

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: P965089

Luminaire Tested: **NAV-SB3D-735-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965089
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-SB3D-735-U-SLL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 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: 23884.5 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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

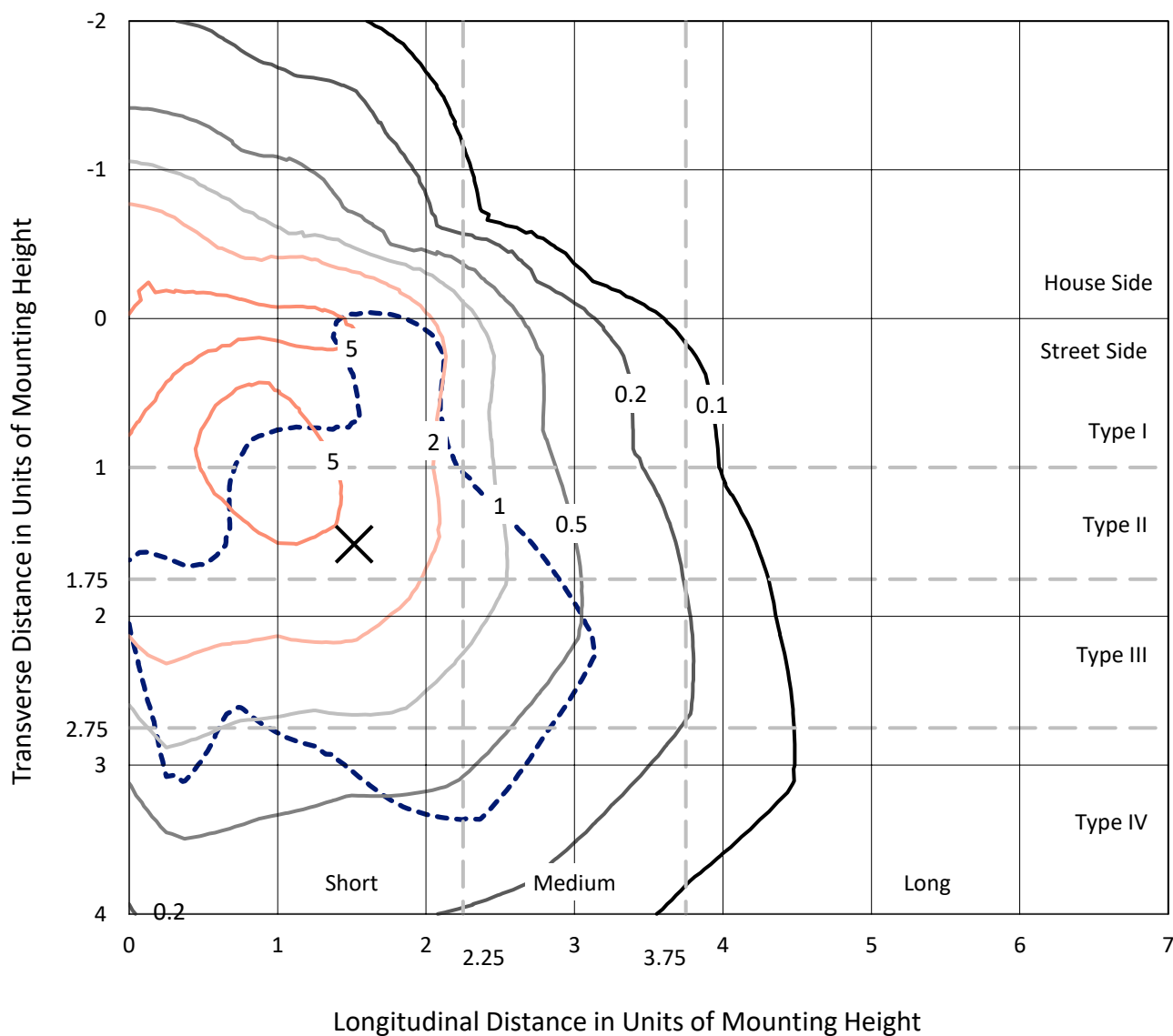


REPORT NUMBER: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

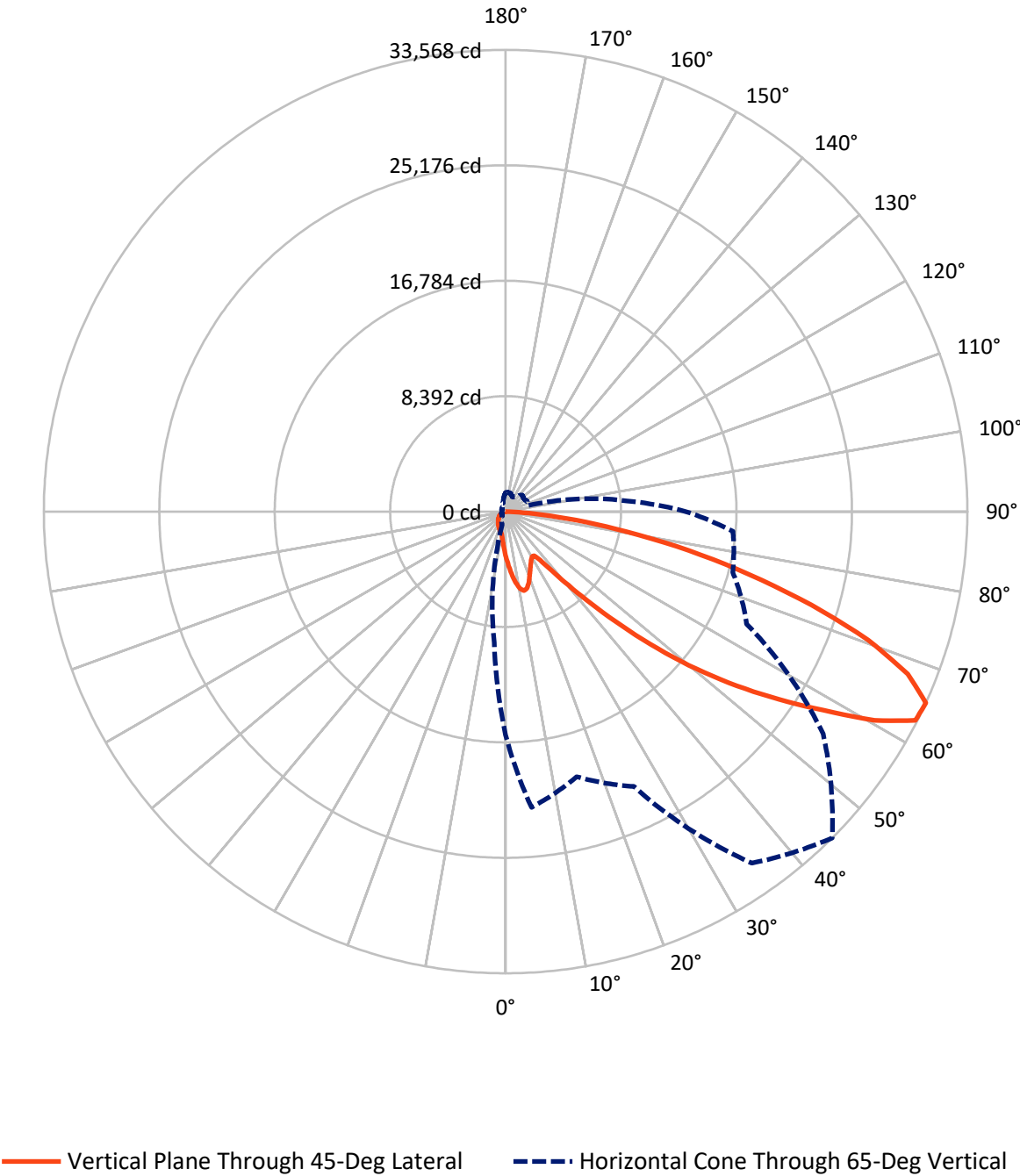
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
Type IV - Short - N/A

