

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: P968251

Luminaire Tested: **NAV-SB5B-735-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968251
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22251.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

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



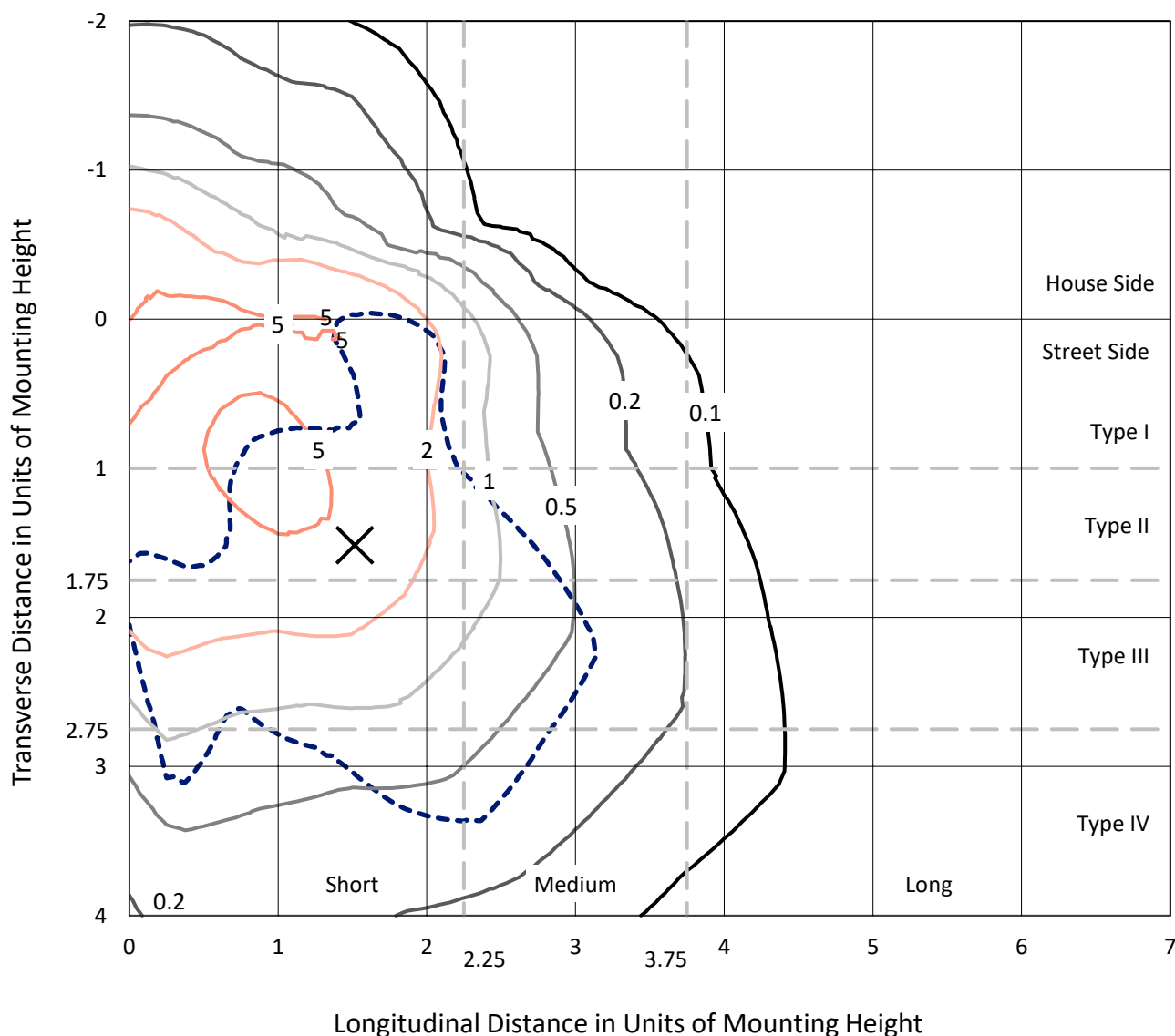
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

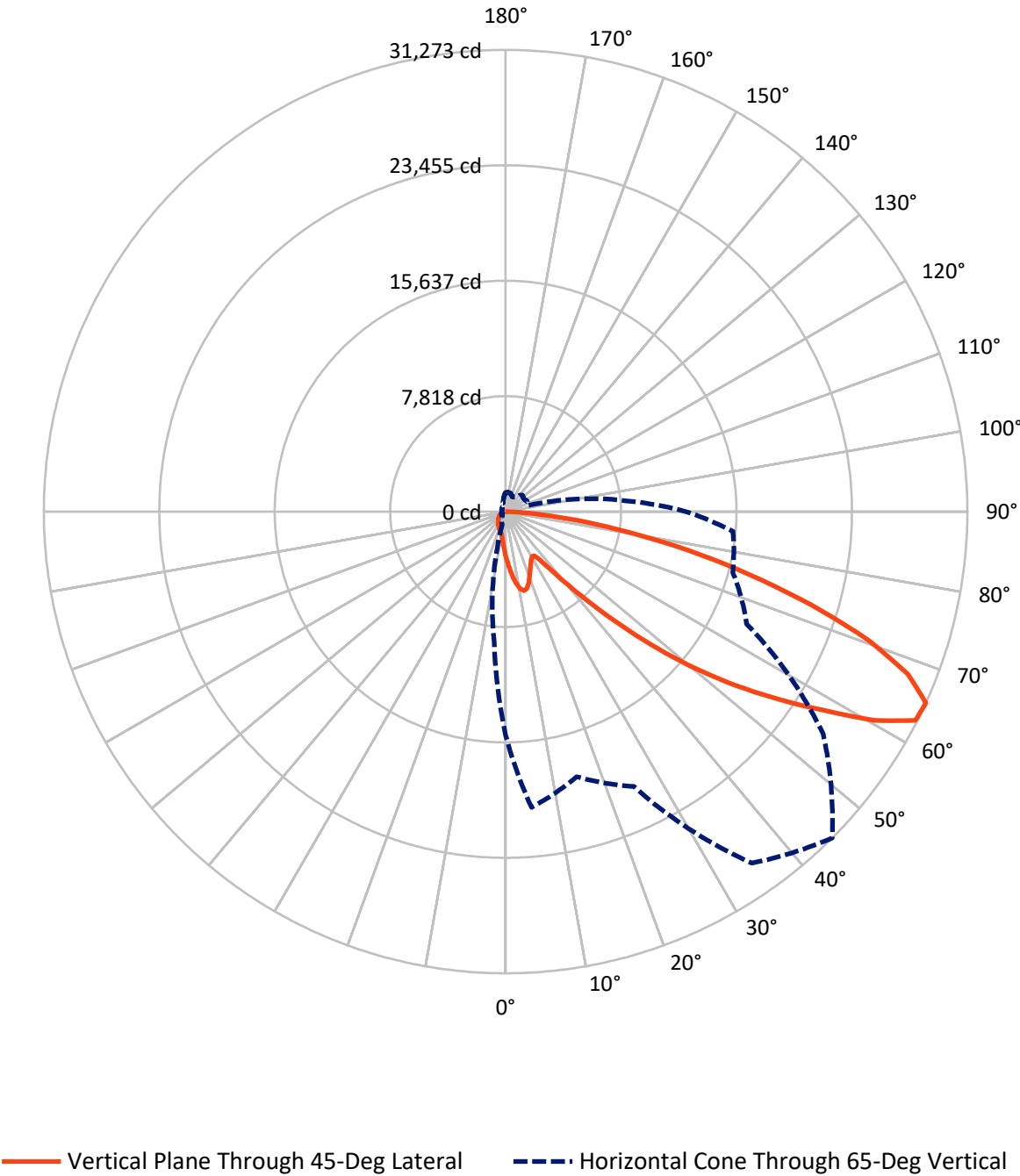


Based on 25 foot mounting height. Maximum calculated value = 8.1 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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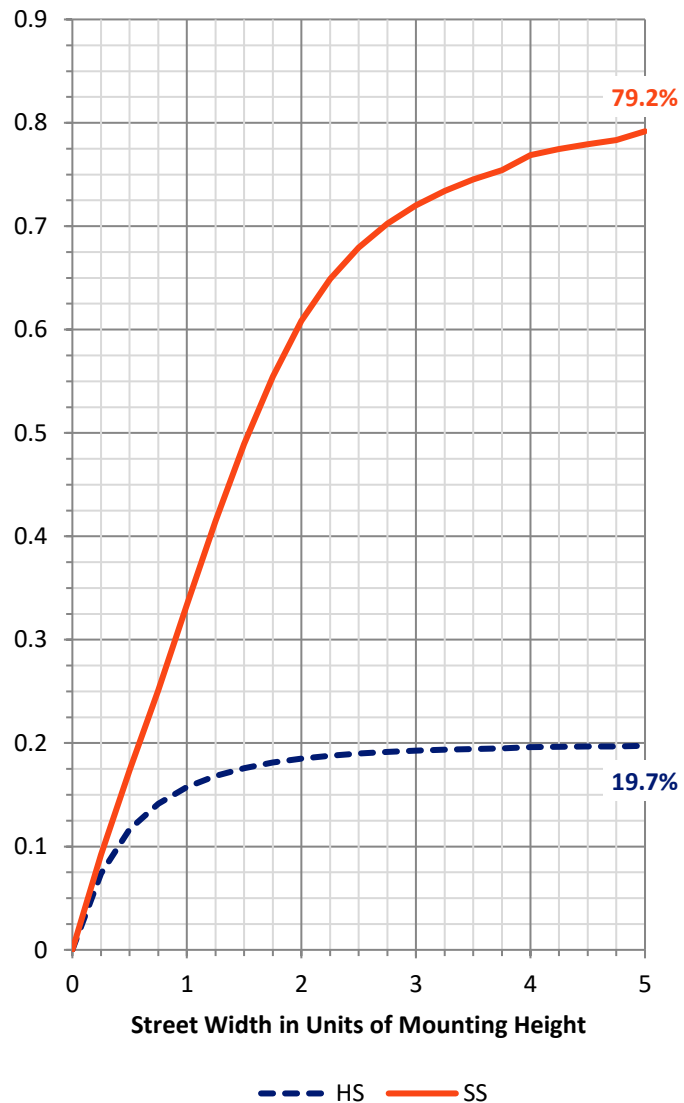
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4423.0	0.0	4423.0
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	17828.8	0.0	17828.8
	% Fixture	80.1	0.0	80.1
Total	Lumens	22251.7	0.0	22251.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.4	1.4
10°-20°	909.3	4.1
20°-30°	1339.7	6.0
30°-40°	1721.1	7.7
40°-50°	2783.5	12.5
50°-60°	4881.2	21.9
60°-70°	6107.7	27.4
70°-80°	3569.1	16.0
80°-90°	636.8	2.9
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°	22251.7	100.0
0°-180°	22251.7	100.0

Coefficient of Utilization



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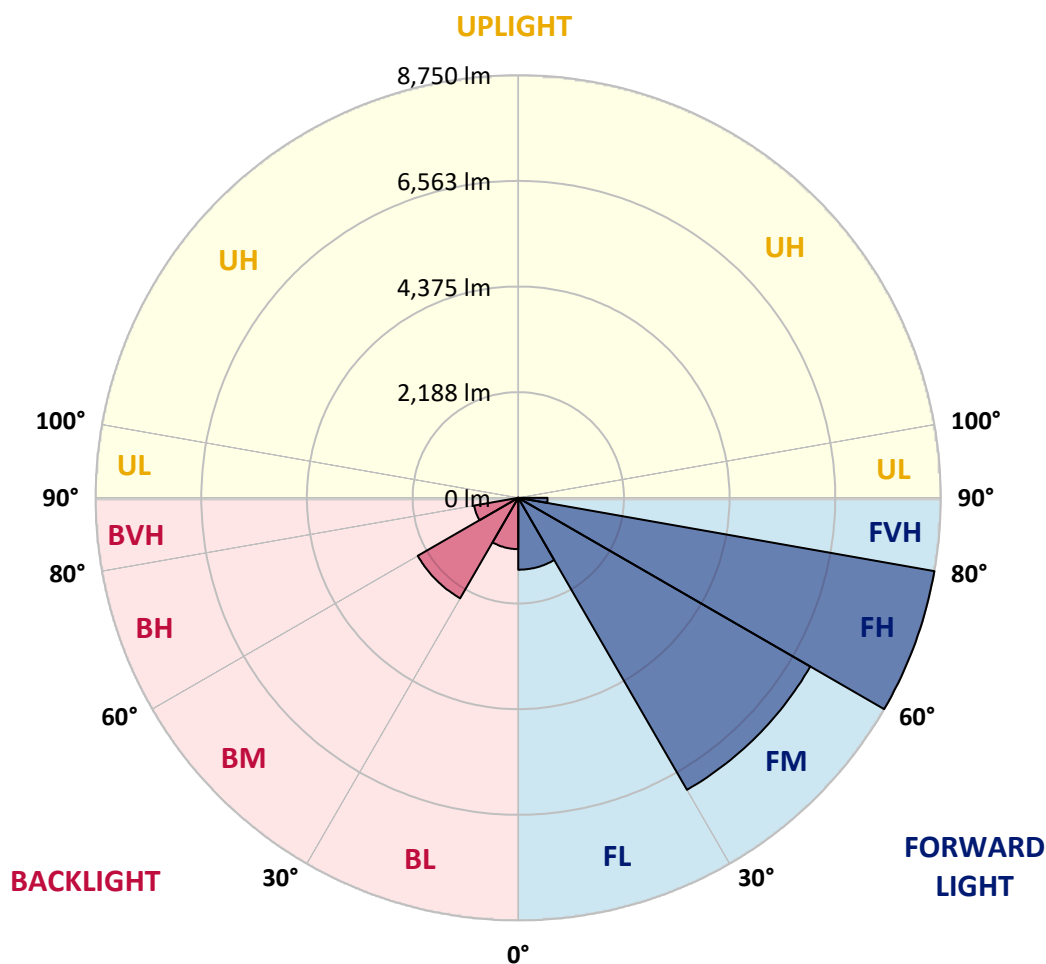
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1488.9	6.7			
FM	(30°-60°)	6982.9	31.4			
FH	(60°-80°)	8750.1	39.3			G4/12000
FVH	(80°-90°)	606.9	2.7			G4/750
BL	(0°-30°)	1063.5	4.8	B3/2500		
BM	(30°-60°)	2403.0	10.8	B2/2500		
