

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: P968780

Luminaire Tested: **NAV-SB5C-735-U-SLR-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968780
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-SB5C-735-U-SLR-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29593.8 lumens
Efficiency: N/A
Efficacy: 118.6 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): 249.5
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

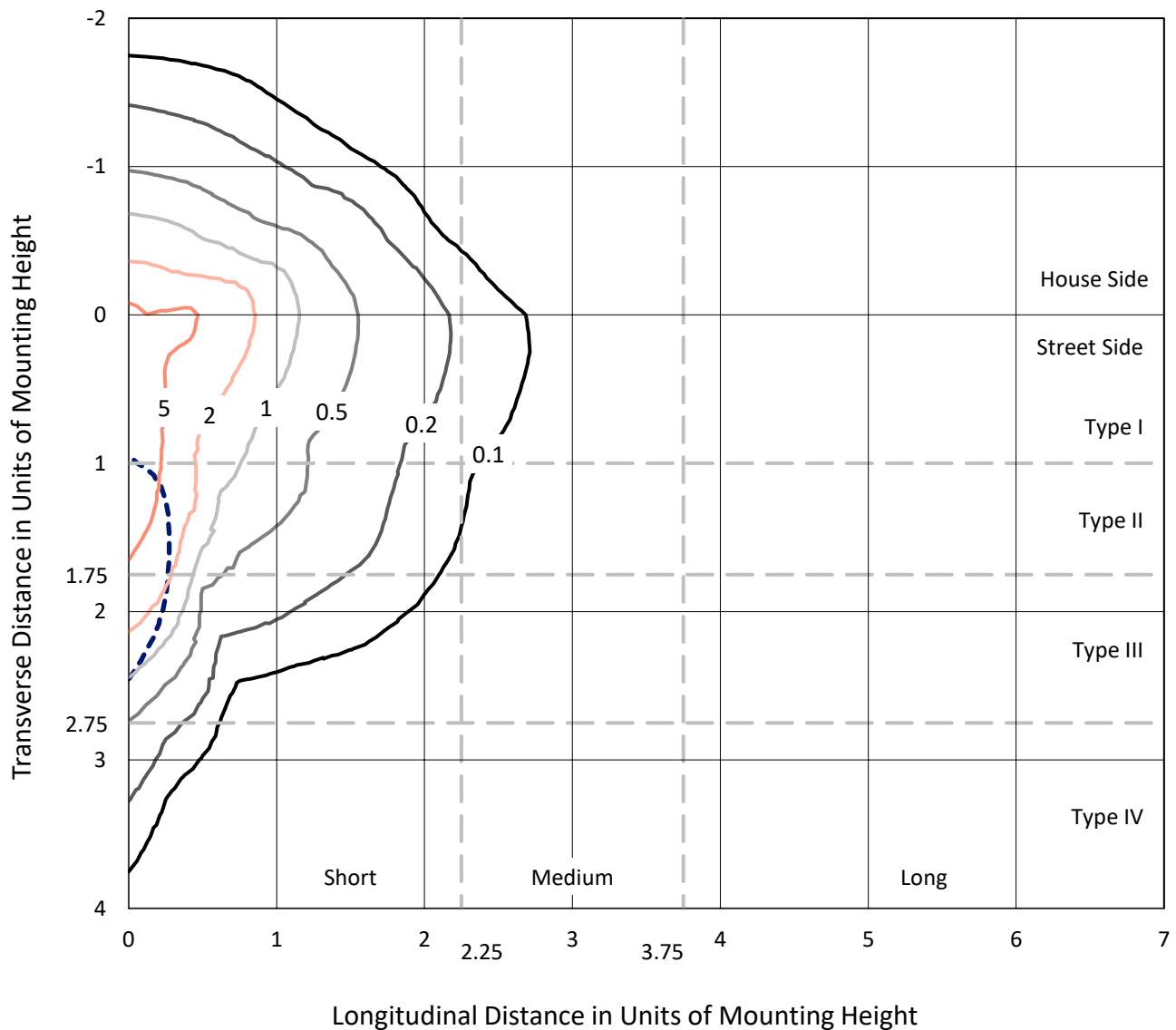


REPORT NUMBER: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

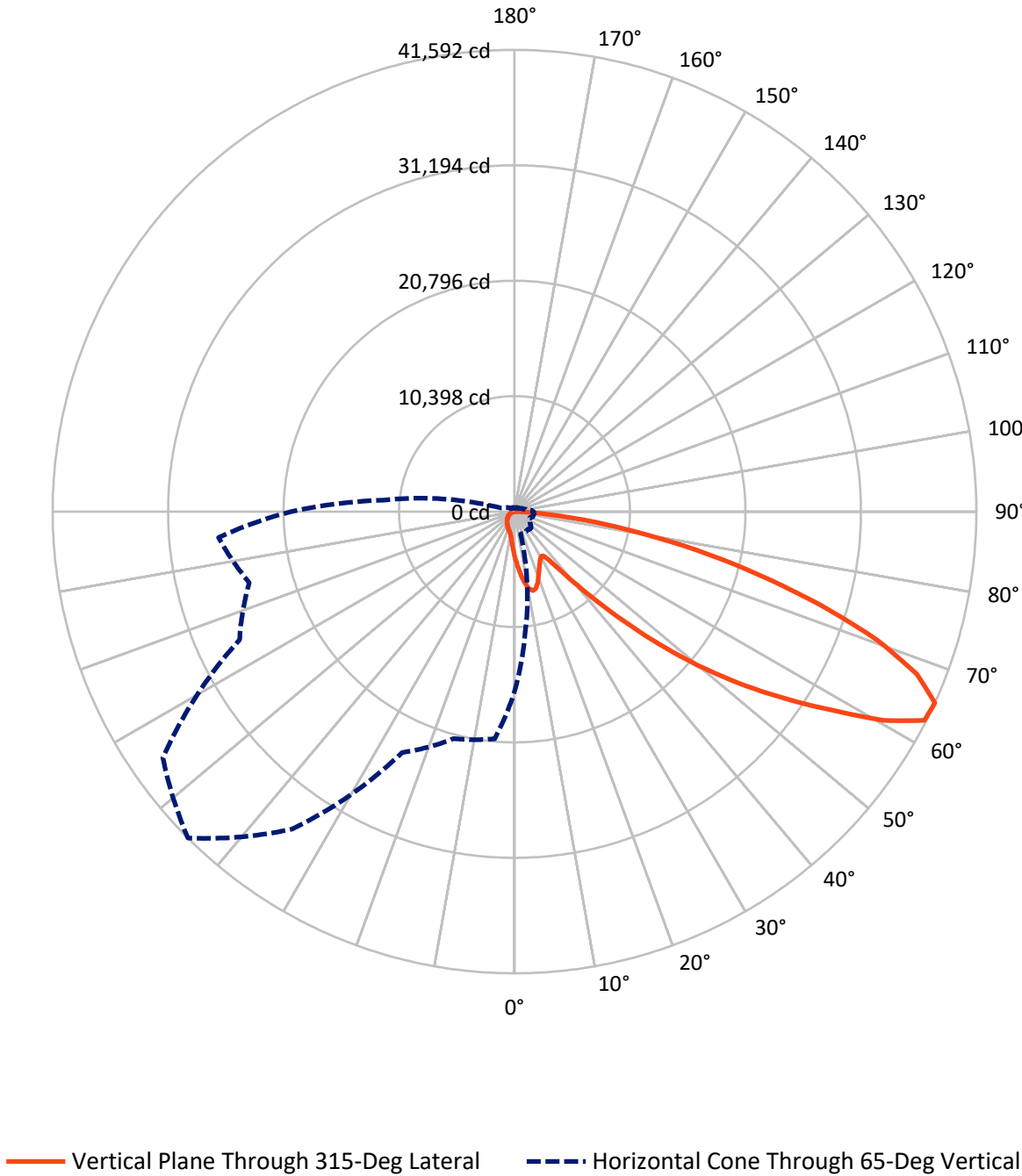
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
Type IV - Short - N/A

REPORT NUMBER: P968780
CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

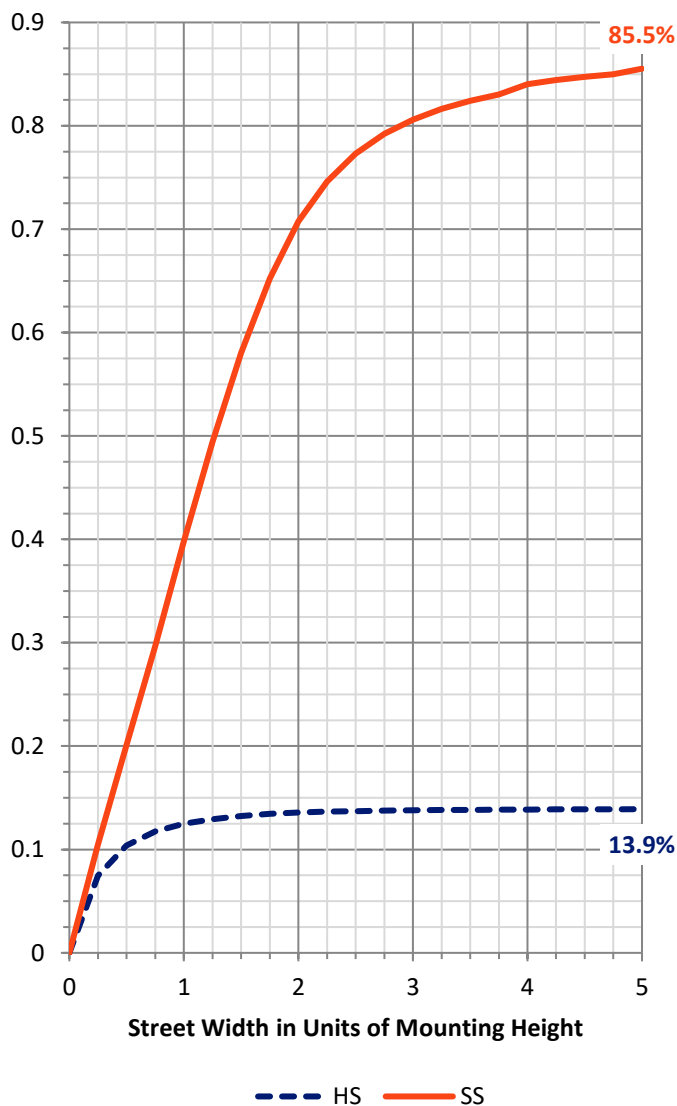
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4144.4	0.0	4144.4
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	25449.4	0.0	25449.4
	% Fixture	86.0	0.0	86.0
Total	Lumens	29593.8	0.0	29593.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.4	1.4
10°-20°	1209.4	4.1
20°-30°	1781.7	6.0
30°-40°	2289.0	7.7
40°-50°	3702.0	12.5
50°-60°	6491.8	21.9
60°-70°	8123.0	27.4
70°-80°	4746.7	16.0
80°-90°	846.9	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°	29593.8	100.0
0°-180°	29593.8	100.0

Coefficient of Utilization



REPORT NUMBER: P968780

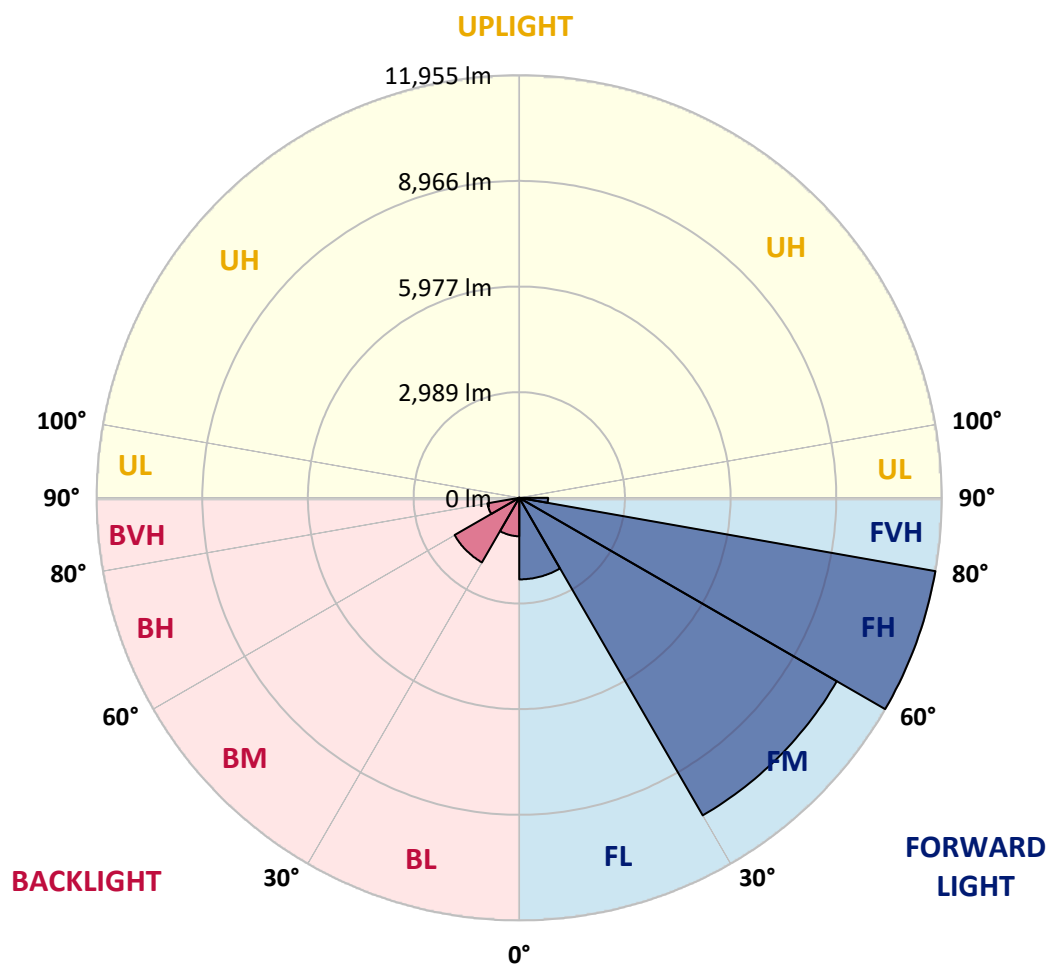
CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2308.2	7.8			
FM	(30°-60°)	10372.3	35.0			
FH	(60°-80°)	11954.5	40.4			G4/12000
FVH	(80°-90°)	814.3	2.8			G5
