

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: P970545

Luminaire Tested: **NAV-SB6B-835-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970545
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-SB6B-835-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 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: 24776.3 lumens
Efficiency: N/A
Efficacy: 112.4 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): 220.4
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

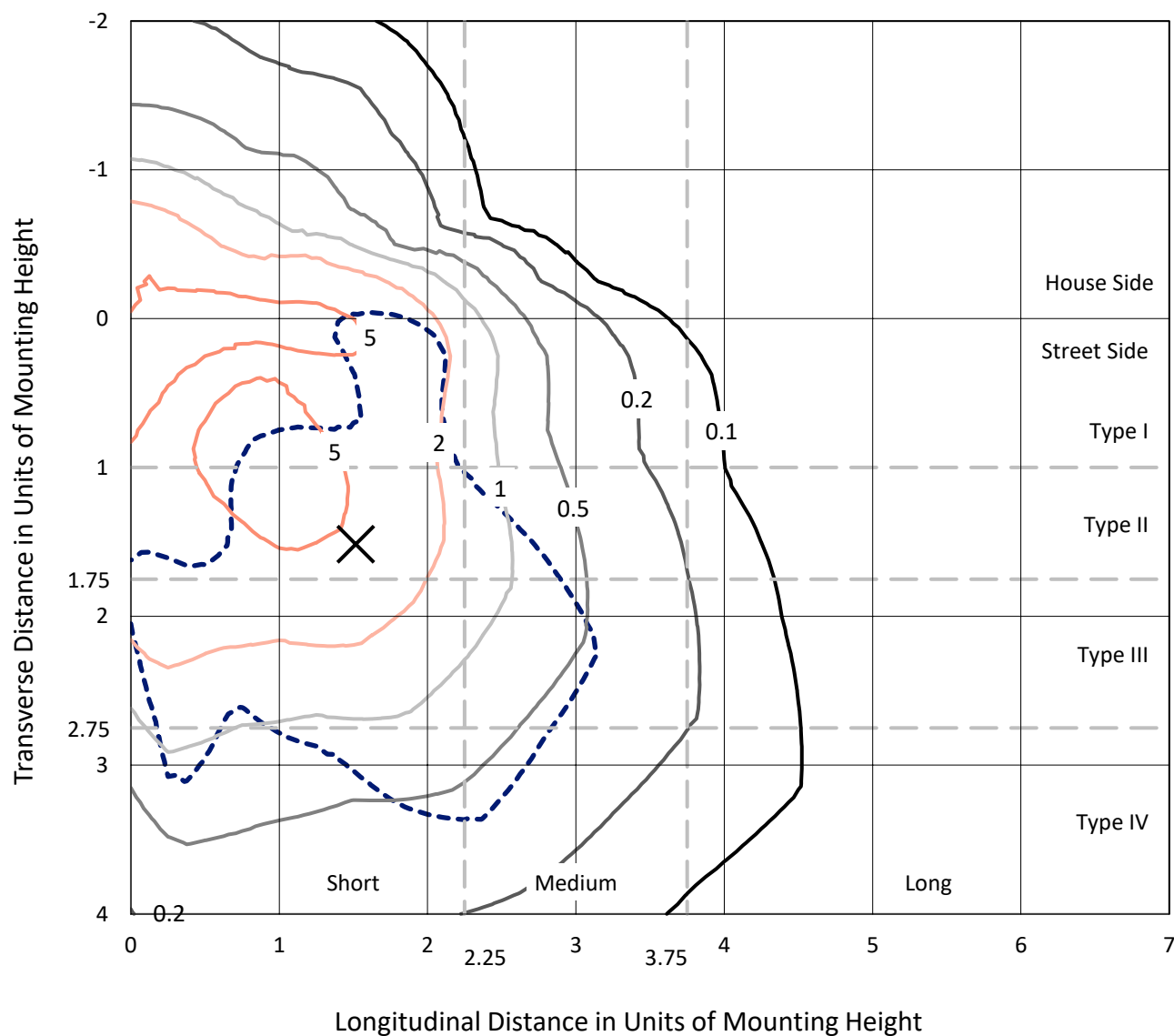


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

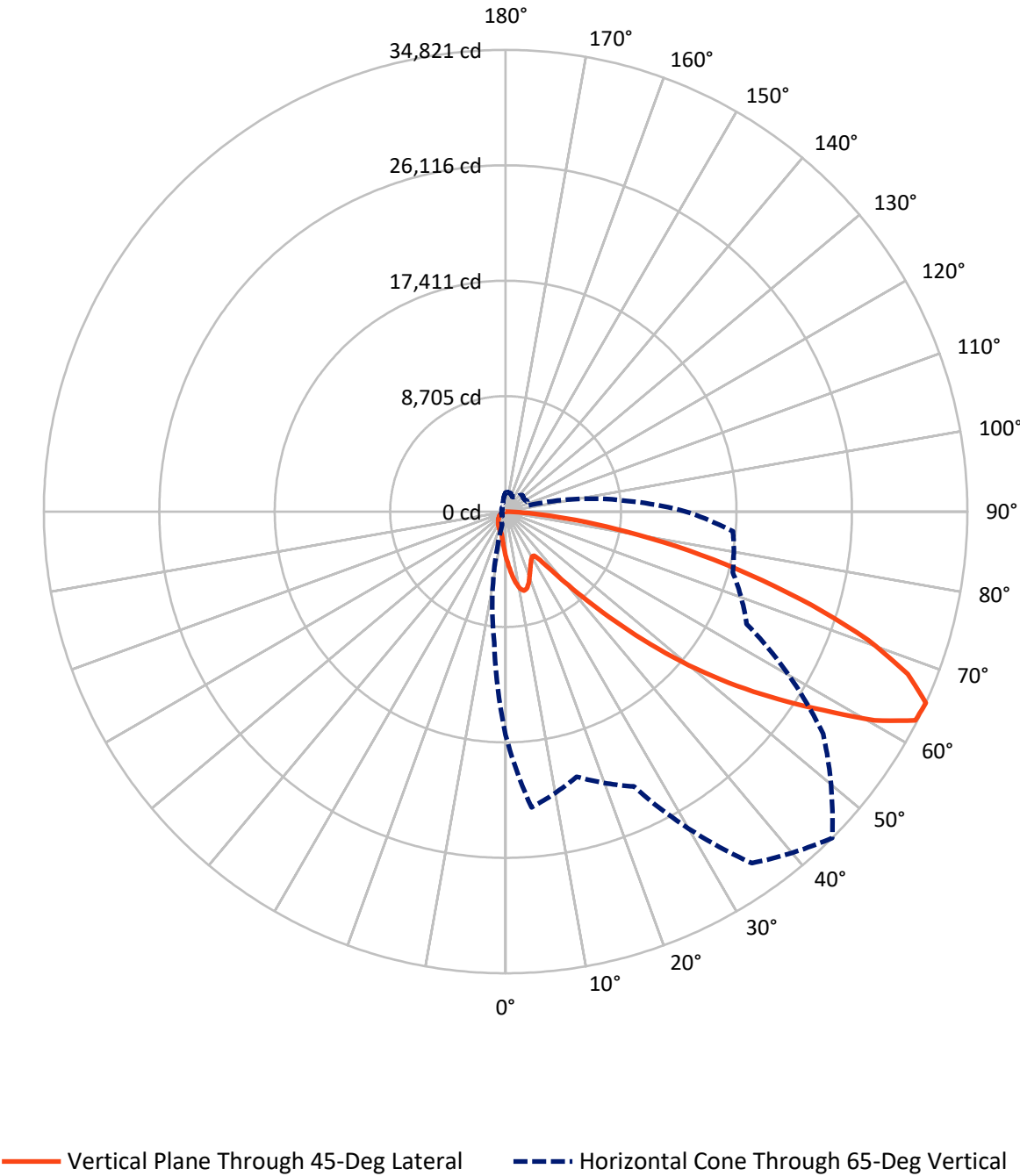


Based on 25 foot mounting height. Maximum calculated value = 9 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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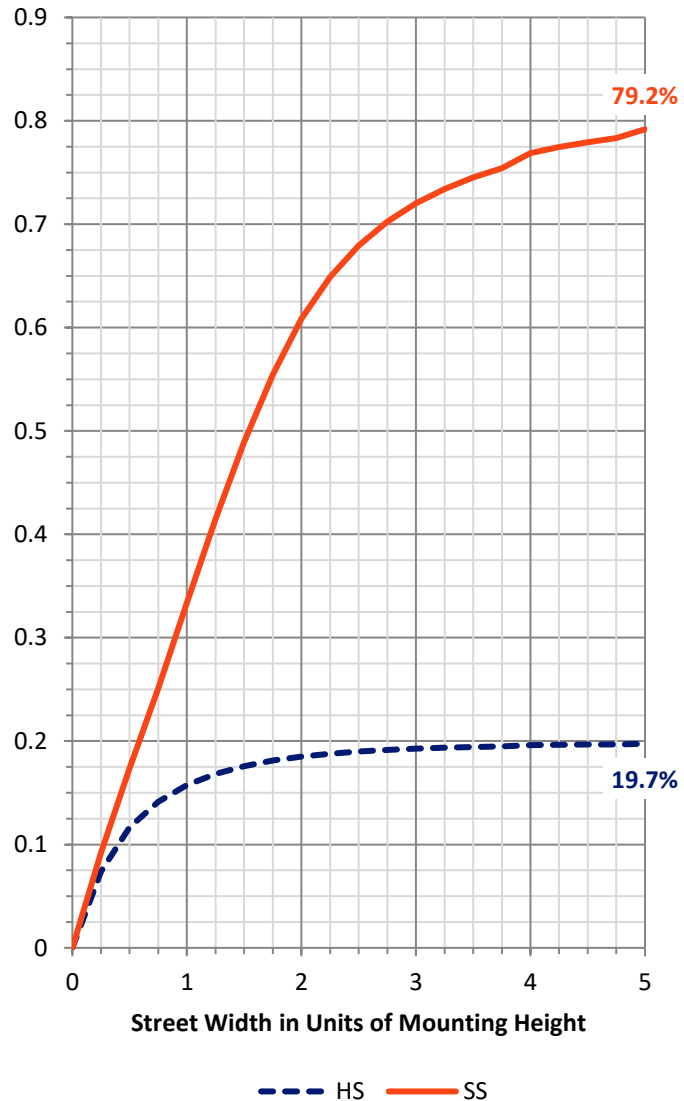
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4924.8	0.0	4924.8
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	19851.5	0.0	19851.5
	% Fixture	80.1	0.0	80.1
Total	Lumens	24776.3	0.0	24776.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.8	1.4
10°-20°	1012.5	4.1
20°-30°	1491.7	6.0
30°-40°	1916.4	7.7
40°-50°	3099.3	12.5
50°-60°	5435.0	21.9
60°-70°	6800.7	27.4
70°-80°	3974.0	16.0
80°-90°	709.0	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°	24776.3	100.0
0°-180°	24776.3	100.0

Coefficient of Utilization



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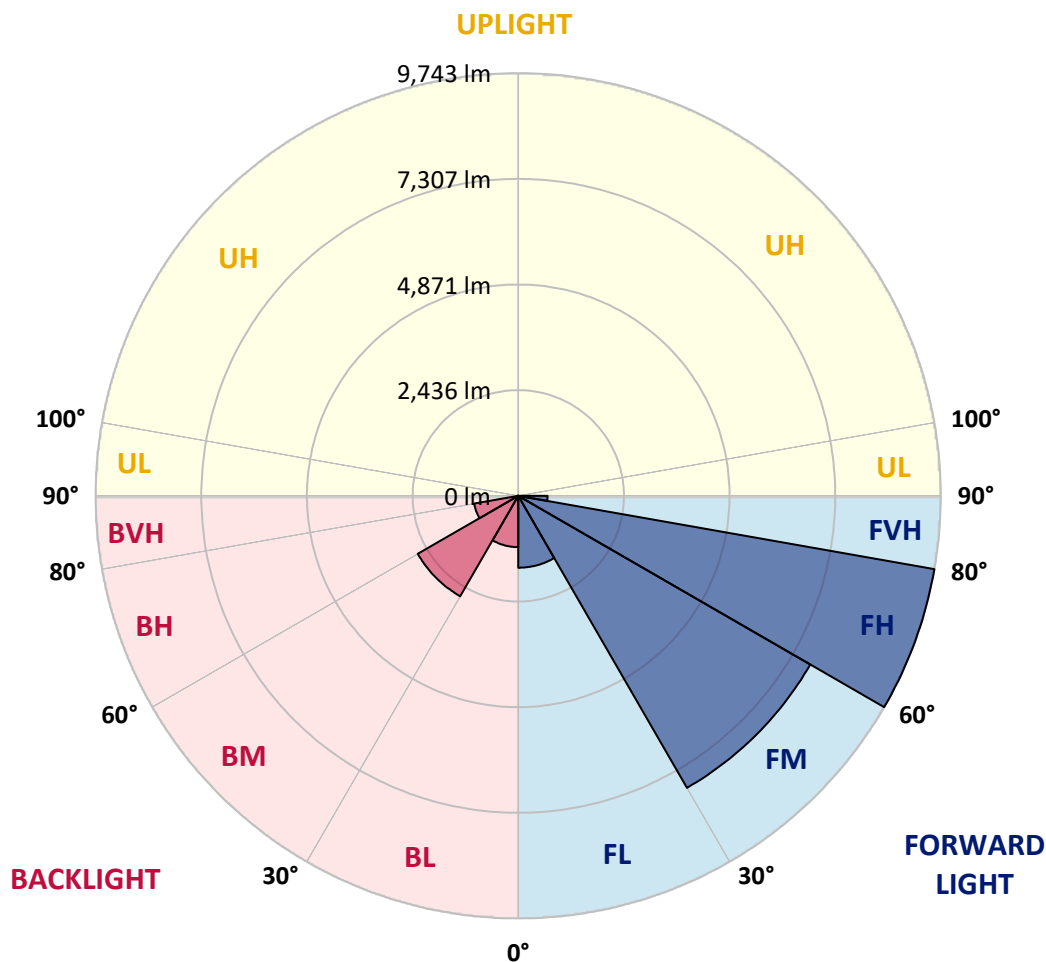
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1657.8	6.7			
FM	(30°-60°)	7775.1	31.4			