BH	(60°-80°)	926.7	4.2	B2/1000		G2/1000
BVH	(80°-90°)	29.8	0.1			G1/100
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°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1
2.5°	3452.1	3478.1	3536.5	3567.1	3614.6	3617.6	3617.6	3576.3	3574.8	3490.4	3481.2
5°	3858.3	3919.7	4057.7	4200.1	4230.8	4238.5	4223.2	4140.4	4079.1	3915.1	3879.8
7.5°	4261.5	4379.5	4589.5	4779.6	4841.0	4841.0	4804.2	4669.3	4543.5	4305.9	4217.1
10°	4595.7	4744.3	5029.5	5242.6	5313.1	5297.7	5222.6	5052.4	4879.3	4591.1	4474.5
12.5°	4816.4	4983.4	5296.2	5467.9	5539.9	5500.0	5414.3	5248.7	5066.3	4762.8	4631.0
15°	4926.8	5101.5	5372.8	5463.2	5443.4	5402.0	5391.3	5311.5	5173.6	4890.0	4745.9
17.5°	4974.3	5136.8	5325.3	5268.6	5100.0	5067.8	5175.1	5276.3	5242.6	5000.4	4865.5
20°	5018.7	5155.1	5211.9	4960.5	4666.2	4637.1	4842.5	5130.6	5277.8	5103.1	4978.9
22.5°	5080.1	5164.4	5047.9	4635.6	4318.2	4250.8	4477.6	4911.5	5288.6	5233.3	5109.2
25°	5164.4	5187.4	4867.0	4327.4	4008.6	3941.1	4152.7	4667.7	5270.1	5374.4	5268.6
27.5°	5265.5	5218.1	4693.8	4069.9	3761.7	3698.9	3910.5	4433.2	5218.1	5515.4	5440.3
30°	5397.3	5257.8	4522.1	3870.6	3585.4	3539.5	3743.4	4230.8	5153.6	5694.8	5653.4
32.5°	5530.7	5274.8	4362.7	3754.1	3545.6	3562.5	3729.6	4122.0	5083.2	5866.5	5886.4
35°	5674.8	5328.4	4284.5	3869.1	3878.3	4025.4	4094.4	4223.2	5072.4	6099.5	6177.7
37.5°	5871.1	5448.0	4378.0	4440.8	4759.7	5064.7	5008.0	4718.3	5196.5	6447.5	6593.0
40°	6153.1	5658.0	4785.7	5414.3	6068.8	6563.9	6347.8	5618.1	5576.7	6948.7	7166.4
42.5°	6563.9	5992.2	5509.3	6603.8	7713.6	8529.1	7949.7	6778.5	6242.0	7664.5	7942.0
