

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: P967353

Luminaire Tested: **NAV-SB4D-830-U-SLL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967353
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-SB4D-830-U-SLL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37427.9 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

Input Watts (W): 293.6
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

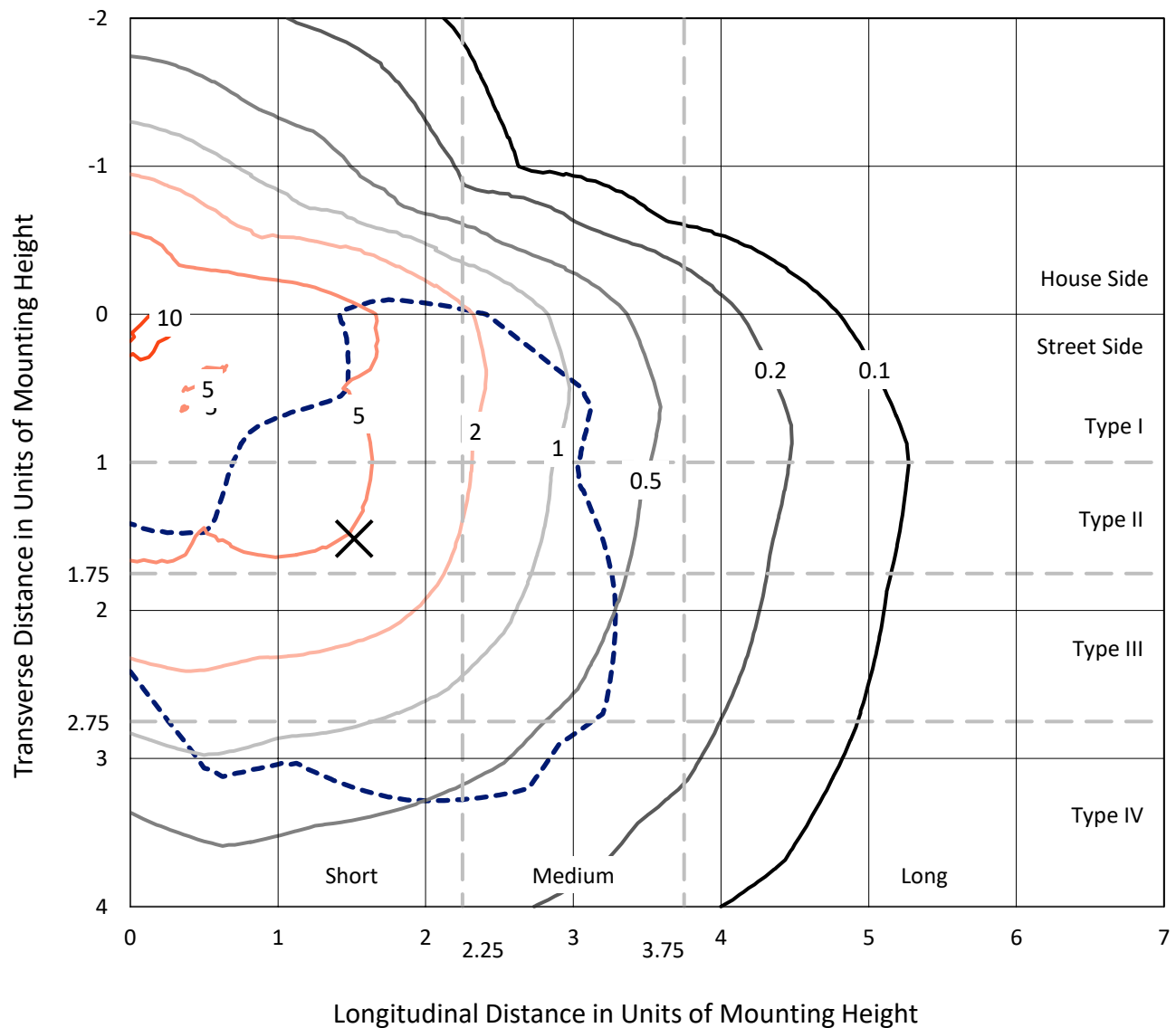


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Iso-Footcandle Lines of Horizontal Illumination

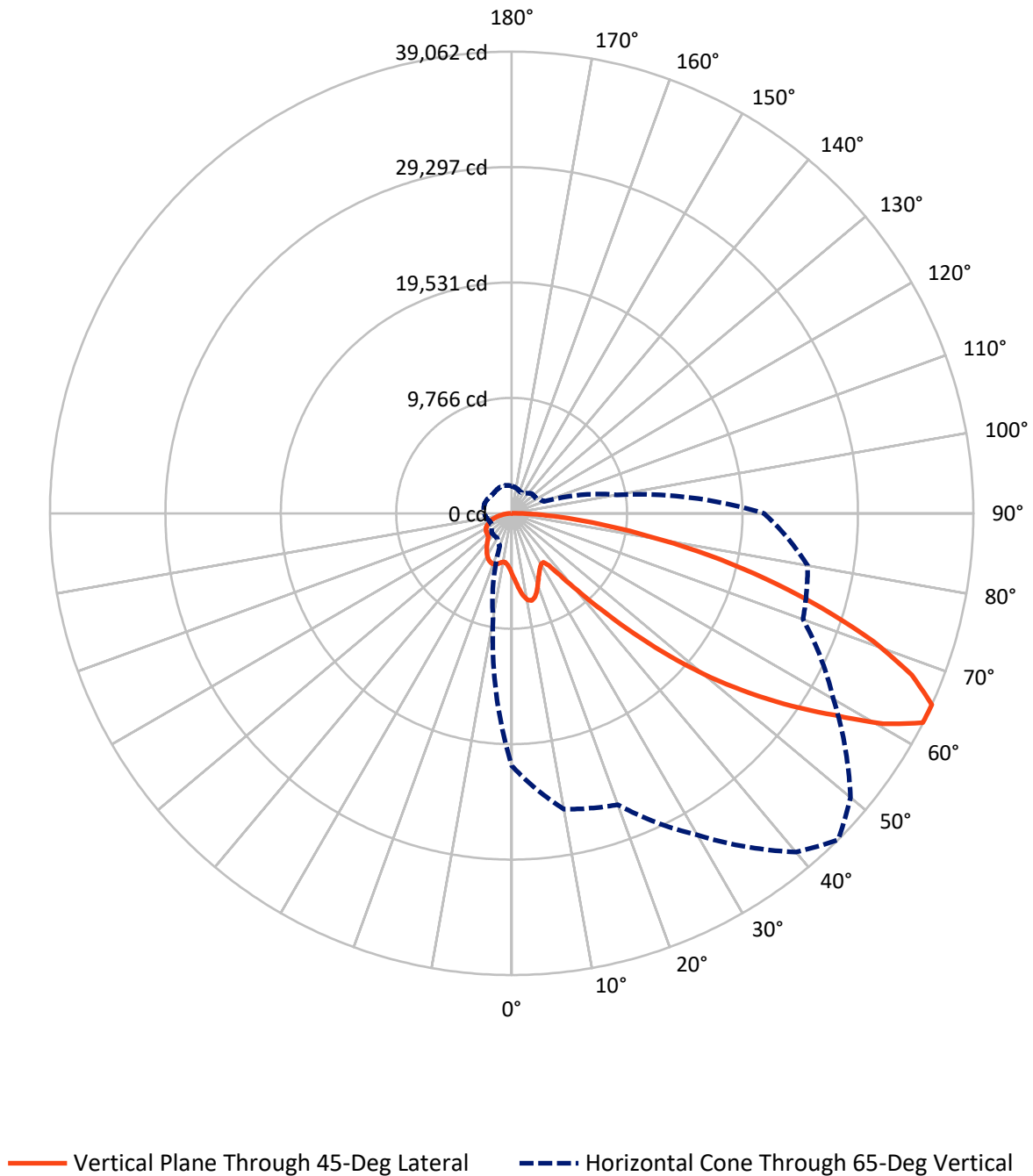
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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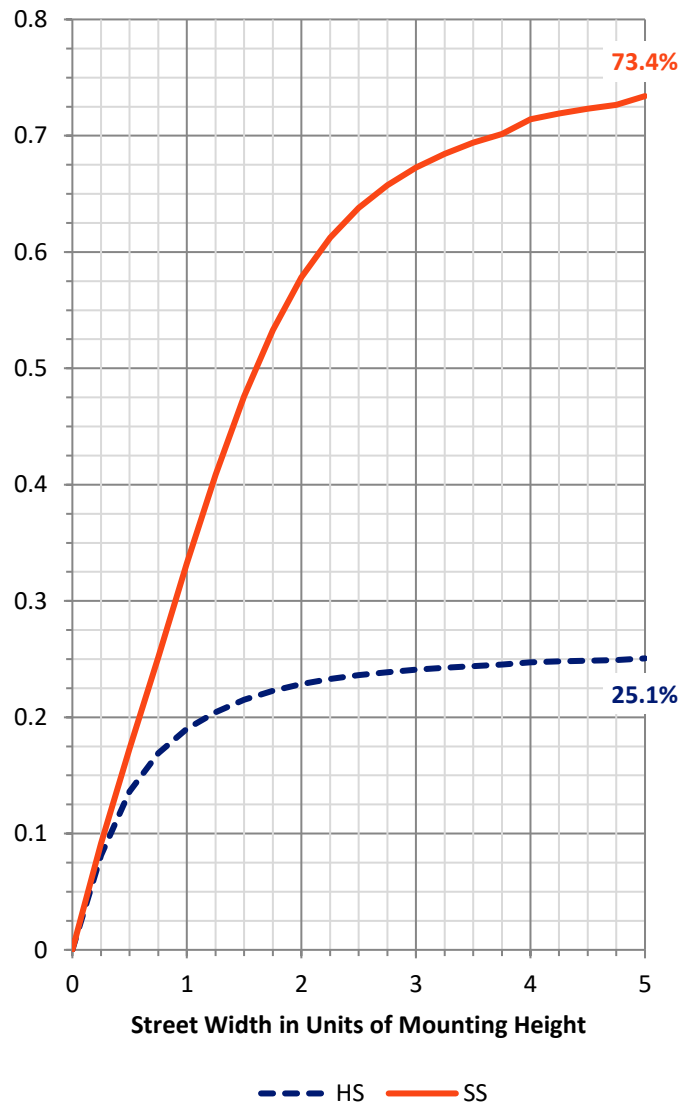
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9512.3	0.0	9512.3
	% Fixture	25.4	0.0	25.4
Street Side	Lumens	27915.6	0.0	27915.6
	% Fixture	74.6	0.0	74.6
Total	Lumens	37427.9	0.0	37427.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	510.5	1.4
10°-20°	1602.7	4.3
20°-30°	2475.6	6.6
30°-40°	3137.2	8.4
40°-50°	4731.7	12.6
50°-60°	7644.8	20.4
60°-70°	9530.5	25.5
70°-80°	6249.6	16.7
80°-90°	1545.1	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°	37427.9	100.0
0°-180°	37427.9	100.0

Coefficient of Utilization



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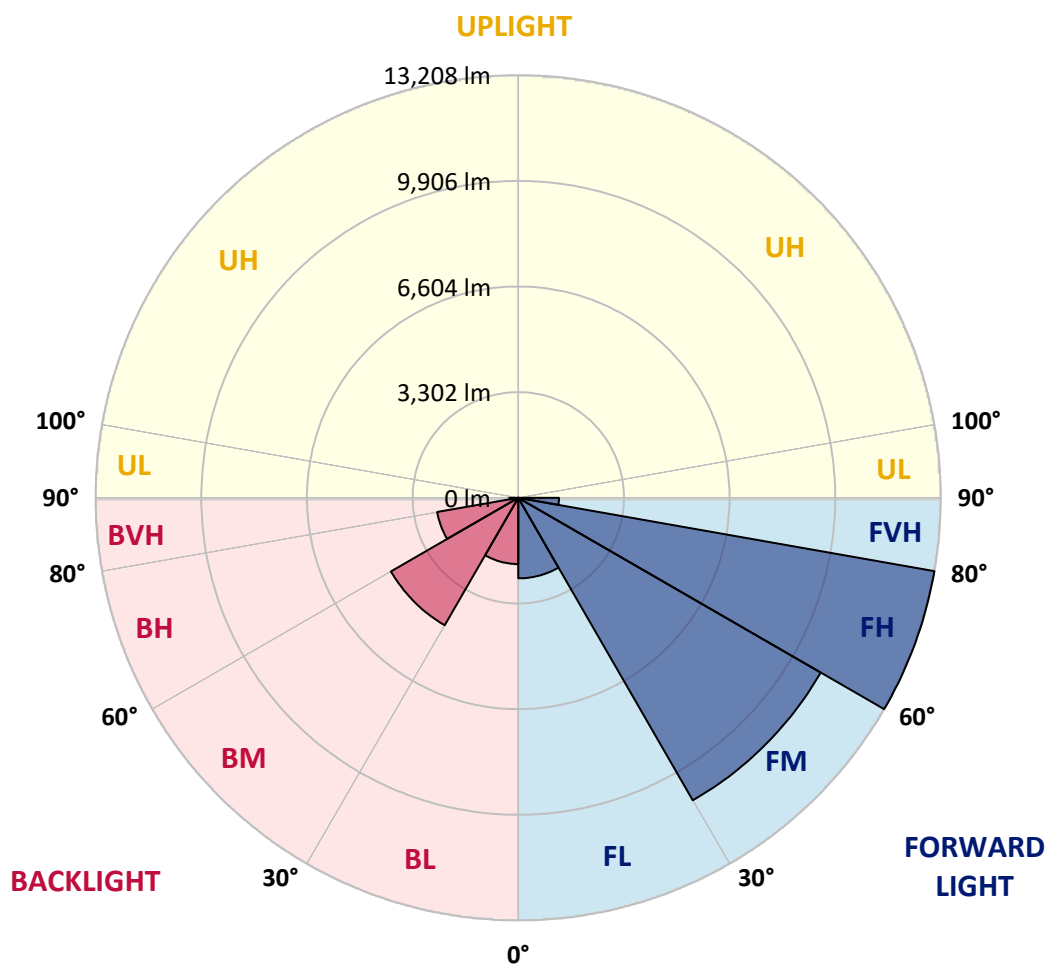
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2517.5	6.7			
FM	(30°-60°)	10916.9	29.2			
FH	(60°-80°)	13208.5	35.3			G5
FVH	(80°-90°)	1272.8	3.4			G5
BL	(0°-30°)	2071.4	5.5	B3/2500		
BM	(30°-60°)	4596.9	12.3	B3/5000		
BH	(60°-80°)	2571.7	6.9	B4/5000		G4/5000
BVH	(80°-90°)	272.3	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5534.7	5555.7	5576.8	5606.6	5636.5	5654.2	5671.9	5680.9	5689.8	5685.8	5689.8
5°	5951.5	6024.7	6098.1	6170.8	6243.7	6283.2	6322.7	6346.6	6370.7	6388.9	6370.7
7.5°	6370.2	6489.4	6608.5	6715.7	6823.0	6887.6	6952.2	6987.1	7021.9	7038.7	7021.9
10°	6691.1	6832.0	6973.1	7098.8	7224.7	7300.9	7376.7	7410.7	7444.5	7457.3	7444.5
12.5°	6887.6	7040.4	7193.0	7306.8	7420.2	7475.5	7530.8	7549.3	7567.9	7569.9	7567.9
15°	7007.0	7138.9	7270.7	7342.0	7413.5	7415.5	7417.4	7397.6	7377.9	7354.6	7377.9
17.5°	7074.1	7163.2	7252.3	7253.7	7254.8	7174.9	7094.9	7021.7	6948.2	6896.4	6948.2
20°	7148.2	7179.2	7210.5	7116.7	7022.8	6846.3	6669.7	6541.1	6412.6	6333.6	6412.6
22.5°	7234.1	7193.4	7152.8	6958.4	6764.1	6504.4	6244.7	6084.0	5923.2	5835.9	5923.2
25°	7344.7	7216.4	7088.0	6793.0	6497.9	6182.5	5867.1	5698.1	5529.4	5446.8	5529.4
27.5°	7494.8	7265.4	7035.7	6644.9	6254.2	5904.6	5555.1	5388.7	5222.7	5144.7	5222.7
30°	7697.2	7355.0	7012.9	6531.9	6050.8	5686.6	5322.4	5168.2	5013.9	4941.2	5013.9
