	2640.9	2596.1	2551.5	2503.6	2455.6	2435.7	2415.7	2410.8
30°	2373.8	2419.0	2442.0	2464.9	2430.9	2396.9	2362.5	2328.0	2317.8	2307.6	2307.6
32.5°	2222.9	2266.4	2291.8	2317.4	2286.2	2254.8	2227.3	2199.9	2193.2	2186.5	2187.5
35°	2077.7	2120.6	2151.3	2181.9	2159.6	2137.4	2112.0	2086.8	2076.6	2066.6	2064.4
37.5°	1939.4	1982.2	2020.1	2057.8	2047.5	2037.3	2014.0	1990.7	1972.2	1953.8	1944.1
40°	1808.6	1850.0	1893.5	1937.0	1939.6	1942.0	1922.2	1902.4	1875.5	1848.9	1830.8
42.5°	1688.0	1727.2	1774.3	1821.2	1833.8	1846.3	1829.6	1813.0	1779.7	1746.4	1720.1
45°	1584.4	1621.6	1670.3	1719.0	1737.1	1755.1	1740.0	1725.1	1686.9	1648.9	1618.0
47.5°	1502.4	1538.7	1586.8	1634.9	1655.7	1676.4	1665.9	1655.5	1621.6	1587.7	1559.0
50°	1441.4	1475.6	1518.6	1561.7	1588.3	1615.0	1614.4	1614.0	1586.8	1559.7	1533.3
52.5°	1399.7	1431.1	1471.2	1511.4	1543.0	1574.6	1580.2	1586.0	1563.8	1541.8	1518.0
55°	1372.9	1406.7	1441.9	1477.0	1510.4	1544.0	1551.8	1559.7	1540.5	1521.2	1500.5
57.5°	1339.2	1378.9	1413.7	1448.5	1482.4	1516.0	1524.0	1532.0	1512.5	1493.0	1472.5
60°	1291.7	1337.4	1372.7	1408.1	1442.0	1475.9	1484.6	1493.4	1474.4	1455.5	1434.3
62.5°	1224.2	1277.6	1315.3	1352.9	1384.0	1415.0	1423.4	1431.8	1414.7	1397.5	1375.2
65°	1147.7	1204.9	1241.0	1276.9	1304.3	1331.7	1340.3	1348.8	1332.3	1315.8	1294.2
67.5°	1069.1	1121.8	1156.0	1190.1	1213.7	1237.3	1245.8	1254.1	1238.8	1223.7	1203.7
70°	988.6	1034.9	1064.5	1094.0	1115.2	1136.5	1144.6	1152.7	1140.4	1128.0	1108.8
72.5°	890.5	926.9	953.7	980.3	1001.1	1022.0	1031.7	1041.3	1030.9	1020.7	1002.3
75°	774.8	802.0	826.0	850.2	869.2	888.3	898.3	908.4	903.3	898.3	882.9
77.5°	657.2	679.2	700.0	720.8	740.8	760.7	770.0	779.4	772.4	765.2	749.7
80°	525.4	543.7	561.2	578.6	593.9	609.0	621.4	633.9	630.8	627.8	607.0
82.5°	379.9	378.3	372.2	366.1	398.4	430.8	452.0	473.2	471.9	470.5	452.8
85°	229.3	221.3	204.4	187.5	217.7	248.0	274.3	300.5	298.4	296.1	282.4
87.5°	109.9	109.5	96.7	83.6	96.2	109.1	119.6	130.3	127.6	124.8	117.8
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: P966299

CATALOG NUMBER: NAV-SB4B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	2595.0	2585.7	2595.0	2602.5	2610.0	2618.1	2626.2	2636.5	2646.9	2659.8	2672.6
5°	2430.5	2422.8	2430.5	2438.3	2446.1	2456.2	2466.4	2480.7	2495.0	2515.6	2536.0
7.5°	2333.0	2327.8	2333.0	2339.9	2346.8	2358.5	2370.2	2387.2	2404.2	2428.5	2452.9
10°	2307.2	2304.8	2307.2	2313.1	2319.1	2330.0	2341.1	2360.4	2379.3	2408.5	2437.6
12.5°	2349.4	2348.5	2349.4	2354.4	2359.4	2371.7	2384.0	2408.6	2433.2	2470.4	2507.6
