

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: P968687

Luminaire Tested: **NAV-SB5C-722-U-SLR-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968687
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-SB5C-722-U-SLR-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24447.3 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

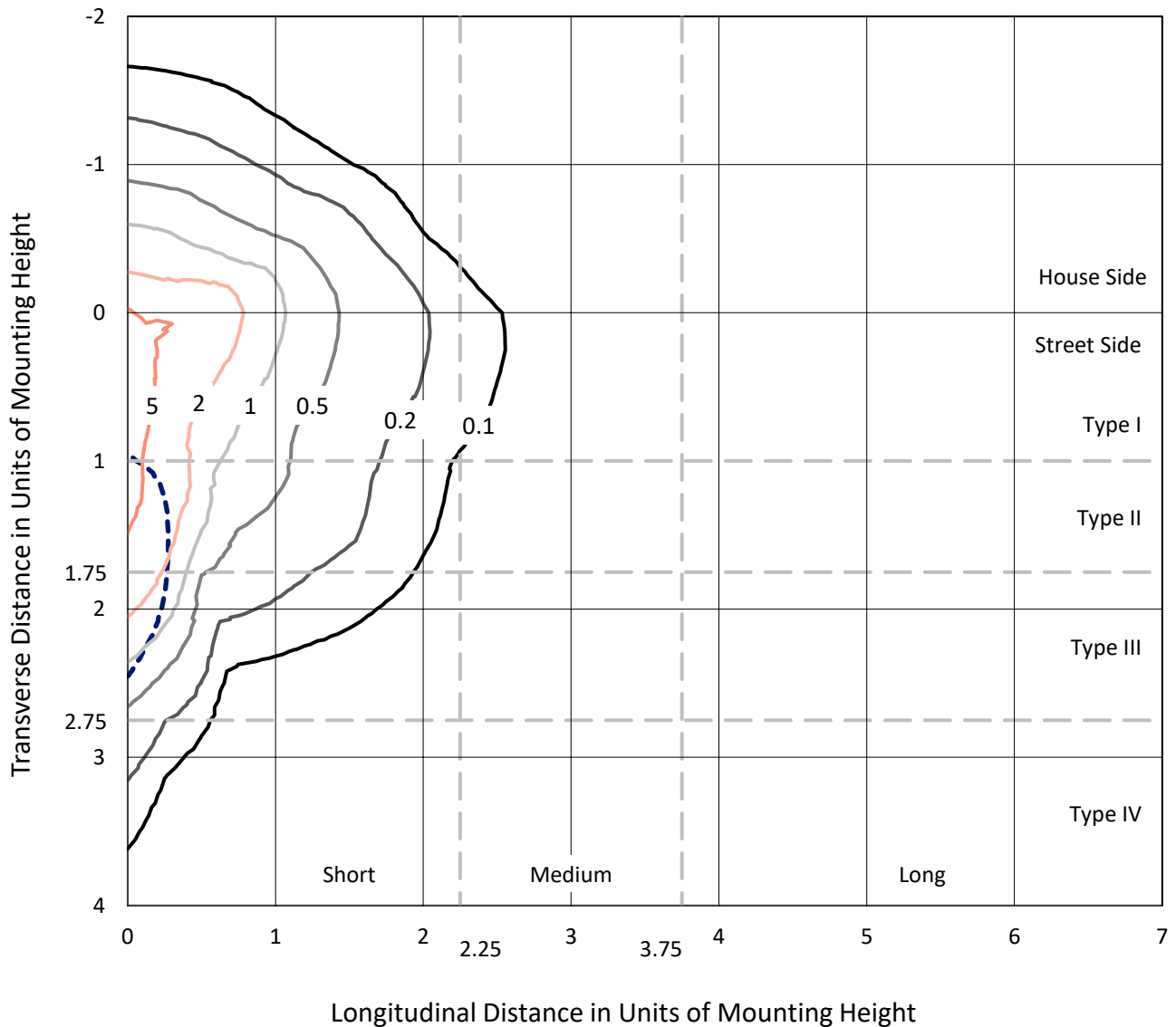
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

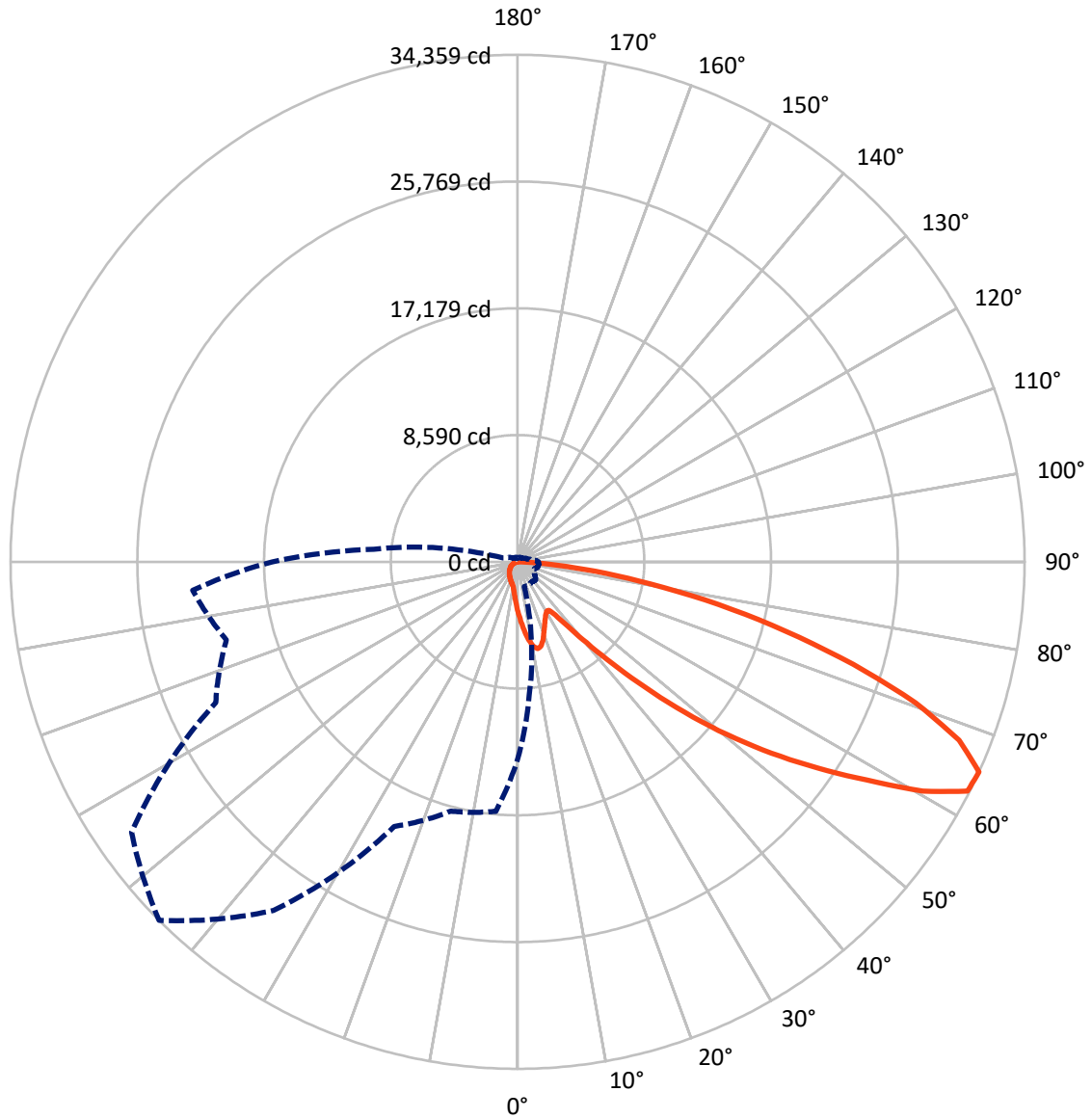
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3423.7	0.0	3423.7
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	21023.6	0.0	21023.6
	% Fixture	86.0	0.0	86.0
Total	Lumens	24447.3	0.0	24447.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.3	1.4
10°-20°	999.1	4.1
20°-30°	1471.8	6.0
30°-40°	1890.9	7.7
40°-50°	3058.2	12.5
50°-60°	5362.8	21.9
60°-70°	6710.3	27.4
70°-80°	3921.2	16.0
80°-90°	699.6	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°	24447.3	100.0
0°-180°	24447.3	100.0

Coefficient of Utilization

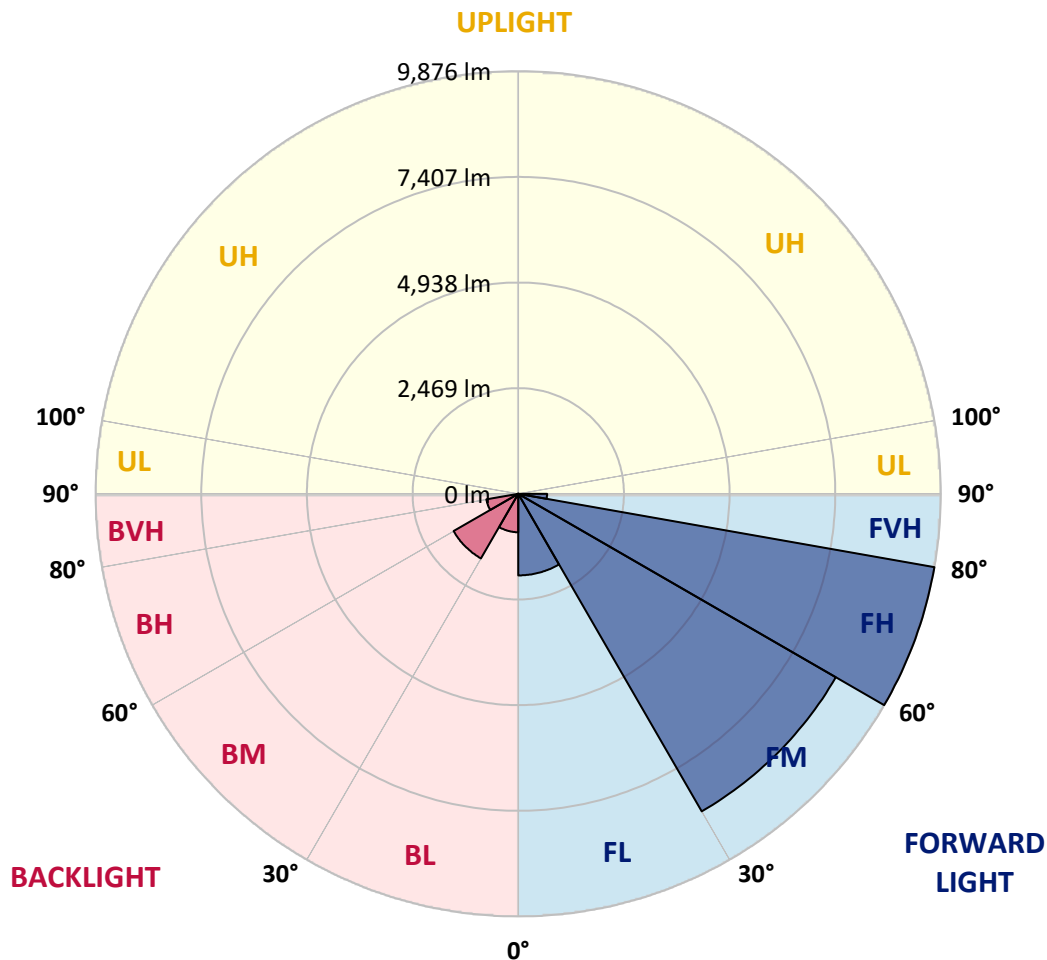


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1906.8	7.8			
FM (30°-60°)	8568.5	35.0			
FH (60°-80°)	9875.6	40.4			G4/12000
FVH (80°-90°)	672.7	2.8			G4/750
BL (0°-30°)	897.4	3.7	B2/1000		
BM (30°-60°)	1743.4	7.1	B2/2500		
BH (60°-80°)	756.0	3.1	B2/1000		G2/1000
BVH (80°-90°)	26.9	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2
2.5°	3824.7	3759.1	3720.3	3624.3	3528.4	3450.9	3346.4	3277.3	3194.8	3115.7	3045.0
5°	4262.6	4156.5	4028.6	3853.4	3693.4	3530.0	3371.7	3215.0	3050.0	2898.4	2805.8
7.5°	4633.1	4479.9	4254.2	4021.8	3818.0	3620.9	3435.7	3228.5	3028.2	2790.7	2664.4
10°	4916.1	4720.7	4424.3	4119.5	3885.4	3686.6	3506.4	3331.2	3129.2	2842.8	2684.6
