

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: P971568

Luminaire Tested: **NAV-SB6D-830-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971568
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-SB6D-830-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA 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: 43374.9 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 440.1
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

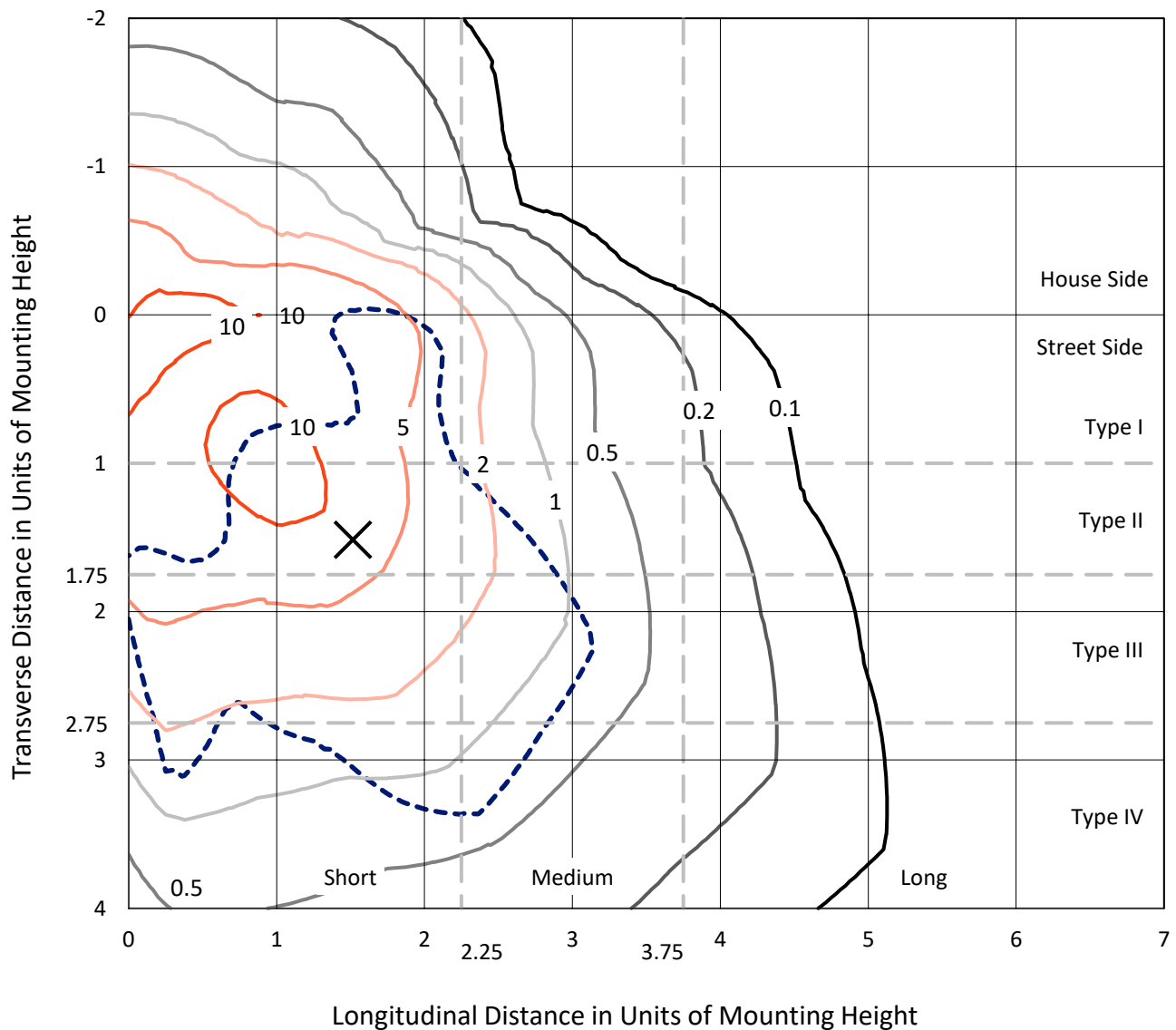


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

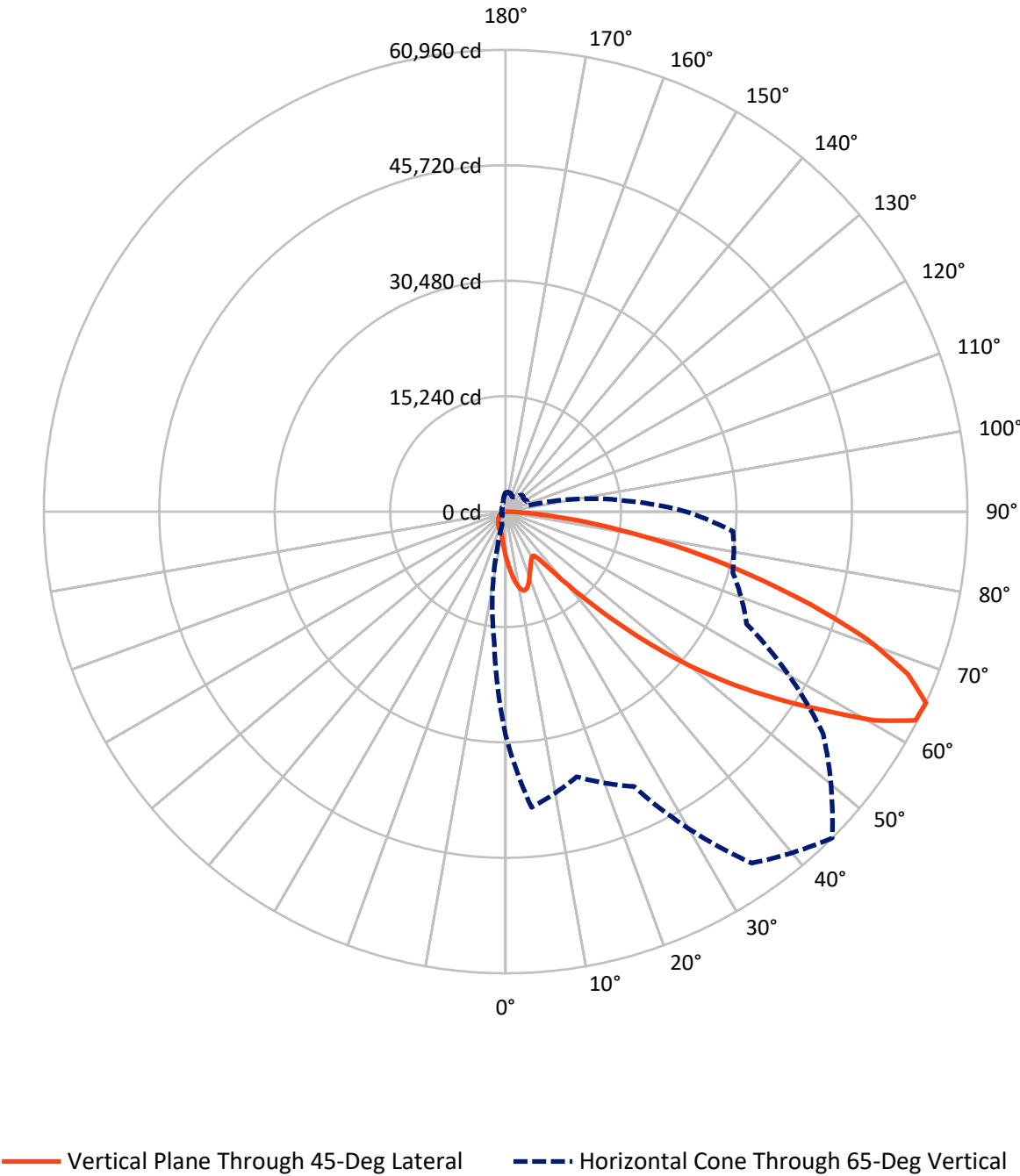


Based on 25 foot mounting height. Maximum calculated value = 15.8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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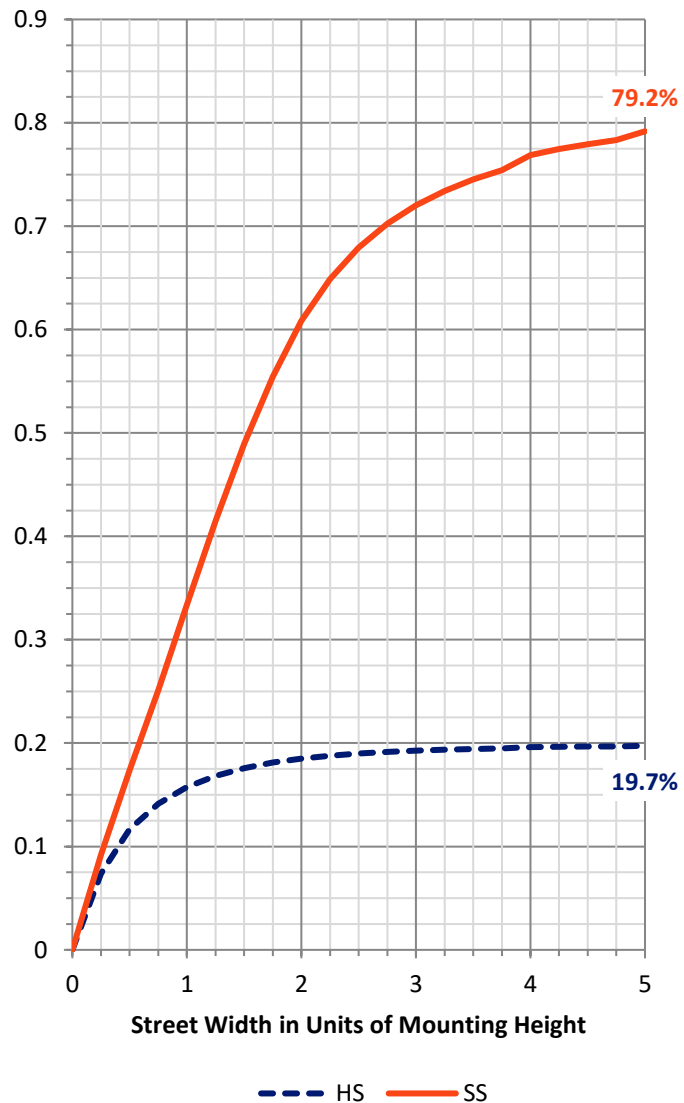
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8621.6	0.0	8621.6
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	34753.3	0.0	34753.3
	% Fixture	80.1	0.0	80.1
Total	Lumens	43374.9	0.0	43374.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	591.3	1.4
10°-20°	1772.6	4.1
20°-30°	2611.4	6.0
30°-40°	3354.9	7.7
40°-50°	5425.9	12.5
50°-60°	9514.8	21.9
60°-70°	11905.6	27.4
70°-80°	6957.1	16.0
80°-90°	1241.3	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°	43374.9	100.0
0°-180°	43374.9	100.0

Coefficient of Utilization



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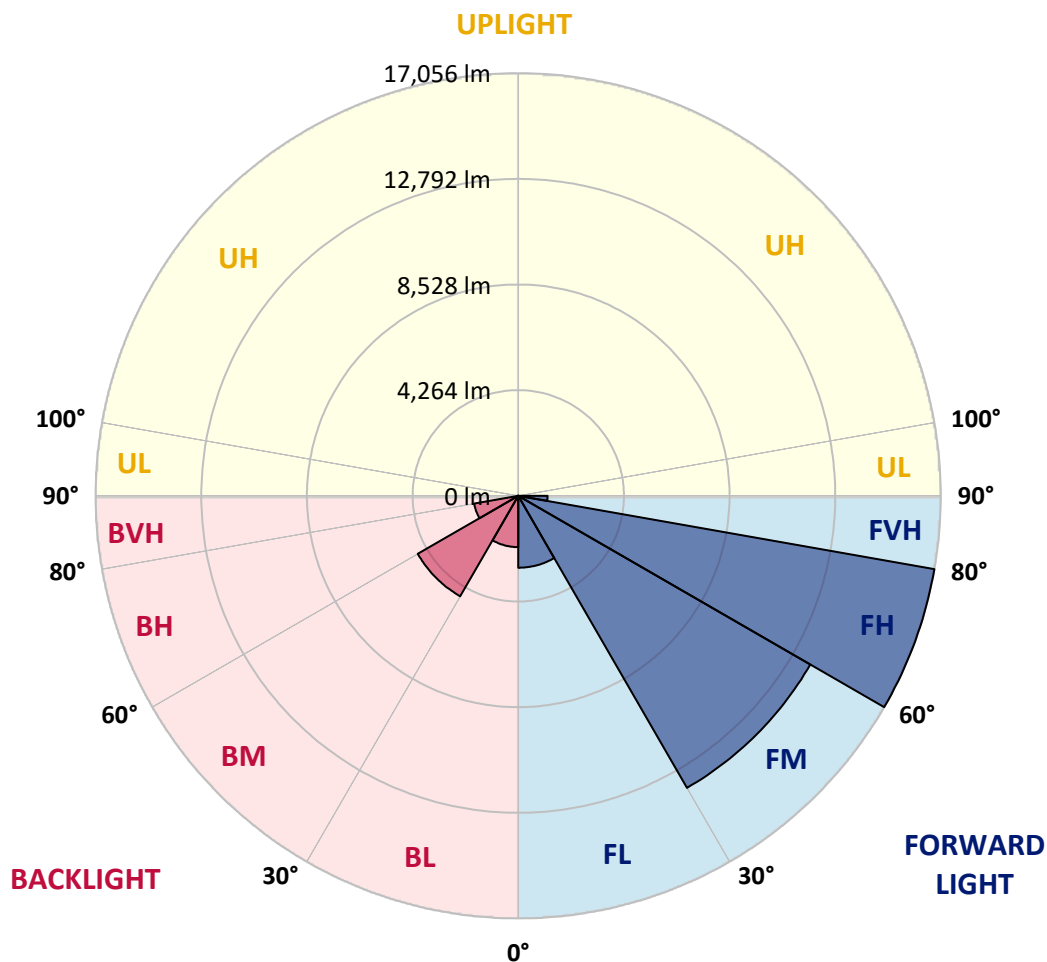
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2902.3	6.7			
FM	(30°-60°)	13611.6	31.4			
FH	(60°-80°)	17056.4	39.3			G5
FVH	(80°-90°)	1183.1	2.7			G5
