

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: P968282

Luminaire Tested: **NAV-SB5B-740-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968282
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-740-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 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: 23541.2 lumens
Efficiency: N/A
Efficacy: 128.9 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



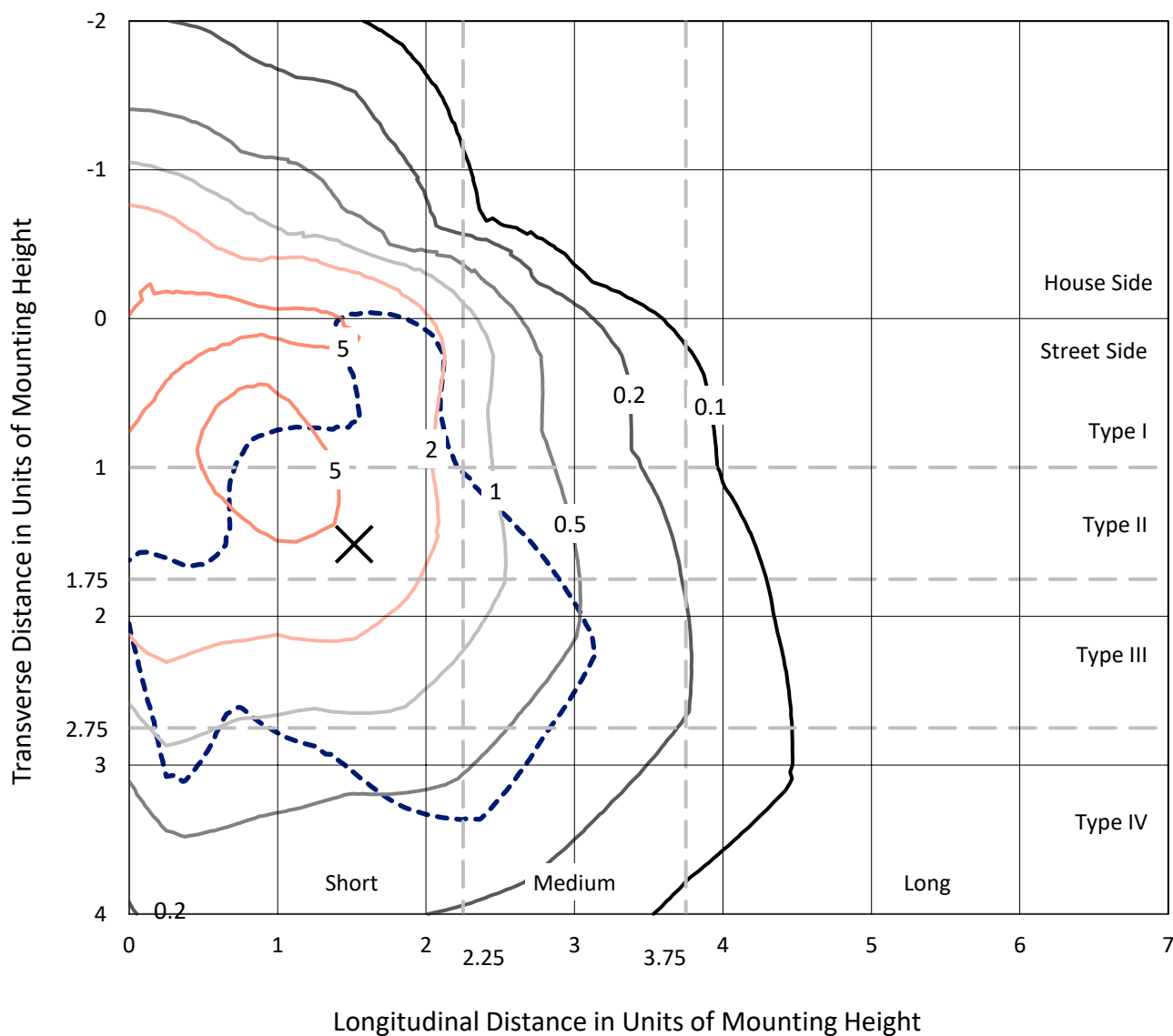
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

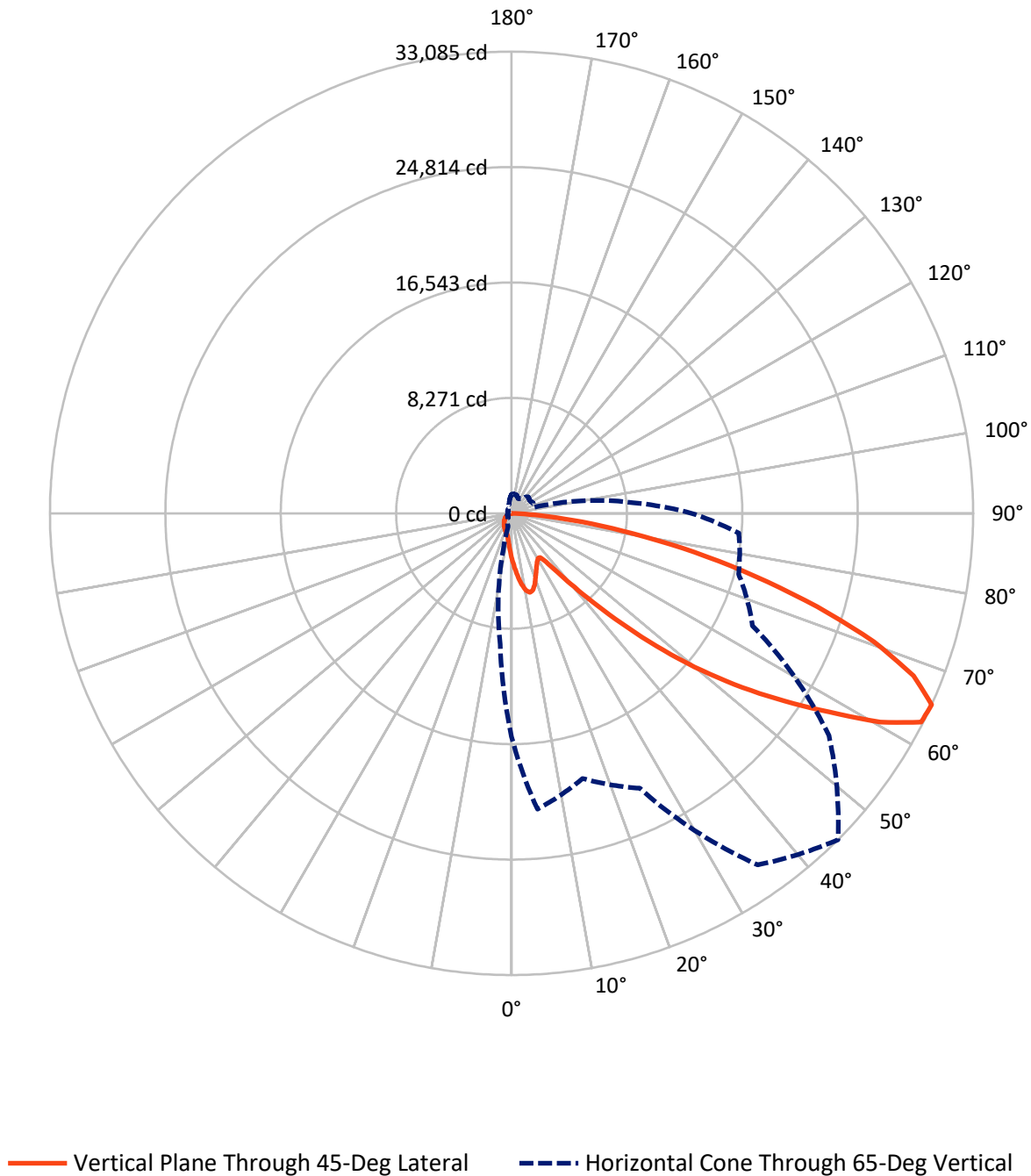


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc

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	4679.3	0.0	4679.3
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	18861.9	0.0	18861.9
	% Fixture	80.1	0.0	80.1
Total	Lumens	23541.2	0.0	23541.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.9	1.4
10°-20°	962.0	4.1
20°-30°	1417.3	6.0
30°-40°	1820.8	7.7
40°-50°	2944.8	12.5
50°-60°	5164.0	21.9
60°-70°	6461.6	27.4
70°-80°	3775.9	16.0
80°-90°	673.7	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°	23541.2	100.0
0°-180°	23541.2	100.0

Coefficient of Utilization



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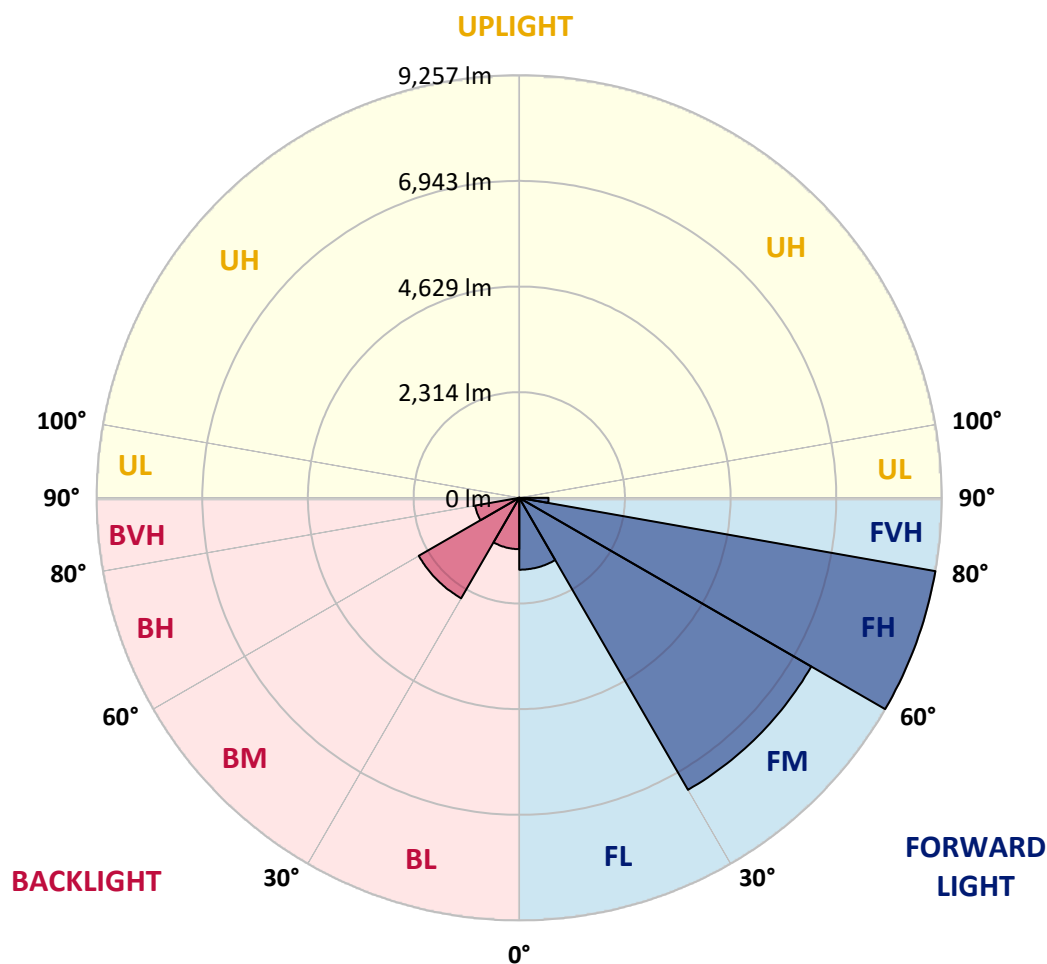
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1575.2	6.7			
FM	(30°-60°)	7387.5	31.4			
FH	(60°-80°)	9257.1	39.3			G4/12000
FVH	(80°-90°)	642.1	2.7			G4/750
BL	(0°-30°)	1125.1	4.8	B3/2500		
BM	(30°-60°)	2542.2	10.8	B3/5000		
BH	(60°-80°)	980.4	4.2	B2/1000		G2/1000
BVH	(80°-90°)	31.6	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°	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7
2.5°	3652.2	3679.7	3741.4	3773.7	3824.1	3827.3	3827.3	3783.5	3781.9	3692.7	3682.9