45°	7171.0	6533.2	6384.6	7859.2	9741.7	11026.2	9821.3	8015.6	7174.0	8748.4	8966.0
47.5°	8012.5	7328.9	7204.7	9182.2	12206.6	13868.2	11897.0	9162.2	8234.8	10226.0	10276.6
50°	9130.0	8400.4	7981.9	10629.2	14909.1	16765.4	13971.0	10269.0	9450.4	12031.9	11973.5
52.5°	10604.6	9894.9	8887.8	12007.3	17688.2	19601.4	16054.2	11240.9	10958.8	14127.3	14007.8
55°	12615.9	12143.7	10126.4	13322.5	20465.9	22454.1	18056.2	12157.5	12951.6	16616.8	15893.2
57.5°	15111.5	15448.7	11912.2	14847.7	22963.0	25394.2	20067.3	13439.1	15539.1	19400.5	16987.7
60°	16721.0	19843.5	15332.2	17102.7	25800.5	28719.1	22823.5	15876.3	18258.5	20398.4	16779.2
62.5°	16331.6	21241.6	19428.2	19981.5	28409.4	31136.5	25524.6	18324.4	18770.5	18928.4	15172.8
65°	15137.5	20113.4	18592.7	20541.0	29070.1	31273.0	26246.6	18008.6	15922.4	15453.3	12195.9
67.5°	13494.2	18775.1	16607.6	19057.1	27876.0	29365.9	24902.2	15930.0	12304.7	11596.4	8848.0
70°	11720.7	17294.3	15304.6	17392.4	25599.6	26042.6	22616.6	14010.8	9050.3	7831.6	5677.9
72.5°	10037.5	15752.2	14412.4	15686.3	22562.9	21646.3	19641.2	12313.8	6590.0	5648.8	4036.1
75°	8316.0	13477.3	13141.6	13659.8	18569.7	17050.6	16319.3	10195.4	5172.0	4086.8	2785.3
77.5°	6416.8	10531.1	11303.7	10938.9	13071.1	12664.9	12649.6	7661.5	3778.7	2727.0	1746.0
80°	4391.8	7339.6	8831.1	7716.7	8483.1	8276.2	9527.1	5139.9	2740.8	1641.7	971.9
82.5°	2581.5	4468.5	6146.9	3735.7	4690.7	4814.8	5673.3	2500.2	1612.6	378.6	211.6
85°	1046.9	1764.3	2403.6	1462.4	2262.6	1908.4	2153.7	702.0	449.2	9.2	0.0
87.5°	263.6	564.2	395.4	164.0	262.1	240.7	190.0	85.8	18.3	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

