

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: P967739

Luminaire Tested: **NAV-SB5A-735-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967739
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17585.9 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 141.7
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



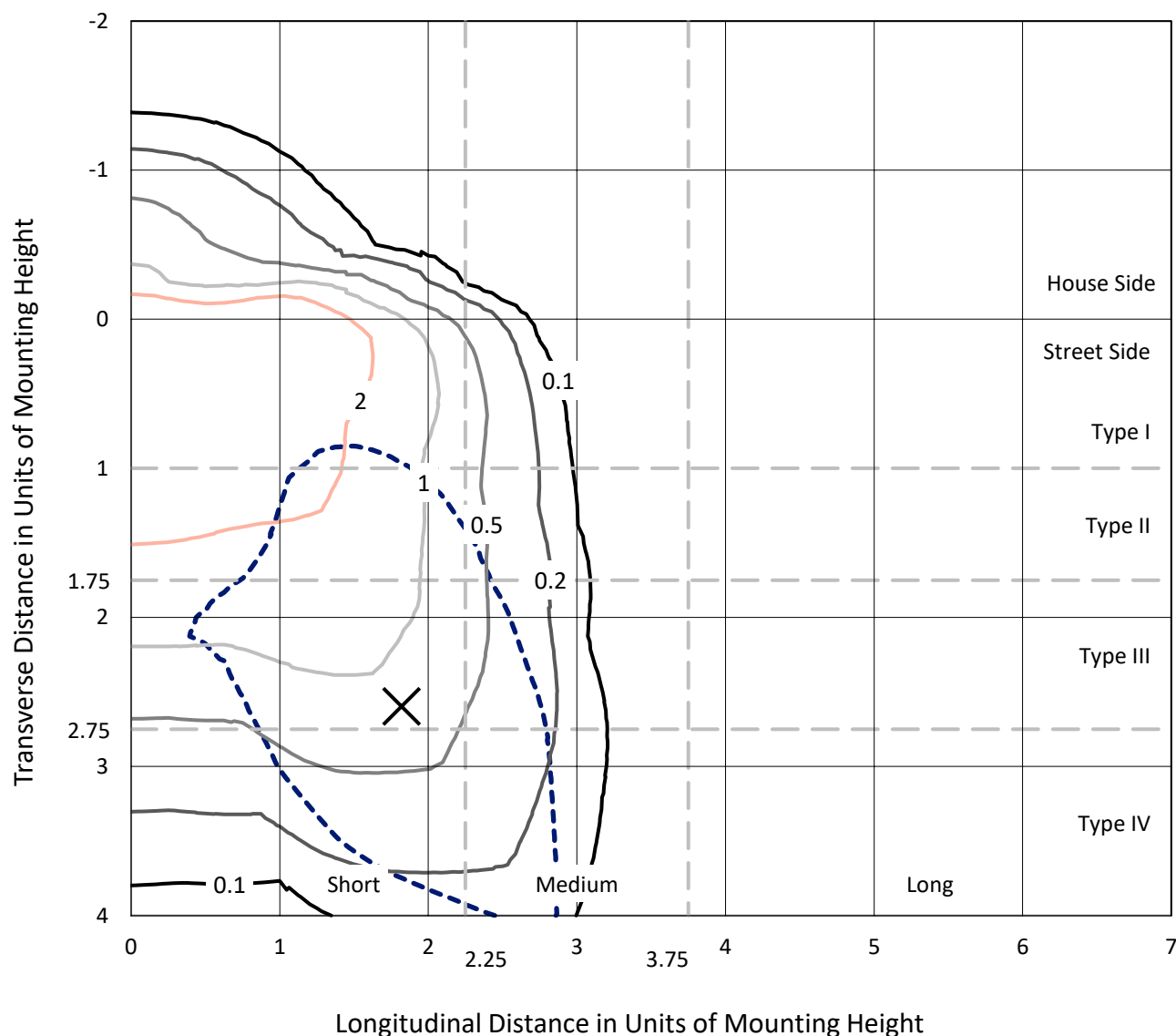
REPORT NUMBER: P967739

CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

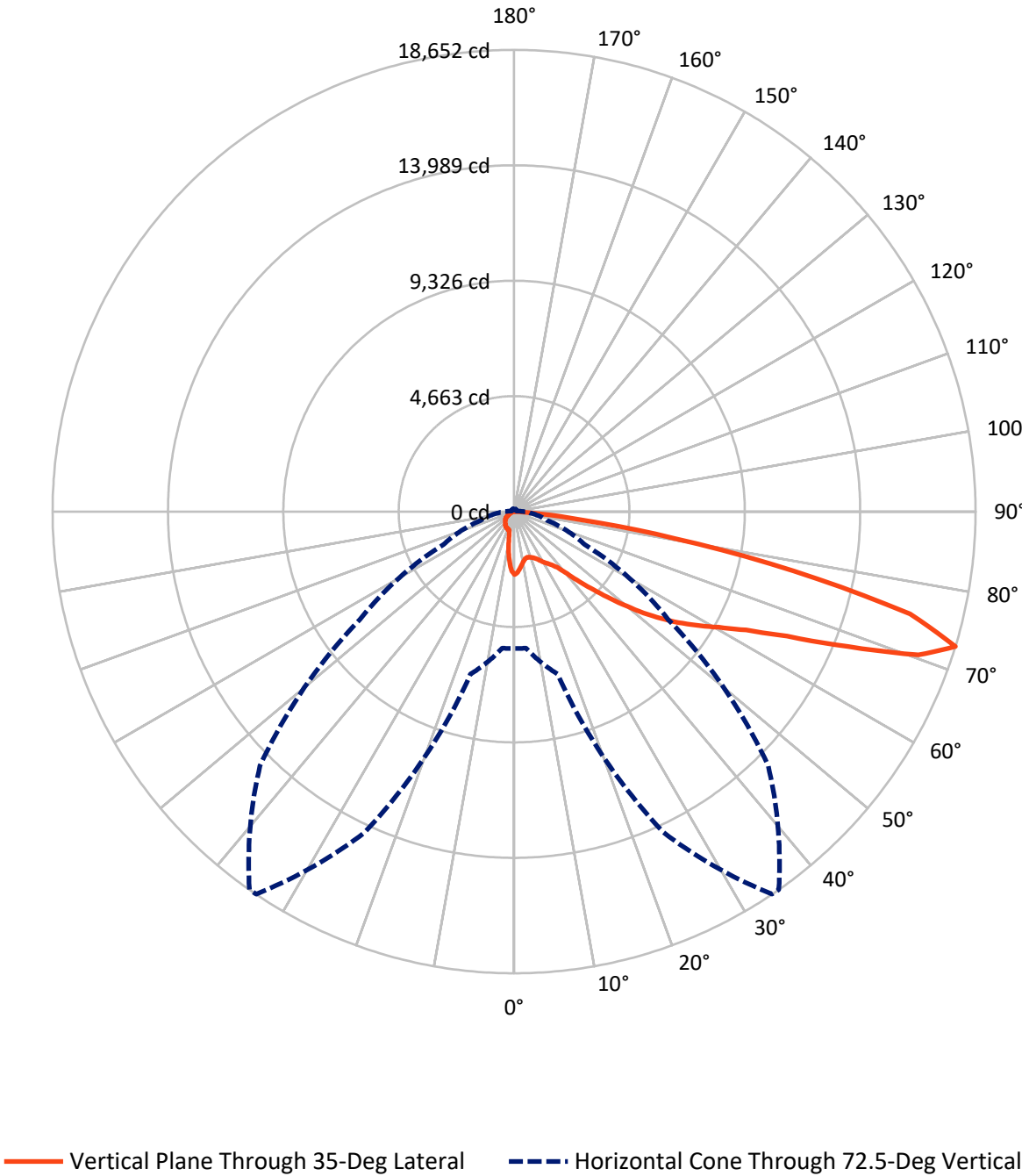


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc

Type IV - Short - N/A

REPORT NUMBER: P967739
CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P967739

CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

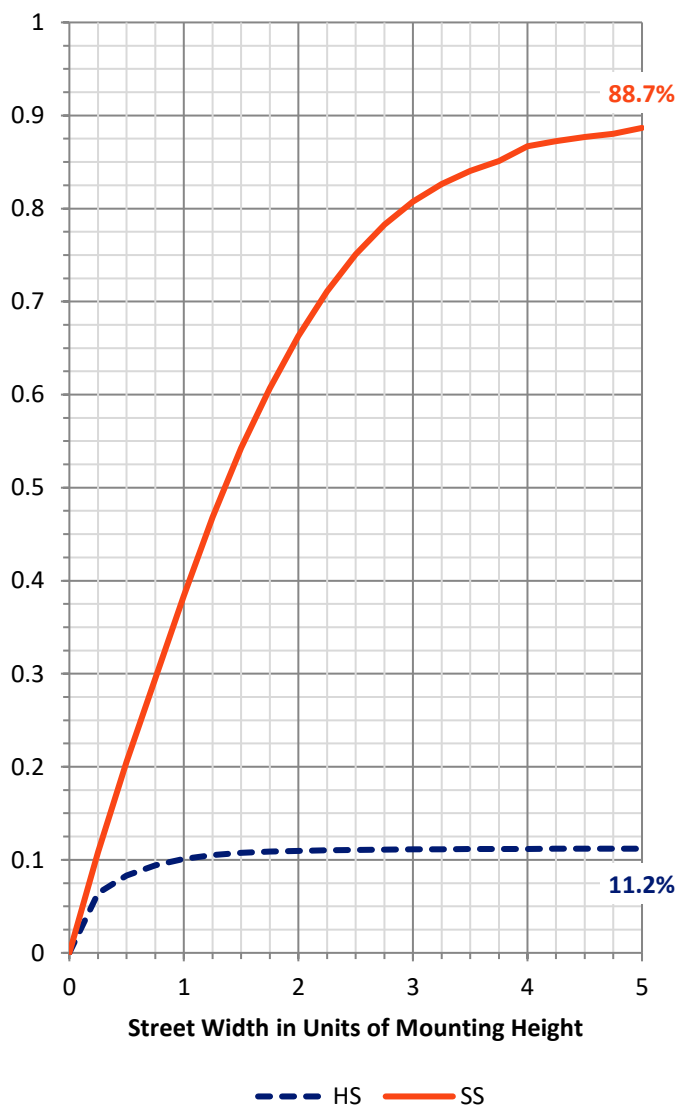
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1979.2	0.0	1979.2
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	15606.7	0.0	15606.7
	% Fixture	88.7	0.0	88.7
Total	Lumens	17585.9	0.0	17585.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.4	1.2
10°-20°	490.0	2.8
20°-30°	795.9	4.5
30°-40°	1328.0	7.6
40°-50°	2512.6	14.3
50°-60°	3992.6	22.7
60°-70°	4939.1	28.1
70°-80°	3070.2	17.5
80°-90°	248.1	1.4
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°	17585.9	100.0
0°-180°	17585.9	100.0