REPORT NUMBER: P965089
CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

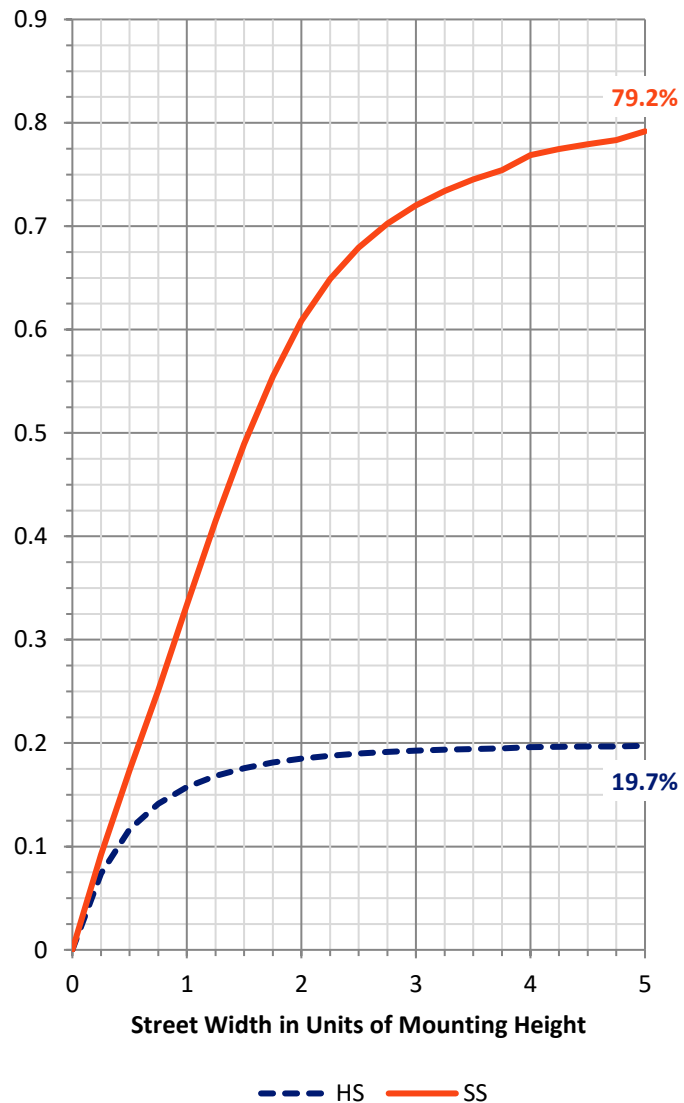
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4747.5	0.0	4747.5
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	19137.0	0.0	19137.0
	% Fixture	80.1	0.0	80.1
Total	Lumens	23884.5	0.0	23884.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.6	1.4
10°-20°	976.1	4.1
20°-30°	1438.0	6.0
30°-40°	1847.4	7.7
40°-50°	2987.8	12.5
50°-60°	5239.4	21.9
60°-70°	6555.9	27.4
70°-80°	3831.0	16.0
80°-90°	683.5	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°	23884.5	100.0
0°-180°	23884.5	100.0