12.5°	5087.9	4879.0	4527.0	4170.0	3902.2	3679.9	3540.1	3462.7	3383.5	3098.9	2913.6
15°	5214.2	4988.5	4599.5	4205.4	3863.4	3590.7	3487.9	3565.4	3656.3	3474.4	3260.5
17.5°	5345.6	5108.1	4693.8	4220.5	3759.1	3417.1	3373.4	3573.8	3784.3	3775.9	3563.7
20°	5470.1	5234.4	4776.3	4210.4	3590.7	3206.6	3245.4	3501.4	3745.6	3848.3	3733.8
22.5°	5613.3	5364.0	4855.4	4171.6	3371.7	3009.6	3130.9	3386.8	3600.7	3722.0	3686.6
25°	5788.5	5527.4	4966.6	4114.5	3135.9	2846.2	3014.6	3253.8	3427.3	3511.4	3509.8
27.5°	5977.1	5722.8	5114.8	4084.1	2945.6	2730.0	2883.3	3095.5	3250.5	3309.4	3309.4
30°	6211.2	5950.1	5289.9	4050.4	2821.0	2662.6	2746.9	2911.9	3063.5	3122.5	3122.5
32.5°	6467.1	6202.8	5458.3	3969.6	2745.2	2612.1	2613.9	2718.2	2856.4	2927.1	2937.1
35°	6787.1	6505.9	5638.5	3792.7	2684.6	2553.2	2484.1	2534.6	2649.2	2733.4	2755.3
37.5°	7243.6	6903.4	5859.2	3540.1	2595.3	2462.3	2347.8	2359.5	2447.1	2539.7	2573.4
40°	7873.4	7437.3	6118.5	3277.3	2467.3	2334.2	2197.8	2192.8	2256.7	2347.8	2384.8
42.5°	8725.6	8142.9	6430.1	3026.4	2344.4	2179.4	2039.5	2031.1	2081.7	2160.8	2199.5
45°	9850.7	9045.6	6812.5	2810.9	2248.3	2027.8	1889.6	1886.3	1928.3	1997.4	2037.8
47.5°	11290.6	10300.3	7194.8	2664.4	2197.8	1908.1	1766.7	1773.5	1810.5	1872.8	1901.4
50°	13155.0	11935.6	7310.9	2590.3	2197.8	1844.2	1657.2	1690.9	1721.2	1768.3	1785.2
52.5°	15389.9	13505.3	6927.0	2522.8	2211.3	1852.6	1564.6	1637.0	1658.9	1699.3	1706.0
55°	17461.4	14275.0	5955.1	2430.3	2214.7	1904.8	1485.4	1593.3	1633.6	1648.8	1647.1
57.5°	18663.9	14010.5	4815.0	2273.7	2201.2	1940.1	1434.9	1539.3	1616.8	1626.9	1611.7
60°	18434.8	13082.6	3545.2	2154.0	2101.9	1926.7	1419.7	1456.8	1579.7	1594.9	1574.7
62.5°	16669.9	11526.4	2460.5	2061.4	1882.9	1867.8	1414.7	1327.2	1498.9	1536.0	1507.4
