

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: P969338

Luminaire Tested: **NAV-SB5D-740-U-SLR-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969338
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-SB5D-740-U-SLR-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA 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: 42542.6 lumens
Efficiency: N/A
Efficacy: 116.6 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): 364.9
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

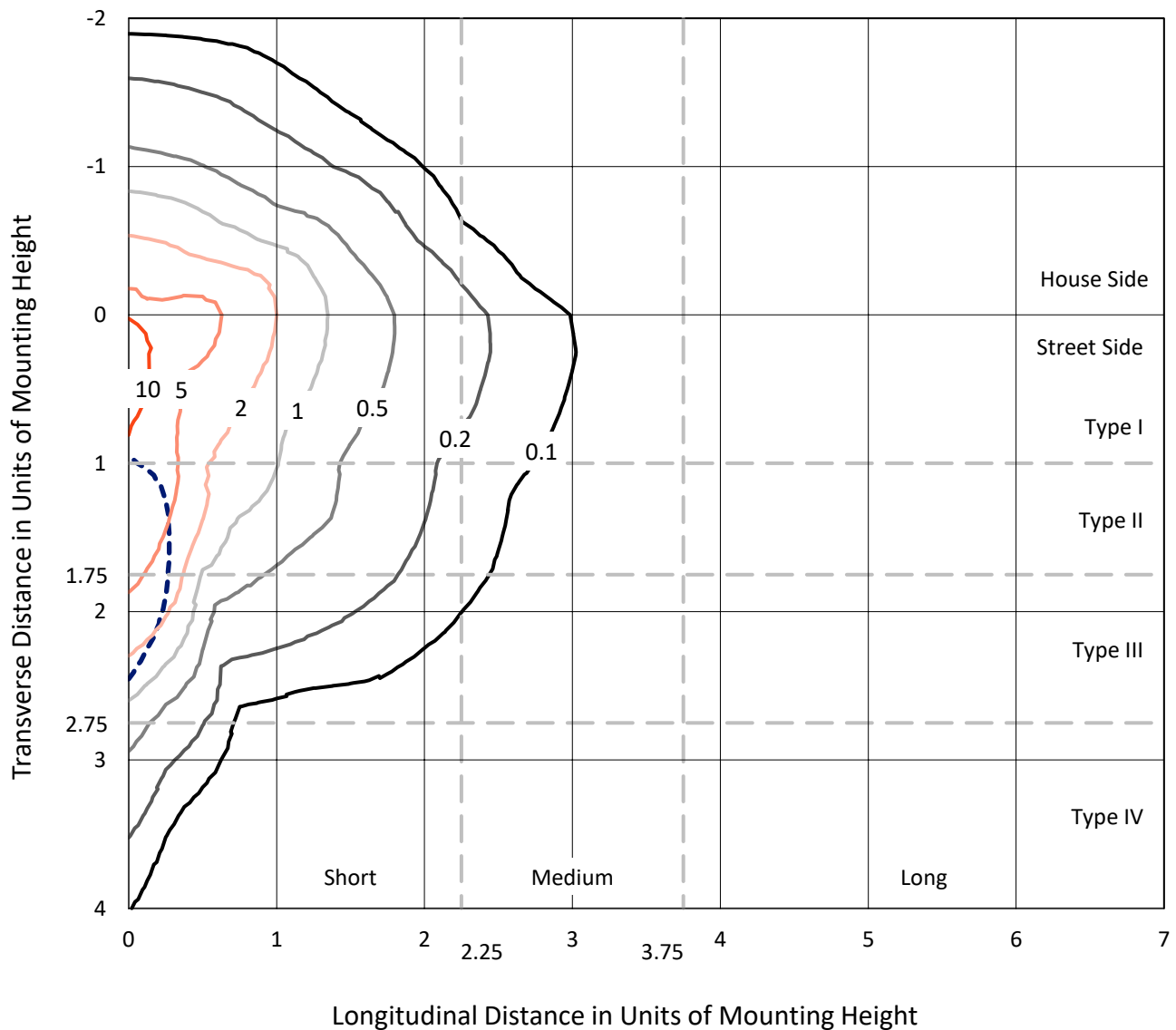


REPORT NUMBER: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

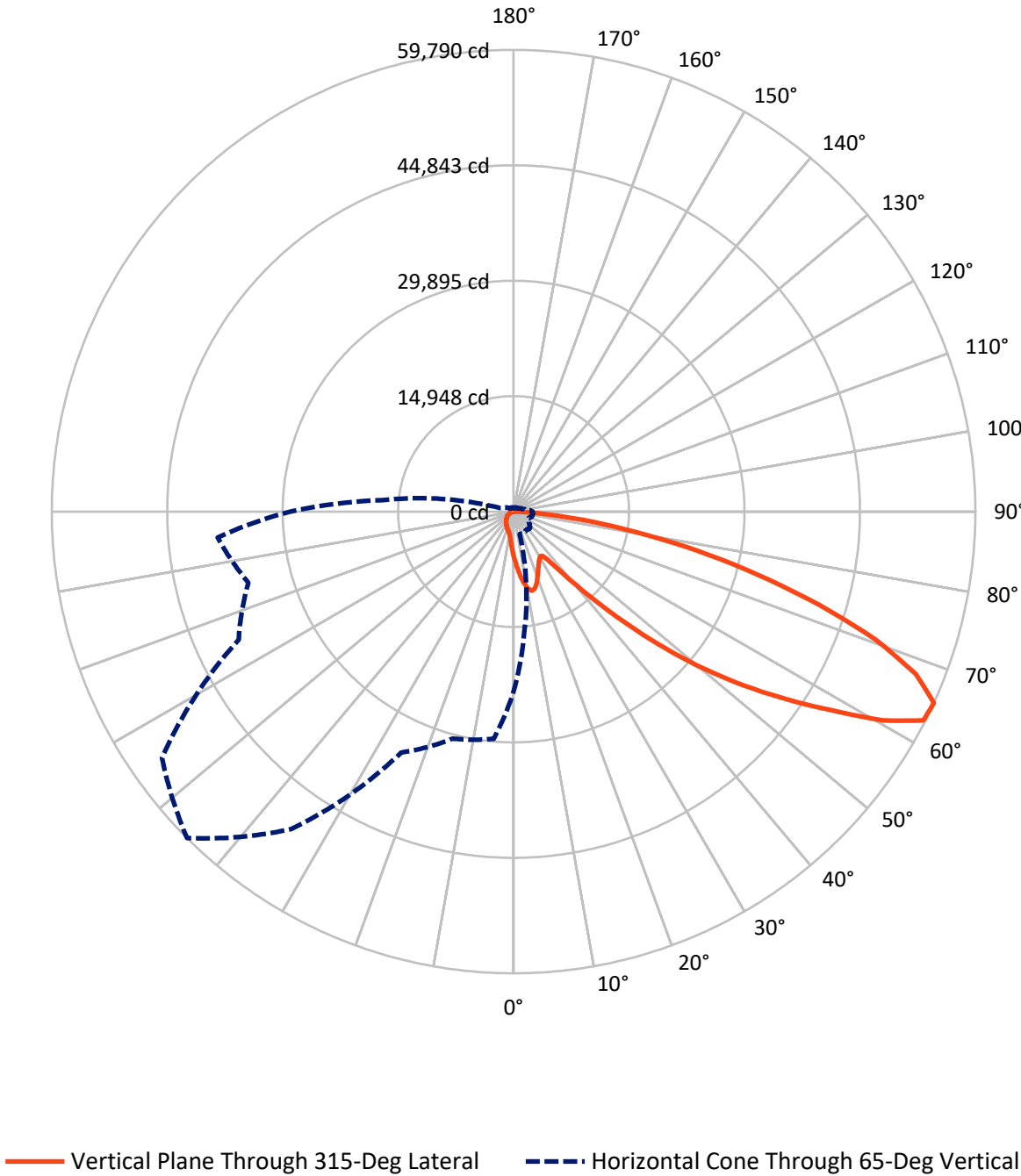


Based on 25 foot mounting height. Maximum calculated value = 13.1 fc

Type IV - Short - N/A

REPORT NUMBER: P969338
CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

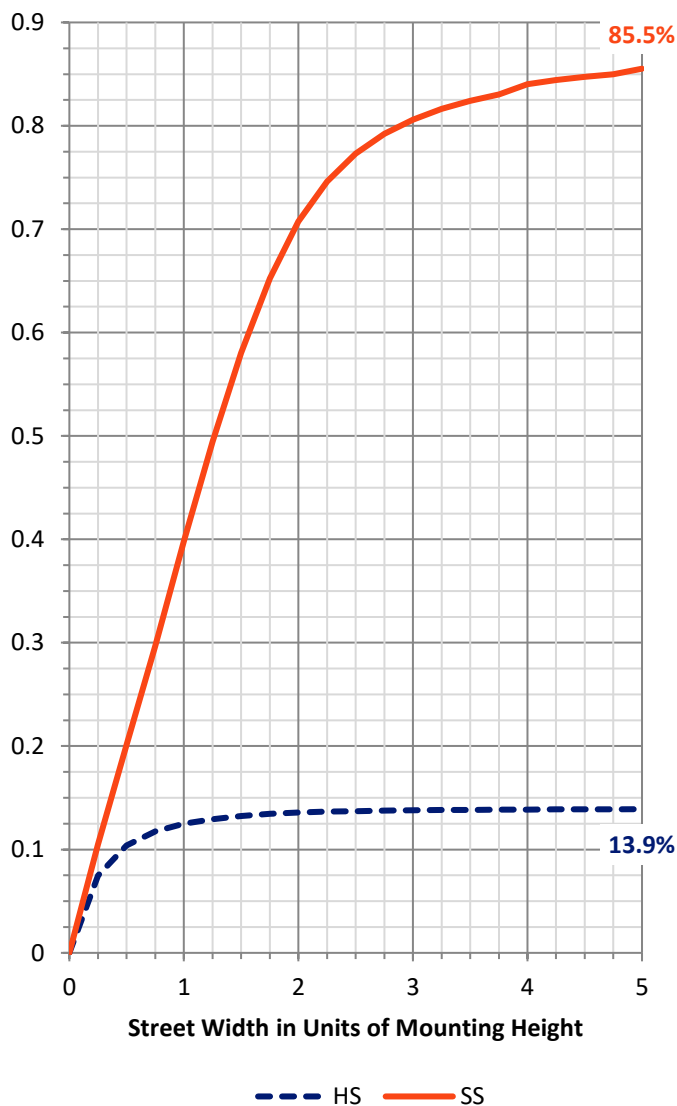
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5957.8	0.0	5957.8
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	36584.8	0.0	36584.8
	% Fixture	86.0	0.0	86.0
Total	Lumens	42542.6	0.0	42542.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	580.0	1.4
10°-20°	1738.6	4.1
20°-30°	2561.3	6.0
30°-40°	3290.5	7.7
40°-50°	5321.8	12.5
50°-60°	9332.2	21.9
60°-70°	11677.2	27.4
70°-80°	6823.6	16.0
80°-90°	1217.4	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°	42542.6	100.0
0°-180°	42542.6	100.0

Coefficient of Utilization



REPORT NUMBER: P969338

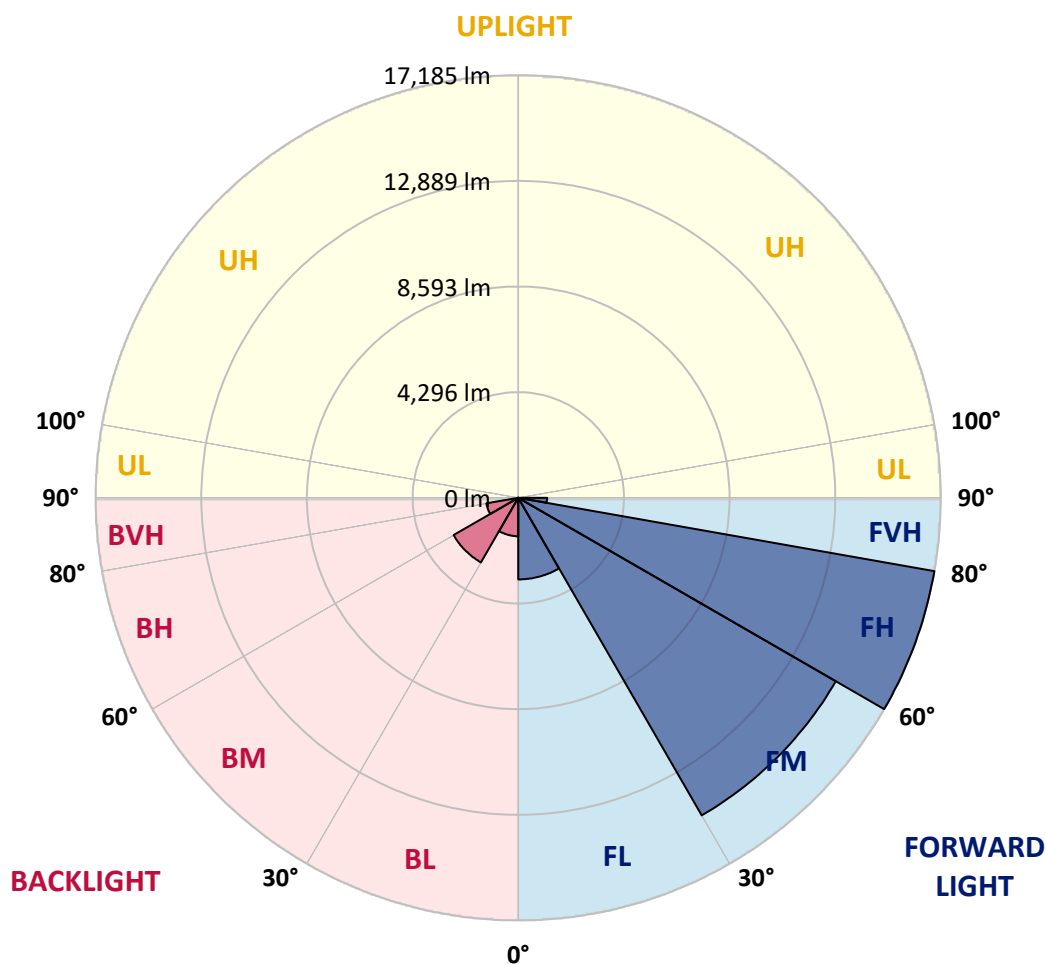
CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3318.2	7.8			
FM	(30°-60°)	14910.7	35.0			
FH	(60°-80°)	17185.3	40.4			G5
