

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: P971599

Luminaire Tested: **NAV-SB6D-835-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971599
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-835-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3500K, 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: 44774 lumens
Efficiency: N/A
Efficacy: 101.7 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



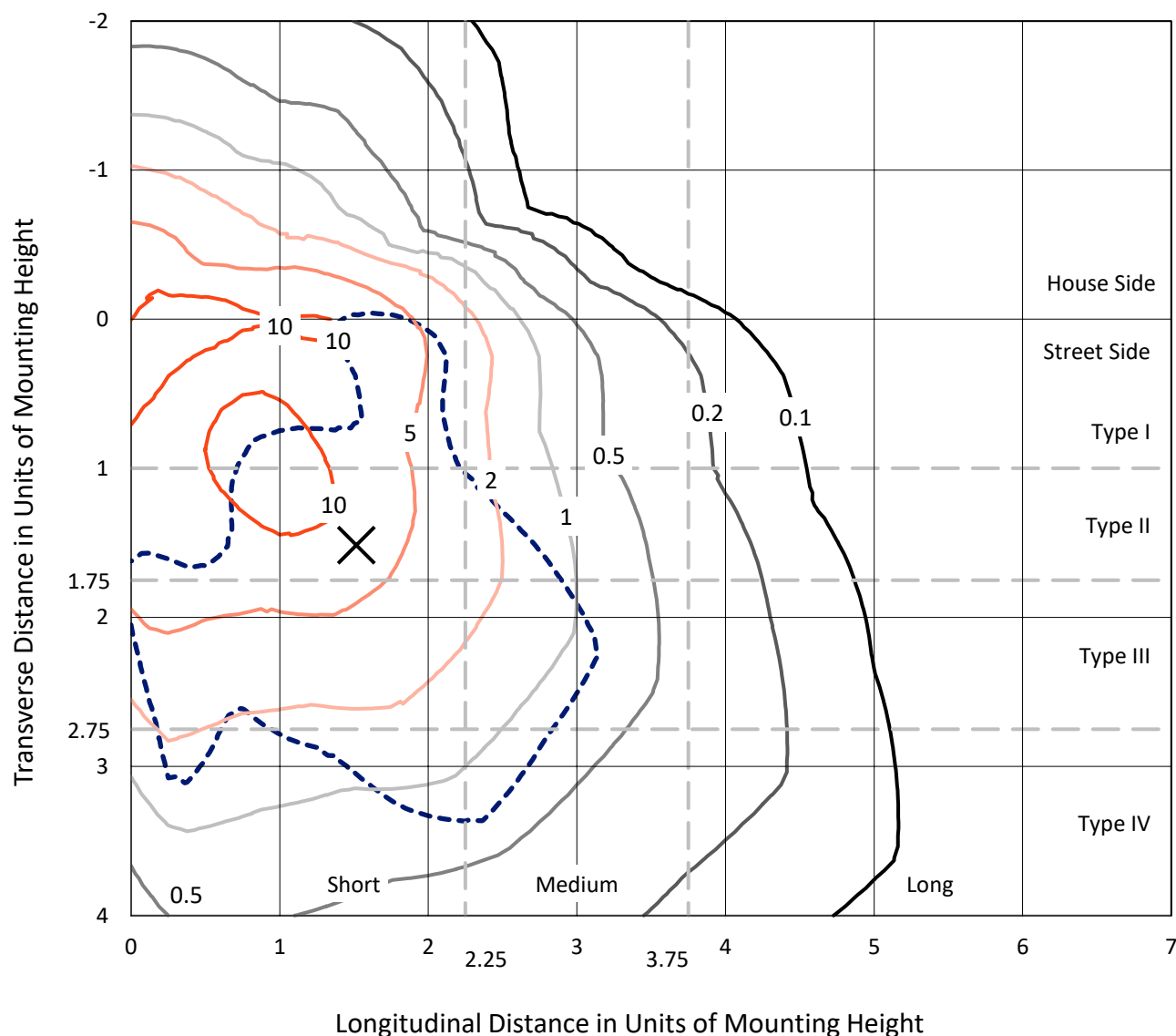
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

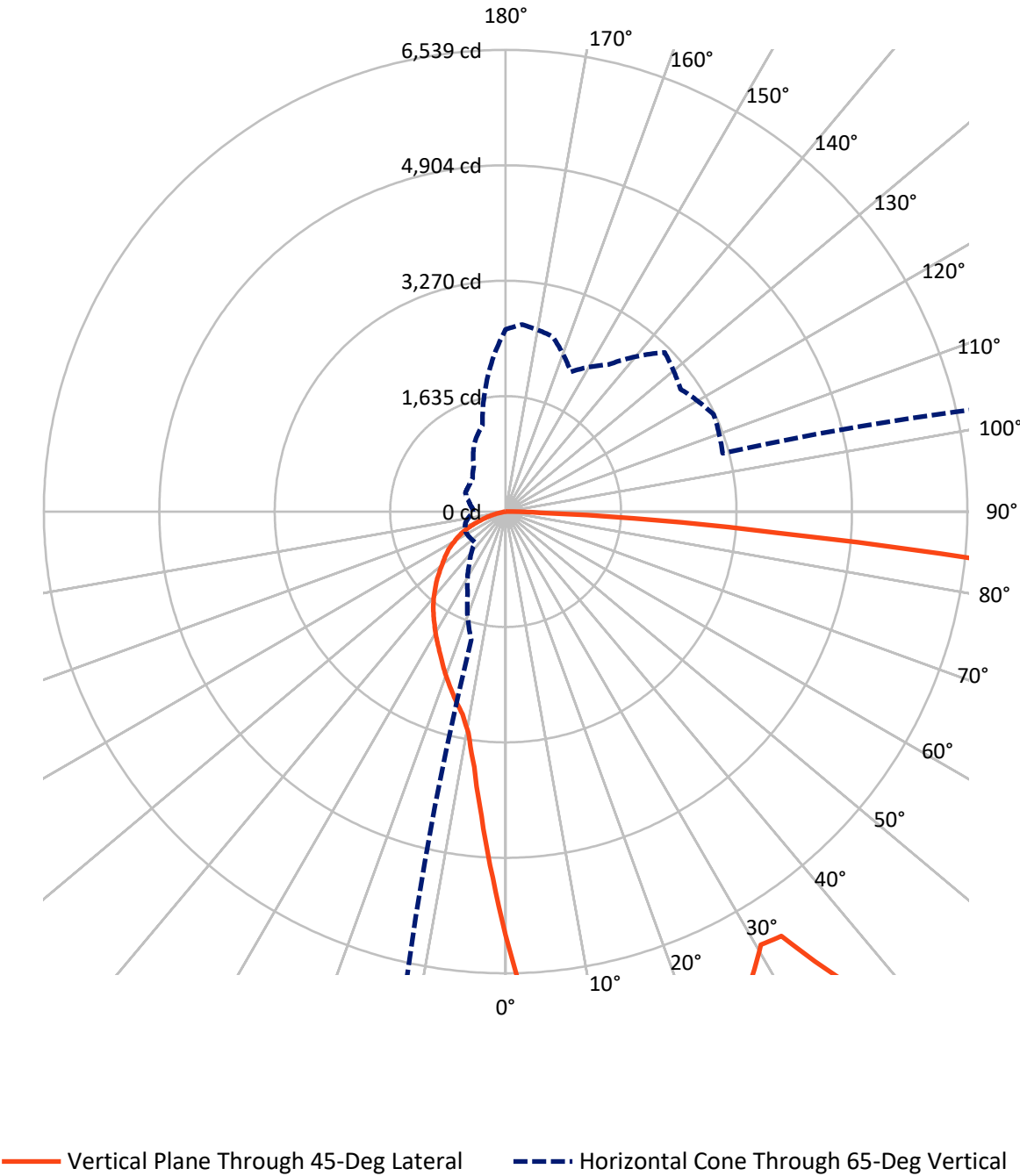


Based on 25 foot mounting height. Maximum calculated value = 16.3 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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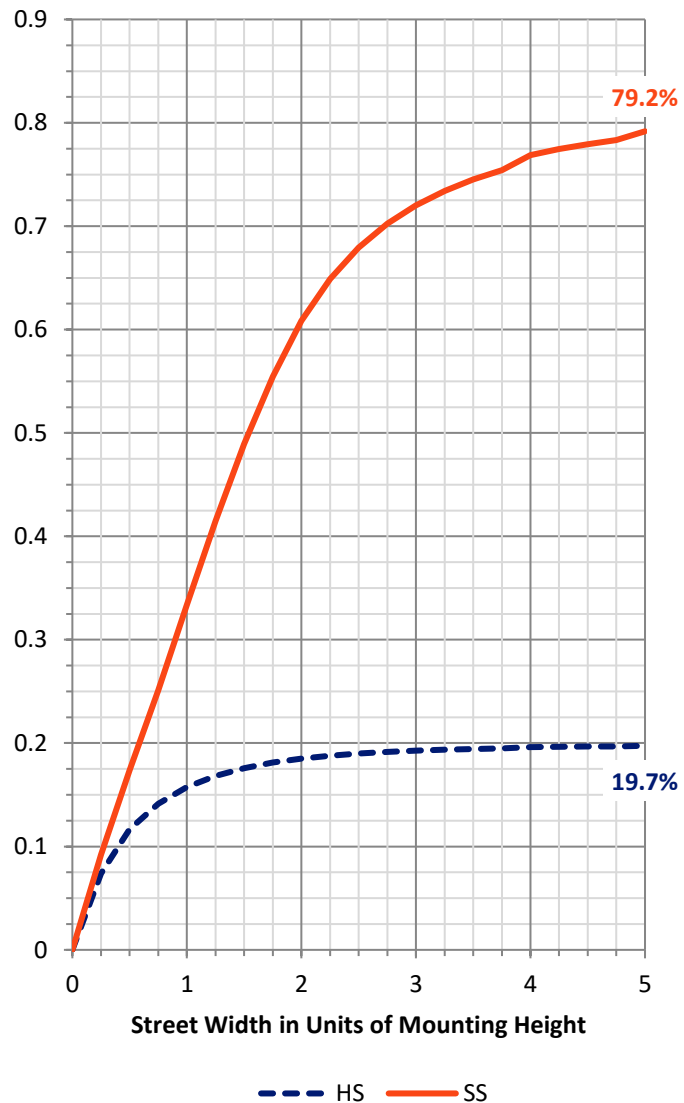
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8899.7	0.0	8899.7
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	35874.4	0.0	35874.4
	% Fixture	80.1	0.0	80.1
Total	Lumens	44774.0	0.0	44774.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.4	1.4
10°-20°	1829.8	4.1
20°-30°	2695.6	6.0
30°-40°	3463.1	7.7
40°-50°	5600.9	12.5
50°-60°	9821.7	21.9
60°-70°	12289.7	27.4
70°-80°	7181.5	16.0
80°-90°	1281.3	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°	44774.0	100.0
0°-180°	44774.0	100.0

Coefficient of Utilization



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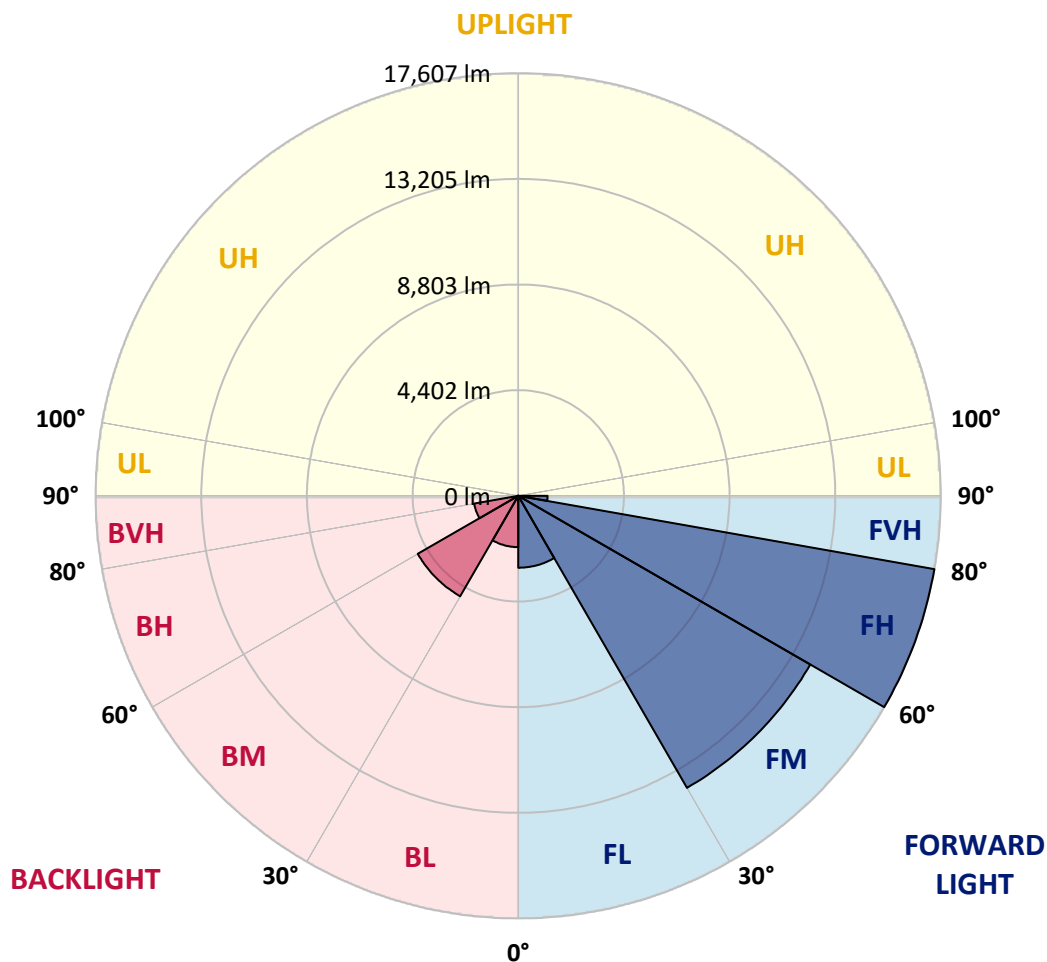
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2995.9	6.7			
FM	(30°-60°)	14050.6	31.4			
FH	(60°-80°)	17606.6	39.3			G5
FVH	(80°-90°)	1221.3	2.7			G5
BL	(0°-30°)	2139.9	4.8	B3/2500		