FH	(60°-80°)	9742.8	39.3			G4/12000
FVH	(80°-90°)	675.8	2.7			G4/750
BL	(0°-30°)	1184.1	4.8	B3/2500		
BM	(30°-60°)	2675.6	10.8	B3/5000		
BH	(60°-80°)	1031.8	4.2	B3/2500		G3/2500
BVH	(80°-90°)	33.2	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°	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7
2.5°	3843.7	3872.8	3937.6	3971.8	4024.7	4028.1	4028.1	3982.0	3980.3	3886.5	3876.2
5°	4296.1	4364.3	4518.0	4676.7	4710.8	4719.4	4702.3	4610.1	4541.9	4359.2	4320.0
7.5°	4745.0	4876.4	5110.2	5321.9	5390.2	5390.2	5349.2	5199.0	5059.0	4794.4	4695.5
10°	5117.1	5282.6	5600.1	5837.4	5915.9	5898.8	5815.1	5625.7	5432.8	5112.0	4982.2
12.5°	5362.9	5548.9	5897.1	6088.3	6168.4	6124.1	6028.5	5844.1	5641.1	5303.1	5156.4
15°	5485.7	5680.3	5982.4	6083.2	6060.9	6014.9	6002.9	5914.1	5760.5	5444.8	5284.4
17.5°	5538.7	5719.6	5929.5	5866.4	5678.6	5642.7	5762.2	5874.9	5837.4	5567.7	5417.4
20°	5588.2	5740.1	5803.2	5523.3	5195.6	5163.1	5391.9	5712.7	5876.6	5682.0	5543.8
22.5°	5656.5	5750.4	5620.6	5161.5	4808.2	4733.0	4985.6	5468.7	5888.5	5827.1	5688.9
25°	5750.4	5775.9	5419.2	4818.4	4463.4	4388.2	4623.8	5197.3	5868.1	5984.2	5866.4
27.5°	5863.0	5810.0	5226.3	4531.6	4188.6	4118.6	4354.1	4936.2	5810.0	6141.2	6057.5
30°	6009.8	5854.4	5035.1	4309.7	3992.3	3941.0	4168.1	4710.8	5738.4	6340.9	6294.8
32.5°	6158.2	5873.1	4857.7	4180.1	3947.9	3966.6	4152.7	4589.6	5659.8	6532.0	6554.3
35°	6318.7	5932.9	4770.6	4308.1	4318.3	4482.1	4558.9	4702.3	5647.9	6791.4	6878.5
37.5°	6537.1	6066.1	4874.7	4944.7	5299.7	5639.3	5576.2	5253.6	5786.1	7178.9	7341.0
40°	6851.2	6299.9	5328.7	6028.5	6757.3	7308.7	7068.0	6255.6	6209.4	7737.0	7979.4