Coefficient of Utilization



REPORT NUMBER: P965089

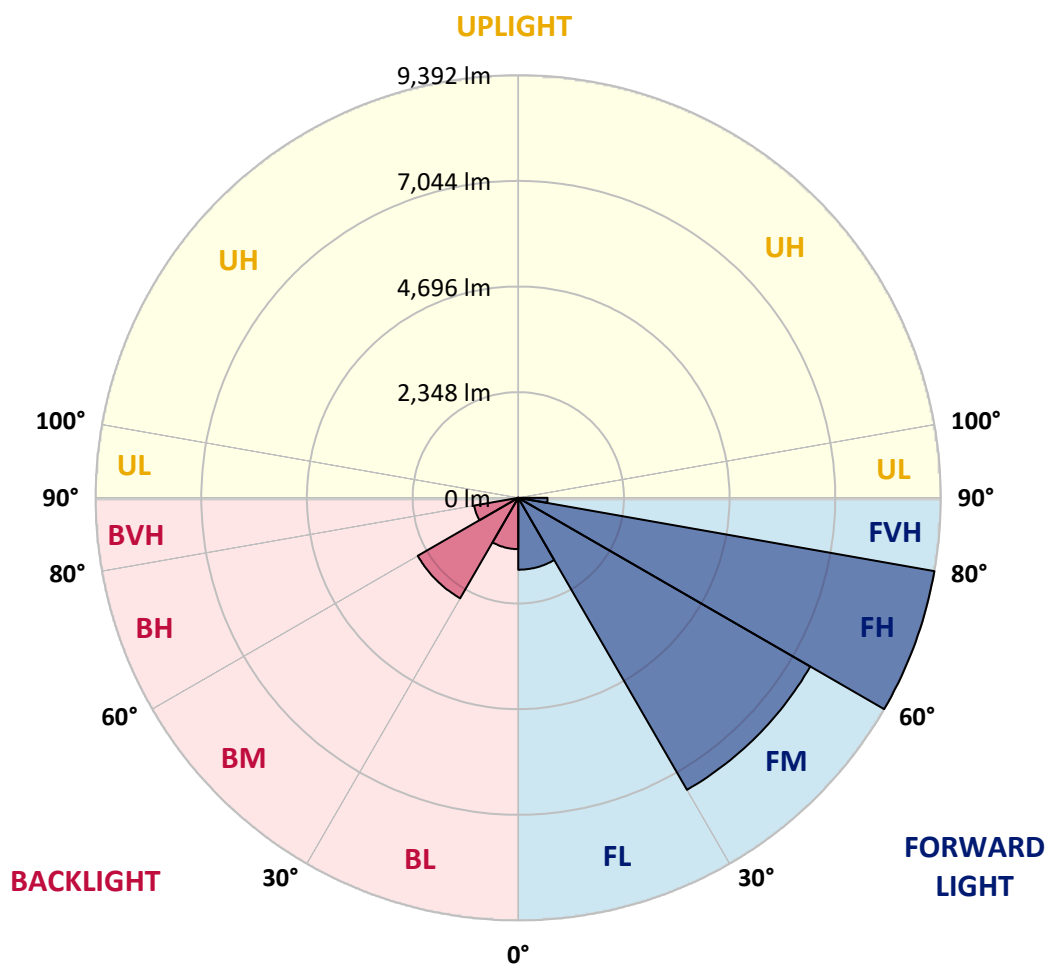
CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1598.2	6.7			
FM	(30°-60°)	7495.3	31.4			
FH	(60°-80°)	9392.1	39.3			G4/12000
FVH	(80°-90°)	651.5	2.7			G4/750
BL	(0°-30°)	1141.5	4.8	B3/2500		
BM	(30°-60°)	2579.3	10.8	B3/5000		
BH	(60°-80°)	994.7	4.2	B2/1000		G2/1000
BVH	(80°-90°)	32.0	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-G4