BL	(0°-30°)	2073.0	4.8	B3/2500		
BM	(30°-60°)	4684.1	10.8	B3/5000		
BH	(60°-80°)	1806.4	4.2	B3/2500		G3/2500
BVH	(80°-90°)	58.2	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-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1
2.5°	6729.1	6780.0	6893.5	6953.3	7045.8	7051.9	7051.9	6971.2	6968.2	6803.8	6785.9
5°	7521.0	7640.6	7909.4	8187.3	8247.0	8262.0	8232.2	8070.8	7951.2	7631.5	7562.9
7.5°	8306.9	8536.9	8946.3	9316.8	9436.4	9436.4	9364.6	9101.7	8856.7	8393.5	8220.2
10°	8958.3	9248.1	9803.9	10219.2	10356.7	10326.8	10180.4	9848.7	9511.1	8949.3	8722.2
12.5°	9388.6	9714.2	10323.8	10658.5	10798.9	10721.2	10553.9	10231.1	9875.6	9283.9	9027.0
15°	9603.7	9944.3	10473.2	10649.5	10610.7	10530.0	10509.1	10353.7	10084.8	9532.0	9251.1
17.5°	9696.3	10013.0	10380.6	10270.0	9941.4	9878.5	10087.7	10285.0	10219.2	9747.1	9484.1
20°	9783.0	10048.9	10159.5	9669.4	9095.7	9039.0	9439.3	10001.1	10287.9	9947.3	9705.3
22.5°	9902.5	10066.8	9839.8	9036.0	8417.4	8285.9	8728.2	9573.8	10308.8	10201.3	9959.3
25°	10066.8	10111.6	9487.2	8435.3	7813.8	7682.4	8094.7	9098.7	10273.1	10476.2	10270.0
27.5°	10264.0	10171.4	9149.5	7933.4	7332.7	7210.3	7622.6	8641.6	10171.4	10751.1	10604.6
30°	10521.0	10249.1	8814.8	7544.9	6989.2	6899.5	7296.9	8247.0	10045.9	11100.7	11020.1
32.5°	10780.9	10282.0	8504.1	7317.8	6911.5	6944.3	7270.0	8035.0	9908.5	11435.4	11474.3
35°	11061.9	10386.5	8351.7	7541.9	7559.9	7846.7	7981.2	8232.2	9887.6	11889.6	12042.0
37.5°	11444.3	10619.6	8533.9	8656.4	9278.0	9872.6	9762.1	9197.3	10129.6	12567.8	12851.8
40°	11994.1	11029.0	9328.8	10553.9	11829.8	12795.0	12373.6	10951.3	10870.6	13545.0	13969.3