42.5°	7308.7	6672.0	6134.3	7353.0	8588.8	9496.8	8851.6	7547.6	6950.2	8534.2	8843.1
45°	7984.5	7274.5	7109.0	8750.9	10846.9	12277.2	10935.6	8925.0	7987.9	9740.9	9983.2
47.5°	8921.6	8160.3	8022.1	10223.9	13591.5	15441.6	13246.7	10201.7	9169.0	11386.2	11442.6
50°	10165.8	9353.4	8887.5	11835.2	16600.6	18667.6	15556.0	11434.1	10522.5	13396.9	13332.1
52.5°	11807.8	11017.6	9896.2	13369.6	19695.1	21825.2	17875.6	12516.2	12202.1	15730.2	15597.0
55°	14047.2	13521.5	11275.3	14834.0	22787.9	25001.6	20104.8	13536.9	14421.0	18502.0	17696.4
57.5°	16825.9	17201.4	13263.8	16532.3	25568.3	28275.3	22344.1	14963.8	17302.1	21601.6	18915.0
60°	18618.1	22094.9	17071.7	19043.1	28727.7	31977.4	25412.9	17677.7	20330.1	22712.8	18683.0
62.5°	18184.5	23651.6	21632.3	22248.5	31632.6	34669.1	28420.4	20403.4	20900.2	21075.9	16894.2
65°	16854.9	22395.3	20702.1	22871.5	32368.3	34821.0	29224.3	20051.8	17728.8	17206.6	13579.5
67.5°	15025.2	20905.2	18491.8	21219.2	31038.6	32697.7	27727.4	17737.3	13700.7	12912.1	9851.8
70°	13050.4	19256.5	17040.9	19365.6	28504.0	28997.4	25182.5	15600.4	10077.1	8720.2	6322.1
72.5°	11176.3	17539.4	16047.6	17466.0	25122.9	24102.2	21869.6	13710.9	7337.7	6289.7	4494.1
75°	9259.5	15006.4	14632.6	15209.6	20676.5	18985.0	18170.9	11352.1	5758.9	4550.4	3101.3
77.5°	7144.8	11725.9	12586.2	12180.0	14554.1	14101.8	14084.7	8530.8	4207.3	3036.5	1944.1
80°	4890.1	8172.3	9833.0	8592.2	9445.6	9215.2	10607.9	5723.0	3051.8	1828.0	1082.1
82.5°	2874.3	4975.5	6844.3	4159.6	5222.9	5361.2	6317.0	2783.8	1795.6	421.6	235.5
