

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: P968902

Luminaire Tested: **NAV-SB5C-827-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968902
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-827-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA 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: 25733.6 lumens
Efficiency: N/A
Efficacy: 103.1 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): 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



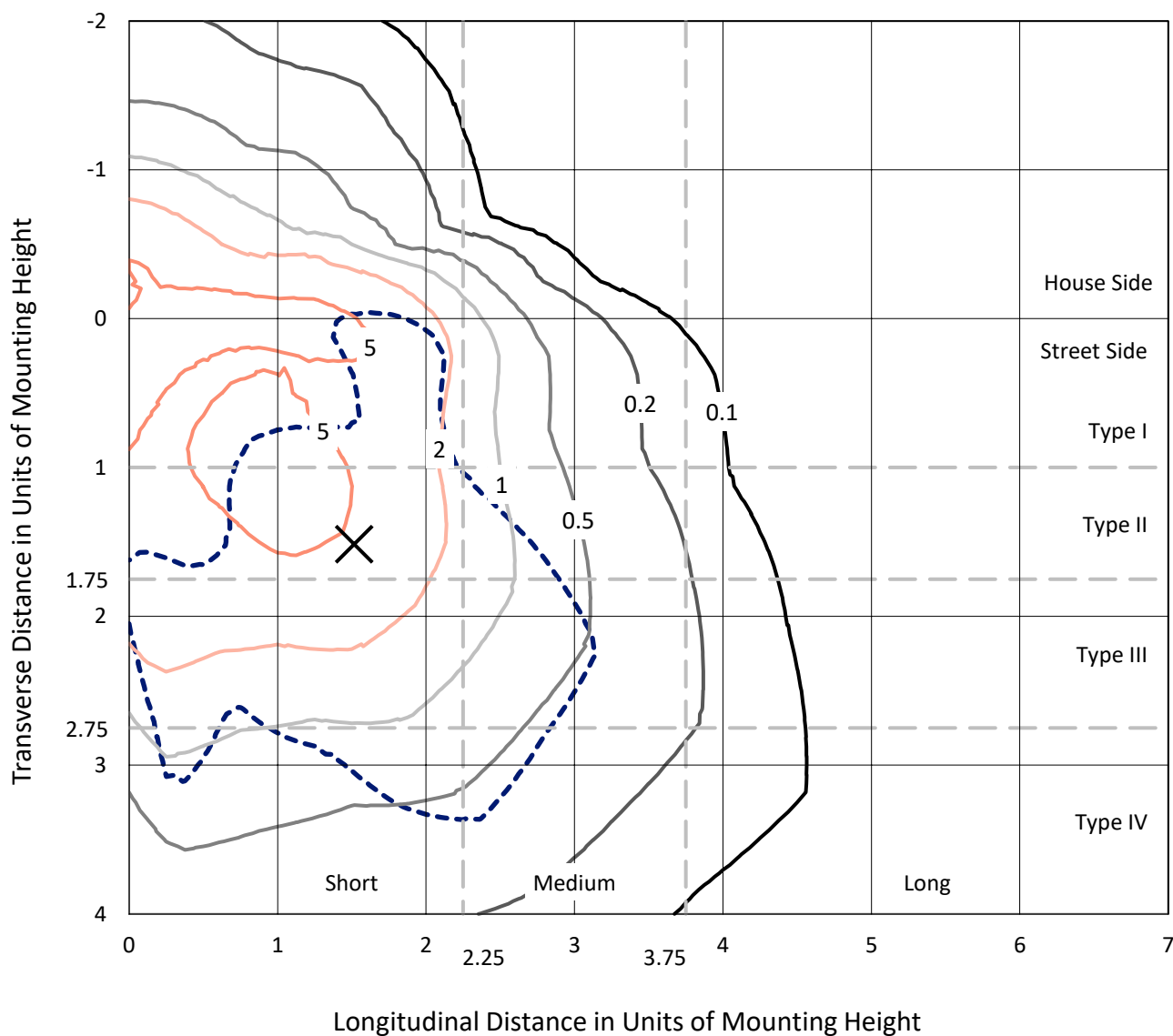
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

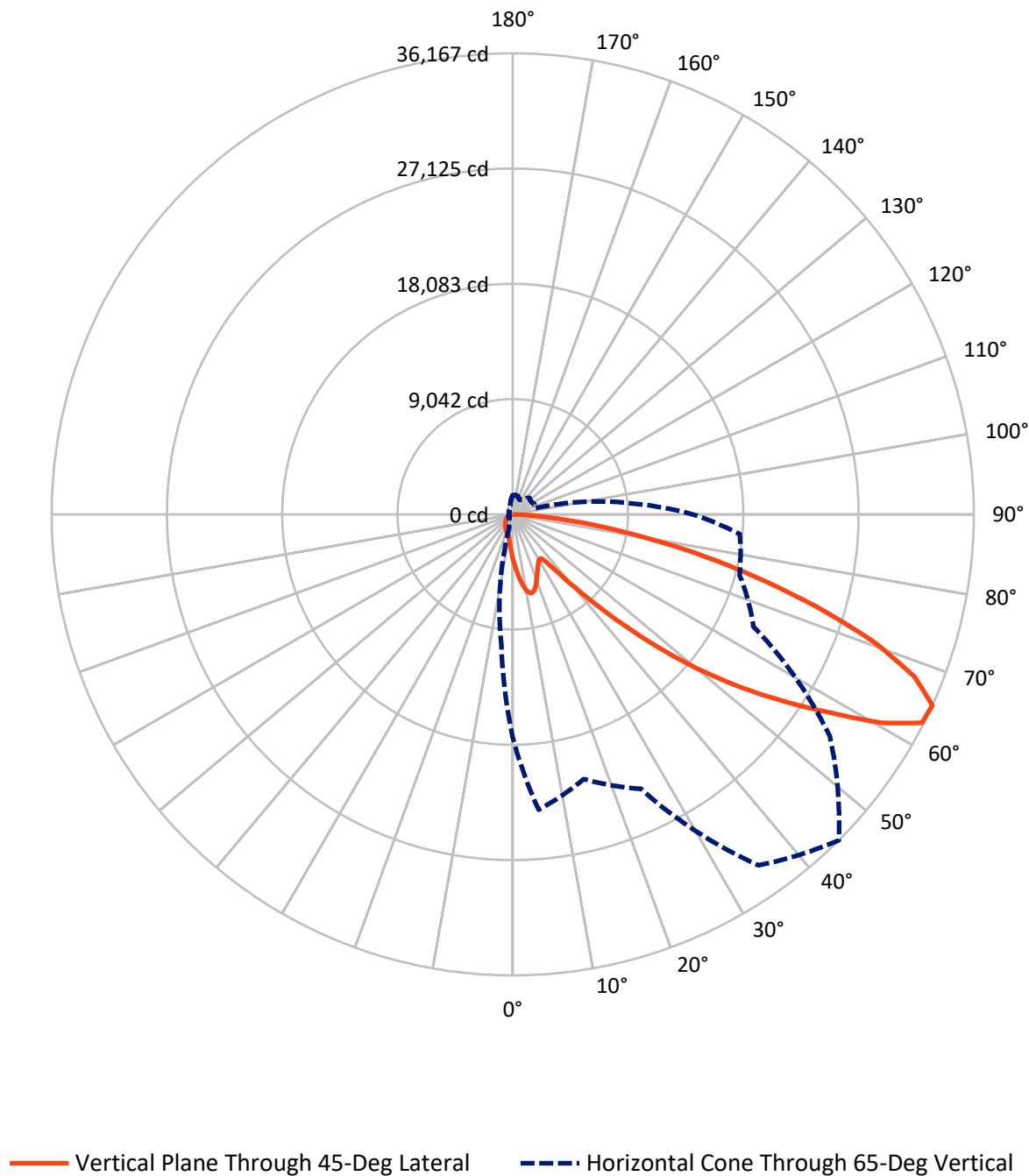


Based on 25 foot mounting height. Maximum calculated value = 9.4 fc

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	5115.1	0.0	5115.1
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	20618.6	0.0	20618.6
	% Fixture	80.1	0.0	80.1
Total	Lumens	25733.6	0.0	25733.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.8	1.4
10°-20°	1051.6	4.1
20°-30°	1549.3	6.0
30°-40°	1990.4	7.7
40°-50°	3219.1	12.5
50°-60°	5645.0	21.9
60°-70°	7063.4	27.4
70°-80°	4127.5	16.0
80°-90°	736.4	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°	25733.6	100.0
0°-180°	25733.6	100.0

Coefficient of Utilization



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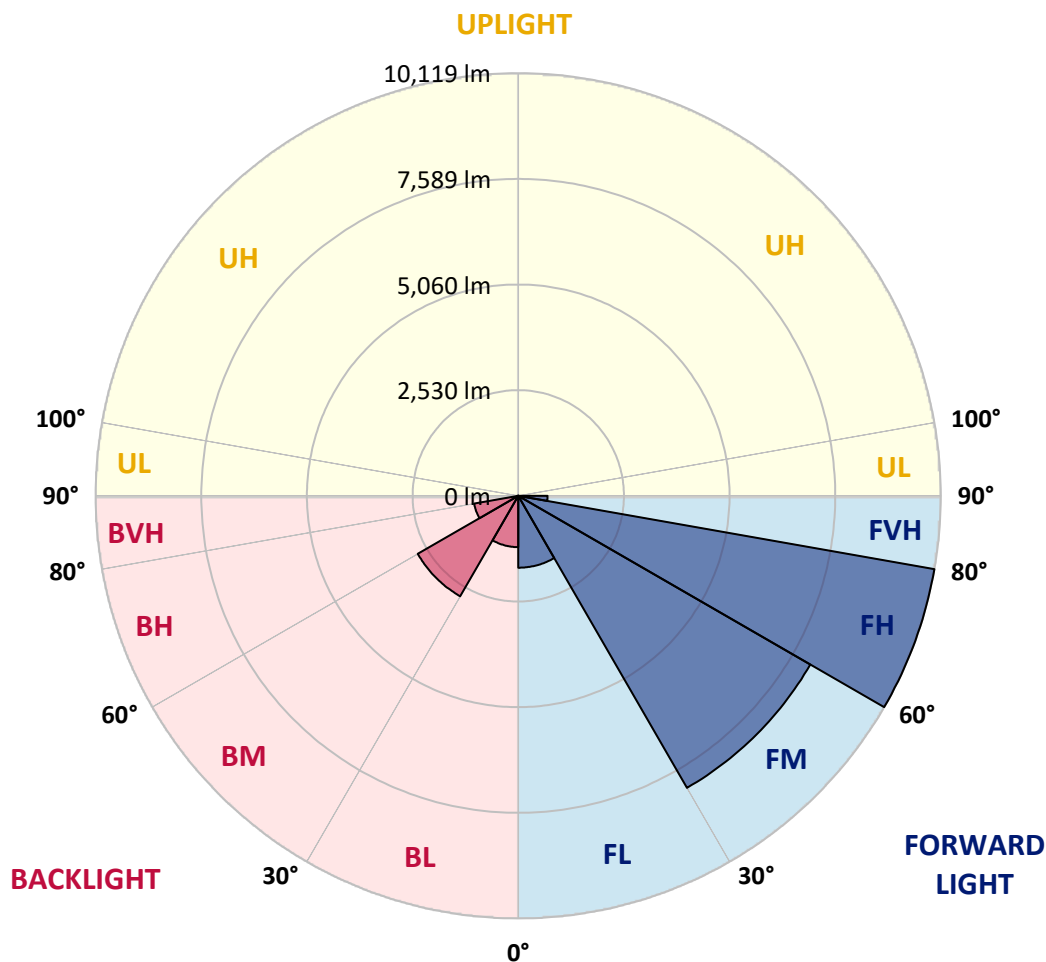
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1721.9	6.7			
FM	(30°-60°)	8075.5	31.4			
FH	(60°-80°)	10119.3	39.3			G4/12000
FVH	(80°-90°)	701.9	2.7			G4/750
BL	(0°-30°)	1229.9	4.8	B3/2500		
BM	(30°-60°)	2779.0	10.8	B3/5000		
BH	(60°-80°)	1071.7	4.2	B3/2500		G3/2500
BVH	(80°-90°)	34.5	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°	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3
2.5°	3992.3	4022.4	4089.9	4125.2	4180.3	4183.7	4183.7	4135.9	4134.1	4036.7	4026.0