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1
2.5°	3421.4	3386.2	3298.9	3211.4	3140.9	3045.9	2983.1	2907.9	2835.9	2771.5	2759.2
5°	3783.3	3666.7	3507.3	3361.7	3213.0	3068.8	2926.4	2776.1	2638.1	2553.8	2500.2
7.5°	4077.6	3872.1	3660.6	3475.2	3295.8	3127.2	2938.6	2756.2	2540.1	2425.0	2320.8
10°	4296.8	4026.9	3749.6	3536.5	3355.5	3191.5	3032.1	2848.2	2587.5	2443.5	2287.1
12.5°	4440.8	4120.5	3795.5	3551.7	3349.4	3222.2	3151.7	3079.6	2820.6	2652.0	2425.0
15°	4540.4	4186.4	3827.7	3516.5	3268.2	3174.6	3245.1	3328.0	3162.4	2967.7	2671.9
17.5°	4649.3	4272.2	3841.5	3421.4	3110.3	3070.4	3252.8	3444.4	3436.8	3243.6	2953.9
20°	4764.3	4347.3	3832.3	3268.2	2918.7	2953.9	3186.9	3409.2	3502.7	3398.5	3140.9
22.5°	4882.3	4419.4	3797.0	3068.8	2739.3	2849.7	3082.7	3277.3	3387.7	3355.5	3159.4
25°	5031.0	4520.6	3744.9	2854.3	2590.6	2743.9	2961.6	3119.5	3196.2	3194.6	3059.7
27.5°	5208.8	4655.4	3717.3	2681.1	2484.8	2624.3	2817.5	2958.6	3012.2	3012.2	2904.8
30°	5415.8	4814.8	3686.6	2567.6	2423.5	2500.2	2650.4	2788.4	2842.0	2842.0	2751.6
32.5°	5645.7	4968.2	3613.0	2498.6	2377.6	2379.1	2474.1	2599.8	2664.2	2673.4	2609.0
35°	5921.6	5132.2	3452.1	2443.5	2323.9	2261.0	2307.1	2411.3	2487.9	2507.9	2468.0
37.5°	6283.5	5333.0	3222.2	2362.2	2241.2	2136.9	2147.6	2227.3	2311.6	2342.3	2316.2
40°	6769.3	5569.0	2983.1	2245.7	2124.6	2000.5	1995.9	2054.1	2136.9	2170.6	2156.8
42.5°	7411.7	5852.6	2754.7	2133.8	1983.6	1856.4	1848.7	1894.7	1966.8	2002.0	1995.9
45°	8233.3	6200.6	2558.4	2046.4	1845.6	1720.0	1716.9	1755.2	1818.0	1854.8	1847.2