FVH	(80°-90°)	1170.7	2.8			G5
BL	(0°-30°)	1561.6	3.7	B3/2500		
BM	(30°-60°)	3033.8	7.1	B3/5000		
BH	(60°-80°)	1315.5	3.1	B3/2500		G3/2500
BVH	(80°-90°)	46.8	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: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8
2.5°	6655.7	6541.4	6474.0	6306.9	6140.0	6005.1	5823.4	5703.2	5559.6	5421.8	5298.7
5°	7417.7	7233.1	7010.4	6705.6	6427.2	6142.8	5867.3	5594.8	5307.6	5043.8	4882.6
7.5°	8062.4	7795.7	7403.1	6998.6	6643.9	6301.1	5978.7	5618.2	5269.5	4856.2	4636.5
10°	8554.9	8214.9	7699.1	7168.6	6761.2	6415.4	6101.8	5797.0	5445.3	4947.1	4671.6
12.5°	8853.7	8490.4	7877.8	7256.5	6790.5	6403.7	6160.5	6025.6	5887.9	5392.5	5070.2
15°	9073.6	8680.8	8003.8	7318.1	6723.1	6248.3	6069.5	6204.4	6362.7	6046.2	5673.9
17.5°	9302.2	8888.9	8168.0	7344.4	6541.4	5946.4	5870.3	6219.1	6585.4	6570.8	6201.5
20°	9519.1	9108.8	8311.6	7326.9	6248.3	5580.1	5647.5	6093.0	6518.0	6696.7	6497.5
22.5°	9768.1	9334.4	8449.3	7259.5	5867.3	5237.2	5448.3	5893.7	6265.9	6477.0	6415.4
25°	10073.0	9618.7	8642.8	7159.8	5457.0	4953.0	5246.1	5662.2	5964.1	6110.6	6107.7
27.5°	10401.2	9958.7	8900.7	7107.0	5125.8	4750.8	5017.5	5386.7	5656.4	5758.9	5758.9
30°	10808.6	10354.3	9205.4	7048.4	4909.0	4633.5	4780.1	5067.3	5331.0	5433.6	5433.6
32.5°	11254.1	10794.0	9498.6	6907.8	4777.1	4545.6	4548.5	4730.2	4970.5	5093.6	5111.3
35°	11810.9	11321.4	9812.1	6600.1	4671.6	4443.0	4322.8	4410.8	4610.0	4756.6	4794.7
37.5°	12605.1	12013.1	10196.1	6160.5	4516.3	4284.7	4085.4	4105.9	4258.4	4419.6	4478.2
40°	13701.2	12942.2	10647.4	5703.2	4293.5	4062.0	3824.6	3815.9	3927.2	4085.4	4149.9