5°	4082.0	4146.8	4292.7	4443.6	4476.0	4484.1	4467.9	4380.3	4315.5	4141.9	4104.6
7.5°	4508.5	4633.3	4855.5	5056.6	5121.4	5121.4	5082.6	4939.8	4806.8	4555.5	4461.4
10°	4862.0	5019.3	5321.0	5546.4	5621.0	5604.7	5525.3	5345.3	5162.0	4857.1	4733.9
12.5°	5095.5	5272.3	5603.2	5784.8	5861.0	5818.8	5728.0	5552.8	5359.8	5038.8	4899.3
15°	5212.2	5397.1	5684.2	5779.9	5758.8	5715.0	5703.6	5619.4	5473.4	5173.4	5020.9
17.5°	5262.6	5434.4	5633.9	5574.0	5395.5	5361.5	5475.0	5582.0	5546.4	5290.1	5147.4
20°	5309.6	5453.9	5513.9	5248.0	4936.6	4905.8	5123.1	5428.0	5583.7	5398.8	5267.4
22.5°	5374.5	5463.7	5340.4	4904.1	4568.4	4497.1	4737.1	5196.0	5595.0	5536.6	5405.2
25°	5463.7	5488.0	5149.0	4578.2	4240.8	4169.5	4393.3	4938.2	5575.6	5685.8	5574.0
27.5°	5570.7	5520.4	4965.8	4305.7	3979.8	3913.2	4137.1	4690.1	5520.4	5835.0	5755.6
30°	5710.2	5562.6	4784.1	4094.9	3793.2	3744.6	3960.3	4476.0	5452.3	6024.7	5981.0
32.5°	5851.2	5580.4	4615.5	3971.7	3751.1	3768.9	3945.7	4360.9	5377.7	6206.4	6227.5
35°	6003.7	5637.2	4532.8	4093.2	4103.0	4258.7	4331.6	4467.9	5366.4	6452.9	6535.6
37.5°	6211.3	5763.7	4631.7	4698.2	5035.5	5358.2	5298.2	4991.8	5497.7	6821.1	6975.1
40°	6509.7	5985.8	5063.1	5728.0	6420.5	6944.3	6715.6	5943.7	5899.9	7351.4	7581.6
42.5°	6944.3	6339.4	5828.6	6986.5	8160.6	9023.4	8410.3	7171.3	6603.8	8108.7	8402.2
45°	7586.5	6911.9	6754.5	8314.7	10306.2	11665.2	10390.5	8480.1	7589.7	9255.2	9485.6
47.5°	8476.9	7753.5	7622.2	9714.2	12914.0	14671.8	12586.3	9693.1	8712.0	10818.7	10872.2
50°	9659.1	8887.2	8444.4	11245.2	15773.0	17737.0	14780.5	10864.1	9998.1	12729.1	12667.5
52.5°	11219.2	10468.3	9402.8	12703.1	18713.2	20737.2	16984.5	11892.3	11593.9	14945.9	14819.4
55°	13346.9	12847.5	10713.2	14094.6	21651.9	23755.3	19102.5	12862.0	13702.1	17579.7	16814.2