BL	(0°-30°)	1086.3	3.7	B3/2500		
BM	(30°-60°)	2110.4	7.1	B2/2500		
BH	(60°-80°)	915.1	3.1	B2/1000		G2/1000
BVH	(80°-90°)	32.5	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



REPORT NUMBER: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7
2.5°	4629.9	4550.4	4503.5	4387.3	4271.1	4177.3	4050.9	3967.4	3867.4	3771.6	3686.0
5°	5160.0	5031.5	4876.5	4664.6	4470.8	4273.1	4081.4	3891.9	3692.0	3508.6	3396.4
7.5°	5608.5	5423.0	5149.8	4868.4	4621.7	4383.2	4158.9	3908.2	3665.6	3378.1	3225.3
10°	5950.9	5714.5	5355.6	4986.6	4703.3	4462.7	4244.6	4032.6	3787.9	3441.3	3249.7
12.5°	6158.9	5906.2	5480.1	5047.8	4723.7	4454.5	4285.3	4191.5	4095.8	3751.2	3526.9
15°	6311.8	6038.7	5567.7	5090.7	4676.8	4346.5	4222.2	4316.0	4426.1	4205.9	3947.0
17.5°	6470.8	6183.4	5681.9	5109.0	4550.4	4136.5	4083.5	4326.1	4580.9	4570.8	4313.9
20°	6621.7	6336.2	5781.7	5096.7	4346.5	3881.7	3928.6	4238.5	4534.1	4658.4	4519.8
22.5°	6795.0	6493.3	5877.6	5049.9	4081.4	3643.2	3789.9	4099.8	4358.7	4505.5	4462.7
25°	7007.0	6691.0	6012.1	4980.6	3796.1	3445.4	3649.3	3938.8	4148.8	4250.7	4248.6
27.5°	7235.4	6927.6	6191.5	4943.9	3565.7	3304.7	3490.2	3747.1	3934.7	4006.0	4006.0
30°	7518.8	7202.8	6403.6	4903.1	3414.8	3223.2	3325.1	3524.9	3708.4	3779.8	3779.8
32.5°	7828.6	7508.5	6607.5	4805.2	3323.0	3162.0	3164.1	3290.5	3457.6	3543.2	3555.5
35°	8216.0	7875.5	6825.6	4591.2	3249.7	3090.7	3007.0	3068.2	3206.9	3308.8	3335.4
37.5°	8768.5	8356.6	7092.7	4285.3	3141.6	2980.6	2841.9	2856.3	2962.2	3074.4	3115.2
40°	9531.0	9002.9	7406.6	3967.4	2986.7	2825.6	2660.5	2654.4	2731.8	2841.9	2886.8