BM	(30°-60°)	4835.1	10.8	B3/5000		
BH	(60°-80°)	1864.6	4.2	B3/2500		G3/2500
BVH	(80°-90°)	60.0	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°	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8
2.5°	6946.2	6998.7	7115.9	7177.6	7273.2	7279.3	7279.3	7196.0	7192.9	7023.3	7004.8
5°	7763.6	7887.0	8164.5	8451.4	8513.1	8528.5	8497.7	8331.1	8207.8	7877.7	7806.8
7.5°	8574.8	8812.3	9234.8	9617.4	9740.8	9740.8	9666.7	9395.3	9142.4	8664.2	8485.4
10°	9247.2	9546.4	10120.1	10548.9	10690.7	10659.9	10508.8	10166.4	9817.9	9238.0	9003.6
12.5°	9691.4	10027.6	10656.8	11002.2	11147.3	11067.0	10894.3	10561.2	10194.1	9583.4	9318.2
15°	9913.5	10265.1	10811.1	10993.0	10952.9	10869.6	10848.1	10687.7	10410.1	9839.5	9549.5
17.5°	10009.1	10336.0	10715.5	10601.3	10262.0	10197.2	10413.2	10616.7	10548.9	10061.5	9790.1
20°	10098.5	10373.1	10487.2	9981.3	9389.1	9330.5	9743.9	10323.7	10619.8	10268.1	10018.3
22.5°	10221.9	10391.6	10157.1	9327.4	8688.9	8553.2	9009.8	9882.6	10641.4	10530.3	10280.5
25°	10391.6	10437.8	9793.2	8707.5	8065.8	7930.1	8355.8	9392.2	10604.3	10814.2	10601.3
27.5°	10595.1	10499.5	9444.7	8189.2	7569.3	7442.8	7868.5	8920.3	10499.5	11097.9	10946.8
30°	10860.4	10579.7	9099.1	7788.3	7214.6	7122.0	7532.2	8513.1	10369.9	11458.8	11375.6
32.5°	11128.7	10613.7	8778.4	7553.8	7134.4	7168.3	7504.5	8294.1	10228.1	11804.2	11844.4
35°	11418.7	10721.6	8621.1	7785.2	7803.7	8099.8	8238.6	8497.7	10206.5	12273.0	12430.4
37.5°	11813.5	10962.2	8809.3	8935.6	9577.3	10191.1	10077.0	9494.0	10456.3	12973.2	13266.3
40°	12381.1	11384.8	9629.7	10894.3	12211.4	13207.6	12772.7	11304.5	11221.3	13981.9	14419.9