5°	4462.1	4533.0	4692.6	4857.4	4892.8	4901.8	4884.0	4788.3	4717.4	4527.6	4486.9
7.5°	4928.3	5064.8	5307.7	5527.5	5598.4	5598.4	5555.9	5399.9	5254.6	4979.8	4877.0
10°	5314.8	5486.7	5816.5	6062.9	6144.5	6126.7	6039.8	5843.1	5642.7	5309.5	5174.7
12.5°	5570.1	5763.3	6125.0	6323.5	6406.9	6360.7	6261.4	6069.9	5859.0	5508.0	5355.5
15°	5697.7	5899.8	6213.5	6318.2	6295.1	6247.3	6234.9	6142.7	5983.1	5655.1	5488.6
17.5°	5752.7	5940.6	6158.6	6093.0	5898.1	5860.8	5984.9	6101.9	6062.9	5782.8	5626.8
20°	5804.1	5961.8	6027.4	5736.7	5396.3	5362.7	5600.2	5933.5	6103.7	5901.5	5757.9
22.5°	5875.0	5972.5	5837.8	5360.9	4993.9	4915.9	5178.3	5679.9	6116.1	6052.3	5908.7
25°	5972.5	5999.1	5628.6	5004.6	4635.9	4557.9	4802.4	5398.2	6094.9	6215.4	6093.0
27.5°	6089.5	6034.6	5428.3	4706.7	4350.4	4277.7	4522.4	5126.8	6034.6	6378.5	6291.6
30°	6241.9	6080.6	5229.7	4476.3	4146.5	4093.3	4329.1	4892.8	5960.1	6585.8	6538.0
32.5°	6396.2	6100.2	5045.4	4341.5	4100.4	4120.0	4313.2	4767.0	5878.6	6784.5	6807.4
35°	6562.9	6162.2	4955.0	4474.5	4485.1	4655.3	4735.1	4884.0	5866.2	7053.8	7144.4
37.5°	6789.7	6300.5	5063.1	5135.8	5504.5	5857.3	5791.7	5456.6	6009.7	7456.3	7624.8
40°	7116.0	6543.3	5534.6	6261.4	7018.5	7591.0	7341.0	6497.3	6449.4	8036.0	8287.7
42.5°	7591.0	6929.8	6371.4	7637.2	8920.7	9863.8	9193.6	7839.2	7218.8	8863.9	9184.8
45°	8293.1	7555.6	7383.6	9089.1	11266.0	12751.6	11358.2	9269.9	8296.7	10117.3	10369.0
47.5°	9266.3	8475.6	8332.0	10619.0	14116.6	16038.4	13758.6	10595.9	9523.4	11826.2	11884.7
50°	10558.6	9714.8	9230.8	12292.4	17242.0	19388.9	16157.1	11875.9	10929.2	13914.6	13847.1
52.5°	12264.1	11443.3	10278.6	13886.2	20456.1	22668.5	18566.3	12999.8	12673.6	16338.0	16199.6
55°	14590.0	14043.9	11710.9	15407.2	23668.4	25967.7	20881.6	14059.9	14978.2	19216.9	18380.2