42.5°	12795.0	11680.4	10739.1	12872.7	15036.0	16625.7	15496.2	13213.3	12167.5	14940.4	15481.2
45°	13978.2	12735.2	12445.3	15319.9	18989.3	21493.2	19144.6	15624.7	13984.2	17052.9	17477.3
47.5°	15618.6	14286.0	14043.9	17898.6	23794.0	27033.1	23190.5	17859.7	16052.0	19933.5	20032.1
50°	17797.0	16374.7	15558.9	20719.4	29062.0	32680.6	27233.3	20017.1	18421.5	23453.4	23339.9
52.5°	20671.5	19288.0	17324.9	23405.7	34479.5	38208.6	31294.2	21911.6	21361.8	27538.2	27305.1
55°	24591.9	23671.6	19739.2	25969.4	39893.8	43769.3	35196.6	23698.4	25246.3	32390.8	30980.4
57.5°	29456.4	30113.9	23220.4	28942.5	44761.4	49500.5	39117.0	26196.5	30290.2	37817.2	33113.9
60°	32594.0	38680.7	29886.7	33338.0	50292.3	55981.7	44489.5	30947.5	35591.0	39762.4	32707.5
62.5°	31835.0	41405.8	37870.9	38949.6	55378.1	60693.8	49754.5	35719.5	36589.0	36896.8	29576.0
65°	29507.3	39206.6	36242.5	40040.3	56665.9	60959.8	51161.8	35104.0	31037.2	30122.8	23773.1
67.5°	26304.1	36598.0	32372.9	37147.8	54338.2	57242.7	48541.3	31052.2	23985.3	22604.8	17247.2
70°	22846.8	33711.5	29832.9	33902.8	49900.9	50764.5	44086.1	27311.0	17641.6	15266.1	11067.8
72.5°	19565.9	30705.5	28093.9	30577.0	43981.5	42194.6	38286.2	24003.2	12845.7	11011.1	7867.6
75°	16210.4	26271.2	25616.8	26626.7	36197.6	33236.4	31811.1	19873.7	10081.8	7966.2	5429.3
77.5°	12508.1	20528.1	22034.1	21323.0	25479.3	24687.5	24657.6	14934.5	7365.6	5315.8	3403.4
80°	8560.8	14307.0	17214.4	15042.0	16536.0	16132.7	18570.9	10019.1	5342.7	3200.3	1894.4
82.5°	5031.9	8710.2	11982.1	7281.9	9143.5	9385.5	11058.9	4873.6	3143.5	738.1	412.4
85°	2040.9	3439.3	4685.3	2850.6	4410.4	3720.1	4198.3	1368.6	875.6	17.9	0.0