32.5°	7936.3	7467.6	6999.1	6454.8	5910.6	5568.3	5226.1	5105.0	4983.8	4931.4	4983.8
35°	8226.5	7653.1	7079.7	6512.5	5945.5	5707.7	5470.1	5441.9	5413.6	5409.3	5413.6
37.5°	8715.4	8040.7	7366.1	6850.6	6335.1	6319.7	6304.4	6433.5	6562.7	6629.8	6562.7
40°	9454.0	8720.3	7986.6	7603.2	7219.9	7490.5	7761.1	8075.1	8389.1	8545.5	8389.1
42.5°	10433.6	9705.6	8977.6	8756.8	8536.0	9126.1	9716.3	10287.4	10858.5	11193.9	10858.5
45°	11643.2	10989.2	10335.2	10237.8	10140.2	11085.7	12031.2	12969.7	13908.4	14478.2	13908.4
47.5°	13156.0	12519.9	11883.5	11863.8	11844.0	13207.9	14571.4	15945.3	17319.1	18125.9	17319.1
50°	15138.8	14353.0	13567.3	13570.7	13574.1	15331.7	17089.4	18902.9	20716.6	21813.0	20716.6
52.5°	17414.9	16463.3	15512.0	15415.9	15319.4	17419.1	19518.6	21762.5	24006.2	25320.5	24006.2
55°	19838.2	18898.0	17958.0	17583.0	17207.9	19544.7	21881.2	24556.2	27231.3	28794.4	27231.3
57.5°	22042.1	21530.2	21018.1	20265.9	19513.8	21873.3	24232.7	27262.6	30292.4	32230.8	30292.4
60°	23374.2	24169.3	24964.6	24030.5	23096.3	25329.2	27562.0	30806.1	34050.1	36145.1	34050.1
62.5°	22697.8	24870.4	27043.1	26937.8	26832.3	28877.7	30923.4	34009.8	37096.0	39032.4	37096.0
65°	21344.0	23383.1	25422.3	25825.7	26229.0	28828.3	31427.9	34420.7	37413.4	39062.0	37413.4
67.5°	19530.0	21469.4	23408.7	23598.0	23787.0	26495.4	29203.6	32209.3	35214.9	36506.5	35214.9
70°	17350.7	19460.1	21569.7	21654.3	21739.0	24161.0	26582.9	29169.4	31755.8	32473.7	31755.8
72.5°	14753.6	17174.4	19595.2	19656.0	19716.7	21611.6	23506.5	25443.8	27380.7	27453.4	27380.7
75°	11468.4	13973.8	16479.1	16704.1	16929.1	18403.4	19877.6	21241.3	22605.0	22239.6	22605.0
77.5°	8194.0	10532.7	12871.5	13193.5	13515.4	14636.2	15756.9	16724.1	17691.4	17063.4	17691.4
80°	5362.9	7330.5	9298.0	9698.0	10098.2	10944.6	11790.7	12298.7	12806.5	11796.2	12806.5
82.5°	3117.4	4462.5	5807.9	6254.8	6701.9	7284.5	7867.1	8079.0	8290.7	7496.8	8290.7
85°	1371.6	2085.6	2799.5	3179.7	3559.8	4038.5	4517.1	4637.3	4757.6	4121.6	4757.6
87.5°	424.7	664.6	904.6	1116.6	1328.7	1568.0	1807.5	1817.7	1827.8	1534.5	1827.8
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°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5680.9	5671.9	5654.2	5636.5	5606.6	5576.8	5555.7	5534.7	5492.3	5449.8	5404.6
5°	6346.6	6322.7	6283.2	6243.7	6170.8	6098.1	6024.7	5951.5	5857.7	5763.8	5670.2
7.5°	6987.1	6952.2	6887.6	6823.0	6715.7	6608.5	6489.4	6370.2	6215.3	6060.6	5917.6
10°	7410.7	7376.7	7300.9	7224.7	7098.8	6973.1	6832.0	6691.1	6495.3	6299.6	6110.6
12.5°	7549.3	7530.8	7475.5	7420.2	7306.8	7193.0	7040.4	6887.6	6672.4	6457.6	6243.5
15°	7397.6	7417.4	7415.5	7413.5	7342.0	7270.7	7138.9	7007.0	6782.8	6558.8	6326.5
17.5°	7021.7	7094.9	7174.9	7254.8	7253.7	7252.3	7163.2	7074.1	6846.9	6619.6	6366.2
