

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: P965633

Luminaire Tested: **NAV-SB4A-735-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-735-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14194.2 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 114
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



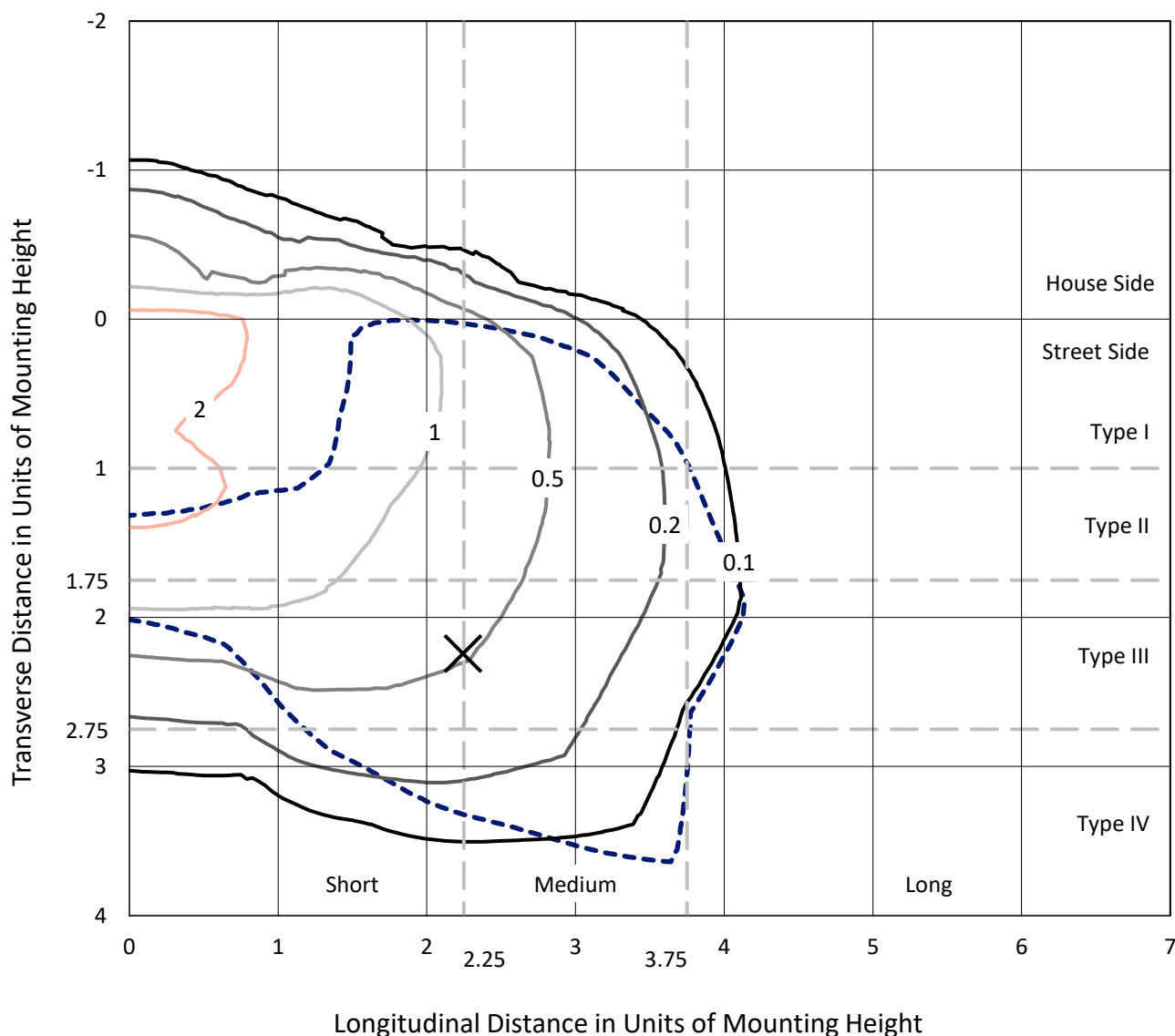
REPORT NUMBER: P965633

CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

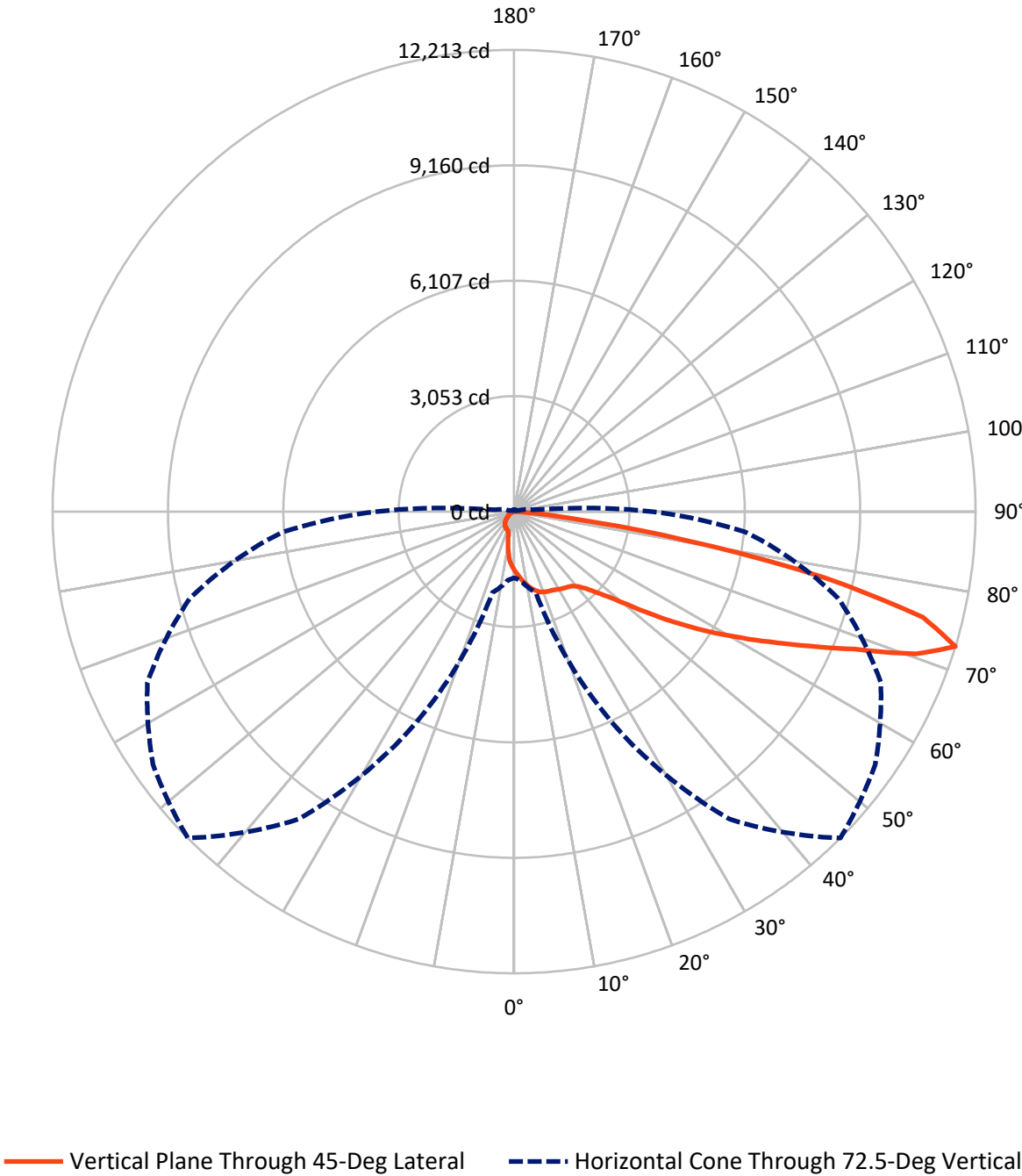


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc

Type IV - Short - N/A

REPORT NUMBER: P965633
CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965633

CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

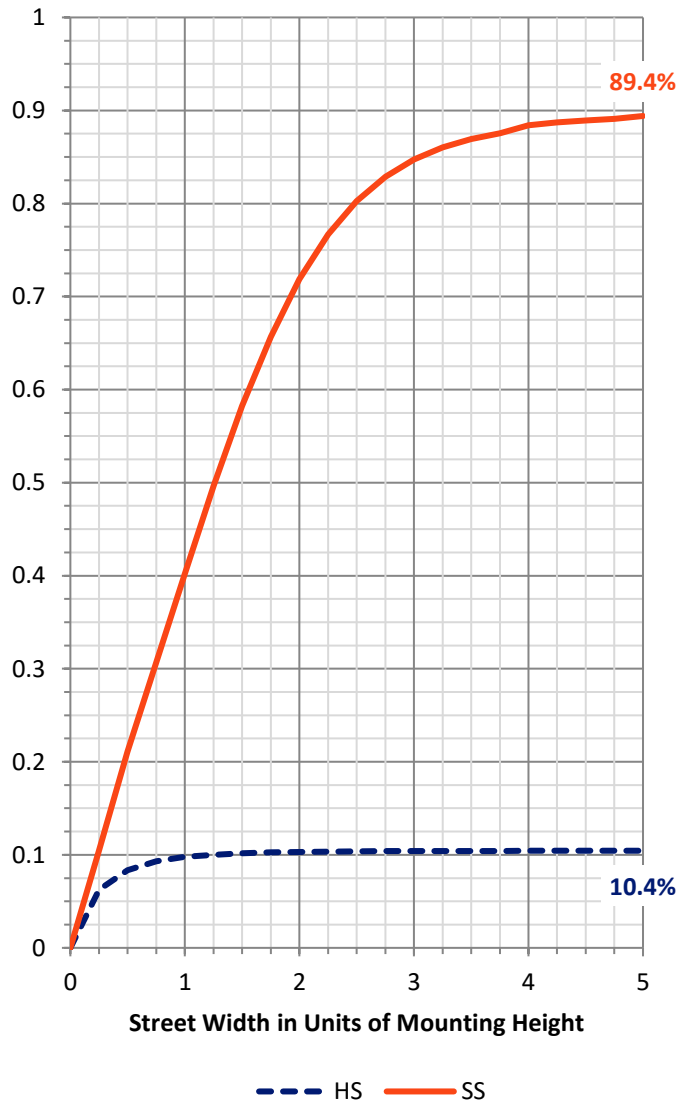
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1491.4	0.0	1491.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	12702.8	0.0	12702.8
	% Fixture	89.5	0.0	89.5
Total	Lumens	14194.2	0.0	14194.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	1.0
10°-20°	428.2	3.0
20°-30°	703.2	5.0
30°-40°	997.2	7.0
40°-50°	1648.3	11.6
50°-60°	2961.1	20.9
60°-70°	4111.6	29.0
70°-80°	2982.4	21.0
80°-90°	215.6	1.5
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°	14194.2	100.0
0°-180°	14194.2	100.0