87.5°	513.9	1099.6	770.9	319.7	511.0	469.1	370.5	167.4	35.9	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°	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1
2.5°	6669.4	6600.7	6430.3	6260.0	6122.5	5937.3	5814.8	5668.4	5527.9	5402.5	5378.6
5°	7374.6	7147.5	6836.7	6552.8	6263.1	5982.1	5704.2	5411.4	5142.5	4978.1	4873.6
7.5°	7948.3	7547.9	7135.5	6774.0	6424.4	6095.7	5728.1	5372.5	4951.3	4727.1	4523.9
10°	8375.6	7849.7	7308.9	6893.5	6540.9	6221.1	5910.5	5551.8	5043.9	4763.0	4458.2
12.5°	8656.4	8032.0	7398.4	6923.4	6528.9	6280.9	6143.4	6003.0	5498.1	5169.4	4727.1
15°	8850.7	8160.4	7461.3	6854.7	6370.6	6188.3	6325.8	6487.1	6164.5	5784.9	5208.2
17.5°	9062.8	8327.8	7488.1	6669.4	6062.8	5985.1	6340.8	6714.3	6699.3	6322.8	5758.0
20°	9286.9	8474.2	7470.2	6370.6	5689.3	5758.0	6212.2	6645.5	6827.7	6624.6	6122.5
22.5°	9517.0	8614.6	7401.4	5982.1	5339.7	5554.9	6009.1	6388.5	6603.7	6540.9	6158.4
25°	9806.9	8811.8	7299.8	5563.8	5049.9	5348.7	5773.0	6080.7	6230.2	6227.2	5964.2
27.5°	10153.4	9074.8	7246.1	5226.2	4843.6	5115.6	5492.1	5767.0	5871.6	5871.6	5662.4
30°	10556.9	9385.5	7186.4	5005.1	4724.1	4873.6	5166.4	5435.3	5539.9	5539.9	5363.6
32.5°	11005.1	9684.4	7042.9	4870.6	4634.5	4637.5	4822.7	5067.8	5193.3	5211.2	5085.7
35°	11542.9	10004.1	6729.1	4763.0	4529.9	4407.4	4497.1	4700.2	4849.7	4888.5	4810.8
37.5°	12248.1	10395.6	6280.9	4604.6	4368.5	4165.4	4186.3	4341.7	4506.0	4565.8	4515.0
40°	13195.3	10855.7	5814.8	4377.6	4141.5	3899.4	3890.5	4004.1	4165.4	4231.1	4204.2
42.5°	14447.4	11408.5	5369.6	4159.4	3866.6	3618.6	3603.6	3693.3	3833.7	3902.5	3890.5