20°	6541.1	6669.7	6846.3	7022.8	7116.7	7210.5	7179.2	7148.2	6912.1	6675.6	6397.1
22.5°	6084.0	6244.7	6504.4	6764.1	6958.4	7152.8	7193.4	7234.1	6992.9	6751.3	6439.0
25°	5698.1	5867.1	6182.5	6497.9	6793.0	7088.0	7216.4	7344.7	7108.2	6871.7	6514.9
27.5°	5388.7	5555.1	5904.6	6254.2	6644.9	7035.7	7265.4	7494.8	7269.3	7043.6	6633.4
30°	5168.2	5322.4	5686.6	6050.8	6531.9	7012.9	7355.0	7697.2	7479.2	7261.4	6786.8
32.5°	5105.0	5226.1	5568.3	5910.6	6454.8	6999.1	7467.6	7936.3	7720.4	7504.7	6947.0
35°	5441.9	5470.1	5707.7	5945.5	6512.5	7079.7	7653.1	8226.5	8020.0	7813.2	7129.5
37.5°	6433.5	6304.4	6319.7	6335.1	6850.6	7366.1	8040.7	8715.4	8451.8	8188.4	7333.9
40°	8075.1	7761.1	7490.5	7219.9	7603.2	7986.6	8720.3	9454.0	9070.0	8686.2	7593.4
42.5°	10287.4	9716.3	9126.1	8536.0	8756.8	8977.6	9705.6	10433.6	9879.4	9325.2	7932.9
45°	12969.7	12031.2	11085.7	10140.2	10237.8	10335.2	10989.2	11643.2	10895.6	10148.1	8379.6
47.5°	15945.3	14571.4	13207.9	11844.0	11863.8	11883.5	12519.9	13156.0	12103.9	11051.7	8855.6
50°	18902.9	17089.4	15331.7	13574.1	13570.7	13567.3	14353.0	15138.8	13552.8	11966.5	9297.2
52.5°	21762.5	19518.6	17419.1	15319.4	15415.9	15512.0	16463.3	17414.9	15074.6	12734.3	9584.0
55°	24556.2	21881.2	19544.7	17207.9	17583.0	17958.0	18898.0	19838.2	16423.9	13009.8	9520.7
57.5°	27262.6	24232.7	21873.3	19513.8	20265.9	21018.1	21530.2	22042.1	17380.1	12718.1	9076.0
60°	30806.1	27562.0	25329.2	23096.3	24030.5	24964.6	24169.3	23374.2	17619.1	11863.8	8248.3
62.5°	34009.8	30923.4	28877.7	26832.3	26937.8	27043.1	24870.4	22697.8	16612.9	10528.0	7129.1
65°	34420.7	31427.9	28828.3	26229.0	25825.7	25422.3	23383.1	21344.0	15189.2	9034.2	5987.2
67.5°	32209.3	29203.6	26495.4	23787.0	23598.0	23408.7	21469.4	19530.0	13494.8	7459.6	4868.5
70°	29169.4	26582.9	24161.0	21739.0	21654.3	21569.7	19460.1	17350.7	11646.2	5941.5	3833.3
72.5°	25443.8	23506.5	21611.6	19716.7	19656.0	19595.2	17174.4	14753.6	9642.0	4530.5	2930.6
75°	21241.3	19877.6	18403.4	16929.1	16704.1	16479.1	13973.8	11468.4	7344.5	3220.8	2127.0
77.5°	16724.1	15756.9	14636.2	13515.4	13193.5	12871.5	10532.7	8194.0	5140.6	2087.1	1441.3
80°	12298.7	11790.7	10944.6	10098.2	9698.0	9298.0	7330.5	5362.9	3312.0	1261.0	928.6
82.5°	8079.0	7867.1	7284.5	6701.9	6254.8	5807.9	4462.5	3117.4	1916.9	716.5	571.1
85°	4637.3	4517.1	4038.5	3559.8	3179.7	2799.5	2085.6	1371.6	862.2	353.1	305.3
87.5°	1817.7	1807.5	1568.0	1328.7	1116.6	904.6	664.6	424.7	282.4	140.2	126.6
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°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5359.5	5314.1	5268.7	5225.2	5181.8	5139.8	5092.9	5055.0	5017.3	4983.1	4949.2
5°	5576.8	5482.6	5388.6	5300.7	5212.8	5129.8	5047.9	4976.4	4904.7	4844.7	4784.8
7.5°	5774.6	5635.4	5496.3	5373.6	5251.0	5137.8	5031.7	4936.5	4841.5	4762.6	4683.5