42.5°	15184.1	14170.1	11189.6	5266.6	4079.6	3792.4	3549.2	3534.5	3622.4	3760.1	3827.6
45°	17141.9	15741.0	11854.8	4891.4	3912.5	3528.7	3288.3	3282.5	3355.7	3475.9	3546.2
47.5°	19647.7	17924.4	12520.2	4636.5	3824.6	3320.5	3074.4	3086.1	3150.5	3259.0	3308.8
50°	22892.0	20770.2	12722.4	4507.4	3824.6	3209.2	2883.8	2942.5	2995.3	3077.3	3106.6
52.5°	26781.1	23501.6	12054.1	4390.3	3848.1	3223.8	2722.7	2848.7	2886.8	2957.1	2968.8
55°	30385.9	24841.0	10363.1	4229.0	3853.9	3314.6	2584.9	2772.5	2842.8	2869.2	2866.3
57.5°	32478.5	24380.9	8379.0	3956.5	3830.5	3376.2	2497.0	2678.7	2813.5	2831.0	2804.7
60°	32079.9	22766.0	6169.2	3748.4	3657.6	3352.8	2470.7	2535.1	2749.0	2775.4	2740.2
62.5°	29008.5	20058.0	4281.8	3587.2	3276.6	3250.2	2461.8	2309.4	2608.3	2672.8	2623.0
65°	23317.0	15790.8	3024.6	3089.0	2872.2	3027.4	2414.9	2075.0	2438.4	2526.3	2450.1
67.5°	16916.3	10685.5	2183.4	2502.8	2602.5	2666.9	2309.4	1905.0	2245.0	2362.2	2262.5
70°	10855.5	5770.6	1532.8	1652.9	2192.2	2265.5	2127.7	1752.5	2048.6	2183.4	2075.0
72.5°	7716.6	3408.4	1102.0	1157.6	1761.4	1887.4	1872.8	1582.6	1820.0	1984.1	1855.1
75°	5325.2	1878.6	744.5	826.5	1277.8	1532.8	1444.8	1359.9	1541.6	1708.6	1582.6
77.5°	3338.1	841.1	445.5	574.4	838.1	1204.6	990.6	1052.2	1201.6	1356.9	1225.1
80°	1858.1	325.3	249.1	381.0	457.2	876.3	548.1	677.0	885.1	996.4	890.9
82.5°	404.5	41.0	111.4	164.1	178.8	509.9	290.2	392.7	556.9	548.1	474.8
85°	0.0	0.0	20.5	23.5	11.7	219.8	105.5	128.9	181.7	169.9	128.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	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: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8
2.5°	5275.4	5131.8	5026.2	4973.5	4929.5	4970.5	4994.0	4994.0	5093.6	5152.3	5175.7