47.5°	9375.3	6548.6	2425.0	2000.5	1736.8	1608.0	1614.2	1647.9	1704.6	1730.6	1720.0
50°	10863.8	6654.4	2357.6	2000.5	1678.5	1508.4	1539.0	1566.6	1609.6	1624.9	1611.1
52.5°	12292.4	6304.9	2296.3	2012.7	1686.2	1424.0	1489.9	1509.9	1546.7	1552.9	1532.9
55°	12993.0	5420.4	2212.0	2015.8	1733.7	1352.1	1450.2	1487.0	1500.7	1499.2	1465.4
57.5°	12752.3	4382.6	2069.5	2003.5	1765.9	1306.1	1401.1	1471.6	1480.8	1467.0	1404.1
60°	11907.6	3226.8	1960.6	1913.1	1753.7	1292.2	1325.9	1437.9	1451.7	1433.3	1330.6
62.5°	10491.3	2239.6	1876.3	1713.8	1700.0	1287.6	1208.0	1364.3	1398.0	1372.0	1221.7
65°	8259.3	1582.0	1615.7	1502.2	1583.5	1263.1	1085.3	1275.4	1321.3	1281.6	1070.0
67.5°	5589.0	1142.1	1309.1	1361.2	1394.9	1208.0	996.4	1174.2	1235.5	1183.4	893.7
70°	3018.3	801.8	864.6	1146.7	1184.9	1112.8	916.7	1071.5	1142.1	1085.3	728.2
72.5°	1782.8	576.4	605.5	921.3	987.2	979.5	827.8	951.9	1037.8	970.4	591.7
75°	982.6	389.4	432.2	668.3	801.8	755.7	711.2	806.3	893.7	827.8	456.8
77.5°	439.9	233.0	300.4	438.4	630.1	518.1	550.3	628.5	709.7	640.7	305.0
80°	170.1	130.3	199.3	239.1	458.4	286.7	354.1	462.9	521.2	466.0	185.5
82.5°	21.4	58.2	85.8	93.5	266.7	151.8	205.4	291.2	286.7	248.4	93.5
85°	0.0	10.8	12.3	6.1	115.0	55.1	67.4	95.0	88.9	67.4	7.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	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

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CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1
2.5°	2684.2	2628.9	2601.3	2578.4	2599.8	2612.1	2612.1	2664.2	2694.8	2707.1	2792.9