10°	5921.8	5752.7	5583.5	5438.5	5293.2	5153.6	5039.6	4939.3	4838.9	4760.0	4681.0
12.5°	6029.5	5830.0	5630.5	5466.4	5302.3	5155.5	5049.5	4967.4	4885.6	4833.1	4780.9
15°	6094.2	5864.5	5634.8	5444.9	5254.9	5092.3	5007.4	4968.1	4929.0	4936.1	4943.3
17.5°	6112.8	5846.2	5579.6	5351.0	5122.5	4931.4	4879.1	4893.5	4907.7	4993.8	5079.9
20°	6118.7	5795.7	5472.5	5189.3	4906.1	4683.5	4669.7	4736.8	4804.0	4953.5	5103.2
22.5°	6126.6	5733.6	5340.6	4999.5	4658.4	4405.0	4432.1	4531.4	4630.8	4801.4	4972.5
25°	6157.8	5672.3	5187.1	4787.6	4388.3	4128.6	4201.7	4316.2	4430.8	4584.2	4737.9
27.5°	6223.0	5631.5	5040.0	4593.8	4147.8	3911.3	4000.2	4110.8	4221.4	4347.6	4473.6
30°	6312.3	5612.4	4912.0	4431.9	3951.8	3753.3	3823.0	3910.8	3998.8	4103.5	4208.1
32.5°	6389.2	5588.6	4787.6	4292.3	3796.8	3636.8	3667.9	3719.7	3771.7	3855.2	3939.0
35°	6445.7	5544.0	4642.6	4155.0	3667.4	3534.1	3521.3	3535.5	3549.9	3613.7	3677.3
37.5°	6479.3	5467.6	4455.8	3993.5	3531.1	3414.7	3367.6	3351.9	3336.1	3381.9	3427.5
40°	6500.4	5362.3	4224.3	3800.7	3377.2	3271.5	3199.3	3163.7	3127.9	3160.9	3193.9
42.5°	6540.5	5253.7	3967.3	3588.0	3208.9	3111.5	3020.7	2973.2	2925.9	2952.7	2979.8
45°	6611.0	5152.8	3694.7	3362.1	3029.5	2930.8	2842.9	2796.7	2750.7	2773.2	2796.1
47.5°	6659.4	5069.4	3479.5	3183.3	2887.3	2759.9	2684.3	2645.6	2606.9	2628.2	2649.3
50°	6627.9	4978.6	3329.3	3064.6	2800.1	2632.6	2544.7	2510.3	2476.2	2509.3	2542.7
52.5°	6433.3	4825.2	3217.2	2986.4	2756.0	2563.4	2440.6	2406.6	2372.9	2422.8	2472.6
55°	6031.4	4570.8	3110.2	2929.8	2749.5	2570.4	2385.3	2331.6	2278.1	2349.0	2419.7
57.5°	5434.0	4212.1	2990.0	2862.6	2735.3	2577.3	2352.2	2274.0	2195.8	2271.9	2348.2
60°	4632.8	3746.5	2860.1	2759.9	2659.9	2555.5	2320.9	2219.6	2118.1	2185.1	2251.8
62.5°	3730.3	3189.1	2648.0	2581.5	2515.0	2502.2	2284.6	2157.8	2031.2	2073.7	2116.1
65°	2940.3	2687.7	2435.1	2403.7	2372.3	2373.9	2208.0	2073.3	1938.4	1954.8	1971.0
67.5°	2277.4	2205.8	2133.9	2151.5	2168.9	2164.5	2071.3	1959.1	1846.9	1841.8	1836.7
70°	1725.1	1745.7	1766.0	1847.4	1928.5	1928.5	1897.9	1818.1	1738.3	1720.6	1702.7
72.5°	1330.7	1392.6	1454.6	1569.9	1685.0	1704.4	1704.8	1650.0	1595.3	1569.3	1543.4
75°	1033.3	1089.4	1145.4	1274.6	1403.7	1493.0	1485.5	1443.5	1401.2	1376.4	1351.3
77.5°	795.5	833.6	872.0	997.3	1122.8	1269.9	1266.0	1232.2	1198.4	1173.1	1147.8
80°	596.4	612.2	628.0	734.3	840.3	1016.1	1015.5	987.3	958.8	937.7	916.4
82.5°	426.2	429.0	432.1	510.3	588.6	738.6	746.9	733.1	719.2	704.3	689.2
85°	257.7	256.4	254.8	312.0	369.3	480.9	491.8	476.9	462.2	445.4	428.6
87.5°	113.0	111.6	110.2	133.5	157.0	203.5	217.2	211.4	205.4	202.2	199.1
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: P967353

CATALOG NUMBER: NAV-SB4D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	4919.4	4889.6	4859.5	4829.7	4806.5	4783.3	4764.5	4745.8	4731.1	4716.5	4703.1