57.5°	17476.0	17866.1	13776.3	17171.1	26556.2	29367.9	23207.4	15542.0	17970.7	22436.3	19646.0
60°	19337.4	22948.6	17731.4	19778.9	29837.6	33213.1	26394.9	18360.7	21115.6	23590.4	19404.9
62.5°	18887.2	24565.5	22468.2	23108.2	32854.9	36008.7	29518.6	21191.8	21707.7	21890.3	17547.0
65°	17506.2	23260.6	21502.0	23755.3	33619.0	36166.5	30353.5	20826.6	18413.8	17871.4	14104.2
67.5°	15605.8	21713.0	19206.2	22039.2	32238.0	33961.1	28798.8	18422.7	14230.1	13411.1	10232.5
70°	13554.7	20000.5	17699.4	20114.0	29605.4	30117.8	26155.5	16203.2	10466.5	9057.1	6566.4
72.5°	11608.1	18217.1	16667.6	18140.9	26093.5	25033.5	22714.6	14240.7	7621.2	6532.7	4667.7
75°	9617.4	15586.3	15198.1	15797.2	21475.5	19718.6	18873.0	11790.8	5981.4	4726.3	3221.2
77.5°	7420.9	12178.9	13072.4	12650.6	15116.5	14646.7	14629.0	8860.3	4369.9	3153.8	2019.1
80°	5079.0	8488.0	10213.0	8924.2	9810.6	9571.2	11017.8	5944.2	3169.7	1898.6	1123.9
82.5°	2985.3	5167.6	7108.9	4320.3	5424.7	5568.3	6561.0	2891.4	1865.0	437.9	244.7
85°	1210.8	2040.5	2779.7	1691.2	2616.6	2207.1	2490.8	811.9	519.5	10.7	0.0
87.5°	304.9	652.4	457.4	189.7	303.2	278.3	219.9	99.3	21.3	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°	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3
2.5°	3956.8	3916.1	3815.0	3714.0	3632.4	3522.5	3449.8	3362.9	3279.7	3205.2	3191.0
5°	4375.2	4240.5	4056.1	3887.7	3715.7	3549.1	3384.2	3210.5	3050.9	2953.4	2891.4
7.5°	4715.6	4478.0	4233.4	4018.9	3811.5	3616.5	3398.4	3187.4	2937.4	2804.5	2684.0
10°	4969.1	4657.1	4336.3	4089.9	3880.6	3690.9	3506.5	3293.8	2992.5	2825.8	2645.0
12.5°	5135.8	4765.2	4389.4	4107.5	3873.5	3726.4	3644.8	3561.5	3262.0	3066.9	2804.5
15°	5251.0	4841.5	4426.7	4066.8	3779.6	3671.4	3752.9	3848.7	3657.2	3432.1	3090.0
17.5°	5376.8	4940.7	4442.6	3956.8	3596.9	3550.9	3761.9	3983.5	3974.5	3751.2	3416.1