65°	13399.2	9074.2	1738.1	1775.1	1650.5	1739.7	1387.7	1192.4	1401.2	1451.7	1407.9
67.5°	9721.0	6140.5	1254.7	1438.3	1495.6	1532.6	1327.2	1094.7	1290.1	1357.4	1300.2
70°	6238.2	3316.1	880.8	949.9	1259.7	1301.9	1222.7	1007.2	1177.2	1254.7	1192.4
72.5°	4434.4	1958.7	633.2	665.2	1012.2	1084.6	1076.1	909.5	1045.9	1140.2	1066.1
75°	3060.1	1079.5	427.7	474.9	734.3	880.8	830.2	781.5	885.9	981.8	909.5
77.5°	1918.3	483.4	255.9	330.0	481.6	692.2	569.3	604.6	690.5	779.7	704.0
80°	1067.7	187.0	143.2	218.9	262.7	503.6	315.0	389.1	508.6	572.6	512.0
82.5°	232.4	23.6	64.0	94.3	102.7	293.0	166.8	225.7	320.0	315.0	272.9
85°	0.0	0.0	11.8	13.4	6.8	126.3	60.7	74.1	104.4	97.7	74.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	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°	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2
2.5°	3031.5	2948.9	2888.3	2858.0	2832.8	2856.4	2869.8	2869.8	2927.1	2960.7	2974.2
5°	2746.9	2598.7	2485.8	2410.1	2364.6	2379.7	2396.6	2415.1	2487.5	2536.4	2568.3
7.5°	2549.8	2322.4	2150.7	2044.6	1989.0	1997.4	2009.2	2024.4	2095.1	2143.9	2186.0
10°	2512.8	2186.0	1943.5	1803.7	1736.4	1724.6	1717.8	1712.8	1754.9	1791.9	1825.6
12.5°	2664.4	2192.8	1854.2	1684.2	1601.7	1566.3	1525.8	1493.8	1500.6	1524.2	1566.3
15°	2935.5	2278.7	1825.6	1621.9	1519.2	1460.2	1413.0	1374.3	1365.8	1374.3	1381.0
17.5°	3245.4	2394.9	1822.2	1567.9	1439.9	1379.3	1340.6	1305.2	1293.4	1295.1	1303.5
20°	3450.9	2487.5	1812.2	1507.4	1364.2	1310.3	1276.6	1241.3	1229.5	1232.8	1234.5
22.5°	3471.1	2536.4	1797.0	1439.9	1288.4	1242.9	1209.2	1177.2	1175.6	1175.6	1185.6
25°	3361.6	2536.4	1765.0	1379.3	1216.0	1175.6	1145.2	1106.5	1113.3	1116.6	1130.1