42.5°	13207.6	12057.2	11085.6	13287.9	15521.1	17162.0	15996.0	13639.5	12559.9	15422.4	15980.6
45°	14429.1	13146.0	12846.8	15814.0	19601.8	22186.5	19762.2	16128.7	14435.3	17603.0	18041.0
47.5°	16122.5	14746.8	14497.0	18475.9	24561.6	27905.1	23938.6	18435.9	16569.7	20576.5	20678.2
50°	18371.1	16902.9	16060.8	21387.6	29999.5	33734.8	28111.9	20662.9	19015.7	24210.0	24092.7
52.5°	21338.3	19910.2	17883.7	24160.6	35591.6	39441.1	32303.6	22618.4	22050.8	28426.4	28185.9
55°	25385.1	24435.1	20376.0	26807.0	41180.7	45181.3	36331.9	24462.9	26060.6	33435.6	31979.7
57.5°	30406.6	31085.3	23969.4	29876.1	46205.3	51097.3	40378.7	27041.4	31267.2	39037.0	34182.0
60°	33645.3	39928.4	30850.9	34413.4	51914.6	57787.4	45924.6	31945.8	36739.1	41045.0	33762.6
62.5°	32861.9	42741.4	39092.5	40206.0	57164.4	62651.7	51359.4	36871.7	37769.3	38087.0	30530.0
65°	30459.1	40471.3	37411.5	41331.8	58493.8	62926.2	52812.2	36236.3	32038.3	31094.5	24540.0
67.5°	27152.6	37778.5	33417.0	38346.1	56091.0	59089.1	50107.1	32053.8	24759.0	23334.0	17803.5
70°	23583.8	34799.0	30795.3	34996.4	51510.6	52402.0	45508.2	28192.0	18210.7	15758.6	11424.9
72.5°	20197.1	31696.0	29000.1	31563.3	45400.2	43555.7	39521.2	24777.5	13260.1	11366.2	8121.4
75°	16733.2	27118.6	26443.2	27485.7	37365.2	34308.5	32837.2	20514.8	10407.0	8223.2	5604.5
77.5°	12911.6	21190.2	22744.9	22010.7	26301.2	25483.9	25453.0	15416.1	7603.2	5487.2	3513.2
80°	8837.0	14768.4	17769.6	15527.2	17069.4	16653.1	19170.0	10342.2	5515.0	3303.5	1955.6
82.5°	5194.2	8991.2	12368.7	7516.8	9438.5	9688.3	11415.6	5030.8	3244.8	761.9	425.7
85°	2106.7	3550.2	4836.5	2942.6	4552.6	3840.2	4333.7	1412.7	903.7	18.6	0.0