45°	16048.9	12086.8	4987.1	3989.1	3597.6	3352.7	3346.6	3421.3	3543.8	3615.6	3600.6
47.5°	18275.1	12765.0	4727.1	3899.4	3385.5	3134.4	3146.4	3212.1	3322.7	3373.6	3352.7
50°	21176.5	12971.3	4595.7	3899.4	3271.9	2940.3	3000.1	3053.8	3137.5	3167.4	3140.5
52.5°	23961.4	12290.0	4476.2	3923.4	3286.9	2775.9	2904.4	2943.3	3014.9	3026.9	2988.1
55°	25326.9	10565.8	4311.8	3929.3	3379.5	2635.5	2826.7	2898.4	2925.4	2922.4	2856.6
57.5°	24857.8	8543.0	4033.9	3905.5	3442.3	2545.8	2731.1	2868.6	2886.5	2859.5	2737.1
60°	23211.4	6289.9	3821.7	3729.2	3418.4	2518.9	2584.6	2802.9	2829.7	2793.8	2593.7
62.5°	20450.4	4365.6	3657.4	3340.7	3313.8	2510.0	2354.6	2659.4	2725.2	2674.3	2381.5
65°	16099.8	3083.7	3149.4	2928.3	3086.7	2462.2	2115.6	2486.0	2575.7	2498.0	2085.7
67.5°	10894.5	2226.1	2551.8	2653.4	2719.1	2354.6	1942.3	2288.8	2408.4	2306.8	1742.1
70°	5883.5	1562.7	1685.3	2235.1	2309.7	2169.3	1786.9	2088.6	2226.1	2115.6	1419.3
72.5°	3475.2	1123.5	1180.3	1795.8	1924.3	1909.4	1613.6	1855.6	2022.9	1891.4	1153.4
75°	1915.3	759.0	842.7	1302.8	1562.7	1473.1	1386.5	1571.7	1742.1	1613.6	890.4
77.5°	857.6	454.2	585.7	854.5	1228.1	1009.9	1072.8	1225.1	1383.4	1249.1	594.6
80°	331.7	254.0	388.5	466.2	893.4	558.7	690.2	902.4	1016.0	908.4	361.5
82.5°	41.8	113.6	167.4	182.2	519.9	295.8	400.4	567.7	558.7	484.1	182.2
85°	0.0	20.9	23.9	12.0	224.1	107.5	131.5	185.2	173.3	131.5	15.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	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°	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1
2.5°	5232.1	5124.6	5070.8	5026.0	5067.8	5091.7	5091.7	5193.3	5253.0	5276.9	5444.3