27.5°	3191.4	2475.7	1704.4	1330.4	1153.6	1111.5	1081.3	1045.9	1054.3	1059.3	1074.5
30°	3023.0	2398.3	1631.9	1274.9	1094.7	1045.9	1024.0	993.6	997.0	1003.8	1020.6
32.5°	2866.4	2315.7	1546.1	1229.5	1035.8	986.9	970.1	936.4	941.5	948.2	966.7
35°	2711.5	2224.8	1445.0	1175.6	981.8	933.1	919.5	880.8	884.2	894.3	914.5
37.5°	2544.8	2128.8	1362.5	1121.7	929.7	879.1	865.6	825.2	828.6	840.4	864.0
40°	2369.6	2034.4	1281.7	1064.4	874.1	823.6	811.8	767.9	771.3	784.8	810.1
42.5°	2192.8	1931.7	1219.3	990.3	816.8	762.9	751.1	710.7	715.8	730.9	756.1
45°	2029.4	1808.8	1179.0	907.7	762.9	702.3	690.5	653.4	663.6	680.4	705.7
47.5°	1889.6	1682.4	1162.0	838.8	705.7	640.0	629.9	599.5	616.4	634.9	655.2
50°	1770.1	1561.2	1140.2	767.9	651.8	586.1	575.9	555.8	577.7	596.2	614.7
52.5°	1684.2	1423.1	1093.1	704.0	604.6	540.6	537.2	527.2	547.3	564.2	581.1
55°	1610.1	1279.9	1017.2	648.4	562.5	501.8	505.2	500.2	517.0	530.5	545.7
57.5°	1542.7	1155.4	921.3	604.6	517.0	468.2	478.3	471.6	480.0	488.4	507.0
60°	1461.9	1029.0	806.7	555.8	463.1	434.5	446.3	427.7	426.1	429.5	434.5
62.5°	1342.2	859.0	687.2	495.2	415.9	397.5	402.5	367.2	340.2	340.2	345.2
65°	1175.6	690.5	575.9	427.7	362.1	347.0	343.6	293.0	255.9	252.7	267.8
67.5°	981.8	567.5	478.3	360.4	301.5	291.4	294.7	257.7	220.6	217.3	234.1
70°	800.0	469.9	385.7	288.0	232.4	242.5	257.7	220.6	185.2	180.2	195.4
72.5°	650.1	373.9	301.5	220.6	171.8	200.4	218.9	180.2	146.5	143.2	156.6
75°	501.8	274.5	215.6	149.9	124.6	155.0	171.8	131.4	104.4	99.3	111.1
77.5°	335.2	170.1	121.3	94.3	74.1	106.1	114.5	69.1	60.7	58.9	67.3
80°	203.8	79.1	52.2	45.5	25.2	38.7	45.5	28.6	32.0	33.7	40.4
82.5°	102.7	21.9	8.4	1.6	0.0	0.0	13.4	6.8	13.4	16.8	25.2
85°	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	8.4	15.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2