20°	5509.8	5027.6	4432.0	3779.6	3375.3	3416.1	3685.6	3942.7	4050.8	3930.3	3632.4
22.5°	5646.3	5111.0	4391.2	3549.1	3168.0	3295.6	3565.1	3790.2	3917.9	3880.6	3653.7
25°	5818.3	5227.9	4330.9	3300.9	2996.0	3173.3	3425.0	3607.6	3696.3	3694.5	3538.5
27.5°	6023.9	5383.9	4299.0	3100.6	2873.7	3035.0	3258.4	3421.4	3483.5	3483.5	3359.4
30°	6263.3	5568.3	4263.5	2969.4	2802.8	2891.4	3065.2	3224.6	3286.8	3286.8	3182.1
32.5°	6529.1	5745.5	4178.4	2889.7	2749.6	2751.3	2861.3	3006.6	3081.0	3091.7	3017.3
35°	6848.2	5935.3	3992.3	2825.8	2687.5	2614.9	2668.1	2788.6	2877.2	2900.2	2854.2
37.5°	7266.6	6167.5	3726.4	2731.8	2591.8	2471.3	2483.7	2575.8	2673.3	2708.8	2678.6
40°	7828.6	6440.5	3449.8	2597.1	2457.0	2313.5	2308.2	2375.5	2471.3	2510.2	2494.3
42.5°	8571.4	6768.5	3185.7	2467.7	2294.0	2146.9	2137.9	2191.1	2274.5	2315.3	2308.2
45°	9521.6	7170.9	2958.8	2366.6	2134.5	1989.0	1985.5	2029.8	2102.5	2145.0	2136.2
47.5°	10842.3	7573.3	2804.5	2313.5	2008.6	1859.7	1866.7	1905.8	1971.3	2001.5	1989.0
50°	12563.7	7695.6	2726.5	2313.5	1941.1	1744.4	1779.9	1811.8	1861.4	1879.1	1863.1
52.5°	14215.9	7291.4	2655.7	2327.7	1950.1	1646.9	1723.1	1746.2	1788.7	1795.8	1772.7
55°	15026.1	6268.6	2558.1	2331.2	2005.0	1563.6	1677.0	1719.6	1735.5	1733.8	1694.7
57.5°	14747.8	5068.4	2393.3	2317.0	2042.2	1510.4	1620.3	1701.9	1712.5	1696.6	1623.9
60°	13771.0	3731.7	2267.4	2212.5	2028.1	1494.4	1533.5	1662.9	1678.8	1657.5	1538.7
62.5°	12132.9	2590.1	2169.9	1981.9	1966.1	1489.1	1397.0	1577.8	1616.7	1586.6	1412.9
65°	9551.8	1829.5	1868.5	1737.4	1831.3	1460.7	1255.1	1475.0	1528.2	1482.0	1237.4
67.5°	6463.5	1320.7	1513.9	1574.2	1613.2	1397.0	1152.3	1357.9	1428.8	1368.6	1033.5
70°	3490.6	927.2	999.9	1326.0	1370.3	1287.0	1060.2	1239.1	1320.7	1255.1	842.0