5°	2365.3	2262.6	2193.6	2152.2	2166.0	2181.3	2198.2	2264.1	2308.6	2337.7	2471.1
7.5°	2113.9	1957.5	1861.0	1810.4	1818.0	1828.8	1842.5	1906.9	1951.4	1989.7	2138.5
10°	1989.7	1768.9	1641.7	1580.4	1569.7	1563.5	1558.9	1597.3	1631.0	1661.6	1808.8
12.5°	1995.9	1687.8	1532.9	1457.8	1425.6	1388.8	1359.7	1365.8	1387.2	1425.6	1519.2
15°	2074.0	1661.6	1476.2	1382.7	1329.0	1286.1	1250.8	1243.2	1250.8	1257.0	1315.3
17.5°	2179.8	1658.7	1427.1	1310.7	1255.4	1220.2	1188.0	1177.3	1178.9	1186.4	1201.8
20°	2264.1	1649.4	1372.0	1241.7	1192.6	1161.9	1129.8	1119.0	1122.1	1123.6	1140.5
22.5°	2308.6	1635.6	1310.7	1172.7	1131.3	1100.6	1071.5	1070.0	1070.0	1079.1	1091.4
25°	2308.6	1606.5	1255.4	1106.8	1070.0	1042.4	1007.2	1013.2	1016.3	1028.6	1046.9
27.5°	2253.4	1551.3	1211.0	1050.0	1011.7	984.1	951.9	959.6	964.2	978.0	1001.0
30°	2182.8	1485.4	1160.4	996.4	951.9	932.0	904.5	907.4	913.6	929.0	955.0
32.5°	2107.7	1407.2	1119.0	942.7	898.3	882.9	852.3	856.9	863.0	879.9	909.0
35°	2025.0	1315.3	1070.0	893.7	849.2	837.0	801.8	804.7	814.0	832.4	861.5
37.5°	1937.6	1240.1	1020.9	846.1	800.2	787.9	751.1	754.2	765.0	786.4	814.0
40°	1851.8	1166.6	968.8	795.6	749.6	738.8	699.0	702.0	714.3	737.3	766.5
42.5°	1758.3	1109.9	901.4	743.4	694.4	683.7	646.9	651.5	665.3	688.3	717.4
45°	1646.4	1073.1	826.3	694.4	639.2	628.5	594.8	603.9	619.3	642.3	672.9
47.5°	1531.4	1057.7	763.4	642.3	582.5	573.3	545.7	561.1	577.9	596.3	630.1
50°	1421.1	1037.8	699.0	593.3	533.4	524.3	505.8	525.8	542.6	559.5	591.7
52.5°	1295.3	994.9	640.7	550.3	492.1	489.0	479.8	498.2	513.5	528.9	556.5