Coefficient of Utilization



REPORT NUMBER: P967739

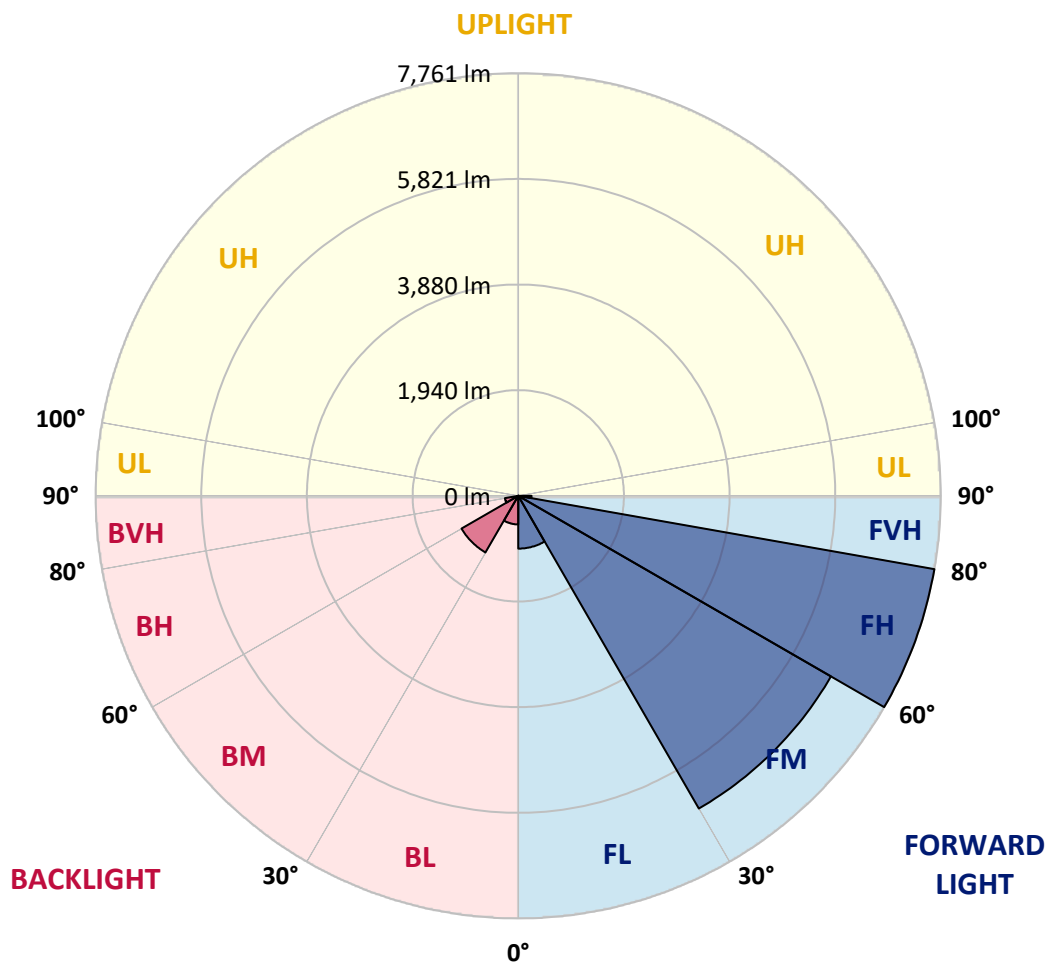
CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	969.4	5.5			
FM	(30°-60°)	6631.6	37.7			
FH	(60°-80°)	7760.9	44.1			G4/12000
FVH	(80°-90°)	244.7	1.4			G3/500
BL	(0°-30°)	525.9	3.0	B2/1000		
BM	(30°-60°)	1201.6	6.8	B2/2500		
BH	(60°-80°)	248.4	1.4	B1/500		G1/500
BVH	(80°-90°)	3.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short