72.5°	2061.8	666.6	700.3	1065.5	1141.6	1132.8	957.4	1100.8	1200.2	1122.2	684.3
75°	1136.3	450.3	499.9	773.0	927.2	874.0	822.6	932.4	1033.5	957.4	528.3
77.5°	508.8	269.5	347.5	507.0	728.6	599.2	636.4	726.8	820.8	741.0	352.8
80°	196.8	150.7	230.4	276.5	530.0	331.5	409.5	535.4	602.7	538.9	214.5
82.5°	24.8	67.3	99.3	108.1	308.4	175.5	237.6	336.8	331.5	287.2	108.1
85°	0.0	12.4	14.1	7.1	132.9	63.9	78.0	109.9	102.8	78.0	8.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	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°	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3
2.5°	3104.1	3040.4	3008.4	2981.8	3006.6	3020.8	3020.8	3081.0	3116.5	3130.8	3230.0
5°	2735.4	2616.6	2536.9	2489.0	2504.9	2522.6	2542.2	2618.4	2669.8	2703.5	2857.7
7.5°	2444.6	2263.8	2152.2	2093.7	2102.5	2114.9	2130.9	2205.3	2256.7	2301.0	2473.0
10°	2301.0	2045.8	1898.6	1827.8	1815.4	1808.2	1802.9	1847.3	1886.2	1921.7	2091.9
12.5°	2308.2	1951.8	1772.7	1685.9	1648.7	1606.2	1572.5	1579.5	1604.3	1648.7	1756.8
15°	2398.6	1921.7	1707.1	1599.0	1537.0	1487.4	1446.6	1437.8	1446.6	1453.7	1521.0
17.5°	2520.9	1918.2	1650.5	1515.8	1451.9	1411.1	1373.9	1361.5	1363.2	1372.2	1389.9
20°	2618.4	1907.5	1586.6	1435.9	1379.2	1343.8	1306.6	1294.2	1297.6	1299.5	1319.0
22.5°	2669.8	1891.5	1515.8	1356.2	1308.3	1272.8	1239.1	1237.4	1237.4	1248.0	1262.2
25°	2669.8	1857.9	1451.9	1279.9	1237.4	1205.5	1164.7	1171.8	1175.4	1189.5	1210.8
27.5°	2606.0	1794.1	1400.5	1214.3	1170.0	1138.2	1100.8	1109.8	1115.1	1131.0	1157.6
30°	2524.5	1717.8	1342.0	1152.3	1100.8	1077.9	1045.9	1049.5	1056.6	1074.3	1104.4
32.5°	2437.6	1627.4	1294.2	1090.3	1038.8	1021.1	985.6	991.0	998.0	1017.6	1051.2
35°	2341.8	1521.0	1237.4	1033.5	982.2	967.9	927.2	930.7	941.4	962.6	996.3
37.5°	2240.8	1434.2	1180.7	978.6	925.4	911.2	868.7	872.2	884.6	909.5	941.4