85°	1165.7	1964.5	2676.3	1628.3	2519.2	2125.0	2398.1	781.8	500.1	10.2	0.0
87.5°	293.6	628.1	440.3	182.7	291.8	267.9	211.7	95.6	20.5	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°	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7
2.5°	3809.6	3770.4	3673.1	3575.8	3497.3	3391.4	3321.5	3237.9	3157.6	3086.0	3072.3
5°	4212.4	4082.8	3905.2	3743.1	3577.6	3417.0	3258.4	3091.1	2937.4	2843.6	2783.8
7.5°	4540.1	4311.5	4075.9	3869.4	3669.7	3481.9	3272.0	3068.8	2828.2	2700.2	2584.1
10°	4784.3	4483.9	4174.9	3937.6	3736.2	3553.6	3376.1	3171.2	2881.2	2720.7	2546.6
12.5°	4944.7	4588.0	4226.1	3954.8	3729.5	3587.7	3509.2	3429.0	3140.6	2952.8	2700.2
15°	5055.6	4661.4	4262.0	3915.5	3639.0	3534.8	3613.3	3705.5	3521.2	3304.4	2975.0
17.5°	5176.8	4756.9	4277.3	3809.6	3463.2	3418.8	3621.9	3835.2	3826.7	3611.7	3289.0
20°	5304.8	4840.6	4267.1	3639.0	3249.8	3289.0	3548.4	3796.0	3900.1	3784.0	3497.3
22.5°	5436.3	4920.8	4227.8	3417.0	3050.1	3173.0	3432.4	3649.2	3772.1	3736.2	3517.8
25°	5601.8	5033.5	4169.8	3178.1	2884.6	3055.2	3297.6	3473.4	3558.7	3557.1	3406.8
27.5°	5799.8	5183.6	4139.1	2985.2	2766.8	2922.1	3137.1	3294.1	3353.9	3353.9	3234.5
30°	6030.2	5361.2	4104.9	2858.9	2698.5	2783.8	2951.1	3104.7	3164.5	3164.5	3063.7
32.5°	6286.2	5531.8	4023.0	2782.2	2647.3	2649.0	2754.8	2894.8	2966.5	2976.7	2905.1
35°	6593.5	5714.5	3843.7	2720.7	2587.5	2517.6	2568.8	2684.9	2770.2	2792.4	2748.0
37.5°	6996.2	5938.0	3587.7	2630.3	2495.4	2379.3	2391.2	2480.0	2573.9	2608.0	2579.0
40°	7537.3	6200.9	3321.5	2500.5	2365.7	2227.4	2222.3	2287.2	2379.3	2416.8	2401.5
42.5°	8252.5	6516.6	3067.2	2376.0	2208.7	2067.0	2058.4	2109.7	2189.8	2229.1	2222.3