Coefficient of Utilization



REPORT NUMBER: P965633

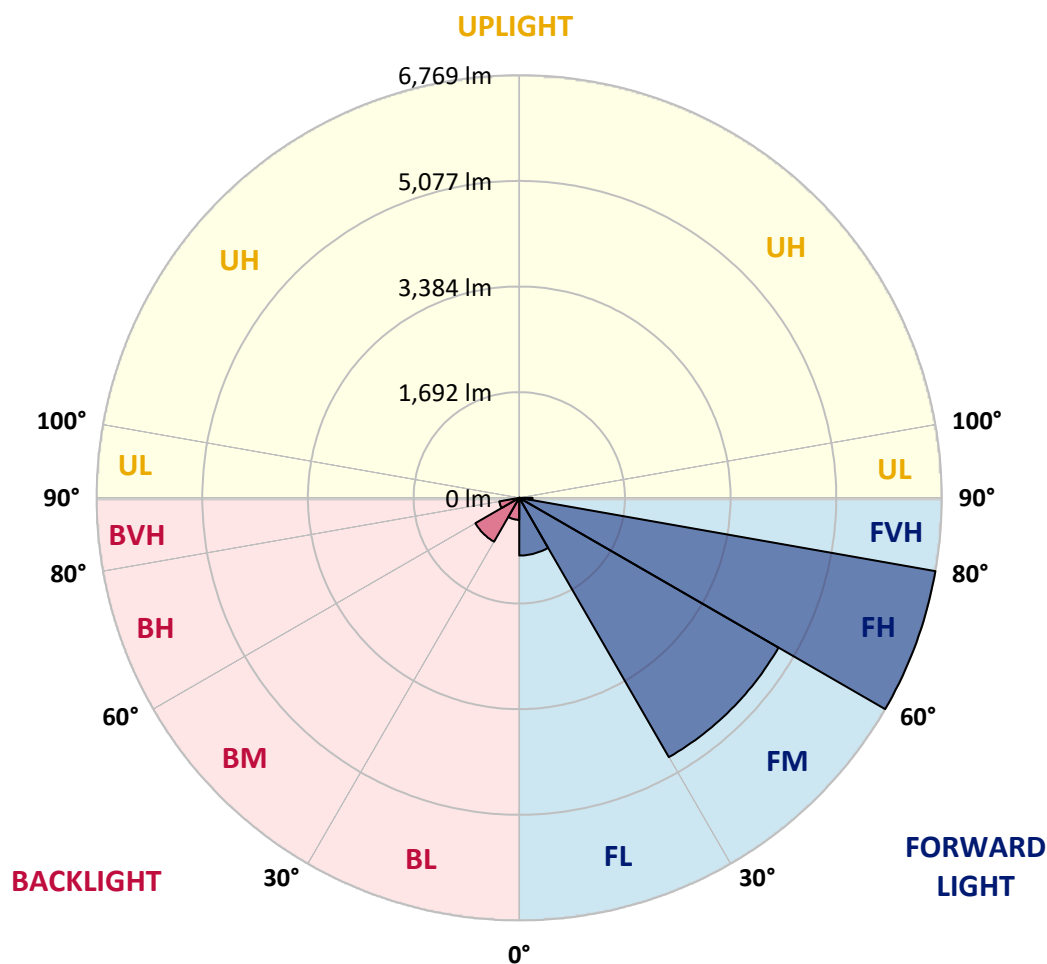
CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	924.6	6.5			
FM	(30°-60°)	4795.6	33.8			
FH	(60°-80°)	6768.8	47.7			G3/7500
FVH	(80°-90°)	213.8	1.5			G2/225
BL	(0°-30°)	353.3	2.5	B1/500		
BM	(30°-60°)	811.1	5.7	B1/1000		
BH	(60°-80°)	325.2	2.3	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