40°	2141.5	1349.1	1120.4	920.0	866.8	854.4	808.4	811.9	826.2	852.7	886.4
42.5°	2033.4	1283.5	1042.4	859.8	803.1	790.7	748.1	753.5	769.4	796.0	829.6
45°	1903.9	1241.0	955.5	803.1	739.2	726.8	687.9	698.4	716.2	742.8	778.3
47.5°	1771.0	1223.2	882.8	742.8	673.6	663.0	631.1	648.8	668.3	689.6	728.6
50°	1643.4	1200.2	808.4	686.0	616.9	606.3	585.0	608.0	627.6	647.1	684.3
52.5°	1498.0	1150.6	741.0	636.4	569.1	565.5	554.8	576.2	593.9	611.6	643.5
55°	1347.4	1070.7	682.5	592.1	528.3	531.9	526.5	544.3	558.4	574.4	602.7
57.5°	1216.2	969.8	636.4	544.3	492.8	503.5	496.4	505.2	514.1	533.6	556.7
60°	1083.1	849.2	585.0	487.5	457.4	469.8	450.3	448.5	452.0	457.4	499.9
62.5°	904.2	723.3	521.2	437.9	418.4	423.7	386.4	358.1	358.1	363.5	427.2
65°	726.8	606.3	450.3	381.2	365.2	361.6	308.4	269.5	265.9	281.9	336.8
67.5°	597.5	503.5	379.4	317.3	306.7	310.3	271.2	232.3	228.7	246.4	287.2
70°	494.6	406.0	303.2	244.7	255.3	271.2	232.3	195.0	189.7	205.6	244.7
72.5°	393.6	317.3	232.3	180.8	210.9	230.4	189.7	154.3	150.7	164.8	202.1
75°	288.9	226.9	157.7	131.2	163.1	180.8	138.3	109.9	104.6	117.0	154.3
77.5°	179.1	127.6	99.3	78.0	111.7	120.5	72.7	63.9	62.0	70.9	97.5
80°	83.3	54.9	47.9	26.5	40.8	47.9	30.1	33.7	35.5	42.5	60.3
82.5°	23.1	8.8	1.7	0.0	0.0	14.1	7.1	14.1	17.7	26.5	38.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	8.8	16.0	28.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	14.1
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: P968902

CATALOG NUMBER: NAV-SB5C-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3	3563.3
2.5°	3304.5	3375.3	3488.8	3605.8	3721.1	3838.1	3951.5	3992.3
5°	2997.8	3160.9	3386.0	3627.1	3875.3	4127.1	4357.5	4462.1
7.5°	2655.7	2889.7	3228.2	3605.8	4001.2	4396.5	4759.9	4928.3
10°	2290.5	2586.5	2972.9	3483.5	4050.8	4596.8	5096.7	5314.8
12.5°	1943.0	2253.2	2680.5	3292.1	4011.8	4712.0	5313.0	5570.1