2.5°	3068.5	3139.3	3206.6	3314.4	3425.6	3535.0	3646.2	3754.0	3792.7	3821.4	3885.4
5°	2714.9	2848.0	3002.8	3216.8	3445.8	3681.6	3920.7	4139.7	4239.0	4306.4	4457.9
7.5°	2349.4	2522.8	2745.2	3066.9	3425.6	3801.1	4176.8	4522.0	4682.0	4811.7	5042.4
10°	1987.3	2176.0	2457.2	2824.4	3309.4	3848.3	4367.0	4842.0	5049.2	5212.4	5525.8
12.5°	1669.0	1845.8	2140.6	2546.4	3127.5	3811.3	4476.5	5047.4	5291.7	5475.2	5818.8
15°	1445.0	1569.7	1830.6	2268.5	2911.9	3691.6	4483.2	5145.1	5412.9	5604.9	5903.0
17.5°	1320.4	1362.5	1532.6	1985.6	2672.8	3535.0	4420.9	5178.8	5465.1	5643.6	5850.8
20°	1253.1	1259.7	1306.9	1618.5	2366.2	3388.5	4362.0	5212.4	5514.0	5663.8	5726.2
22.5°	1199.1	1199.1	1210.9	1323.8	1970.5	3213.4	4343.4	5271.5	5581.3	5674.0	5546.0
25°	1150.3	1150.3	1153.6	1184.0	1561.2	2945.6	4331.6	5362.4	5674.0	5699.2	5347.2
27.5°	1099.7	1101.5	1101.5	1118.3	1258.1	2581.8	4281.1	5480.3	5785.1	5732.9	5156.9
30°	1049.2	1052.6	1052.6	1064.4	1113.3	2155.7	4181.8	5621.7	5929.9	5776.7	4968.3
32.5°	998.7	1002.0	1002.0	1012.2	1047.6	1721.2	4057.2	5751.4	6076.4	5795.2	4793.1
35°	946.5	951.5	948.2	961.7	998.7	1369.2	3898.8	5881.1	6234.8	5854.2	4707.2
37.5°	894.3	897.7	896.0	909.5	951.5	1182.2	3715.2	5978.8	6450.3	5985.5	4810.0
40°	842.0	840.4	840.4	855.6	901.1	1128.4	3484.5	6133.7	6760.2	6216.2	5257.9
42.5°	788.2	788.2	784.8	801.7	857.2	1087.9	3263.9	6411.6	7211.6	6583.4	6052.8
45°	739.3	737.7	730.9	746.1	815.2	1017.2	3186.4	6930.3	7878.6	7177.9	7014.5
47.5°	692.2	690.5	673.6	687.2	764.6	953.2	3476.1	7779.1	8803.1	8052.0	7915.6
50°	650.1	651.8	619.8	631.6	714.1	904.4	4104.3	8880.6	10030.9	9229.2	8769.4
52.5°	611.3	611.3	569.3	575.9	651.8	860.6	4702.2	10074.6	11651.1	10871.3	9764.8