REPORT NUMBER: P965633

CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1698.4	1701.3	1699.3	1687.8	1668.4	1657.7	1651.9	1632.5	1619.9	1597.7	1574.4
5°	1854.4	1866.0	1859.2	1836.0	1799.2	1773.0	1765.3	1725.5	1689.7	1648.0	1599.6
7.5°	2020.1	2025.9	2013.3	1983.3	1933.9	1889.3	1882.5	1827.3	1770.1	1706.1	1640.3
10°	2163.5	2170.2	2150.9	2107.3	2051.0	1995.9	1986.1	1925.2	1857.3	1778.8	1694.5
12.5°	2283.6	2290.4	2265.1	2212.9	2150.9	2093.7	2084.0	2020.1	1945.4	1858.2	1753.6
15°	2374.6	2387.2	2353.3	2297.1	2230.3	2173.1	2168.3	2105.4	2032.7	1935.7	1824.3
17.5°	2427.9	2440.5	2408.5	2340.8	2283.6	2235.1	2229.4	2177.0	2109.1	2016.2	1893.2
20°	2436.6	2448.3	2414.4	2355.2	2307.8	2269.0	2266.2	2228.4	2178.9	2089.8	1967.7
22.5°	2410.5	2425.0	2394.0	2346.5	2313.6	2293.2	2289.4	2268.1	2239.9	2164.4	2037.5
25°	2383.3	2395.0	2371.7	2330.1	2312.6	2310.7	2313.6	2309.7	2303.9	2239.9	2118.9
27.5°	2381.5	2394.0	2367.9	2328.2	2318.4	2338.8	2341.7	2360.2	2365.0	2308.8	2197.4
30°	2397.9	2406.6	2381.5	2339.8	2335.0	2381.5	2382.4	2415.3	2423.1	2366.9	2274.9
32.5°	2433.8	2443.4	2418.3	2357.2	2350.4	2415.3	2418.3	2461.8	2474.5	2428.9	2356.3
35°	2518.0	2529.7	2500.6	2405.7	2381.5	2447.3	2456.0	2507.4	2532.6	2494.7	2440.5
37.5°	2728.2	2694.4	2654.6	2503.5	2452.2	2497.7	2512.3	2572.3	2616.8	2573.3	2541.3
40°	3250.5	3143.9	3020.0	2670.1	2576.1	2605.2	2616.8	2676.9	2738.0	2695.3	2679.9
42.5°	4034.3	3908.3	3708.8	3053.8	2763.2	2777.6	2786.5	2838.7	2924.9	2891.0	2894.9
45°	4732.8	4687.3	4483.9	3708.8	3112.9	3041.2	3051.8	3079.0	3205.9	3193.3	3218.5
47.5°	5269.6	5243.4	5086.5	4460.6	3703.9	3363.8	3393.9	3406.5	3589.6	3634.1	3702.0
50°	5682.3	5672.7	5532.1	5129.1	4476.1	3839.5	3850.2	3823.0	4097.2	4207.7	4336.6
52.5°	6071.8	6104.7	6001.1	5750.1	5300.6	4462.5	4460.6	4332.7	4702.8	4869.5	5089.3
55°	6423.5	6435.2	6445.7	6383.8	6129.9	5171.7	5153.3	4944.1	5405.2	5577.6	5816.1
57.5°	6753.8	6758.7	6853.7	6980.6	6993.2	5933.2	5899.3	5648.4	6172.5	6295.5	6441.9
60°	6975.7	6998.0	7198.6	7551.2	7705.2	6719.0	6700.5	6444.8	6953.4	7010.6	6983.4
62.5°	6656.0	6791.6	7297.4	7996.8	8377.6	7590.0	7581.2	7340.9	7775.0	7728.5	7496.0
65°	5387.8	5617.4	6506.8	8298.2	9037.4	8562.7	8575.3	8319.5	8618.9	8467.7	7912.6
67.5°	3768.8	4011.0	5063.2	8322.4	9774.7	9705.0	9777.7	9376.5	9515.1	9176.0	8011.4
70°	2606.2	2731.2	3416.1	7801.2	10349.2	11278.4	11276.4	10674.8	10406.4	9498.6	7507.6
72.5°	1752.6	1817.5	2218.7	6189.1	9926.8	12213.3	12157.1	11666.9	10706.7	8883.4	6133.8
75°	739.2	786.7	1026.9	3478.1	7853.6	11173.7	11021.6	10310.5	9513.1	6995.1	3826.9
77.5°	234.4	254.8	405.0	1245.0	4325.9	8399.0	8238.1	6438.9	6376.0	3509.2	1399.0
80°	111.4	129.9	227.7	499.9	1702.3	4568.1	4545.9	2921.0	2742.8	947.5	281.0
82.5°	48.5	57.2	126.0	267.4	761.5	1629.6	1662.6	994.0	822.6	359.5	86.2
85°	15.5	20.3	58.1	123.0	321.6	405.0	400.2	236.4	331.4	195.7	30.0
87.5°	0.0	0.0	19.4	28.1	32.9	23.3	26.1	20.3	92.0	54.2	10.7
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: P965633