57.5°	15987.1	16343.9	12602.6	15708.2	24293.7	26865.8	21230.2	14217.8	16439.6	20524.8	17972.1
60°	17690.0	20993.4	16220.6	18093.8	27295.5	30383.4	24146.1	16796.4	19316.5	21580.6	17751.6
62.5°	17278.0	22472.5	20553.9	21139.4	30055.8	32940.8	27003.6	19386.3	19858.2	20025.2	16052.0
65°	16014.7	21278.9	19670.1	21731.3	30754.7	33085.2	27767.5	19052.2	16845.1	16348.7	12902.6
67.5°	14276.2	19863.1	17569.9	20161.4	29491.4	31067.6	26345.2	16853.2	13017.7	12268.4	9360.7
70°	12399.8	18296.5	16191.4	18400.3	27083.1	27551.8	23927.2	14822.7	9574.7	8285.5	6006.9
72.5°	10619.2	16665.0	15247.6	16595.3	23870.4	22900.7	20779.4	13027.4	6971.8	5976.2	4270.0
75°	8798.0	14258.4	13903.2	14451.4	19645.8	18038.7	17265.1	10786.2	5471.8	4323.6	2946.7
77.5°	6788.6	11141.3	11958.7	11572.8	13828.6	13398.8	13382.6	8105.5	3997.6	2885.1	1847.2
80°	4646.3	7764.9	9342.9	8163.8	8974.7	8755.8	10079.1	5437.7	2899.6	1736.9	1028.2
82.5°	2731.0	4727.4	6503.2	3952.2	4962.5	5093.8	6002.1	2645.0	1706.1	400.6	223.8
85°	1107.6	1866.6	2542.9	1547.1	2393.7	2019.0	2278.6	742.7	475.2	9.7	0.0
87.5°	278.9	596.8	418.4	173.5	277.4	254.6	201.1	90.8	19.5	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°	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7
2.5°	3619.7	3582.4	3490.0	3397.6	3322.9	3222.4	3155.9	3076.4	3000.2	2932.1	2919.1
5°	4002.4	3879.2	3710.5	3556.4	3399.2	3246.7	3095.9	2936.9	2791.0	2701.8	2645.0
7.5°	4313.8	4096.5	3872.8	3676.5	3486.7	3308.4	3108.9	2915.9	2687.2	2565.6	2455.3
10°	4545.8	4260.3	3966.7	3741.4	3550.0	3376.5	3207.8	3013.2	2737.5	2585.0	2419.6
12.5°	4698.2	4359.2	4015.4	3757.5	3543.5	3408.9	3334.3	3258.1	2984.0	2805.6	2565.6
15°	4803.6	4429.0	4049.5	3720.2	3457.5	3358.6	3433.2	3520.8	3345.7	3139.7	2826.7
17.5°	4918.8	4519.8	4064.1	3619.7	3290.6	3248.3	3441.3	3644.1	3636.0	3431.6	3125.1