5°	4780.1	4522.1	4325.8	4193.9	4114.8	4141.1	4170.4	4202.7	4328.7	4413.6	4469.4
7.5°	4437.1	4041.5	3742.6	3557.9	3461.2	3475.9	3496.4	3522.7	3645.8	3730.8	3804.1
10°	4372.6	3804.1	3382.1	3138.9	3021.6	3001.1	2989.3	2980.6	3053.8	3118.4	3176.9
12.5°	4636.5	3815.9	3226.7	2930.8	2787.2	2725.6	2655.3	2599.6	2611.3	2652.3	2725.6
15°	5108.3	3965.3	3176.9	2822.3	2643.6	2541.0	2458.9	2391.5	2376.9	2391.5	2403.2
17.5°	5647.5	4167.5	3171.0	2728.5	2505.8	2400.2	2332.9	2271.3	2250.8	2253.8	2268.4
20°	6005.1	4328.7	3153.5	2623.0	2373.9	2280.1	2221.5	2160.0	2139.5	2145.3	2148.2
22.5°	6040.2	4413.6	3127.1	2505.8	2242.0	2162.9	2104.2	2048.6	2045.7	2045.7	2063.2
25°	5849.8	4413.6	3071.4	2400.2	2116.0	2045.7	1992.9	1925.5	1937.2	1943.1	1966.6
27.5°	5553.8	4308.2	2965.9	2315.3	2007.6	1934.3	1881.5	1820.0	1834.6	1843.5	1869.8
30°	5260.7	4173.4	2839.9	2218.6	1905.0	1820.0	1781.9	1729.2	1735.0	1746.7	1776.0
32.5°	4988.2	4029.8	2690.4	2139.5	1802.4	1717.4	1688.1	1629.4	1638.3	1650.0	1682.2
35°	4718.5	3871.5	2514.5	2045.7	1708.6	1623.6	1600.2	1532.8	1538.6	1556.3	1591.4
37.5°	4428.3	3704.5	2370.9	1951.9	1617.8	1529.8	1506.4	1436.0	1442.0	1462.5	1503.5
40°	4123.6	3540.4	2230.3	1852.3	1521.1	1433.2	1412.7	1336.4	1342.2	1365.7	1409.7
42.5°	3815.9	3361.6	2121.9	1723.2	1421.4	1327.6	1307.1	1236.8	1245.6	1271.9	1315.9
45°	3531.5	3147.6	2051.5	1579.6	1327.6	1222.1	1201.6	1137.1	1154.7	1184.0	1227.9
47.5°	3288.3	2927.8	2022.2	1459.5	1227.9	1113.7	1096.1	1043.3	1072.7	1104.8	1140.1
50°	3080.2	2716.8	1984.1	1336.4	1134.2	1019.9	1002.3	967.2	1005.2	1037.5	1069.7