55°	1165.0	925.9	590.2	512.0	456.8	459.9	455.3	470.6	482.9	496.6	521.2
57.5°	1051.5	838.6	550.3	470.6	426.2	435.3	429.2	436.9	444.5	461.5	481.3
60°	936.6	734.3	505.8	421.6	395.4	406.2	389.4	387.9	390.9	395.4	432.2
62.5°	781.8	625.5	450.7	378.6	361.7	366.3	334.2	309.7	309.7	314.3	369.4
65°	628.5	524.3	389.4	329.5	315.8	312.7	266.7	233.0	229.9	243.7	291.2
67.5°	516.6	435.3	328.0	274.4	265.2	268.2	234.5	200.8	197.7	213.1	248.4
70°	427.7	351.1	262.1	211.6	220.8	234.5	200.8	168.6	164.0	177.8	211.6
72.5°	340.3	274.4	200.8	156.3	182.4	199.3	164.0	133.4	130.3	142.6	174.8
75°	249.9	196.2	136.4	113.5	141.0	156.3	119.6	95.0	90.4	101.2	133.4
77.5°	154.8	110.4	85.8	67.4	96.6	104.2	62.8	55.1	53.6	61.3	84.4
80°	72.1	47.6	41.4	23.0	35.3	41.4	26.0	29.1	30.6	36.8	52.1
82.5°	19.9	7.7	1.5	0.0	0.0	12.3	6.1	12.3	15.4	23.0	33.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	7.7	13.8	24.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	12.3
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: P968251

CATALOG NUMBER: NAV-SB5B-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1	3081.1
2.5°	2857.4	2918.7	3016.8	3117.9	3217.6	3318.7	3416.8	3452.1
5°	2592.1	2733.2	2927.8	3136.3	3350.9	3568.6	3767.9	3858.3
7.5°	2296.3	2498.6	2791.4	3117.9	3459.8	3801.6	4115.9	4261.5
10°	1980.5	2236.5	2570.7	3012.2	3502.7	3974.8	4407.1	4595.7
12.5°	1680.1	1948.3	2317.7	2846.6	3469.0	4074.5	4594.2	4816.4
15°	1428.6	1666.2	2064.9	2650.4	3360.2	4080.6	4683.0	4926.8
17.5°	1240.1	1394.9	1807.3	2432.7	3217.6	4023.8	4713.7	4974.3
20°	1146.7	1189.5	1473.1	2153.7	3084.2	3970.2	4744.3	5018.7