20°	5040.3	4599.3	4054.4	3457.5	3087.8	3125.1	3371.6	3606.8	3705.7	3595.4	3322.9
22.5°	5165.3	4675.4	4017.1	3246.7	2898.1	3014.8	3261.3	3467.3	3584.0	3550.0	3342.4
25°	5322.5	4782.5	3961.9	3019.6	2740.7	2902.9	3133.2	3300.2	3381.4	3379.7	3237.0
27.5°	5510.7	4925.2	3932.7	2836.4	2628.8	2776.4	2980.8	3129.9	3186.7	3186.7	3073.2
30°	5729.6	5093.8	3900.3	2716.5	2563.9	2645.0	2804.0	2950.0	3006.7	3006.7	2911.0
32.5°	5972.9	5256.1	3822.4	2643.5	2515.4	2517.0	2617.4	2750.5	2818.5	2828.3	2760.2
35°	6264.8	5429.6	3652.2	2585.0	2458.6	2392.0	2440.7	2551.0	2632.1	2653.2	2611.0
37.5°	6647.5	5642.0	3408.9	2499.1	2371.0	2260.7	2272.0	2356.4	2445.5	2478.0	2450.5
40°	7161.6	5891.8	3155.9	2375.8	2247.7	2116.4	2111.5	2173.1	2260.7	2296.4	2281.8
42.5°	7841.1	6191.8	2914.3	2257.5	2098.5	1963.9	1955.8	2004.5	2080.6	2118.0	2111.5
45°	8710.3	6559.9	2706.7	2165.0	1952.6	1819.6	1816.3	1856.9	1923.4	1962.3	1954.2
47.5°	9918.6	6928.1	2565.6	2116.4	1837.4	1701.2	1707.6	1743.4	1803.4	1831.0	1819.6
50°	11493.3	7040.0	2494.2	2116.4	1775.8	1595.8	1628.2	1657.4	1702.8	1719.0	1704.5
52.5°	13004.8	6670.2	2429.4	2129.3	1783.9	1506.6	1576.3	1597.5	1636.3	1642.9	1621.8
55°	13745.9	5734.5	2340.2	2132.6	1834.2	1430.4	1534.1	1573.1	1587.7	1586.1	1550.4
57.5°	13491.3	4636.6	2189.4	2119.6	1868.3	1381.7	1482.3	1556.9	1566.6	1552.1	1485.5
60°	12597.7	3413.8	2074.2	2024.0	1855.2	1367.1	1402.8	1521.2	1535.8	1516.3	1407.6
62.5°	11099.2	2369.4	1985.0	1813.1	1798.5	1362.2	1278.0	1443.3	1479.1	1451.5	1292.5
65°	8737.9	1673.6	1709.3	1589.3	1675.3	1336.3	1148.2	1349.3	1397.9	1355.8	1132.0
67.5°	5912.9	1208.2	1385.0	1440.1	1475.8	1278.0	1054.1	1242.3	1307.1	1251.9	945.5
70°	3193.2	848.2	914.7	1213.1	1253.6	1177.4	969.8	1133.5	1208.2	1148.2	770.3