5°	4731.9	4679.0	4631.1	4582.8	4545.9	4508.8	4482.8	4457.0	4438.7	4420.3	4406.3
7.5°	4617.0	4550.2	4491.3	4432.7	4388.6	4344.9	4314.0	4283.2	4262.1	4241.1	4228.5
10°	4609.3	4537.4	4471.3	4405.0	4352.6	4299.8	4265.4	4230.7	4210.7	4190.8	4180.2
12.5°	4724.4	4668.4	4599.8	4531.4	4464.3	4397.1	4352.8	4308.3	4285.9	4263.9	4254.8
15°	4928.6	4914.1	4854.6	4795.2	4699.5	4604.0	4536.4	4468.9	4437.8	4407.1	4395.2
17.5°	5125.7	5171.3	5123.4	5075.6	4949.0	4822.4	4722.8	4623.3	4577.4	4531.4	4516.5
20°	5199.0	5294.7	5272.7	5250.4	5105.6	4961.0	4838.9	4717.2	4658.4	4599.6	4580.8
22.5°	5097.1	5221.7	5235.1	5248.4	5110.1	4971.9	4846.3	4720.4	4658.6	4596.6	4575.9
25°	4860.4	4983.1	5029.0	5074.6	4961.2	4848.0	4736.2	4624.9	4571.2	4517.7	4498.1
27.5°	4571.9	4670.3	4721.3	4772.4	4691.6	4611.1	4524.3	4437.6	4401.8	4365.6	4356.7
30°	4289.7	4371.5	4412.9	4454.4	4393.0	4331.4	4269.4	4207.0	4188.7	4170.0	4170.0
32.5°	4017.2	4095.6	4141.6	4187.8	4131.4	4074.7	4025.1	3975.6	3963.5	3951.5	3953.0
35°	3754.7	3832.4	3887.6	3943.0	3902.7	3862.6	3816.7	3771.1	3752.7	3734.6	3730.6
37.5°	3504.7	3582.2	3650.4	3718.8	3700.2	3681.7	3639.6	3597.3	3563.9	3530.8	3513.2
40°	3268.5	3343.1	3421.8	3500.6	3505.1	3509.4	3473.7	3438.0	3389.4	3341.2	3308.4
42.5°	3050.5	3121.3	3206.3	3291.2	3313.9	3336.7	3306.4	3276.4	3216.1	3156.0	3108.3
45°	2863.2	2930.4	3018.5	3106.6	3139.2	3171.8	3144.5	3117.4	3048.5	2979.8	2923.9
47.5°	2715.1	2780.7	2867.6	2954.5	2992.0	3029.5	3010.5	2991.7	2930.4	2869.2	2817.4
50°	2604.7	2666.5	2744.3	2822.1	2870.3	2918.6	2917.4	2916.5	2867.6	2818.6	2770.8
52.5°	2529.5	2586.2	2658.6	2731.3	2788.4	2845.5	2855.8	2866.0	2826.1	2786.3	2743.4
55°	2480.9	2542.1	2605.8	2669.1	2729.6	2790.2	2804.4	2818.6	2783.9	2749.0	2711.5
57.5°	2420.0	2492.0	2554.8	2617.7	2678.8	2739.6	2754.1	2768.4	2733.3	2698.1	2661.0
60°	2334.3	2417.0	2480.7	2544.7	2606.0	2667.2	2682.9	2698.7	2664.4	2630.3	2591.9
62.5°	2212.4	2308.7	2376.9	2444.9	2501.0	2557.2	2572.3	2587.5	2556.6	2525.5	2485.2
65°	2074.1	2177.3	2242.5	2307.7	2357.1	2406.5	2422.1	2437.4	2407.6	2377.8	2338.7
67.5°	1931.9	2027.2	2089.1	2150.7	2193.4	2236.0	2251.2	2266.3	2238.8	2211.5	2175.2
70°	1786.5	1870.2	1923.6	1976.9	2015.5	2053.9	2068.6	2083.1	2060.9	2038.5	2003.8
72.5°	1609.4	1675.2	1723.3	1771.5	1809.2	1846.9	1864.4	1881.7	1863.1	1844.6	1811.4
75°	1400.3	1449.2	1492.8	1536.5	1570.8	1605.3	1623.4	1641.5	1632.5	1623.4	1595.5
77.5°	1187.8	1227.4	1265.0	1302.5	1338.6	1374.5	1391.5	1408.6	1395.8	1382.8	1354.8
80°	949.6	982.6	1014.1	1045.7	1073.2	1100.4	1123.0	1145.4	1139.9	1134.6	1096.9
82.5°	686.4	683.7	672.7	661.6	720.1	778.5	816.8	855.2	852.8	850.2	818.4
85°	414.3	400.0	369.3	338.7	393.4	448.3	495.7	543.1	539.2	535.3	510.3