45°	9167.4	6904.1	2848.7	2278.6	2055.0	1915.1	1911.6	1954.4	2024.3	2065.3	2056.8
47.5°	10439.0	7291.5	2700.2	2227.4	1933.9	1790.5	1797.3	1834.9	1898.0	1927.0	1915.1
50°	12096.3	7409.3	2625.1	2227.4	1869.0	1679.6	1713.7	1744.3	1792.2	1809.2	1793.9
52.5°	13687.0	7020.2	2556.9	2241.1	1877.5	1585.7	1659.1	1681.2	1722.2	1729.0	1706.8
55°	14467.1	6035.3	2463.0	2244.4	1930.4	1505.4	1614.7	1655.6	1671.0	1669.3	1631.7
57.5°	14199.1	4879.8	2304.2	2230.8	1966.3	1454.2	1560.0	1638.6	1648.8	1633.4	1563.4
60°	13258.7	3592.8	2183.0	2130.2	1952.6	1438.9	1476.4	1601.0	1616.3	1595.9	1481.5
62.5°	11681.5	2493.7	2089.2	1908.2	1892.9	1433.8	1345.0	1519.0	1556.7	1527.7	1360.4
65°	9196.4	1761.5	1799.0	1672.7	1763.1	1406.4	1208.5	1420.0	1471.3	1426.9	1191.4
67.5°	6223.1	1271.6	1457.7	1515.7	1553.2	1345.0	1109.5	1307.4	1375.7	1317.6	995.1
70°	3360.8	892.7	962.7	1276.7	1319.4	1239.1	1020.7	1193.1	1271.6	1208.5	810.8
72.5°	1985.0	641.8	674.2	1025.8	1099.2	1090.7	921.7	1060.0	1155.5	1080.5	658.9
75°	1094.1	433.6	481.3	744.2	892.7	841.4	792.0	897.8	995.1	921.7	508.6
77.5°	489.8	259.4	334.6	488.1	701.5	576.9	612.7	699.8	790.3	713.5	339.7
80°	189.4	145.0	221.9	266.3	510.3	319.2	394.3	515.5	580.4	518.9	206.5
82.5°	23.9	64.9	95.6	104.1	296.9	169.0	228.7	324.3	319.2	276.5	104.1
85°	0.0	12.0	13.6	6.9	128.0	61.4	75.1	105.8	99.0	75.1	8.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	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°	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7
2.5°	2988.7	2927.2	2896.4	2870.9	2894.8	2908.4	2908.4	2966.5	3000.6	3014.2	3109.8