Type IV Short



REPORT NUMBER: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3
2.5°	3705.5	3733.4	3795.9	3828.9	3879.8	3883.1	3883.1	3838.7	3837.1	3746.6	3736.7
5°	4141.5	4207.3	4355.3	4508.4	4541.3	4549.6	4533.1	4444.2	4378.4	4202.3	4164.5
7.5°	4574.2	4700.9	4926.4	5130.3	5196.1	5196.1	5156.7	5011.8	4877.0	4621.9	4526.5
10°	4932.9	5092.5	5398.6	5627.2	5702.9	5686.5	5605.8	5423.3	5237.3	4928.0	4802.9
12.5°	5169.8	5349.2	5684.9	5869.2	5946.4	5903.7	5811.5	5633.8	5438.0	5112.3	4970.7
15°	5288.3	5475.9	5767.2	5864.2	5842.8	5798.4	5786.8	5701.3	5553.2	5248.8	5094.1
17.5°	5339.3	5513.7	5716.1	5655.2	5474.2	5439.7	5554.9	5663.4	5627.2	5367.3	5222.5
20°	5387.0	5533.5	5594.3	5324.5	5008.6	4977.3	5197.8	5507.1	5665.1	5477.5	5344.2
22.5°	5452.8	5543.3	5418.3	4975.7	4635.0	4562.7	4806.2	5271.9	5676.7	5617.4	5484.1
25°	5543.3	5568.0	5224.1	4645.0	4302.7	4230.3	4457.4	5010.2	5656.9	5768.8	5655.2
27.5°	5652.0	5600.9	5038.2	4368.5	4037.8	3970.3	4197.4	4758.5	5600.9	5920.1	5839.5
30°	5793.4	5643.8	4853.9	4154.6	3848.6	3799.3	4018.1	4541.3	5531.8	6112.7	6068.2
32.5°	5936.6	5661.8	4682.8	4029.6	3805.8	3823.9	4003.2	4424.5	5456.2	6296.9	6318.3
35°	6091.3	5719.4	4598.9	4153.0	4162.8	4320.8	4394.9	4533.1	5444.6	6547.0	6630.9
37.5°	6301.9	5847.7	4699.2	4766.8	5108.9	5436.4	5375.5	5064.5	5577.8	6920.5	7076.8
40°	6604.6	6073.1	5136.9	5811.5	6514.1	7045.5	6813.6	6030.4	5986.0	7458.6	7692.2
42.5°	7045.5	6431.9	5913.5	7088.4	8279.6	9155.0	8533.0	7276.0	6700.0	8227.0	8524.8
45°	7697.1	7012.6	6853.0	8436.0	10456.5	11835.4	10542.0	8603.7	7700.4	9390.2	9623.9
47.5°	8600.5	7866.7	7733.3	9855.9	13102.3	14885.9	12770.0	9834.6	8839.1	10976.4	11030.7
50°	9800.0	9016.7	8567.6	11409.2	16003.1	17995.7	14996.2	11022.5	10143.9	12914.7	12852.2
52.5°	11382.8	10621.0	9540.0	12888.3	18986.2	21039.7	17232.2	12065.7	11762.9	15164.0	15035.6
55°	13541.6	13034.8	10869.5	14300.2	21967.7	24101.7	19381.1	13049.7	13902.0	17836.1	17059.5
57.5°	16220.3	16582.3	12786.4	15937.3	24648.1	27257.6	21539.9	14425.2	16679.4	20824.1	18234.2
60°	17948.0	21299.6	16457.3	18357.6	27693.7	30826.5	24498.3	17041.3	19598.3	21895.3	18010.5
62.5°	17530.1	22800.2	20853.7	21447.7	30494.2	33421.3	27397.5	19669.0	20147.9	20317.3	16286.1
65°	16248.3	21589.3	19957.1	22048.3	31203.3	33567.7	28172.4	19330.1	17090.7	16587.3	13090.8
67.5°	14484.4	20152.8	17826.2	20455.5	29921.5	31520.8	26729.4	17098.9	13207.6	12447.4	9497.2
70°	12580.7	18563.4	16427.7	18668.6	27478.1	27953.6	24276.2	15038.9	9714.4	8406.3	6094.5
72.5°	10774.1	16908.1	15470.0	16837.4	24218.6	23234.6	21082.5	13217.5	7073.5	6063.3	4332.4
75°	8926.3	14466.3	14105.9	14662.1	19932.4	18301.8	17516.8	10943.5	5551.6	4386.6	2989.7
77.5°	6887.6	11303.9	12133.1	11741.6	14030.3	13594.3	13577.8	8223.7	4055.9	2927.2	1874.1
80°	4714.1	7878.2	9479.1	8282.9	9105.6	8883.5	10226.1	5517.1	2942.0	1762.2	1043.1
82.5°	2770.9	4796.3	6598.0	4009.8	5034.9	5168.2	6089.6	2683.7	1730.9	406.4	227.0
85°	1123.8	1893.9	2580.0	1569.7	2428.6	2048.6	2311.8	753.6	482.1	9.8	0.0
87.5°	283.0	605.5	424.6	176.1	281.4	258.3	204.1	92.1	19.8	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