5°	4610.7	4410.4	4276.0	4195.2	4222.2	4252.0	4284.9	4413.3	4500.1	4556.8	4816.8
7.5°	4120.6	3815.8	3627.6	3529.0	3543.8	3564.7	3591.7	3717.2	3803.8	3878.5	4168.4
10°	3878.5	3448.2	3200.3	3080.7	3059.8	3047.8	3038.9	3113.5	3179.3	3239.1	3525.9
12.5°	3890.5	3289.8	2988.1	2841.7	2778.9	2707.2	2650.4	2662.3	2704.3	2778.9	2961.2
15°	4042.9	3239.1	2877.5	2695.2	2590.7	2507.0	2438.3	2423.3	2438.3	2450.3	2563.7
17.5°	4249.0	3233.1	2782.0	2554.8	2447.2	2378.5	2315.8	2294.9	2297.8	2312.8	2342.6
20°	4413.3	3215.2	2674.3	2420.3	2324.7	2264.9	2202.2	2181.3	2187.2	2190.2	2223.1
22.5°	4500.1	3188.3	2554.8	2285.9	2205.2	2145.4	2088.6	2085.7	2085.7	2103.6	2127.5
25°	4500.1	3131.5	2447.2	2157.4	2085.7	2031.9	1963.2	1975.1	1981.1	2005.0	2040.9
27.5°	4392.4	3024.0	2360.6	2046.8	1972.1	1918.4	1855.6	1870.5	1879.5	1906.4	1951.2
30°	4255.0	2895.4	2262.0	1942.3	1855.6	1816.7	1763.0	1768.9	1780.9	1810.8	1861.6
32.5°	4108.6	2743.1	2181.3	1837.6	1751.0	1721.2	1661.4	1670.3	1682.3	1715.1	1771.9
35°	3947.3	2563.7	2085.7	1742.1	1655.4	1631.5	1562.7	1568.8	1586.7	1622.6	1679.3
37.5°	3776.9	2417.4	1990.0	1649.4	1559.7	1535.9	1464.1	1470.2	1491.1	1532.9	1586.7
40°	3609.6	2274.0	1888.5	1550.8	1461.1	1440.2	1362.5	1368.6	1392.5	1437.3	1494.0
42.5°	3427.3	2163.4	1757.0	1449.2	1353.6	1332.7	1261.0	1270.0	1296.8	1341.6	1398.4
45°	3209.2	2091.6	1610.6	1353.6	1246.0	1225.1	1159.4	1177.3	1207.1	1252.0	1311.8
47.5°	2985.1	2061.8	1488.1	1252.0	1135.5	1117.6	1063.7	1093.7	1126.5	1162.4	1228.1
50°	2770.0	2022.9	1362.5	1156.4	1039.9	1021.9	986.0	1024.9	1057.8	1090.6	1153.4
52.5°	2524.9	1939.3	1249.1	1072.8	959.2	953.1	935.3	971.1	1001.0	1030.8	1084.7