52.5°	2930.8	2476.5	1902.1	1225.1	1052.2	940.7	934.9	917.3	952.5	981.8	1011.1
55°	2801.8	2227.3	1770.2	1128.3	978.9	873.4	879.2	870.4	899.7	923.2	949.6
57.5°	2684.6	2010.5	1603.1	1052.2	899.7	814.8	832.3	820.6	835.3	849.9	882.1
60°	2543.8	1790.7	1403.8	967.2	806.0	756.1	776.6	744.5	741.5	747.3	756.1
62.5°	2335.8	1494.7	1195.8	861.6	723.9	691.7	700.5	638.9	592.0	592.0	600.8
65°	2045.7	1201.6	1002.3	744.5	630.1	603.7	597.9	509.9	445.5	439.6	466.0
67.5°	1708.6	987.7	832.3	627.2	524.6	507.1	512.9	448.4	384.0	378.0	407.3
70°	1392.1	817.6	671.2	501.1	404.5	422.0	448.4	384.0	322.4	313.5	340.0
72.5°	1131.3	650.7	524.6	384.0	298.9	348.8	381.0	313.5	255.0	249.1	272.5
75°	873.4	477.8	375.2	260.9	216.9	269.7	298.9	228.6	181.7	172.9	193.4
77.5°	583.2	296.0	211.0	164.1	128.9	184.6	199.3	120.1	105.5	102.6	117.3
80°	354.6	137.8	90.8	79.1	44.0	67.4	79.1	49.8	55.7	58.6	70.3
82.5°	178.8	38.1	14.7	3.0	0.0	0.0	23.5	11.7	23.5	29.3	44.0
85°	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	14.7	26.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7
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: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8
2.5°	5339.8	5462.9	5580.1	5767.7	5961.1	6151.6	6345.1	6532.6	6600.1	6649.9	6761.2
5°	4724.3	4955.9	5225.6	5597.7	5996.2	6406.6	6822.8	7203.8	7376.7	7493.9	7757.7
7.5°	4088.4	4390.3	4777.1	5336.9	5961.1	6614.7	7268.3	7869.0	8147.4	8373.1	8774.6
10°	3458.2	3786.6	4276.0	4914.9	5758.9	6696.7	7599.5	8425.9	8786.4	9070.6	9615.7
12.5°	2904.3	3212.0	3725.0	4431.3	5442.3	6632.3	7789.9	8783.4	9208.4	9527.9	10125.7
15°	2514.5	2731.4	3185.7	3947.7	5067.3	6424.2	7801.7	8953.4	9419.4	9753.5	10272.2