72.5°	1886.1	609.8	640.6	974.7	1044.4	1036.3	875.8	1007.1	1097.9	1026.5	626.0
75°	1039.6	411.9	457.4	707.0	848.2	799.5	752.5	853.0	945.5	875.8	483.3
77.5°	465.5	246.5	317.9	463.8	666.6	548.2	582.2	664.9	750.9	677.9	322.8
80°	180.0	137.9	210.8	253.0	484.9	303.3	374.6	489.7	551.3	493.0	196.2
82.5°	22.8	61.6	90.8	98.9	282.2	160.5	217.3	308.1	303.3	262.7	98.9
85°	0.0	11.4	13.0	6.5	121.7	58.4	71.3	100.6	94.1	71.3	8.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7
2.5°	2839.7	2781.2	2752.1	2727.7	2750.5	2763.4	2763.4	2818.5	2851.0	2864.0	2954.8
5°	2502.3	2393.7	2320.7	2276.9	2291.5	2307.8	2325.6	2395.3	2442.4	2473.1	2614.3
7.5°	2236.3	2071.0	1968.8	1915.3	1923.4	1934.7	1949.3	2017.4	2064.5	2105.0	2262.3
10°	2105.0	1871.4	1736.9	1672.0	1660.7	1654.1	1649.3	1689.8	1725.5	1758.0	1913.7
12.5°	2111.5	1785.6	1621.8	1542.3	1508.2	1469.3	1438.5	1444.9	1467.7	1508.2	1607.1
15°	2194.2	1758.0	1561.7	1462.8	1406.1	1360.7	1323.4	1315.3	1323.4	1329.8	1391.4
17.5°	2306.1	1754.7	1509.8	1386.6	1328.2	1290.9	1256.9	1245.5	1247.1	1255.2	1271.4
20°	2395.3	1745.0	1451.5	1313.6	1261.7	1229.3	1195.3	1183.9	1187.2	1188.7	1206.5
22.5°	2442.4	1730.4	1386.6	1240.7	1196.9	1164.4	1133.5	1132.0	1132.0	1141.7	1154.7
25°	2442.4	1699.6	1328.2	1170.9	1132.0	1102.8	1065.5	1071.9	1075.2	1088.1	1107.6
27.5°	2383.9	1641.2	1281.1	1110.9	1070.3	1041.2	1007.1	1015.2	1020.1	1034.6	1059.0
30°	2309.3	1571.4	1227.6	1054.1	1007.1	986.0	956.8	960.1	966.6	982.8	1010.3
32.5°	2229.9	1488.7	1183.9	997.3	950.4	934.1	901.7	906.5	913.1	930.9	961.7
35°	2142.4	1391.4	1132.0	945.5	898.4	885.5	848.2	851.4	861.1	880.6	911.4
37.5°	2049.9	1312.0	1080.0	895.2	846.5	833.5	794.7	797.9	809.2	832.0	861.1
40°	1959.1	1234.1	1024.9	841.7	793.0	781.7	739.5	742.7	755.7	780.0	810.9