55°	2271.0	1804.8	1150.5	998.0	890.4	896.5	887.4	917.4	941.3	968.1	1016.0
57.5°	2049.8	1634.5	1072.8	917.4	830.7	848.6	836.7	851.6	866.5	899.4	938.3
60°	1825.7	1431.3	986.0	821.7	770.9	791.8	759.0	755.9	762.0	770.9	842.7
62.5°	1524.0	1219.1	878.5	738.1	705.2	714.1	651.4	603.6	603.6	612.5	720.2
65°	1225.1	1021.9	759.0	642.5	615.5	609.6	519.9	454.2	448.2	475.1	567.7
67.5°	1007.0	848.6	639.5	534.8	516.9	523.0	457.2	391.4	385.5	415.3	484.1
70°	833.6	684.3	511.0	412.4	430.3	457.2	391.4	328.7	319.7	346.7	412.4
72.5°	663.4	534.8	391.4	304.8	355.6	388.5	319.7	259.9	254.0	277.9	340.6
75°	487.1	382.4	266.0	221.1	274.9	304.8	233.1	185.2	176.3	197.2	259.9
77.5°	301.8	215.1	167.4	131.5	188.3	203.2	122.5	107.5	104.6	119.5	164.3
80°	140.4	92.7	80.7	44.8	68.7	80.7	50.8	56.8	59.8	71.8	101.6
82.5°	38.8	15.0	3.0	0.0	0.0	23.9	12.0	23.9	29.9	44.8	65.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	15.0	26.9	47.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	23.9
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: P971568

CATALOG NUMBER: NAV-SB6D-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1	6006.1
2.5°	5569.7	5689.3	5880.5	6077.7	6272.0	6469.2	6660.4	6729.1
5°	5052.8	5327.7	5707.2	6113.6	6531.9	6956.3	7344.7	7521.0
7.5°	4476.2	4870.6	5441.3	6077.7	6744.1	7410.4	8023.0	8306.9
10°	3860.6	4359.6	5011.0	5871.6	6827.7	7748.1	8590.7	8958.3
12.5°	3275.0	3797.8	4518.0	5548.8	6762.0	7942.3	8955.3	9388.6
15°	2784.9	3248.0	4025.0	5166.4	6549.9	7954.3	9128.5	9603.7
17.5°	2417.4	2719.1	3522.9	4742.1	6272.0	7843.7	9188.3	9696.3
20°	2235.1	2318.8	2871.5	4198.3	6012.0	7739.2	9248.1	9783.0