REPORT NUMBER: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3
2.5°	3672.6	3634.6	3540.9	3447.1	3371.4	3269.4	3201.9	3121.3	3043.9	2974.9	2961.7
5°	4060.8	3935.8	3764.6	3608.3	3448.7	3294.0	3141.0	2979.8	2831.8	2741.3	2683.7
7.5°	4376.8	4156.3	3929.2	3730.1	3537.6	3356.6	3154.2	2958.5	2726.4	2603.0	2491.2
10°	4612.1	4322.4	4024.7	3795.9	3601.7	3425.8	3254.6	3057.2	2777.4	2622.8	2455.0
12.5°	4766.8	4422.9	4074.0	3812.4	3595.2	3458.7	3382.9	3305.6	3027.5	2846.5	2603.0
15°	4873.7	4493.6	4108.5	3774.6	3508.0	3407.6	3483.3	3572.1	3394.5	3185.5	2868.0
17.5°	4990.5	4585.7	4123.4	3672.6	3338.5	3295.7	3491.6	3697.2	3689.0	3481.6	3170.6
20°	5113.9	4666.3	4113.5	3508.0	3132.8	3170.6	3420.7	3659.4	3759.7	3647.9	3371.4
22.5°	5240.6	4743.7	4075.6	3294.0	2940.3	3058.8	3308.9	3517.9	3636.3	3601.7	3391.1
25°	5400.2	4852.2	4019.7	3063.7	2780.7	2945.2	3178.9	3348.4	3430.7	3429.0	3284.2
27.5°	5591.1	4997.1	3990.1	2877.8	2667.2	2816.9	3024.3	3175.7	3233.2	3233.2	3118.0
30°	5813.2	5168.2	3957.2	2756.0	2601.3	2683.7	2844.9	2993.0	3050.6	3050.6	2953.4
32.5°	6060.0	5332.8	3878.2	2682.0	2552.0	2553.7	2655.7	2790.6	2859.6	2869.6	2800.5
35°	6356.1	5508.8	3705.5	2622.8	2494.4	2427.0	2476.3	2588.2	2670.4	2691.9	2649.1
37.5°	6744.5	5724.3	3458.7	2535.5	2405.6	2293.6	2305.2	2390.7	2481.2	2514.1	2486.2
40°	7266.0	5977.7	3201.9	2410.5	2280.5	2147.3	2142.4	2204.9	2293.6	2329.9	2315.1
42.5°	7955.5	6282.1	2956.8	2290.4	2129.1	1992.6	1984.3	2033.7	2111.1	2148.9	2142.4
45°	8837.4	6655.6	2746.2	2196.6	1981.0	1846.1	1842.8	1884.0	1951.4	1991.0	1982.7
47.5°	10063.2	7029.1	2603.0	2147.3	1864.3	1726.0	1732.6	1768.8	1829.7	1857.6	1846.1
50°	11660.9	7142.7	2530.6	2147.3	1801.7	1619.1	1652.0	1681.6	1727.6	1744.1	1729.3
52.5°	13194.4	6767.6	2464.8	2160.4	1809.9	1528.6	1599.3	1620.7	1660.2	1666.8	1645.4
55°	13946.4	5818.1	2374.3	2163.7	1861.0	1451.2	1556.6	1596.0	1610.9	1609.1	1573.0
57.5°	13688.1	4704.2	2221.3	2150.6	1895.5	1401.9	1503.9	1579.6	1589.5	1574.6	1507.2
60°	12781.4	3463.6	2104.4	2053.5	1882.3	1387.0	1423.3	1543.3	1558.2	1538.4	1428.2
62.5°	11261.1	2403.9	2013.9	1839.6	1824.7	1382.1	1296.5	1464.4	1500.6	1472.6	1311.4
65°	8865.4	1698.0	1734.2	1612.5	1699.7	1355.8	1164.9	1369.0	1418.3	1375.6	1148.5
67.5°	5999.1	1225.8	1405.2	1461.1	1497.3	1296.5	1069.5	1260.3	1326.1	1270.3	959.3
70°	3239.8	860.6	928.0	1230.7	1271.9	1194.5	983.9	1150.2	1225.8	1164.9	781.6
72.5°	1913.6	618.7	650.0	988.9	1059.6	1051.4	888.5	1021.8	1114.0	1041.5	635.1
75°	1054.7	417.9	464.0	717.4	860.6	811.2	763.4	865.5	959.3	888.5	490.4
77.5°	472.2	250.1	322.5	470.6	676.3	556.2	590.7	674.7	761.8	687.8	327.4
80°	182.7	139.8	213.9	256.7	492.0	307.7	380.1	496.9	559.4	500.2	199.1
82.5°	23.1	62.5	92.1	100.3	286.3	162.9	220.5	312.6	307.7	266.6	100.3
85°	0.0	11.5	13.1	6.6	123.4	59.2	72.4	102.0	95.4	72.4	8.2
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