42.5°	10562.5	9857.1	7783.7	3663.6	2837.9	2638.0	2468.9	2458.7	2519.9	2615.7	2662.5
45°	11924.3	10949.9	8246.5	3402.6	2721.7	2454.6	2287.4	2283.4	2334.3	2417.9	2466.9
47.5°	13667.5	12468.7	8709.3	3225.3	2660.5	2309.8	2138.6	2146.8	2191.7	2267.0	2301.7
50°	15924.3	14448.3	8850.1	3135.5	2660.5	2232.3	2006.1	2046.8	2083.5	2140.6	2161.0
52.5°	18629.7	16348.3	8385.2	3054.0	2676.8	2242.6	1894.0	1981.6	2008.1	2057.1	2065.2
55°	21137.2	17280.1	7208.8	2941.9	2680.9	2305.7	1798.2	1928.6	1977.5	1995.9	1993.8
57.5°	22592.9	16960.0	5828.7	2752.2	2664.6	2348.6	1737.0	1863.3	1957.1	1969.4	1951.1
60°	22315.7	15836.7	4291.5	2607.5	2544.3	2332.3	1718.6	1763.5	1912.3	1930.7	1906.2
62.5°	20179.1	13952.9	2978.5	2495.4	2279.3	2260.9	1712.5	1606.5	1814.5	1859.2	1824.6
65°	16219.9	10984.5	2103.9	2148.8	1997.9	2106.0	1679.9	1443.4	1696.2	1757.4	1704.4
67.5°	11767.4	7433.1	1518.8	1741.1	1810.4	1855.2	1606.5	1325.1	1561.7	1643.2	1573.9
70°	7551.4	4014.2	1066.2	1149.8	1525.0	1575.9	1480.1	1219.1	1425.1	1518.8	1443.4
72.5°	5367.9	2371.0	766.6	805.2	1225.3	1312.9	1302.8	1100.8	1266.1	1380.2	1290.5
75°	3704.3	1306.8	517.8	574.9	888.9	1066.2	1005.1	946.0	1072.4	1188.6	1100.8
77.5°	2322.0	585.1	309.9	399.5	583.0	837.9	689.1	731.8	835.9	943.9	852.2
80°	1292.5	226.3	173.3	265.1	318.1	609.6	381.2	471.0	615.7	693.2	619.7
82.5°	281.4	28.5	77.5	114.2	124.3	354.8	201.8	273.2	387.3	381.2	330.3
85°	0.0	0.0	14.2	16.3	8.2	152.9	73.4	89.7	126.4	118.3	89.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	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: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7