17.5°	2297.7	2370.9	2666.9	3455.4	4651.0	6151.6	7693.2	9012.0	9510.3	9820.9	10181.4
20°	2180.5	2192.2	2274.3	2816.4	4117.7	5896.6	7590.6	9070.6	9595.2	9856.1	9964.5
22.5°	2086.7	2086.7	2107.2	2303.6	3428.9	5591.9	7558.4	9173.2	9712.5	9873.7	9650.9
25°	2001.7	2001.7	2007.6	2060.4	2716.8	5125.8	7537.8	9331.5	9873.7	9917.6	9305.2
27.5°	1913.8	1916.7	1916.7	1946.0	2189.3	4492.8	7449.9	9536.6	10067.1	9976.2	8974.0
30°	1825.8	1831.7	1831.7	1852.3	1937.2	3751.4	7277.0	9782.8	10319.2	10052.5	8645.7
32.5°	1737.9	1743.8	1743.8	1761.4	1823.0	2995.3	7060.2	10008.5	10574.1	10084.7	8340.9
35°	1647.1	1655.9	1650.0	1673.4	1737.9	2382.7	6784.7	10234.1	10849.6	10187.3	8191.4
37.5°	1556.3	1562.1	1559.1	1582.6	1655.9	2057.4	6465.2	10404.2	11224.8	10415.8	8370.2
40°	1465.3	1462.5	1462.5	1488.8	1567.9	1963.6	6063.7	10673.7	11764.0	10817.3	9149.8
42.5°	1371.6	1371.6	1365.7	1395.0	1491.8	1893.3	5679.7	11157.3	12549.5	11456.3	10533.1
45°	1286.6	1283.7	1271.9	1298.4	1418.5	1770.2	5544.9	12060.0	13710.0	12490.9	12206.5
47.5°	1204.6	1201.6	1172.3	1195.8	1330.6	1658.8	6049.0	13537.1	15319.0	14011.9	13774.5
50°	1131.3	1134.2	1078.5	1099.0	1242.6	1573.8	7142.2	15453.8	17455.5	16060.4	15260.4
52.5°	1063.8	1063.8	990.6	1002.3	1134.2	1497.6	8182.7	17531.7	20274.9	18917.9	16992.4
55°	996.4	990.6	908.6	914.4	1025.7	1389.2	8338.0	19559.8	24120.0	23217.4	19360.5
57.5°	920.2	908.6	832.3	832.3	926.1	1310.1	7227.2	21118.9	28891.3	29536.0	22774.8
60°	826.5	817.6	767.8	753.2	847.0	1380.4	5099.5	21300.6	31968.5	37938.4	29313.3
62.5°	706.3	718.0	691.7	671.2	770.8	1433.2	3021.6	19838.2	31224.2	40611.3	37144.3