87.5°	530.5	1135.1	795.8	330.0	527.5	484.2	382.4	172.7	37.0	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°	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8
2.5°	6884.5	6813.6	6637.8	6461.9	6320.0	6128.8	6002.4	5851.2	5706.3	5576.7	5552.0
5°	7612.5	7378.1	7057.2	6764.2	6465.1	6175.1	5888.2	5585.9	5308.4	5138.7	5030.8
7.5°	8204.7	7791.3	7365.6	6992.4	6631.6	6292.3	5912.9	5545.9	5111.0	4879.6	4669.9
10°	8645.8	8102.9	7544.6	7115.9	6751.9	6421.8	6101.1	5731.0	5206.6	4916.6	4602.0
12.5°	8935.6	8291.0	7637.2	7146.7	6739.6	6483.5	6341.7	6196.7	5675.4	5336.2	4879.6
15°	9136.1	8423.7	7702.0	7075.8	6576.1	6387.9	6529.8	6696.3	6363.2	5971.5	5376.2
17.5°	9355.2	8596.4	7729.6	6884.5	6258.3	6178.2	6545.2	6930.7	6915.4	6526.7	5943.8
20°	9586.5	8747.6	7711.2	6576.1	5872.8	5943.8	6412.6	6859.8	7048.0	6838.3	6320.0
22.5°	9824.0	8892.5	7640.2	6175.1	5511.9	5734.1	6202.9	6594.5	6816.7	6751.9	6357.0
25°	10123.2	9096.1	7535.4	5743.3	5212.7	5521.2	5959.1	6276.9	6431.2	6428.0	6156.6
27.5°	10481.0	9367.5	7479.8	5394.7	5000.0	5280.6	5669.3	5953.0	6060.9	6060.9	5845.1
30°	10897.4	9688.3	7418.1	5166.5	4876.5	5030.8	5333.1	5610.6	5718.6	5718.6	5536.6
32.5°	11360.1	9996.7	7270.1	5027.7	4784.0	4787.1	4978.3	5231.3	5360.7	5379.3	5249.7
35°	11915.3	10326.8	6946.2	4916.6	4676.0	4549.6	4642.1	4851.8	5006.1	5046.2	4966.0
37.5°	12643.2	10730.8	6483.5	4753.1	4509.5	4299.8	4321.3	4481.7	4651.3	4713.1	4660.7
40°	13621.0	11205.8	6002.4	4518.7	4275.1	4025.2	4016.0	4133.2	4299.8	4367.6	4339.8
42.5°	14913.3	11776.5	5542.8	4293.6	3991.2	3735.3	3719.8	3812.4	3957.3	4028.4	4016.0