2.5°	3669.7	3569.8	3496.4	3459.7	3429.1	3457.6	3473.9	3473.9	3543.2	3584.0	3600.3
5°	3325.1	3145.7	3009.1	2917.4	2862.3	2880.7	2901.1	2923.5	3011.1	3070.3	3109.0
7.5°	3086.6	2811.4	2603.4	2475.0	2407.7	2417.9	2432.2	2450.6	2536.2	2595.3	2646.2
10°	3041.8	2646.2	2352.7	2183.5	2101.9	2087.6	2079.5	2073.4	2124.3	2169.2	2210.0
12.5°	3225.3	2654.4	2244.6	2038.7	1938.8	1896.0	1847.0	1808.3	1816.5	1845.0	1896.0
15°	3553.5	2758.4	2210.0	1963.3	1839.0	1767.5	1710.5	1663.6	1653.4	1663.6	1671.8
17.5°	3928.6	2899.0	2205.9	1898.0	1743.1	1669.7	1622.8	1580.0	1565.7	1567.7	1578.0
20°	4177.3	3011.1	2193.6	1824.6	1651.4	1586.1	1545.3	1502.5	1488.3	1492.3	1494.3
22.5°	4201.8	3070.3	2175.3	1743.1	1559.6	1504.6	1463.8	1425.1	1423.0	1423.0	1435.2
25°	4069.2	3070.3	2136.6	1669.7	1471.9	1423.0	1386.3	1339.5	1347.6	1351.7	1368.0
27.5°	3863.3	2996.9	2063.1	1610.6	1396.6	1345.5	1308.8	1266.1	1276.2	1282.4	1300.7
30°	3659.5	2903.1	1975.5	1543.3	1325.1	1266.1	1239.5	1202.8	1206.9	1215.0	1235.4
32.5°	3469.8	2803.2	1871.5	1488.3	1253.8	1194.6	1174.3	1133.5	1139.6	1147.8	1170.2
35°	3282.4	2693.1	1749.2	1423.0	1188.6	1129.4	1113.1	1066.2	1070.3	1082.5	1107.0
37.5°	3080.4	2577.0	1649.3	1357.8	1125.3	1064.2	1047.9	999.0	1003.1	1017.3	1045.8
40°	2868.5	2462.8	1551.4	1288.4	1058.1	996.9	982.7	929.7	933.8	950.1	980.6
42.5°	2654.4	2338.4	1476.0	1198.7	988.8	923.5	909.3	860.3	866.4	884.8	915.4
45°	2456.6	2189.6	1427.1	1098.9	923.5	850.1	835.9	791.0	803.3	823.6	854.2
47.5°	2287.4	2036.7	1406.7	1015.3	854.2	774.7	762.5	725.8	746.2	768.5	793.0
50°	2142.7	1889.9	1380.2	929.7	788.9	709.5	697.2	672.8	699.3	721.7	744.2