22.5°	1091.4	1102.2	1204.9	1793.5	2924.8	3953.4	4798.0	5080.1
25°	1046.9	1050.0	1077.7	1421.1	2681.1	3942.7	4880.7	5164.4
27.5°	1002.6	1002.6	1017.8	1145.1	2349.9	3896.6	4988.1	5265.5
30°	958.1	958.1	968.8	1013.2	1962.2	3806.2	5116.9	5397.3
32.5°	912.0	912.0	921.3	953.5	1566.6	3692.8	5234.9	5530.7
35°	866.1	863.0	875.2	909.0	1246.3	3548.7	5353.0	5674.8
37.5°	817.0	815.5	827.8	866.1	1076.1	3381.6	5441.8	5871.1
40°	765.0	765.0	778.7	820.1	1027.0	3171.6	5582.9	6153.1
42.5°	717.4	714.3	729.7	780.2	990.3	2970.8	5835.8	6563.9
45°	671.4	665.3	679.1	741.9	925.9	2900.2	6308.0	7171.0
47.5°	628.5	613.2	625.5	696.0	867.7	3164.0	7080.5	8012.5
50°	593.3	564.2	574.8	650.0	823.2	3735.7	8083.0	9130.0
52.5°	556.5	518.1	524.3	593.3	783.3	4279.9	9169.9	10604.6
55°	518.1	475.2	478.3	536.5	726.6	4361.2	10230.6	12615.9
57.5°	475.2	435.3	435.3	484.4	685.2	3780.2	11046.1	15111.5
60°	427.7	401.6	393.9	443.0	722.0	2667.3	11141.2	16721.0
62.5°	375.6	361.7	351.1	403.1	749.6	1580.4	10376.3	16331.6
65°	315.8	312.7	305.0	443.0	631.6	933.6	8907.8	15137.5
67.5°	265.2	260.6	260.6	464.4	479.8	587.1	6959.4	13494.2
70°	228.4	211.6	211.6	351.1	291.2	406.2	4859.3	11720.7
72.5°	191.6	173.2	160.9	280.5	217.7	297.4	3036.7	10037.5
75°	153.3	139.5	124.1	185.5	162.5	225.3	1764.3	8316.0
77.5°	110.4	104.2	87.3	136.4	118.1	162.5	1050.0	6416.8
80°	56.7	58.2	55.1	78.2	79.7	110.4	597.9	4391.8
82.5°	33.7	26.0	29.1	38.3	46.0	62.8	225.3	2581.5
85°	21.4	13.8	13.8	18.3	23.0	24.5	69.0	1046.9
87.5°	10.8	4.6	6.1	9.2	7.7	6.1	3.1	263.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)