22.5°	2127.5	2148.4	2348.6	3496.1	5701.3	7706.3	9352.7	9902.5
25°	2040.9	2046.8	2100.6	2770.0	5226.2	7685.3	9514.0	10066.8
27.5°	1954.2	1954.2	1984.1	2232.1	4580.7	7595.7	9723.3	10264.0
30°	1867.5	1867.5	1888.5	1975.1	3824.8	7419.4	9974.2	10521.0
32.5°	1777.9	1777.9	1795.8	1858.6	3053.8	7198.3	10204.3	10780.9
35°	1688.3	1682.3	1706.2	1771.9	2429.4	6917.4	10434.4	11061.9
37.5°	1592.6	1589.7	1613.6	1688.3	2097.7	6591.7	10607.7	11444.3
40°	1491.1	1491.1	1517.9	1598.6	2002.0	6182.3	10882.6	11994.1
42.5°	1398.4	1392.5	1422.3	1520.9	1930.3	5790.9	11375.7	12795.0
45°	1308.8	1296.8	1323.7	1446.3	1804.8	5653.5	12295.9	13978.2
47.5°	1225.1	1195.3	1219.1	1356.6	1691.2	6167.4	13801.9	15618.6
50°	1156.4	1099.6	1120.5	1266.9	1604.6	7281.9	15756.1	17797.0
52.5°	1084.7	1009.9	1021.9	1156.4	1526.9	8342.7	17874.7	20671.5
55°	1009.9	926.3	932.2	1045.8	1416.3	8501.0	19942.4	24591.9
57.5°	926.3	848.6	848.6	944.2	1335.7	7368.6	21532.1	29456.4
60°	833.6	782.9	767.9	863.6	1407.4	5199.2	21717.4	32594.0
62.5°	732.1	705.2	684.3	785.9	1461.1	3080.7	20226.3	31835.0
65°	615.5	609.6	594.6	863.6	1231.1	1819.8	17363.7	29507.3
67.5°	516.9	508.0	508.0	905.4	935.3	1144.4	13565.9	26304.1
70°	445.3	412.4	412.4	684.3	567.7	791.8	9472.2	22846.8
72.5°	373.5	337.6	313.8	546.8	424.4	579.6	5919.4	19565.9
75°	298.8	271.9	242.0	361.5	316.7	439.2	3439.3	16210.4
77.5°	215.1	203.2	170.4	266.0	230.1	316.7	2046.8	12508.1
80°	110.6	113.6	107.5	152.4	155.4	215.1	1165.3	8560.8
82.5°	65.7	50.8	56.8	74.7	89.7	122.5	439.2	5031.9
85°	41.8	26.9	26.9	35.9	44.8	47.8	134.5	2040.9
87.5°	20.9	8.9	12.0	17.9	15.0	12.0	5.9	513.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)