52.5°	2038.7	1722.7	1323.1	852.2	731.8	654.5	650.4	638.2	662.6	683.0	703.4
55°	1949.0	1549.4	1231.3	784.9	680.9	607.5	611.6	605.5	625.9	642.2	660.5
57.5°	1867.4	1398.5	1115.2	731.8	625.9	566.7	579.0	570.8	581.1	591.2	613.7
60°	1769.6	1245.7	976.5	672.8	560.7	526.0	540.3	517.8	515.8	519.9	526.0
62.5°	1624.8	1039.8	831.8	599.4	503.6	481.1	487.3	444.4	411.8	411.8	417.9
65°	1423.0	835.9	697.2	517.8	438.3	419.9	415.9	354.8	309.9	305.8	324.1
67.5°	1188.6	687.1	579.0	436.2	364.9	352.7	356.8	311.9	267.1	263.0	283.4
70°	968.4	568.8	466.9	348.6	281.4	293.6	311.9	267.1	224.3	218.1	236.5
72.5°	786.9	452.6	364.9	267.1	208.0	242.6	265.1	218.1	177.3	173.3	189.6
75°	607.5	332.3	261.0	181.4	150.9	187.6	208.0	159.0	126.4	120.2	134.6
77.5°	405.7	205.9	146.8	114.2	89.7	128.4	138.7	83.5	73.4	71.3	81.6
80°	246.7	95.8	63.2	55.0	30.5	46.8	55.0	34.6	38.7	40.8	48.9
82.5°	124.3	26.5	10.1	2.0	0.0	0.0	16.3	8.2	16.3	20.4	30.5
85°	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	10.1	18.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
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: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7
2.5°	3714.5	3800.2	3881.7	4012.2	4146.7	4279.3	4413.8	4544.2	4591.2	4625.8	4703.3
5°	3286.4	3447.5	3635.0	3894.0	4171.2	4456.6	4746.1	5011.1	5131.5	5212.9	5396.4
7.5°	2844.0	3054.0	3323.0	3712.4	4146.7	4601.3	5056.0	5473.9	5667.6	5824.6	6103.9
10°	2405.7	2634.0	2974.4	3418.9	4006.0	4658.4	5286.3	5861.3	6112.1	6309.8	6688.9
12.5°	2020.4	2234.4	2591.2	3082.5	3785.8	4613.6	5418.9	6110.0	6405.6	6627.9	7043.7