55°	572.6	569.3	522.1	525.4	589.5	798.3	4791.5	11240.0	13860.7	13341.9	11125.6
57.5°	528.8	522.1	478.3	478.3	532.2	752.9	4153.1	12136.1	16602.4	16973.0	13087.6
60°	474.9	469.9	441.3	432.9	486.8	793.2	2930.5	12240.4	18370.9	21801.4	16845.0
62.5°	405.9	412.7	397.5	385.7	442.9	823.6	1736.4	11400.0	17943.0	23337.4	21345.1
65°	320.0	347.0	343.6	335.2	486.8	693.9	1025.6	9786.7	16631.1	22097.9	20427.2
67.5°	272.9	291.4	286.3	286.3	510.3	527.2	645.0	7646.1	14825.7	20627.6	18246.2
70°	232.4	250.9	232.4	232.4	385.7	320.0	446.3	5338.8	12877.1	19000.7	16814.7
72.5°	192.0	210.5	190.3	176.8	308.2	239.1	326.8	3336.4	11027.9	17306.4	15834.5
75°	146.5	168.4	153.2	136.4	203.8	178.6	247.5	1938.5	9136.5	14807.1	14438.4
77.5°	92.7	121.3	114.5	96.0	149.9	129.7	178.6	1153.6	7050.0	11570.2	12419.0
80°	57.3	62.3	64.0	60.7	85.9	87.5	121.3	656.8	4825.1	8063.8	9702.4
82.5°	37.0	37.0	28.6	32.0	42.1	50.5	69.1	247.5	2836.2	4909.3	6753.5
85°	27.0	23.6	15.2	15.2	20.2	25.2	27.0	75.7	1150.3	1938.5	2640.8
87.5°	13.4	11.8	5.0	6.8	10.1	8.4	6.8	3.4	289.7	619.8	434.5
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: P968687

CATALOG NUMBER: NAV-SB5C-722-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2	3385.2
2.5°	3919.1	3971.3	3974.6	3974.6	3929.1	3927.5	3834.8	3824.7
5°	4614.7	4648.3	4656.7	4639.9	4549.0	4481.5	4301.3	4262.6
7.5°	5251.2	5318.6	5318.6	5278.1	5129.9	4991.9	4730.8	4633.1
10°	5759.8	5837.3	5820.5	5738.0	5551.0	5360.6	5044.0	4916.1
12.5°	6007.4	6086.6	6042.8	5948.5	5766.5	5566.2	5232.7	5087.9
15°	6002.4	5980.5	5935.0	5923.2	5835.6	5684.0	5372.4	5214.2
17.5°	5788.5	5603.2	5567.8	5685.8	5796.9	5759.8	5493.7	5345.6
20°	5449.9	5126.5	5094.6	5320.3	5636.9	5798.5	5606.5	5470.1
22.5°	5092.9	4744.3	4670.2	4919.5	5396.0	5810.3	5749.7	5613.3