42.5°	1860.2	1174.1	953.6	786.6	734.6	723.3	684.4	689.2	703.9	728.2	759.0
45°	1741.8	1135.2	874.1	734.6	676.3	664.9	629.2	639.0	655.2	679.5	712.0
47.5°	1620.1	1119.0	807.6	679.5	616.2	606.5	577.4	593.6	611.4	630.9	666.6
50°	1503.4	1097.9	739.5	627.6	564.4	554.6	535.2	556.3	574.1	591.9	626.0
52.5°	1370.3	1052.5	677.9	582.2	520.6	517.3	507.6	527.1	543.2	559.5	588.7
55°	1232.6	979.5	624.3	541.7	483.3	486.6	481.6	497.8	510.9	525.4	551.3
57.5°	1112.5	887.1	582.2	497.8	450.8	460.5	454.1	462.2	470.3	488.1	509.2
60°	990.9	776.8	535.2	446.0	418.4	429.8	411.9	410.3	413.6	418.4	457.4
62.5°	827.1	661.6	476.8	400.6	382.7	387.6	353.5	327.6	327.6	332.4	390.8
65°	664.9	554.6	411.9	348.7	334.0	330.9	282.2	246.5	243.2	257.9	308.1
67.5°	546.5	460.5	347.1	290.3	280.5	283.8	248.2	212.5	209.2	225.4	262.7
70°	452.4	371.4	277.4	223.8	233.5	248.2	212.5	178.4	173.5	188.1	223.8
72.5°	360.0	290.3	212.5	165.4	193.0	210.8	173.5	141.1	137.9	150.8	184.9
75°	264.3	207.6	144.3	120.0	149.2	165.4	126.5	100.6	95.6	107.0	141.1
77.5°	163.8	116.7	90.8	71.3	102.2	110.3	66.5	58.4	56.8	64.9	89.2
80°	76.3	50.2	43.8	24.3	37.3	43.8	27.6	30.9	32.4	38.9	55.1
82.5°	21.1	8.1	1.6	0.0	0.0	13.0	6.5	13.0	16.2	24.3	35.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	8.1	14.6	25.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	13.0
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: P968282

CATALOG NUMBER: NAV-SB5B-740-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7	3259.7
2.5°	3022.9	3087.8	3191.5	3298.7	3404.0	3511.0	3614.9	3652.2
5°	2742.4	2891.5	3097.5	3318.1	3545.2	3775.4	3986.2	4082.0
7.5°	2429.4	2643.5	2953.2	3298.7	3660.3	4021.9	4354.4	4508.5
10°	2095.3	2366.1	2719.6	3186.7	3705.7	4205.2	4662.5	4862.0
12.5°	1777.5	2061.3	2452.1	3011.6	3670.0	4310.6	4860.3	5095.5