15°	1749.2	1900.0	2216.0	2746.2	3524.9	4468.8	5427.1	6228.2	6552.4	6784.8	7145.7
17.5°	1598.4	1649.3	1855.2	2403.6	3235.4	4279.3	5351.6	6269.0	6615.6	6831.7	7082.4
20°	1516.8	1525.0	1582.0	1959.2	2864.4	4101.8	5280.3	6309.8	6674.7	6856.1	6931.6
22.5°	1451.6	1451.6	1465.9	1602.4	2385.3	3889.9	5257.8	6381.1	6756.3	6868.4	6713.4
25°	1392.5	1392.5	1396.6	1433.3	1889.9	3565.7	5243.6	6491.2	6868.4	6899.0	6472.9
27.5°	1331.3	1333.3	1333.3	1353.7	1522.9	3125.3	5182.4	6633.9	7002.9	6939.8	6242.6
30°	1270.1	1274.2	1274.2	1288.4	1347.6	2609.5	5062.1	6805.2	7178.3	6992.8	6014.2
32.5°	1209.0	1213.0	1213.0	1225.3	1268.0	2083.5	4911.3	6962.2	7355.6	7015.2	5802.1
35°	1145.7	1151.9	1147.8	1164.1	1209.0	1657.4	4719.6	7119.1	7547.3	7086.5	5698.2
37.5°	1082.5	1086.6	1084.6	1100.8	1151.9	1431.2	4497.4	7237.4	7808.2	7245.5	5822.5
40°	1019.4	1017.3	1017.3	1035.7	1090.7	1365.9	4218.1	7425.0	8183.4	7524.8	6364.8
42.5°	954.1	954.1	950.1	970.5	1037.7	1317.0	3951.0	7761.3	8729.7	7969.3	7327.1
45°	895.0	893.0	884.8	903.1	986.8	1231.3	3857.2	8389.2	9537.0	8688.9	8491.2
47.5°	837.9	835.9	815.5	831.8	925.6	1153.9	4207.9	9416.8	10656.3	9747.0	9581.9
50°	786.9	788.9	750.2	764.5	864.4	1094.8	4968.3	10750.1	12142.6	11172.1	10615.5
52.5°	740.0	740.0	689.1	697.2	788.9	1041.8	5692.0	12195.6	14103.8	13159.9	11820.4
55°	693.2	689.1	632.0	636.1	713.5	966.4	5800.1	13606.3	16778.5	16150.6	13467.7
57.5°	640.1	632.0	579.0	579.0	644.2	911.3	5027.4	14690.9	20097.6	20546.0	15842.8
60°	574.9	568.8	534.1	524.0	589.2	960.2	3547.3	14817.3	22238.2	26391.0	20391.1
62.5°	491.3	499.5	481.1	466.9	536.2	996.9	2101.9	13800.0	21720.4	28250.3	25838.5