REPORT NUMBER: P967739

CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2435.4	2456.0	2459.9	2466.4	2466.4	2474.0	2487.0	2505.0	2534.6	2550.1	2560.3
5°	2244.6	2260.1	2279.5	2295.0	2324.6	2328.5	2378.7	2427.7	2496.0	2547.5	2583.6
7.5°	2052.7	2070.7	2096.5	2133.8	2172.5	2184.2	2260.1	2342.6	2450.9	2547.5	2608.1
10°	1917.4	1918.7	1941.9	1979.3	2041.1	2055.2	2148.1	2265.4	2400.7	2532.1	2631.3
12.5°	1841.4	1850.4	1860.7	1889.1	1948.3	1957.3	2056.6	2194.4	2350.3	2523.0	2658.3
15°	1841.4	1847.8	1854.2	1868.5	1916.1	1923.8	2011.5	2149.3	2324.6	2526.9	2702.1
17.5°	1860.7	1871.0	1865.8	1882.6	1932.8	1938.0	2015.4	2136.4	2323.3	2551.3	2769.1
20°	1907.1	1914.8	1904.6	1914.8	1965.0	1975.4	2055.2	2160.9	2345.2	2593.9	2852.9
22.5°	1980.5	1984.4	1959.9	1967.7	2019.1	2032.1	2124.8	2230.5	2398.0	2662.2	2965.0
25°	2073.3	2081.1	2043.6	2052.7	2101.7	2117.1	2224.0	2334.8	2481.8	2756.2	3108.0
27.5°	2180.3	2184.2	2151.9	2150.7	2213.8	2235.6	2343.9	2463.8	2593.9	2874.8	3288.4
30°	2302.7	2314.2	2283.4	2278.2	2358.1	2376.2	2483.1	2622.3	2758.8	3052.7	3544.9
32.5°	2399.3	2408.3	2390.3	2403.2	2484.4	2498.5	2651.9	2846.4	3017.8	3305.2	3894.1
35°	2538.5	2543.6	2502.4	2525.6	2618.4	2654.4	2882.5	3160.9	3343.9	3622.1	4350.2
37.5°	3042.3	3042.3	2867.0	2752.4	2841.3	2873.5	3198.2	3556.4	3745.9	4047.4	4924.9
40°	3739.4	3727.8	3471.4	3236.8	3225.3	3288.4	3648.0	4055.1	4265.1	4557.7	5571.8
42.5°	4482.9	4464.9	4115.7	3883.7	3845.1	3867.0	4167.2	4669.8	4883.7	5180.0	6267.6
45°	5142.6	5137.5	4817.9	4506.1	4436.5	4506.1	4815.3	5388.8	5542.2	5854.0	6962.1
47.5°	5695.5	5695.5	5462.2	5258.7	5222.6	5263.8	5692.8	6186.4	6172.2	6571.7	7638.6
50°	6332.0	6326.9	6105.2	6017.6	6055.0	6113.0	6703.1	7026.6	6824.2	7276.6	8242.9
52.5°	6777.9	6808.8	6732.8	6718.6	6909.3	7009.8	7728.8	7848.6	7408.0	7945.3	8695.3
55°	7130.9	7167.0	7254.6	7353.9	7721.1	7852.5	8722.3	8628.2	7896.4	8525.1	8955.5
57.5°	7630.9	7579.4	7714.7	7910.5	8504.5	8663.1	9684.9	9364.0	8289.4	8995.5	8983.9
60°	8237.8	8245.5	8268.8	8516.1	9286.7	9490.3	10633.2	10059.9	8541.9	9284.1	8669.4
62.5°	8967.1	8978.8	9026.5	9406.5	10336.9	10528.9	11643.5	10629.5	8657.9	9203.0	7857.6
65°	8916.9	8965.9	9498.1	10798.2	11933.5	12122.9	12822.5	11028.9	8482.7	8460.8	6397.7
67.5°	8123.1	8203.1	9093.4	12460.5	14340.5	14551.8	14247.7	11107.5	7726.2	6579.5	4173.7
70°	7081.9	7110.3	8181.1	13955.2	17127.6	17341.6	15523.4	10242.8	5863.0	3669.8	1869.7
72.5°	5530.5	5536.9	6793.3	14301.8	18640.4	18652.0	14522.2	7603.9	3153.1	1409.7	649.4
75°	3950.8	3912.1	4550.0	11598.4	16399.6	16531.1	10887.1	3566.8	1204.8	666.1	323.4
77.5°	2118.4	2160.9	2574.6	6878.4	11329.1	11553.3	5940.3	1028.3	613.4	453.6	213.9
80°	654.6	690.6	1055.3	3149.3	6417.1	6552.4	2202.2	457.5	427.8	323.4	140.4
82.5°	206.1	213.9	492.2	1323.4	2663.5	2725.4	637.9	259.0	292.5	213.9	82.5
85°	59.2	60.6	219.0	493.5	658.5	671.4	179.1	100.6	167.5	132.7	42.5
87.5°	6.5	20.6	82.5	82.5	58.0	56.7	19.4	21.9	47.7	16.7	7.7
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: P967739