87.5°	198.4	197.9	174.6	151.1	173.9	197.1	216.3	235.4	230.6	225.5	212.9
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: P967353

CATALOG NUMBER: NAV-SB4D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	4689.5	4672.7	4689.5	4703.1	4716.5	4731.1	4745.8	4764.5	4783.3	4806.5	4829.7
5°	4392.2	4378.4	4392.2	4406.3	4420.3	4438.7	4457.0	4482.8	4508.8	4545.9	4582.8
7.5°	4216.0	4206.6	4216.0	4228.5	4241.1	4262.1	4283.2	4314.0	4344.9	4388.6	4432.7
10°	4169.5	4165.1	4169.5	4180.2	4190.8	4210.7	4230.7	4265.4	4299.8	4352.6	4405.0
12.5°	4245.7	4244.1	4245.7	4254.8	4263.9	4285.9	4308.3	4352.8	4397.1	4464.3	4531.4
15°	4383.3	4382.4	4383.3	4395.2	4407.1	4437.8	4468.9	4536.4	4604.0	4699.5	4795.2
17.5°	4501.3	4498.9	4501.3	4516.5	4531.4	4577.4	4623.3	4722.8	4822.4	4949.0	5075.6
20°	4562.1	4556.1	4562.1	4580.8	4599.6	4658.4	4717.2	4838.9	4961.0	5105.6	5250.4
22.5°	4555.2	4546.3	4555.2	4575.9	4596.6	4658.6	4720.4	4846.3	4971.9	5110.1	5248.4
25°	4478.7	4467.3	4478.7	4498.1	4517.7	4571.2	4624.9	4736.2	4848.0	4961.2	5074.6
27.5°	4347.8	4344.9	4347.8	4356.7	4365.6	4401.8	4437.6	4524.3	4611.1	4691.6	4772.4
30°	4170.0	4173.0	4170.0	4170.0	4170.0	4188.7	4207.0	4269.4	4331.4	4393.0	4454.4
32.5°	3954.8	3957.7	3954.8	3953.0	3951.5	3963.5	3975.6	4025.1	4074.7	4131.4	4187.8
35°	3726.7	3724.7	3726.7	3730.6	3734.6	3752.7	3771.1	3816.7	3862.6	3902.7	3943.0
37.5°	3495.7	3485.7	3495.7	3513.2	3530.8	3563.9	3597.3	3639.6	3681.7	3700.2	3718.8
40°	3276.0	3256.6	3276.0	3308.4	3341.2	3389.4	3438.0	3473.7	3509.4	3505.1	3500.6
42.5°	3060.8	3029.5	3060.8	3108.3	3156.0	3216.1	3276.4	3306.4	3336.7	3313.9	3291.2
45°	2868.0	2832.1	2868.0	2923.9	2979.8	3048.5	3117.4	3144.5	3171.8	3139.2	3106.6
47.5°	2765.9	2731.3	2765.9	2817.4	2869.2	2930.4	2991.7	3010.5	3029.5	2992.0	2954.5
50°	2723.0	2689.8	2723.0	2770.8	2818.6	2867.6	2916.5	2917.4	2918.6	2870.3	2822.1
52.5°	2700.7	2670.1	2700.7	2743.4	2786.3	2826.1	2866.0	2855.8	2845.5	2788.4	2731.3
55°	2674.0	2646.4	2674.0	2711.5	2749.0	2783.9	2818.6	2804.4	2790.2	2729.6	2669.1
57.5°	2623.7	2595.1	2623.7	2661.0	2698.1	2733.3	2768.4	2754.1	2739.6	2678.8	2617.7
60°	2553.6	2524.0	2553.6	2591.9	2630.3	2664.4	2698.7	2682.9	2667.2	2606.0	2544.7
62.5°	2444.9	2409.4	2444.9	2485.2	2525.5	2556.6	2587.5	2572.3	2557.2	2501.0	2444.9
65°	2299.8	2269.1	2299.8	2338.7	2377.8	2407.6	2437.4	2422.1	2406.5	2357.1	2307.7
67.5°	2138.9	2111.2	2138.9	2175.2	2211.5	2238.8	2266.3	2251.2	2236.0	2193.4	2150.7
70°	1969.0	1937.4	1969.0	2003.8	2038.5	2060.9	2083.1	2068.6	2053.9	2015.5	1976.9
72.5°	1778.4	1747.8	1778.4	1811.4	1844.6	1863.1	1881.7	1864.4	1846.9	1809.2	1771.5
75°	1567.7	1538.4	1567.7	1595.5	1623.4	1632.5	1641.5	1623.4	1605.3	1570.8	1536.5