45°	16566.7	12476.6	5148.0	4117.7	3713.7	3460.8	3454.6	3531.7	3658.2	3732.2	3716.8
47.5°	18864.6	13176.8	4879.6	4025.2	3494.7	3235.6	3247.9	3315.8	3430.0	3482.3	3460.8
50°	21859.6	13389.7	4743.9	4025.2	3377.5	3035.1	3096.8	3152.3	3238.7	3269.5	3241.8
52.5°	24734.3	12686.4	4620.5	4049.9	3393.0	2865.5	2998.1	3038.2	3112.2	3124.6	3084.4
55°	26144.0	10906.6	4450.9	4056.0	3488.5	2720.5	2917.9	2992.0	3019.6	3016.6	2948.7
57.5°	25659.6	8818.5	4164.1	4031.4	3553.3	2628.0	2819.2	2961.1	2979.6	2951.8	2825.4
60°	23960.1	6492.8	3945.0	3849.4	3528.7	2600.2	2668.1	2893.3	2920.9	2883.9	2677.3
62.5°	21110.1	4506.4	3775.4	3448.4	3420.6	2591.0	2430.6	2745.2	2813.0	2760.6	2458.4
65°	16619.0	3183.1	3251.0	3022.7	3186.2	2541.6	2183.8	2566.3	2658.8	2578.6	2152.9
67.5°	11246.0	2297.9	2634.1	2739.0	2806.9	2430.6	2004.9	2362.7	2486.0	2381.2	1798.3
70°	6073.3	1613.1	1739.6	2307.2	2384.3	2239.3	1844.5	2156.1	2297.9	2183.8	1465.1
72.5°	3587.2	1159.8	1218.3	1853.7	1986.3	1971.0	1665.6	1915.4	2088.2	1952.4	1190.6
75°	1977.1	783.4	869.8	1344.8	1613.1	1520.7	1431.2	1622.5	1798.3	1665.6	919.2
77.5°	885.3	468.8	604.5	882.1	1267.7	1042.5	1107.3	1264.6	1428.1	1289.3	613.8
80°	342.3	262.2	401.0	481.1	922.3	576.8	712.5	931.5	1048.7	937.7	373.2
82.5°	43.2	117.3	172.7	188.2	536.7	305.3	413.3	586.1	576.8	499.7	188.2
85°	0.0	21.6	24.7	12.3	231.3	111.0	135.7	191.3	178.9	135.7	15.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	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°	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8
2.5°	5400.9	5289.8	5234.4	5188.0	5231.3	5255.9	5255.9	5360.7	5422.5	5447.2	5619.9
5°	4759.3	4552.6	4413.9	4330.6	4358.3	4389.2	4423.1	4555.7	4645.2	4703.8	4972.2