15°	2425.6	2425.0	2425.6	2432.1	2438.7	2455.7	2472.9	2510.2	2547.6	2600.5	2653.4
17.5°	2490.9	2489.5	2490.9	2499.3	2507.6	2533.0	2558.4	2613.4	2668.5	2738.6	2808.6
20°	2524.5	2521.2	2524.5	2534.8	2545.3	2577.8	2610.3	2677.7	2745.3	2825.2	2905.4
22.5°	2520.7	2515.8	2520.7	2532.2	2543.6	2577.9	2612.1	2681.7	2751.2	2827.8	2904.2
25°	2478.3	2472.0	2478.3	2489.1	2499.9	2529.5	2559.2	2620.8	2682.7	2745.4	2808.1
27.5°	2405.9	2404.2	2405.9	2410.8	2415.7	2435.7	2455.6	2503.6	2551.5	2596.1	2640.9
30°	2307.6	2309.2	2307.6	2307.6	2307.6	2317.8	2328.0	2362.5	2396.9	2430.9	2464.9
32.5°	2188.5	2190.1	2188.5	2187.5	2186.5	2193.2	2199.9	2227.3	2254.8	2286.2	2317.4
35°	2062.2	2061.1	2062.2	2064.4	2066.6	2076.6	2086.8	2112.0	2137.4	2159.6	2181.9
37.5°	1934.4	1928.8	1934.4	1944.1	1953.8	1972.2	1990.7	2014.0	2037.3	2047.5	2057.8
40°	1812.8	1802.2	1812.8	1830.8	1848.9	1875.5	1902.4	1922.2	1942.0	1939.6	1937.0
42.5°	1693.7	1676.4	1693.7	1720.1	1746.4	1779.7	1813.0	1829.6	1846.3	1833.8	1821.2
45°	1587.0	1567.1	1587.0	1618.0	1648.9	1686.9	1725.1	1740.0	1755.1	1737.1	1719.0
47.5°	1530.5	1511.4	1530.5	1559.0	1587.7	1621.6	1655.5	1665.9	1676.4	1655.7	1634.9
50°	1506.9	1488.5	1506.9	1533.3	1559.7	1586.8	1614.0	1614.4	1615.0	1588.3	1561.7
52.5°	1494.4	1477.5	1494.4	1518.0	1541.8	1563.8	1586.0	1580.2	1574.6	1543.0	1511.4
55°	1479.7	1464.4	1479.7	1500.5	1521.2	1540.5	1559.7	1551.8	1544.0	1510.4	1477.0
57.5°	1451.8	1436.0	1451.8	1472.5	1493.0	1512.5	1532.0	1524.0	1516.0	1482.4	1448.5
60°	1413.1	1396.7	1413.1	1434.3	1455.5	1474.4	1493.4	1484.6	1475.9	1442.0	1408.1
62.5°	1352.9	1333.3	1352.9	1375.2	1397.5	1414.7	1431.8	1423.4	1415.0	1384.0	1352.9
65°	1272.6	1255.7	1272.6	1294.2	1315.8	1332.3	1348.8	1340.3	1331.7	1304.3	1276.9
67.5°	1183.6	1168.3	1183.6	1203.7	1223.7	1238.8	1254.1	1245.8	1237.3	1213.7	1190.1
70°	1089.6	1072.0	1089.6	1108.8	1128.0	1140.4	1152.7	1144.6	1136.5	1115.2	1094.0
72.5°	984.1	967.2	984.1	1002.3	1020.7	1030.9	1041.3	1031.7	1022.0	1001.1	980.3
75°	867.5	851.4	867.5	882.9	898.3	903.3	908.4	898.3	888.3	869.2	850.2
77.5°	734.2	721.3	734.2	749.7	765.2	772.4	779.4	770.0	760.7	740.8	720.8
80°	586.0	561.7	586.0	607.0	627.8	630.8	633.9	621.4	609.0	593.9	578.6
82.5°	435.2	419.6	435.2	452.8	470.5	471.9	473.2	452.0	430.8	398.4	366.1
85°	268.7	254.6	268.7	282.4	296.1	298.4	300.5	274.3	248.0	217.7	187.5
87.5°	110.6	103.8	110.6	117.8	124.8	127.6	130.3	119.6	109.1	96.2	83.6
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: P966299