CATALOG NUMBER: NAV-SB5A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2554.0	2555.2	2538.5	2510.1	2479.2	2453.4	2421.3	2395.4	2377.4	2372.3	2381.3
5°	2572.0	2563.0	2515.2	2428.9	2325.8	2237.0	2137.7	2059.1	2007.6	1985.7	1993.4
7.5°	2599.1	2573.3	2468.9	2298.8	2101.7	1926.4	1748.5	1610.7	1523.0	1479.3	1485.7
10°	2622.3	2570.7	2391.6	2110.7	1809.1	1543.8	1304.0	1137.9	1045.0	1001.2	1002.6
12.5°	2644.2	2569.4	2291.1	1887.7	1479.3	1154.6	931.6	849.2	823.4	814.4	811.8
15°	2685.4	2573.3	2164.8	1632.6	1150.7	872.4	791.2	789.9	795.1	792.4	791.2
17.5°	2742.1	2577.2	2021.8	1362.0	887.9	769.3	765.4	777.1	784.7	780.8	779.6
20°	2815.6	2592.6	1869.7	1094.0	762.8	743.5	752.6	762.8	769.3	762.8	761.6
22.5°	2918.6	2619.7	1703.4	878.8	722.9	728.1	735.7	747.3	753.8	744.8	743.5
25°	3044.9	2662.2	1539.9	764.1	703.6	710.0	721.6	734.5	742.2	733.2	732.0
27.5°	3208.6	2730.5	1389.1	738.3	684.2	688.1	704.9	724.2	734.5	722.9	722.9
30°	3445.6	2842.6	1258.9	750.0	672.6	663.6	686.9	713.9	725.5	715.1	713.9
32.5°	3760.0	3001.1	1179.1	768.0	667.5	635.3	657.1	692.0	711.2	704.9	704.9
35°	4172.4	3242.1	1148.1	788.6	663.6	605.7	621.0	658.5	692.0	698.4	698.4
37.5°	4672.4	3577.0	1157.1	797.7	652.0	581.2	588.9	621.0	664.9	685.5	690.6
40°	5240.6	3967.5	1208.7	788.6	639.1	560.6	561.8	586.3	624.9	655.9	666.1
42.5°	5826.9	4423.7	1304.0	755.1	627.5	542.5	538.6	555.3	581.2	603.0	612.0
45°	6384.8	4892.7	1398.1	708.7	613.4	524.5	515.5	521.8	527.1	536.1	541.2
47.5°	6871.9	5222.6	1371.0	666.1	594.0	503.8	488.4	485.7	470.4	469.0	467.7
50°	7208.2	5294.7	1217.7	623.7	565.7	480.6	456.1	440.6	413.6	400.8	402.0
52.5°	7315.2	5010.0	994.8	581.2	519.3	449.7	414.9	390.4	356.9	345.3	344.1
55°	7173.5	4452.0	795.1	529.6	454.9	408.5	369.8	337.6	310.6	296.3	296.3
57.5°	6826.8	3742.0	628.8	469.0	386.5	362.1	323.4	291.2	268.0	253.9	251.2
60°	6252.1	2971.5	497.4	396.9	329.8	311.8	271.9	251.2	230.6	213.9	210.0
62.5°	5379.8	2121.0	390.4	314.4	275.7	255.1	232.0	216.5	192.0	168.8	164.9
65°	4198.2	1297.5	301.6	230.6	221.6	211.4	197.1	183.0	153.3	130.2	126.3
67.5°	2648.0	614.7	215.1	173.9	175.3	170.0	163.7	152.0	130.2	109.6	106.9
70°	1166.1	297.7	141.8	132.7	130.2	130.2	135.3	131.4	110.8	91.5	87.6
72.5°	396.9	159.8	105.7	100.6	94.1	92.8	113.4	109.6	88.9	70.8	67.0
75°	207.5	106.9	77.3	72.2	56.7	68.3	90.2	85.1	63.1	46.4	42.5
77.5°	135.3	76.1	52.8	46.4	32.2	45.1	67.0	59.2	37.4	23.2	20.6
80°	85.1	50.2	31.0	21.9	15.5	24.5	36.1	25.7	14.1	5.1	3.9
82.5°	45.1	25.7	11.6	7.7	6.5	7.7	9.0	6.5	2.6	0.0	0.0
85°	18.0	9.0	3.9	2.6	1.3	0.0	2.6	1.3	0.0	0.0	0.0
87.5°	6.5	1.3	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)