7.5°	4253.4	3938.9	3744.5	3642.7	3658.2	3679.7	3707.5	3837.1	3926.6	4003.6	4302.8
10°	4003.6	3559.5	3303.5	3180.1	3158.5	3146.1	3136.9	3214.0	3281.8	3343.6	3639.7
12.5°	4016.0	3396.0	3084.4	2933.3	2868.6	2794.6	2735.9	2748.2	2791.5	2868.6	3056.8
15°	4173.3	3343.6	2970.3	2782.2	2674.2	2587.8	2516.9	2501.5	2516.9	2529.3	2646.4
17.5°	4386.1	3337.4	2871.6	2637.2	2526.2	2455.2	2390.5	2368.9	2372.0	2387.3	2418.2
20°	4555.7	3318.8	2760.6	2498.4	2399.7	2338.0	2273.2	2251.6	2257.9	2260.9	2294.9
22.5°	4645.2	3291.2	2637.2	2359.7	2276.3	2214.6	2156.1	2152.9	2152.9	2171.5	2196.2
25°	4645.2	3232.5	2526.2	2227.0	2152.9	2097.5	2026.5	2038.8	2045.0	2069.7	2106.7
27.5°	4534.2	3121.4	2436.7	2112.8	2035.8	1980.2	1915.4	1930.9	1940.1	1967.9	2014.1
30°	4392.2	2988.8	2335.0	2004.9	1915.4	1875.3	1819.8	1826.0	1838.3	1869.2	1921.7
32.5°	4241.1	2831.6	2251.6	1897.0	1807.5	1776.6	1714.9	1724.3	1736.6	1770.5	1829.1
35°	4074.6	2646.4	2152.9	1798.3	1708.8	1684.1	1613.1	1619.3	1637.8	1674.8	1733.5
37.5°	3898.8	2495.4	2054.2	1702.6	1610.1	1585.4	1511.4	1517.5	1539.1	1582.3	1637.8
40°	3726.1	2347.2	1949.3	1600.8	1508.3	1486.8	1406.5	1412.7	1437.4	1483.6	1542.2
42.5°	3537.9	2233.2	1813.6	1496.0	1397.3	1375.7	1301.6	1310.9	1338.6	1384.9	1443.5
45°	3312.7	2159.2	1662.6	1397.3	1286.3	1264.6	1196.8	1215.2	1246.1	1292.4	1354.1
47.5°	3081.4	2128.3	1536.1	1292.4	1172.1	1153.6	1098.1	1128.9	1162.9	1199.9	1267.7
50°	2859.3	2088.2	1406.5	1193.7	1073.4	1054.9	1017.8	1058.0	1091.9	1125.9	1190.6
52.5°	2606.4	2001.8	1289.3	1107.3	990.1	983.9	965.4	1002.4	1033.3	1064.2	1119.7