15°	1511.5	1762.8	2184.5	2804.0	3554.9	4317.1	4954.4	5212.2
17.5°	1312.0	1475.8	1912.0	2573.7	3404.0	4257.0	4986.8	5262.6
20°	1213.1	1258.5	1558.5	2278.6	3263.0	4200.3	5019.3	5309.6
22.5°	1154.7	1166.0	1274.7	1897.5	3094.3	4182.5	5076.0	5374.5
25°	1107.6	1110.9	1140.1	1503.4	2836.4	4171.1	5163.6	5463.7
27.5°	1060.6	1060.6	1076.9	1211.4	2486.1	4122.4	5277.1	5570.7
30°	1013.6	1013.6	1024.9	1071.9	2075.8	4026.8	5413.3	5710.2
32.5°	964.9	964.9	974.7	1008.7	1657.4	3906.8	5538.3	5851.2
35°	916.2	913.1	926.0	961.7	1318.5	3754.4	5663.1	6003.7
37.5°	864.4	862.7	875.8	916.2	1138.5	3577.6	5757.2	6211.3
40°	809.2	809.2	823.9	867.7	1086.6	3355.3	5906.4	6509.7
42.5°	759.0	755.7	771.9	825.4	1047.7	3143.0	6174.0	6944.3
45°	710.3	703.9	718.4	784.9	979.5	3068.3	6673.5	7586.5
47.5°	664.9	648.7	661.6	736.3	917.9	3347.2	7490.8	8476.9
50°	627.6	596.8	608.1	687.6	870.8	3952.2	8551.5	9659.1
52.5°	588.7	548.2	554.6	627.6	828.7	4527.9	9701.2	11219.2
55°	548.2	502.8	505.9	567.6	768.7	4613.8	10823.5	13346.9
57.5°	502.8	460.5	460.5	512.5	724.9	3999.2	11686.2	15987.1
60°	452.4	424.9	416.8	468.7	763.8	2821.8	11786.8	17690.0
62.5°	397.3	382.7	371.4	426.5	793.0	1672.0	10977.5	17278.0
65°	334.0	330.9	322.8	468.7	668.2	987.7	9424.0	16014.7
67.5°	280.5	275.7	275.7	491.4	507.6	621.2	7362.7	14276.2
70°	241.6	223.8	223.8	371.4	308.1	429.8	5140.9	12399.8
72.5°	202.7	183.3	170.3	296.7	230.3	314.6	3212.7	10619.2
75°	162.2	147.6	131.4	196.2	171.9	238.4	1866.6	8798.0
77.5°	116.7	110.3	92.5	144.3	124.8	171.9	1110.9	6788.6
80°	60.0	61.6	58.4	82.7	84.4	116.7	632.5	4646.3
82.5°	35.7	27.6	30.9	40.6	48.7	66.5	238.4	2731.0
85°	22.8	14.6	14.6	19.5	24.3	25.9	73.0	1107.6
87.5°	11.4	4.8	6.5	9.7	8.1	6.5	3.3	278.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)