65°	387.3	419.9	415.9	405.7	589.2	840.0	1241.6	11846.9	20132.2	26749.8	24727.4
67.5°	330.3	352.7	346.6	346.6	617.8	638.2	780.8	9255.8	17946.7	24970.0	22087.3
70°	281.4	303.8	281.4	281.4	466.9	387.3	540.3	6462.7	15587.9	23000.7	20354.4
72.5°	232.4	254.8	230.4	214.0	373.1	289.5	395.5	4038.7	13349.4	20949.8	19167.9
75°	177.3	203.9	185.5	165.1	246.7	216.1	299.7	2346.5	11060.0	17924.3	17477.8
77.5°	112.1	146.8	138.7	116.2	181.4	157.0	216.1	1396.6	8534.0	14005.9	15033.4
80°	69.3	75.4	77.5	73.4	103.9	106.0	146.8	795.1	5840.9	9761.3	11745.0
82.5°	44.9	44.9	34.6	38.7	50.9	61.2	83.5	299.7	3433.1	5942.8	8175.2
85°	32.6	28.5	18.3	18.3	24.5	30.5	32.6	91.7	1392.5	2346.5	3196.7
87.5°	16.3	14.2	6.1	8.2	12.2	10.1	8.2	4.1	350.7	750.2	526.0
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: P968780

CATALOG NUMBER: NAV-SB5C-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7	4097.7
2.5°	4744.1	4807.2	4811.3	4811.3	4756.3	4754.3	4642.1	4629.9
5°	5586.0	5626.8	5637.0	5616.6	5506.5	5425.0	5206.9	5160.0
7.5°	6356.6	6438.2	6438.2	6389.3	6209.9	6042.7	5726.7	5608.5
10°	6972.4	7066.1	7045.7	6945.9	6719.6	6489.2	6105.9	5950.9
12.5°	7272.1	7367.9	7314.9	7200.7	6980.6	6737.9	6334.3	6158.9
15°	7265.9	7239.5	7184.4	7170.1	7064.1	6880.6	6503.4	6311.8
17.5°	7007.0	6782.7	6740.0	6882.7	7017.3	6972.4	6650.3	6470.8
20°	6597.2	6205.9	6167.1	6440.3	6823.5	7019.3	6786.8	6621.7
22.5°	6165.1	5743.1	5653.3	5955.0	6532.0	7033.6	6960.2	6795.0
25°	5755.3	5331.2	5241.5	5522.8	6207.8	7009.1	7147.7	7007.0
27.5°	5412.7	5003.0	4919.4	5200.7	5895.9	6939.8	7335.2	7235.4