65°	556.9	603.7	597.9	583.2	847.0	1207.4	1784.8	17030.6	28941.1	38454.3	35547.0
67.5°	474.8	507.1	498.3	498.3	888.1	917.3	1122.5	13305.5	25799.4	35895.7	31751.6
70°	404.5	436.6	404.5	404.5	671.2	556.9	776.6	9290.5	22408.4	33064.7	29260.6
72.5°	334.2	366.3	331.2	307.7	536.3	416.2	568.6	5805.8	19190.5	30116.3	27554.9
75°	255.0	293.0	266.7	237.4	354.6	310.7	430.8	3373.3	15899.3	25767.1	25125.2
77.5°	161.2	211.0	199.3	167.1	260.9	225.7	310.7	2007.6	12268.1	20134.2	21611.3
80°	99.6	108.4	111.4	105.5	149.4	152.4	211.0	1143.0	8396.6	14032.4	16884.0
82.5°	64.5	64.5	49.8	55.7	73.3	87.9	120.1	430.8	4935.4	8543.1	11752.2
85°	46.8	41.0	26.3	26.3	35.2	44.0	46.8	131.9	2001.7	3373.3	4595.4
87.5°	23.5	20.5	8.8	11.7	17.6	14.7	11.7	5.8	504.1	1078.5	756.1
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: P969338

CATALOG NUMBER: NAV-SB5D-740-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8	5890.8
2.5°	6819.8	6910.7	6916.6	6916.6	6837.5	6834.5	6673.3	6655.7
5°	8030.3	8088.9	8103.5	8074.2	7916.0	7798.7	7485.2	7417.7
7.5°	9138.1	9255.2	9255.2	9184.9	8927.0	8686.7	8232.5	8062.4
10°	10023.2	10158.0	10128.6	9985.0	9659.7	9328.5	8777.6	8554.9
12.5°	10454.0	10591.7	10515.5	10351.4	10034.9	9686.1	9105.8	8853.7
15°	10445.2	10407.0	10327.9	10307.4	10155.0	9891.2	9349.0	9073.6
17.5°	10073.0	9750.6	9689.0	9894.2	10087.6	10023.2	9560.1	9302.2
20°	9483.9	8921.2	8865.5	9258.2	9809.1	10090.5	9756.5	9519.1
22.5°	8862.6	8255.9	8126.9	8560.7	9390.1	10111.1	10005.5	9768.1
25°	8273.5	7663.9	7535.0	7939.3	8924.1	10075.9	10275.2	10073.0
27.5°	7781.1	7192.0	7071.9	7476.4	8475.7	9976.2	10544.8	10401.2
30°	7400.1	6855.0	6767.0	7156.9	8088.9	9853.1	10887.8	10808.6