5°	2633.6	2519.2	2442.5	2396.3	2411.7	2428.8	2447.6	2521.0	2570.5	2602.9	2751.4
7.5°	2353.7	2179.7	2072.1	2015.8	2024.3	2036.3	2051.6	2123.3	2172.8	2215.4	2381.1
10°	2215.4	1969.6	1828.0	1759.7	1747.8	1741.0	1735.8	1778.5	1816.1	1850.2	2014.0
12.5°	2222.3	1879.2	1706.8	1623.2	1587.3	1546.4	1513.9	1520.8	1544.7	1587.3	1691.5
15°	2309.3	1850.2	1643.7	1539.6	1479.8	1432.0	1392.8	1384.3	1392.8	1399.6	1464.4
17.5°	2427.1	1846.7	1589.1	1459.3	1397.9	1358.6	1322.8	1310.9	1312.5	1321.1	1338.1
20°	2521.0	1836.6	1527.7	1382.5	1327.9	1293.8	1258.0	1246.0	1249.4	1251.1	1269.9
22.5°	2570.5	1821.2	1459.3	1305.7	1259.6	1225.5	1193.1	1191.4	1191.4	1201.6	1215.2
25°	2570.5	1788.7	1397.9	1232.4	1191.4	1160.6	1121.4	1128.2	1131.6	1145.2	1165.7
27.5°	2509.0	1727.3	1348.4	1169.2	1126.5	1095.8	1060.0	1068.5	1073.6	1089.0	1114.6
30°	2430.5	1653.9	1292.1	1109.5	1060.0	1037.7	1007.1	1010.4	1017.3	1034.3	1063.3
32.5°	2346.8	1566.9	1246.0	1049.7	1000.2	983.2	949.0	954.1	960.9	979.7	1012.2
35°	2254.7	1464.4	1191.4	995.1	945.6	931.9	892.7	896.1	906.3	926.8	959.2
37.5°	2157.4	1380.8	1136.7	942.2	890.9	877.3	836.3	839.8	851.7	875.6	906.3
40°	2061.9	1298.9	1078.7	885.8	834.7	822.7	778.3	781.8	795.4	821.0	853.4
42.5°	1957.7	1235.7	1003.6	827.8	773.2	761.3	720.3	725.4	740.8	766.4	798.8
45°	1833.1	1194.7	919.9	773.2	711.8	699.8	662.3	672.5	689.5	715.1	749.3
47.5°	1705.1	1177.7	850.0	715.1	648.6	638.4	607.6	624.7	643.5	664.0	701.5
50°	1582.2	1155.5	778.3	660.5	594.0	583.7	563.2	585.5	604.2	623.0	658.9
52.5°	1442.3	1107.7	713.5	612.7	547.9	544.5	534.2	554.7	571.7	588.9	619.6