30°	5147.8	4768.5	4707.4	4978.5	5626.8	6854.1	7573.8	7518.8
32.5°	4992.8	4715.5	4738.0	4960.2	5482.1	6760.4	7802.1	7828.6
35°	5145.7	5157.9	5353.7	5445.4	5616.6	6746.0	8112.0	8216.0
37.5°	5906.2	6330.2	6735.9	6660.4	6275.2	6911.2	8574.7	8768.5
40°	7200.7	8071.3	8729.7	8442.3	7471.8	7416.8	9241.4	9531.0
42.5°	8782.7	10258.7	11343.4	10572.7	9015.2	8301.6	10193.5	10562.5
45°	10452.4	12956.0	14664.4	13062.0	10660.4	9541.1	11634.9	11924.3
47.5°	12211.8	16234.2	18444.2	15822.4	12185.3	10951.9	13600.2	13667.5
50°	14136.4	19828.4	22297.3	18580.8	13657.3	12568.7	16001.8	15924.3
52.5°	15969.2	23524.6	26068.9	21351.4	14949.8	14574.7	18788.7	18629.7
55°	17718.4	27218.8	29863.0	24013.9	16169.0	17225.0	22099.5	21137.2
57.5°	19746.9	30539.8	33773.1	26688.6	17873.3	20666.4	25801.8	22592.9
60°	22745.8	34313.4	38195.1	30354.2	21114.9	24283.0	27129.0	22315.7
62.5°	26574.5	37783.3	41410.1	33946.5	24370.7	24964.0	25173.9	20179.1
65°	27318.6	38662.0	41591.6	34906.7	23950.7	21176.0	20552.2	16219.9
67.5°	25345.2	37073.8	39055.5	33118.8	21186.2	16364.6	15422.8	11767.4
70°	23131.2	34046.4	34635.6	30079.0	18633.8	12036.5	10415.7	7551.4
72.5°	20862.0	30007.7	28788.6	26121.9	16376.9	8764.4	7512.6	5367.9
75°	18166.9	24696.9	22676.5	21704.1	13559.4	6878.6	5435.2	3704.3
77.5°	14548.2	17384.0	16843.7	16823.4	10189.4	5025.4	3626.9	2322.0
80°	10262.8	11282.2	11007.0	12670.5	6835.7	3645.2	2183.5	1292.5
82.5°	4968.3	6238.5	6403.6	7545.2	3325.1	2144.7	503.6	281.4
85°	1944.9	3009.1	2538.2	2864.4	933.8	597.4	12.2	0.0
87.5°	218.1	348.6	320.1	252.8	114.2	24.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)