77.5°	1326.8	1303.5	1326.8	1354.8	1382.8	1395.8	1408.6	1391.5	1374.5	1338.6	1302.5
80°	1058.9	1015.2	1058.9	1096.9	1134.6	1139.9	1145.4	1123.0	1100.4	1073.2	1045.7
82.5°	786.4	758.4	786.4	818.4	850.2	852.8	855.2	816.8	778.5	720.1	661.6
85°	485.4	460.1	485.4	510.3	535.3	539.2	543.1	495.7	448.3	393.4	338.7
87.5°	199.9	187.6	199.9	212.9	225.5	230.6	235.4	216.3	197.1	173.9	151.1
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: P967353

CATALOG NUMBER: NAV-SB4D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	4859.5	4889.6	4919.4	4949.2	4983.1	5017.3	5055.0	5092.9	5139.8	5181.8	5225.2
5°	4631.1	4679.0	4731.9	4784.8	4844.7	4904.7	4976.4	5047.9	5129.8	5212.8	5300.7
7.5°	4491.3	4550.2	4617.0	4683.5	4762.6	4841.5	4936.5	5031.7	5137.8	5251.0	5373.6
10°	4471.3	4537.4	4609.3	4681.0	4760.0	4838.9	4939.3	5039.6	5153.6	5293.2	5438.5
12.5°	4599.8	4668.4	4724.4	4780.9	4833.1	4885.6	4967.4	5049.5	5155.5	5302.3	5466.4
15°	4854.6	4914.1	4928.6	4943.3	4936.1	4929.0	4968.1	5007.4	5092.3	5254.9	5444.9
17.5°	5123.4	5171.3	5125.7	5079.9	4993.8	4907.7	4893.5	4879.1	4931.4	5122.5	5351.0
20°	5272.7	5294.7	5199.0	5103.2	4953.5	4804.0	4736.8	4669.7	4683.5	4906.1	5189.3
22.5°	5235.1	5221.7	5097.1	4972.5	4801.4	4630.8	4531.4	4432.1	4405.0	4658.4	4999.5
25°	5029.0	4983.1	4860.4	4737.9	4584.2	4430.8	4316.2	4201.7	4128.6	4388.3	4787.6
27.5°	4721.3	4670.3	4571.9	4473.6	4347.6	4221.4	4110.8	4000.2	3911.3	4147.8	4593.8
30°	4412.9	4371.5	4289.7	4208.1	4103.5	3998.8	3910.8	3823.0	3753.3	3951.8	4431.9
32.5°	4141.6	4095.6	4017.2	3939.0	3855.2	3771.7	3719.7	3667.9	3636.8	3796.8	4292.3
35°	3887.6	3832.4	3754.7	3677.3	3613.7	3549.9	3535.5	3521.3	3534.1	3667.4	4155.0
37.5°	3650.4	3582.2	3504.7	3427.5	3381.9	3336.1	3351.9	3367.6	3414.7	3531.1	3993.5
40°	3421.8	3343.1	3268.5	3193.9	3160.9	3127.9	3163.7	3199.3	3271.5	3377.2	3800.7
42.5°	3206.3	3121.3	3050.5	2979.8	2952.7	2925.9	2973.2	3020.7	3111.5	3208.9	3588.0
45°	3018.5	2930.4	2863.2	2796.1	2773.2	2750.7	2796.7	2842.9	2930.8	3029.5	3362.1
47.5°	2867.6	2780.7	2715.1	2649.3	2628.2	2606.9	2645.6	2684.3	2759.9	2887.3	3183.3
50°	2744.3	2666.5	2604.7	2542.7	2509.3	2476.2	2510.3	2544.7	2632.6	2800.1	3064.6
52.5°	2658.6	2586.2	2529.5	2472.6	2422.8	2372.9	2406.6	2440.6	2563.4	2756.0	2986.4
55°	2605.8	2542.1	2480.9	2419.7	2349.0	2278.1	2331.6	2385.3	2570.4	2749.5	2929.8
57.5°	2554.8	2492.0	2420.0	2348.2	2271.9	2195.8	2274.0	2352.2	2577.3	2735.3	2862.6
60°	2480.7	2417.0	2334.3	2251.8	2185.1	2118.1	2219.6	2320.9	2555.5	2659.9	2759.9
62.5°	2376.9	2308.7	2212.4	2116.1	2073.7	2031.2	2157.8	2284.6	2502.2	2515.0	2581.5
65°	2242.5	2177.3	2074.1	1971.0	1954.8	1938.4	2073.3	2208.0	2373.9	2372.3	2403.7
67.5°	2089.1	2027.2	1931.9	1836.7	1841.8	1846.9	1959.1	2071.3	2164.5	2168.9	2151.5