55°	1297.2	1030.9	657.1	570.1	508.6	512.1	507.0	524.0	537.6	553.0	580.4
57.5°	1170.9	933.7	612.7	524.0	474.5	484.7	478.0	486.5	495.0	513.7	536.0
60°	1042.8	817.5	563.2	469.3	440.3	452.3	433.6	431.8	435.2	440.3	481.3
62.5°	870.5	696.4	501.8	421.6	402.8	408.0	372.1	344.8	344.8	349.9	411.3
65°	699.8	583.7	433.6	367.0	351.6	348.2	296.9	259.4	256.0	271.4	324.3
67.5°	575.2	484.7	365.3	305.6	295.3	298.7	261.2	223.6	220.2	237.3	276.5
70°	476.2	390.8	291.8	235.5	245.8	261.2	223.6	187.8	182.7	198.0	235.5
72.5°	378.9	305.6	223.6	174.1	203.2	221.9	182.7	148.5	145.0	158.8	194.5
75°	278.2	218.4	151.9	126.3	157.0	174.1	133.1	105.8	100.7	112.6	148.5
77.5°	172.4	122.9	95.6	75.1	107.5	116.0	70.0	61.4	59.8	68.3	93.9
80°	80.3	52.9	46.1	25.6	39.3	46.1	29.0	32.4	34.1	41.0	58.0
82.5°	22.1	8.5	1.7	0.0	0.0	13.6	6.9	13.6	17.1	25.6	37.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	8.5	15.4	27.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	13.6
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: P970545

CATALOG NUMBER: NAV-SB6B-835-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7	3430.7
2.5°	3181.5	3249.8	3359.0	3471.7	3582.7	3695.3	3804.5	3843.7
5°	2886.3	3043.2	3260.0	3492.2	3731.1	3973.5	4195.4	4296.1
7.5°	2556.9	2782.2	3108.1	3471.7	3852.4	4232.9	4582.9	4745.0
10°	2205.2	2490.2	2862.3	3353.9	3900.1	4425.8	4907.1	5117.1
12.5°	1870.7	2169.4	2580.7	3169.6	3862.5	4536.8	5115.4	5362.9
15°	1590.8	1855.4	2299.1	2951.1	3741.4	4543.6	5214.4	5485.7
17.5°	1380.8	1553.2	2012.4	2708.8	3582.7	4480.4	5248.5	5538.7
20°	1276.7	1324.5	1640.3	2398.1	3434.2	4420.7	5282.6	5588.2