REPORT NUMBER: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3
2.5°	2881.1	2821.8	2792.2	2767.6	2790.6	2803.8	2803.8	2859.6	2892.7	2905.8	2997.9
5°	2538.8	2428.6	2354.5	2310.1	2324.9	2341.4	2359.4	2430.3	2477.9	2509.2	2652.4
7.5°	2269.0	2101.1	1997.5	1943.2	1951.4	1963.0	1977.7	2046.8	2094.6	2135.7	2295.3
10°	2135.7	1898.8	1762.2	1696.4	1684.9	1678.3	1673.4	1714.5	1750.7	1783.6	1941.6
12.5°	2142.4	1811.6	1645.4	1564.8	1530.2	1490.8	1459.5	1466.1	1489.1	1530.2	1630.6
15°	2226.2	1783.6	1584.5	1484.1	1426.6	1380.5	1342.6	1334.4	1342.6	1349.2	1411.7
17.5°	2339.8	1780.3	1531.9	1406.8	1347.6	1309.7	1275.2	1263.6	1265.3	1273.6	1290.0
20°	2430.3	1770.5	1472.6	1332.8	1280.1	1247.2	1212.7	1201.1	1204.5	1206.1	1224.2
22.5°	2477.9	1755.6	1406.8	1258.7	1214.3	1181.4	1150.2	1148.5	1148.5	1158.4	1171.5
25°	2477.9	1724.4	1347.6	1188.0	1148.5	1118.9	1081.1	1087.6	1090.9	1104.0	1123.8
27.5°	2418.7	1665.1	1299.9	1127.1	1086.0	1056.4	1021.8	1030.0	1034.9	1049.8	1074.4
30°	2343.0	1594.4	1245.6	1069.5	1021.8	1000.4	970.8	974.1	980.6	997.1	1025.1
32.5°	2262.4	1510.4	1201.1	1011.9	964.2	947.7	914.8	919.7	926.4	944.4	975.7
35°	2173.6	1411.7	1148.5	959.3	911.5	898.4	860.6	863.9	873.7	893.5	924.8
37.5°	2079.8	1331.2	1095.8	908.3	858.8	845.7	806.3	809.5	821.0	844.1	873.7
40°	1987.7	1252.1	1039.9	853.9	804.6	793.0	750.3	753.6	766.8	791.4	822.7
42.5°	1887.2	1191.3	967.5	798.1	745.4	733.8	694.3	699.3	714.1	738.8	770.1
45°	1767.2	1151.8	886.8	745.4	686.1	674.7	638.4	648.3	664.7	689.4	722.3
47.5°	1643.8	1135.3	819.4	689.4	625.2	615.4	585.8	602.2	620.3	640.0	676.3
50°	1525.3	1114.0	750.3	636.7	572.6	562.7	542.9	564.4	582.5	600.5	635.1
52.5°	1390.3	1067.8	687.8	590.7	528.2	524.9	515.0	534.7	551.2	567.6	597.3
55°	1250.5	993.8	633.4	549.6	490.4	493.6	488.7	505.1	518.3	533.1	559.4
57.5°	1128.7	900.1	590.7	505.1	457.5	467.3	460.7	468.9	477.1	495.3	516.7
60°	1005.3	788.1	542.9	452.4	424.6	436.0	417.9	416.3	419.5	424.6	464.0
62.5°	839.2	671.3	483.7	406.4	388.3	393.3	358.6	332.4	332.4	337.3	396.6
65°	674.7	562.7	417.9	353.7	339.0	335.7	286.3	250.1	246.8	261.6	312.6
67.5°	554.5	467.3	352.1	294.5	284.6	287.9	251.7	215.6	212.3	228.7	266.6
70°	459.1	376.8	281.4	227.0	237.0	251.7	215.6	181.0	176.1	190.9	227.0
72.5°	365.3	294.5	215.6	167.8	195.8	213.9	176.1	143.2	139.8	153.0	187.6
75°	268.2	210.6	146.5	121.8	151.4	167.8	128.3	102.0	97.1	108.5	143.2
77.5°	166.2	118.5	92.1	72.4	103.6	111.9	67.4	59.2	57.6	65.8	90.5
80°	77.3	51.0	44.4	24.7	37.8	44.4	28.0	31.3	32.9	39.5	56.0
82.5°	21.4	8.2	1.6	0.0	0.0	13.1	6.6	13.1	16.5	24.7	36.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	8.2	14.8	26.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
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: P965089