15°	1652.2	1927.0	2387.9	3065.2	3886.0	4719.1	5415.8	5697.7
17.5°	1434.2	1613.2	2090.1	2813.4	3721.1	4653.5	5451.3	5752.7
20°	1326.0	1375.7	1703.7	2490.8	3566.8	4591.5	5486.7	5804.1
22.5°	1262.2	1274.6	1393.4	2074.2	3382.5	4572.0	5548.8	5875.0
25°	1210.8	1214.3	1246.3	1643.4	3100.6	4559.6	5644.6	5972.5
27.5°	1159.4	1159.4	1177.1	1324.3	2717.7	4506.4	5768.6	6089.5
30°	1108.0	1108.0	1120.4	1171.8	2269.1	4401.9	5917.5	6241.9
32.5°	1054.8	1054.8	1065.5	1102.7	1811.8	4270.7	6054.1	6396.2
35°	1001.6	998.0	1012.3	1051.2	1441.3	4104.0	6190.6	6562.9
37.5°	944.8	943.1	957.4	1001.6	1244.5	3910.8	6293.4	6789.7
40°	884.6	884.6	900.6	948.4	1187.8	3667.9	6456.5	7116.0
42.5°	829.6	826.2	843.9	902.3	1145.2	3435.7	6749.0	7591.0
45°	776.4	769.4	785.4	858.0	1070.7	3354.1	7295.0	8293.1
47.5°	726.8	709.1	723.3	804.8	1003.4	3659.0	8188.5	9266.3
50°	686.0	652.4	664.8	751.6	952.0	4320.3	9347.9	10558.6
52.5°	643.5	599.2	606.3	686.0	905.9	4949.6	10604.8	12264.1
55°	599.2	549.6	553.1	620.4	840.3	5043.5	11831.6	14590.0
57.5°	549.6	503.5	503.5	560.2	792.4	4371.6	12774.7	17476.0
60°	494.6	464.4	455.6	512.3	835.0	3084.6	12884.6	19337.4
62.5°	434.3	418.4	406.0	466.3	866.8	1827.8	12000.0	18887.2
65°	365.2	361.6	352.8	512.3	730.4	1079.6	10301.7	17506.2
67.5°	306.7	301.3	301.3	537.2	554.8	679.0	8048.4	15605.8
70°	264.1	244.7	244.7	406.0	336.8	469.8	5619.7	13554.7
72.5°	221.6	200.3	186.1	324.4	251.7	343.9	3511.9	11608.1
75°	177.3	161.3	143.6	214.5	187.9	260.6	2040.5	9617.4
77.5°	127.6	120.5	101.1	157.7	136.5	187.9	1214.3	7420.9
80°	65.6	67.3	63.9	90.4	92.1	127.6	691.4	5079.0
82.5°	38.9	30.1	33.7	44.3	53.2	72.7	260.6	2985.3
85°	24.8	16.0	16.0	21.3	26.5	28.4	79.7	1210.8
87.5°	12.4	5.3	7.1	10.7	8.8	7.1	3.6	304.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)