22.5°	1215.2	1227.2	1341.5	1997.0	3256.6	4401.9	5342.4	5656.5
25°	1165.7	1169.2	1199.9	1582.2	2985.2	4390.0	5434.5	5750.4
27.5°	1116.2	1116.2	1133.3	1275.0	2616.5	4338.7	5554.1	5863.0
30°	1066.7	1066.7	1078.7	1128.2	2184.8	4238.1	5697.4	6009.8
32.5°	1015.6	1015.6	1025.8	1061.7	1744.3	4111.8	5828.9	6158.2
35°	964.3	960.9	974.6	1012.2	1387.6	3951.3	5960.3	6318.7
37.5°	909.8	908.0	921.7	964.3	1198.2	3765.2	6059.3	6537.1
40°	851.7	851.7	867.0	913.2	1143.6	3531.4	6216.3	6851.2
42.5°	798.8	795.4	812.4	868.8	1102.6	3307.9	6497.9	7308.7
45°	747.6	740.8	756.1	826.2	1030.9	3229.4	7023.6	7984.5
47.5°	699.8	682.8	696.4	774.9	966.1	3522.9	7883.9	8921.6
50°	660.5	628.1	640.0	723.6	916.6	4159.6	9000.1	10165.8
52.5°	619.6	576.9	583.7	660.5	872.2	4765.4	10210.2	11807.8
55°	576.9	529.1	532.5	597.4	809.0	4855.9	11391.3	14047.2
57.5°	529.1	484.7	484.7	539.4	762.9	4209.1	12299.4	16825.9
60°	476.2	447.2	438.7	493.2	803.9	2969.8	12405.3	18618.1
62.5°	418.2	402.8	390.8	448.8	834.7	1759.7	11553.5	18184.5
65°	351.6	348.2	339.7	493.2	703.3	1039.5	9918.4	16854.9
67.5°	295.3	290.2	290.2	517.2	534.2	653.7	7749.0	15025.2
70°	254.3	235.5	235.5	390.8	324.3	452.3	5410.7	13050.4
72.5°	213.3	192.9	179.2	312.3	242.4	331.1	3381.3	11176.3
75°	170.7	155.3	138.3	206.5	180.9	250.9	1964.5	9259.5
77.5°	122.9	116.0	97.3	151.9	131.4	180.9	1169.2	7144.8
80°	63.1	64.9	61.4	87.0	88.8	122.9	665.6	4890.1
82.5°	37.5	29.0	32.4	42.6	51.2	70.0	250.9	2874.3
85°	23.9	15.4	15.4	20.5	25.6	27.3	76.8	1165.7
87.5°	12.0	5.1	6.9	10.2	8.5	6.9	3.4	293.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)