25°	4754.4	4404.1	4330.0	4562.4	5128.3	5790.1	5904.7	5788.5
27.5°	4471.5	4132.9	4063.9	4296.3	4870.6	5732.9	6059.6	5977.1
30°	4252.5	3939.3	3888.7	4112.7	4648.3	5662.2	6256.7	6211.2
32.5°	4124.5	3895.5	3914.0	4097.5	4528.8	5584.7	6445.3	6467.1
35°	4250.8	4260.9	4422.6	4498.4	4639.9	5572.9	6701.2	6787.1
37.5°	4879.0	5229.3	5564.5	5502.2	5183.8	5709.4	7083.6	7243.6
40°	5948.5	6667.6	7211.6	6974.1	6172.4	6126.9	7634.3	7873.4
42.5°	7255.4	8474.7	9370.7	8734.0	7447.3	6857.9	8420.8	8725.6
45°	8634.7	10702.8	12114.2	10790.4	8806.5	7881.8	9611.5	9850.7
47.5°	10088.2	13411.0	15236.6	13070.8	10066.2	9047.4	11235.0	11290.6
50°	11677.9	16380.1	18419.7	15349.5	11282.2	10382.8	13219.0	13155.0
52.5°	13192.1	19433.6	21535.4	17638.2	12349.9	12040.1	15521.3	15389.9
55°	14637.0	22485.2	24669.6	19837.7	13357.1	14229.5	18256.3	17461.4
57.5°	16312.8	25228.7	27899.8	22047.3	14765.0	17072.3	21314.8	18663.9
60°	18790.2	28346.2	31552.8	25075.5	17442.8	20060.1	22411.1	18434.8
62.5°	21953.0	31212.6	34208.7	28043.0	20132.4	20622.6	20796.0	16669.9
65°	22567.7	31938.5	34358.6	28836.2	19785.6	17493.4	16978.0	13399.2
67.5°	20937.5	30626.5	32263.5	27359.2	17501.8	13518.7	12740.6	9721.0
70°	19108.5	28125.5	28612.3	24848.2	15393.2	9943.3	8604.4	6238.2
72.5°	17234.0	24789.2	23782.0	21579.1	13528.9	7240.2	6206.2	4434.4
75°	15007.5	20401.9	18732.9	17929.6	11201.4	5682.4	4490.0	3060.1
77.5°	12018.2	14360.9	13914.6	13897.7	8417.4	4151.5	2996.1	1918.3
80°	8478.1	9320.1	9092.8	10467.1	5647.0	3011.2	1803.7	1067.7
82.5°	4104.3	5153.5	5289.9	6233.1	2746.9	1771.7	415.9	232.4
85°	1606.7	2485.8	2096.7	2366.2	771.3	493.4	10.1	0.0
87.5°	180.2	288.0	264.4	208.8	94.3	20.2	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)