70°	1923.6	1870.2	1786.5	1702.7	1720.6	1738.3	1818.1	1897.9	1928.5	1928.5	1847.4
72.5°	1723.3	1675.2	1609.4	1543.4	1569.3	1595.3	1650.0	1704.8	1704.4	1685.0	1569.9
75°	1492.8	1449.2	1400.3	1351.3	1376.4	1401.2	1443.5	1485.5	1493.0	1403.7	1274.6
77.5°	1265.0	1227.4	1187.8	1147.8	1173.1	1198.4	1232.2	1266.0	1269.9	1122.8	997.3
80°	1014.1	982.6	949.6	916.4	937.7	958.8	987.3	1015.5	1016.1	840.3	734.3
82.5°	672.7	683.7	686.4	689.2	704.3	719.2	733.1	746.9	738.6	588.6	510.3
85°	369.3	400.0	414.3	428.6	445.4	462.2	476.9	491.8	480.9	369.3	312.0
87.5°	174.6	197.9	198.4	199.1	202.2	205.4	211.4	217.2	203.5	157.0	133.5
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: P967353

CATALOG NUMBER: NAV-SB4D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6	5146.6
2.5°	5268.7	5314.1	5359.5	5404.6	5449.8	5492.3	5534.7
5°	5388.6	5482.6	5576.8	5670.2	5763.8	5857.7	5951.5
7.5°	5496.3	5635.4	5774.6	5917.6	6060.6	6215.3	6370.2
10°	5583.5	5752.7	5921.8	6110.6	6299.6	6495.3	6691.1
12.5°	5630.5	5830.0	6029.5	6243.5	6457.6	6672.4	6887.6
15°	5634.8	5864.5	6094.2	6326.5	6558.8	6782.8	7007.0
17.5°	5579.6	5846.2	6112.8	6366.2	6619.6	6846.9	7074.1
20°	5472.5	5795.7	6118.7	6397.1	6675.6	6912.1	7148.2
22.5°	5340.6	5733.6	6126.6	6439.0	6751.3	6992.9	7234.1
25°	5187.1	5672.3	6157.8	6514.9	6871.7	7108.2	7344.7
27.5°	5040.0	5631.5	6223.0	6633.4	7043.6	7269.3	7494.8
30°	4912.0	5612.4	6312.3	6786.8	7261.4	7479.2	7697.2
32.5°	4787.6	5588.6	6389.2	6947.0	7504.7	7720.4	7936.3
35°	4642.6	5544.0	6445.7	7129.5	7813.2	8020.0	8226.5
37.5°	4455.8	5467.6	6479.3	7333.9	8188.4	8451.8	8715.4
40°	4224.3	5362.3	6500.4	7593.4	8686.2	9070.0	9454.0
42.5°	3967.3	5253.7	6540.5	7932.9	9325.2	9879.4	10433.6
45°	3694.7	5152.8	6611.0	8379.6	10148.1	10895.6	11643.2
47.5°	3479.5	5069.4	6659.4	8855.6	11051.7	12103.9	13156.0
50°	3329.3	4978.6	6627.9	9297.2	11966.5	13552.8	15138.8
52.5°	3217.2	4825.2	6433.3	9584.0	12734.3	15074.6	17414.9
55°	3110.2	4570.8	6031.4	9520.7	13009.8	16423.9	19838.2
57.5°	2990.0	4212.1	5434.0	9076.0	12718.1	17380.1	22042.1
60°	2860.1	3746.5	4632.8	8248.3	11863.8	17619.1	23374.2
62.5°	2648.0	3189.1	3730.3	7129.1	10528.0	16612.9	22697.8
65°	2435.1	2687.7	2940.3	5987.2	9034.2	15189.2	21344.0
67.5°	2133.9	2205.8	2277.4	4868.5	7459.6	13494.8	19530.0
70°	1766.0	1745.7	1725.1	3833.3	5941.5	11646.2	17350.7
72.5°	1454.6	1392.6	1330.7	2930.6	4530.5	9642.0	14753.6
75°	1145.4	1089.4	1033.3	2127.0	3220.8	7344.5	11468.4
77.5°	872.0	833.6	795.5	1441.3	2087.1	5140.6	8194.0
80°	628.0	612.2	596.4	928.6	1261.0	3312.0	5362.9
82.5°	432.1	429.0	426.2	571.1	716.5	1916.9	3117.4
85°	254.8	256.4	257.7	305.3	353.1	862.2	1371.6
87.5°	110.2	111.6	113.0	126.6	140.2	282.4	424.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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