 CATALOG NUMBER: NAV-SB4B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	2689.1	2705.7	2722.2	2738.7	2757.5	2776.4	2797.2	2818.2	2844.2	2867.4	2891.4
5°	2562.6	2589.1	2618.5	2647.8	2680.9	2714.1	2753.8	2793.3	2838.6	2884.6	2933.2
7.5°	2485.3	2517.9	2554.8	2591.7	2635.4	2679.1	2731.7	2784.3	2843.0	2905.7	2973.5
10°	2474.2	2510.8	2550.6	2590.3	2633.9	2677.7	2733.2	2788.7	2851.8	2929.0	3009.5
12.5°	2545.4	2583.3	2614.3	2645.5	2674.4	2703.4	2748.7	2794.1	2852.9	2934.1	3024.9
15°	2686.3	2719.2	2727.3	2735.4	2731.4	2727.5	2749.2	2770.9	2817.9	2907.8	3013.0
17.5°	2835.0	2861.6	2836.4	2811.1	2763.4	2715.7	2707.8	2699.8	2728.9	2834.6	2961.0
20°	2917.7	2930.0	2877.0	2823.9	2741.1	2658.3	2621.2	2584.0	2591.7	2714.8	2871.5
22.5°	2897.0	2889.5	2820.5	2751.6	2656.9	2562.5	2507.6	2452.6	2437.6	2577.8	2766.6
25°	2782.9	2757.5	2689.6	2621.7	2536.7	2451.8	2388.5	2325.0	2284.6	2428.3	2649.3
27.5°	2612.5	2584.3	2529.9	2475.5	2405.8	2336.0	2274.8	2213.6	2164.4	2295.2	2542.1
30°	2442.0	2419.0	2373.8	2328.6	2270.7	2212.8	2164.1	2115.5	2077.0	2186.8	2452.4
32.5°	2291.8	2266.4	2222.9	2179.7	2133.3	2087.1	2058.4	2029.6	2012.5	2101.0	2375.2
35°	2151.3	2120.6	2077.7	2034.9	1999.7	1964.4	1956.4	1948.5	1955.7	2029.4	2299.3
37.5°	2020.1	1982.2	1939.4	1896.7	1871.3	1846.0	1854.7	1863.6	1889.5	1954.1	2209.8
40°	1893.5	1850.0	1808.6	1767.3	1749.1	1730.8	1750.6	1770.4	1810.3	1868.8	2103.2
42.5°	1774.3	1727.2	1688.0	1648.9	1634.0	1619.1	1645.3	1671.5	1721.8	1775.7	1985.5
45°	1670.3	1621.6	1584.4	1547.2	1534.5	1522.1	1547.5	1573.2	1621.8	1676.4	1860.5
47.5°	1586.8	1538.7	1502.4	1466.1	1454.4	1442.6	1464.0	1485.4	1527.2	1597.8	1761.6
50°	1518.6	1475.6	1441.4	1407.0	1388.6	1370.2	1389.1	1408.1	1456.7	1549.4	1695.9
52.5°	1471.2	1431.1	1399.7	1368.3	1340.7	1313.0	1331.8	1350.5	1418.5	1525.1	1652.6
55°	1441.9	1406.7	1372.9	1339.0	1299.8	1260.6	1290.2	1319.9	1422.4	1521.5	1621.2
57.5°	1413.7	1378.9	1339.2	1299.4	1257.2	1215.0	1258.3	1301.5	1426.2	1513.6	1584.0
60°	1372.7	1337.4	1291.7	1246.1	1209.1	1172.1	1228.3	1284.3	1414.2	1471.8	1527.2
62.5°	1315.3	1277.6	1224.2	1171.0	1147.5	1124.0	1194.0	1264.2	1384.7	1391.7	1428.4
65°	1241.0	1204.9	1147.7	1090.7	1081.7	1072.7	1147.3	1221.8	1313.6	1312.7	1330.1
67.5°	1156.0	1121.8	1069.1	1016.4	1019.2	1022.0	1084.1	1146.2	1197.7	1200.2	1190.5
70°	1064.5	1034.9	988.6	942.3	952.1	962.0	1006.0	1050.2	1067.1	1067.1	1022.2
72.5°	953.7	926.9	890.5	854.0	868.4	882.8	913.1	943.3	943.1	932.4	868.7