55°	2344.2	1863.0	1187.6	1030.2	919.2	925.4	916.0	946.9	971.6	999.4	1048.7
57.5°	2115.9	1687.3	1107.3	946.9	857.5	876.0	863.7	879.0	894.5	928.4	968.5
60°	1884.6	1477.4	1017.8	848.2	795.8	817.3	783.4	780.3	786.6	795.8	869.8
62.5°	1573.1	1258.5	906.8	761.9	728.0	737.2	672.4	623.1	623.1	632.3	743.3
65°	1264.6	1054.9	783.4	663.2	635.4	629.2	536.7	468.8	462.7	490.5	586.1
67.5°	1039.5	876.0	660.1	552.2	533.6	539.8	471.9	404.1	397.9	428.8	499.7
70°	860.6	706.3	527.5	425.7	444.1	471.9	404.1	339.3	330.0	357.8	425.7
72.5°	684.7	552.2	404.1	314.6	367.1	401.0	330.0	268.3	262.2	286.9	351.7
75°	502.8	394.8	274.5	228.3	283.7	314.6	240.6	191.3	181.9	203.6	268.3
77.5°	311.5	222.1	172.7	135.7	194.3	209.7	126.5	111.0	107.9	123.4	169.6
80°	144.9	95.6	83.2	46.2	70.9	83.2	52.5	58.6	61.7	74.0	104.9
82.5°	40.1	15.4	3.1	0.0	0.0	24.7	12.3	24.7	30.9	46.2	67.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	15.4	27.8	49.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	24.7
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: P971599

CATALOG NUMBER: NAV-SB6D-835-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8	6199.8
2.5°	5749.4	5872.8	6070.3	6273.8	6474.3	6677.9	6875.3	6946.2
5°	5215.8	5499.6	5891.3	6310.8	6742.7	7180.6	7581.6	7763.6
7.5°	4620.5	5027.7	5616.8	6273.8	6961.6	7649.5	8281.8	8574.8
10°	3985.1	4500.3	5172.7	6060.9	7048.0	7998.0	8867.8	9247.2
12.5°	3380.6	3920.3	4663.8	5727.8	6980.1	8198.5	9244.2	9691.4
15°	2874.7	3352.8	4154.7	5333.1	6761.1	8210.9	9423.0	9913.5
17.5°	2495.4	2806.9	3636.6	4895.1	6474.3	8096.7	9484.7	10009.1
20°	2307.2	2393.6	2964.2	4333.7	6206.0	7988.7	9546.4	10098.5