CATALOG NUMBER: NAV-SB4A-735-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1562.7	1547.2	1520.1	1495.0	1472.6	1450.4	1436.8	1417.5	1415.5	1415.5	1420.3
5°	1573.4	1548.3	1499.8	1448.4	1389.3	1333.1	1276.9	1222.7	1205.3	1192.7	1198.4
7.5°	1604.4	1564.7	1488.2	1390.3	1277.9	1154.9	1068.7	975.6	939.8	920.4	923.3
10°	1649.0	1594.7	1478.5	1307.0	1124.8	957.2	834.1	733.4	694.6	678.2	678.2
12.5°	1698.4	1631.6	1461.0	1203.4	957.2	756.7	636.5	590.0	584.2	584.2	584.2
15°	1757.5	1676.1	1431.0	1081.3	781.9	598.7	556.2	558.0	563.9	567.7	567.7
17.5°	1818.6	1723.5	1383.5	944.6	626.9	538.6	539.7	542.5	547.3	551.2	551.2
20°	1884.5	1771.1	1320.5	799.3	537.7	521.2	524.2	527.1	530.9	532.9	533.8
22.5°	1955.2	1815.6	1246.0	656.9	507.7	506.7	507.7	510.6	515.5	515.5	517.3
25°	2030.7	1865.0	1160.7	553.2	492.2	492.2	494.2	496.1	499.9	499.9	500.9
27.5°	2108.2	1910.6	1070.6	499.0	478.6	477.6	477.6	480.5	482.5	483.5	484.4
30°	2193.5	1963.9	980.5	487.3	467.9	463.1	460.2	462.2	464.1	465.0	467.0
32.5°	2280.6	2015.3	900.1	492.2	457.3	448.5	438.9	437.0	437.0	440.9	443.7
35°	2377.6	2071.4	838.0	508.6	451.5	427.2	411.7	403.0	404.1	409.8	412.8
37.5°	2493.8	2139.2	792.5	523.2	447.6	403.0	377.8	367.2	360.4	367.2	365.2
40°	2645.9	2239.0	759.6	534.8	442.8	374.9	341.0	323.6	311.0	314.9	312.9
42.5°	2869.7	2395.9	747.0	535.8	432.1	342.0	303.3	280.0	261.6	262.6	258.7
45°	3183.6	2644.0	811.9	523.2	408.9	306.2	263.5	232.6	220.9	218.0	214.1
47.5°	3613.8	3005.4	962.1	497.0	374.9	271.3	224.8	198.6	189.9	185.0	182.1
50°	4190.3	3469.4	1128.7	467.9	341.0	238.3	192.8	176.3	170.6	165.6	164.7
52.5°	4858.8	3940.3	1265.4	438.9	307.1	209.3	172.4	162.8	158.0	154.1	153.0
55°	5472.1	4264.9	1257.6	407.8	274.2	186.0	158.0	152.1	146.3	142.4	140.5
57.5°	5853.8	4310.4	1036.7	374.0	236.4	167.6	144.3	140.5	133.7	128.8	127.9
60°	6029.2	4050.8	726.6	329.4	198.6	150.2	129.9	127.9	119.2	112.3	110.5
62.5°	6061.1	3568.2	484.4	274.2	165.6	133.7	115.3	112.3	100.8	89.2	83.3
65°	5931.3	2878.4	335.2	214.1	141.4	116.2	98.8	93.0	80.5	68.8	64.9
67.5°	5520.5	2021.0	233.5	154.1	120.1	92.0	78.5	76.6	66.8	57.2	54.2
70°	4767.7	1152.0	156.0	115.3	94.9	62.9	62.0	64.0	54.2	46.5	42.6
72.5°	3655.5	527.1	96.9	84.3	64.9	42.6	49.4	50.4	41.6	34.8	31.0
75°	2151.8	225.7	61.0	54.2	32.9	28.1	35.9	36.8	28.1	22.2	19.4
77.5°	732.5	85.3	38.7	32.0	16.5	15.5	23.3	23.3	15.5	8.7	6.8
80°	166.7	32.0	19.4	12.6	7.8	6.8	7.8	6.8	3.9	0.9	0.0
82.5°	47.5	12.6	7.8	4.8	2.9	2.9	0.9	0.0	0.0	0.0	0.0
85°	13.5	5.8	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

(END OF REPORT)