75°	826.0	802.0	774.8	747.7	761.6	775.4	798.8	822.0	826.2	776.8	705.3
77.5°	700.0	679.2	657.2	635.2	649.1	663.2	681.8	700.5	702.7	621.3	551.9
80°	561.2	543.7	525.4	507.1	518.9	530.5	546.3	561.9	562.3	465.0	406.3
82.5°	372.2	378.3	379.9	381.4	389.7	398.0	405.7	413.3	408.8	325.6	282.4
85°	204.4	221.3	229.3	237.2	246.4	255.7	263.9	272.1	266.1	204.4	172.7
87.5°	96.7	109.5	109.9	110.2	111.9	113.7	117.0	120.2	112.5	86.9	73.9
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: P966299

CATALOG NUMBER: NAV-SB4B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0	2848.0
2.5°	2915.5	2940.6	2965.7	2990.6	3015.8	3039.2	3062.7
5°	2981.8	3033.9	3086.0	3137.6	3189.5	3241.4	3293.3
7.5°	3041.4	3118.5	3195.4	3274.6	3353.7	3439.3	3525.0
10°	3089.7	3183.3	3276.9	3381.4	3485.9	3594.3	3702.6
12.5°	3115.7	3226.1	3336.5	3455.0	3573.4	3692.3	3811.3
15°	3118.2	3245.3	3372.4	3500.8	3629.3	3753.3	3877.5
17.5°	3087.5	3235.0	3382.6	3522.8	3663.0	3788.8	3914.6
20°	3028.3	3207.1	3385.9	3539.9	3694.0	3824.9	3955.6
22.5°	2955.3	3172.8	3390.2	3563.1	3735.9	3869.6	4003.1
25°	2870.4	3138.9	3407.5	3605.1	3802.5	3933.3	4064.3
27.5°	2788.9	3116.2	3443.6	3670.6	3897.7	4022.5	4147.4
30°	2718.1	3105.6	3493.0	3755.6	4018.2	4138.7	4259.4
32.5°	2649.3	3092.5	3535.5	3844.2	4152.8	4272.2	4391.6
35°	2569.1	3067.8	3566.8	3945.2	4323.6	4437.9	4552.2
37.5°	2465.6	3025.6	3585.4	4058.3	4531.1	4677.0	4822.7
40°	2337.6	2967.3	3597.1	4201.9	4806.5	5019.0	5231.5
42.5°	2195.3	2907.2	3619.3	4389.8	5160.3	5466.8	5773.5
45°	2044.5	2851.3	3658.3	4637.0	5615.6	6029.3	6442.8
47.5°	1925.4	2805.2	3685.1	4900.3	6115.6	6697.9	7280.0
50°	1842.3	2755.0	3667.6	5144.7	6621.8	7499.5	8377.2
52.5°	1780.2	2670.0	3559.9	5303.3	7046.7	8341.8	9636.7
55°	1721.0	2529.3	3337.6	5268.4	7199.1	9088.4	10977.6
57.5°	1654.6	2330.8	3006.9	5022.3	7037.8	9617.5	12197.3
60°	1582.7	2073.2	2563.6	4564.3	6564.9	9749.7	12934.4
62.5°	1465.3	1764.7	2064.1	3944.9	5825.8	9192.9	12560.1
65°	1347.5	1487.3	1627.0	3313.1	4999.2	8405.1	11811.0
67.5°	1180.8	1220.6	1260.2	2694.1	4127.9	7467.5	10807.2
70°	977.2	966.0	954.6	2121.2	3287.8	6444.5	9601.2
72.5°	804.9	770.6	736.4	1621.7	2506.9	5335.5	8164.1
75°	633.9	602.8	571.7	1177.0	1782.2	4064.2	6346.2
77.5°	482.5	461.2	440.2	797.6	1155.0	2844.6	4534.2
80°	347.5	338.8	330.0	513.8	697.8	1832.7	2967.6
82.5°	239.1	237.4	235.9	316.0	396.5	1060.7	1725.1
85°	140.9	141.9	142.6	168.9	195.4	477.1	759.0
87.5°	61.0	61.7	62.5	70.0	77.6	156.3	234.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)