32.5°	7177.4	6778.8	6811.0	7130.5	7880.8	9718.3	11216.0	11254.1
35°	7397.2	7414.7	7696.1	7828.0	8074.2	9697.8	11661.4	11810.9
37.5°	8490.4	9099.9	9683.2	9574.7	9020.8	9935.2	12326.8	12605.1
40°	10351.4	11602.8	12549.5	12136.2	10741.2	10662.0	13285.0	13701.2
42.5°	12625.6	14747.5	16306.6	15198.8	12959.8	11934.0	14653.7	15184.1
45°	15025.9	18624.9	21080.9	18777.3	15324.9	13715.8	16725.7	17141.9
47.5°	17555.2	23337.5	26514.4	22745.5	17517.0	15743.9	19551.0	19647.7
50°	20321.8	28504.4	32053.5	26710.8	19633.1	18068.0	23003.4	22892.0
52.5°	22956.5	33817.8	37475.4	30693.6	21491.2	20951.9	27009.7	26781.1
55°	25471.0	39128.4	42929.6	34521.2	23243.7	24761.8	31769.3	30385.9
57.5°	28387.2	43902.5	48550.7	38366.4	25693.8	29708.9	37091.5	32478.5
60°	32698.3	49327.3	54907.5	43635.8	30353.7	34908.1	38999.4	32079.9
62.5°	38202.3	54315.5	59529.2	48799.8	35034.1	35886.9	36188.9	29008.5
65°	39272.0	55578.6	59790.1	50180.2	34430.4	30441.6	29544.8	23317.0
67.5°	36435.0	53295.6	56144.3	47609.9	30456.2	23525.1	22171.1	16916.3
70°	33252.2	48943.4	49790.4	43240.1	26786.9	17303.1	14973.2	10855.5
72.5°	29990.3	43137.6	41385.0	37551.6	23542.6	12599.3	10799.8	7716.6
75°	26115.9	35503.0	32598.7	31200.7	19492.3	9888.3	7813.4	5325.2
77.5°	20913.8	24990.4	24213.8	24184.5	14647.9	7224.3	5213.8	3338.1
80°	14753.3	16218.7	15823.0	18214.6	9826.8	5240.2	3138.9	1858.1
82.5°	7142.2	8968.0	9205.4	10846.7	4780.1	3083.1	723.9	404.5
85°	2795.9	4325.8	3648.8	4117.7	1342.2	858.7	17.6	0.0
87.5°	313.5	501.1	460.1	363.4	164.1	35.2	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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