22.5°	2196.2	2217.7	2424.4	3608.8	5885.1	7954.8	9654.4	10221.9
25°	2106.7	2112.8	2168.4	2859.3	5394.7	7933.2	9820.9	10391.6
27.5°	2017.2	2017.2	2048.1	2304.1	4728.5	7840.7	10036.8	10595.1
30°	1927.8	1927.8	1949.3	2038.8	3948.1	7658.7	10295.9	10860.4
32.5°	1835.3	1835.3	1853.7	1918.5	3152.3	7430.4	10533.4	11128.7
35°	1742.7	1736.6	1761.3	1829.1	2507.7	7140.6	10770.9	11418.7
37.5°	1644.0	1640.9	1665.6	1742.7	2165.3	6804.4	10949.9	11813.5
40°	1539.1	1539.1	1566.9	1650.1	2066.6	6381.8	11233.6	12381.1
42.5°	1443.5	1437.4	1468.2	1570.0	1992.6	5977.7	11742.6	13207.6
45°	1350.9	1338.6	1366.4	1492.9	1863.0	5835.8	12692.6	14429.1
47.5°	1264.6	1233.8	1258.5	1400.4	1745.8	6366.4	14247.1	16122.5
50°	1193.7	1135.1	1156.7	1307.8	1656.4	7516.8	16264.4	18371.1
52.5°	1119.7	1042.5	1054.9	1193.7	1576.1	8611.8	18451.2	21338.3
55°	1042.5	956.2	962.4	1079.5	1462.1	8775.3	20585.7	25385.1
57.5°	956.2	876.0	876.0	974.7	1378.7	7606.3	22226.6	30406.6
60°	860.6	808.1	792.7	891.4	1452.7	5367.0	22417.9	33645.3
62.5°	755.7	728.0	706.3	811.2	1508.3	3180.1	20878.7	32861.9
65°	635.4	629.2	613.8	891.4	1270.8	1878.4	17923.9	30459.1
67.5°	533.6	524.4	524.4	934.6	965.4	1181.3	14003.4	27152.6
70°	459.6	425.7	425.7	706.3	586.1	817.3	9777.8	23583.8
72.5°	385.6	348.5	323.9	564.5	438.0	598.4	6110.3	20197.1
75°	308.4	280.6	249.8	373.2	327.0	453.5	3550.2	16733.2
77.5°	222.1	209.7	175.8	274.5	237.5	327.0	2112.8	12911.6
80°	114.1	117.3	111.0	157.3	160.4	222.1	1202.9	8837.0
82.5°	67.9	52.5	58.6	77.1	92.6	126.5	453.5	5194.2
85°	43.2	27.8	27.8	37.0	46.2	49.3	138.8	2106.7
87.5°	21.6	9.2	12.3	18.6	15.4	12.3	6.1	530.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)