CATALOG NUMBER: NAV-SB3D-735-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3	3307.3
2.5°	3067.0	3132.8	3238.2	3346.7	3453.6	3562.3	3667.6	3705.5
5°	2782.4	2933.8	3142.8	3366.5	3596.8	3830.5	4044.3	4141.5
7.5°	2464.8	2682.0	2996.3	3346.7	3713.7	4080.6	4417.9	4574.2
10°	2125.8	2400.7	2759.3	3233.2	3759.7	4266.6	4730.5	4932.9
12.5°	1803.4	2091.3	2487.9	3055.5	3723.5	4373.5	4931.3	5169.8
15°	1533.5	1788.5	2216.4	2844.9	3606.7	4380.0	5026.7	5288.3
17.5°	1331.2	1497.3	1939.9	2611.3	3453.6	4319.1	5059.6	5339.3
20°	1230.7	1276.8	1581.3	2311.8	3310.5	4261.5	5092.5	5387.0
22.5°	1171.5	1183.1	1293.2	1925.2	3139.4	4243.5	5150.1	5452.8
25°	1123.8	1127.1	1156.7	1525.3	2877.8	4231.9	5239.0	5543.3
27.5°	1076.0	1076.0	1092.5	1229.1	2522.4	4182.6	5354.1	5652.0
30°	1028.4	1028.4	1039.9	1087.6	2106.1	4085.5	5492.4	5793.4
32.5°	979.0	979.0	988.9	1023.5	1681.6	3963.8	5619.0	5936.6
35°	929.7	926.4	939.5	975.7	1337.7	3809.1	5745.7	6091.3
37.5°	877.0	875.4	888.5	929.7	1155.1	3629.7	5841.2	6301.9
40°	821.0	821.0	835.9	880.3	1102.4	3404.3	5992.6	6604.6
42.5°	770.1	766.8	783.2	837.5	1062.9	3188.8	6264.0	7045.5
45°	720.7	714.1	728.9	796.3	993.8	3113.1	6770.8	7697.1
47.5°	674.7	658.2	671.3	747.0	931.3	3396.1	7600.1	8600.5
50°	636.7	605.5	617.0	697.6	883.6	4009.8	8676.2	9800.0
52.5°	597.3	556.2	562.7	636.7	840.8	4593.9	9842.8	11382.8
55°	556.2	510.0	513.3	575.8	779.9	4681.2	10981.3	13541.6
57.5°	510.0	467.3	467.3	520.0	735.5	4057.6	11856.7	16220.3
60°	459.1	431.1	422.9	475.5	775.0	2863.0	11958.8	17948.0
62.5°	403.1	388.3	376.8	432.8	804.6	1696.4	11137.6	17530.1
65°	339.0	335.7	327.4	475.5	677.9	1002.0	9561.4	16248.3
67.5°	284.6	279.7	279.7	498.6	515.0	630.2	7470.1	14484.4
70°	245.2	227.0	227.0	376.8	312.6	436.0	5215.9	12580.7
72.5°	205.7	185.9	172.8	301.1	233.6	319.2	3259.5	10774.1
75°	164.5	149.8	133.2	199.1	174.5	241.9	1893.9	8926.3
77.5°	118.5	111.9	93.8	146.5	126.7	174.5	1127.1	6887.6
80°	60.9	62.5	59.2	83.9	85.6	118.5	641.8	4714.1
82.5°	36.2	28.0	31.3	41.1	49.4	67.4	241.9	2770.9
85°	23.1	14.8	14.8	19.8	24.7	26.3	74.0	1123.8
87.5°	11.5	4.9	6.6	9.8	8.2	6.6	3.3	283.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)