

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: P961515

Luminaire Tested: **NAV-SB2A-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961515
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6817.3 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 57.3
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

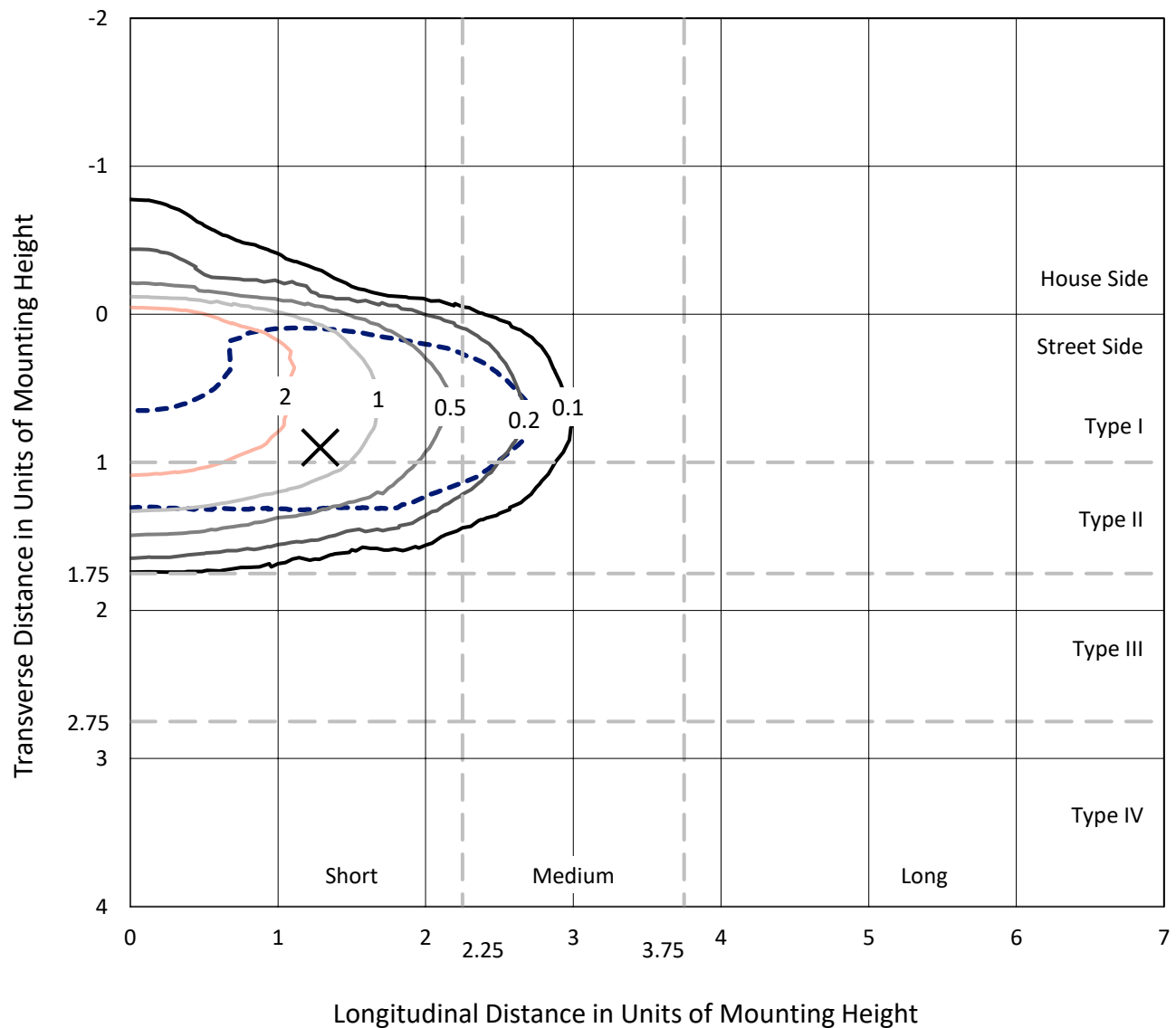


REPORT NUMBER: P961515

CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

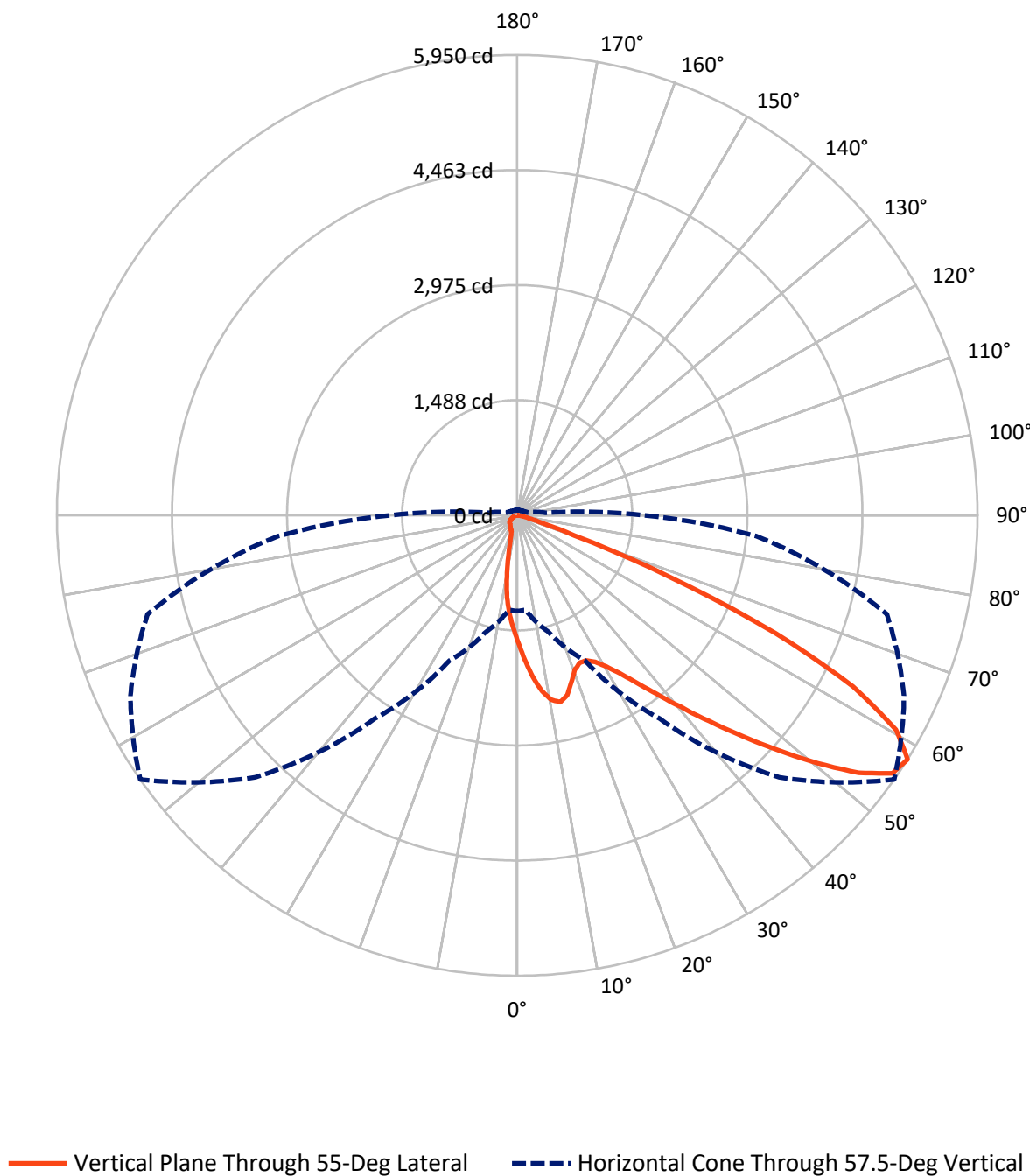


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc

Type II - Short - N/A

REPORT NUMBER: P961515
CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P961515

CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

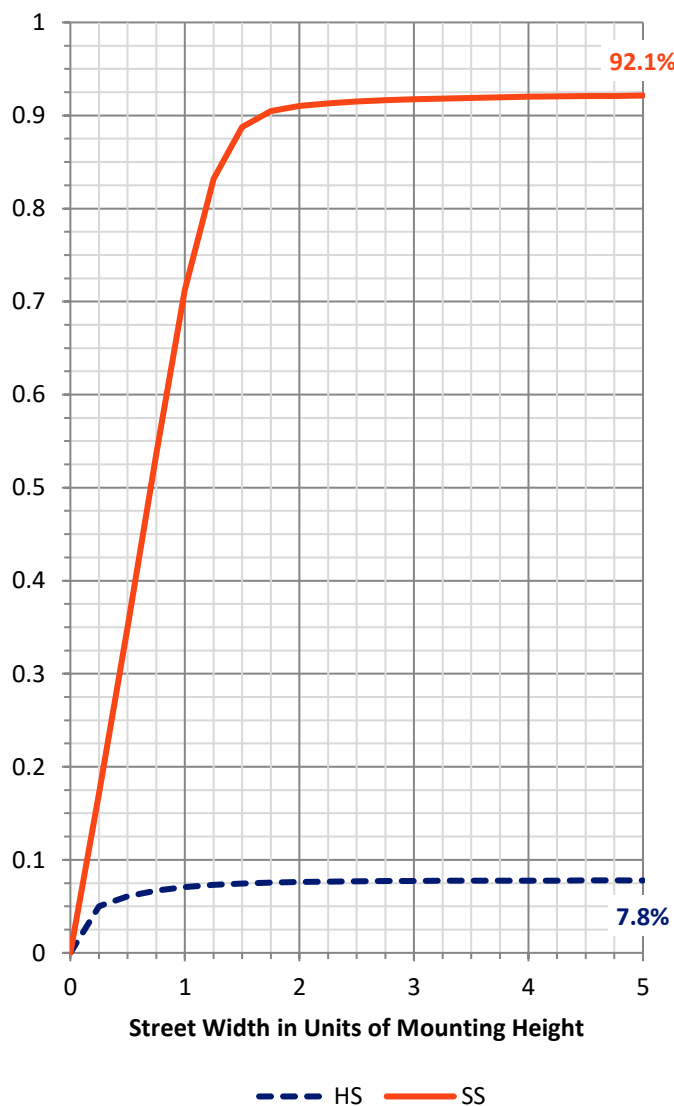
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	532.4	0.0	532.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	6284.9	0.0	6284.9
	% Fixture	92.2	0.0	92.2
Total	Lumens	6817.3	0.0	6817.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	2.2
10°-20°	369.2	5.4
20°-30°	590.7	8.7
30°-40°	999.9	14.7
40°-50°	1641.6	24.1
50°-60°	1804.2	26.5
60°-70°	1034.9	15.2
70°-80°	211.5	3.1
80°-90°	12.5	0.2
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°	6817.3	100.0
0°-180°	6817.3	100.0

Coefficient of Utilization



REPORT NUMBER: P961515

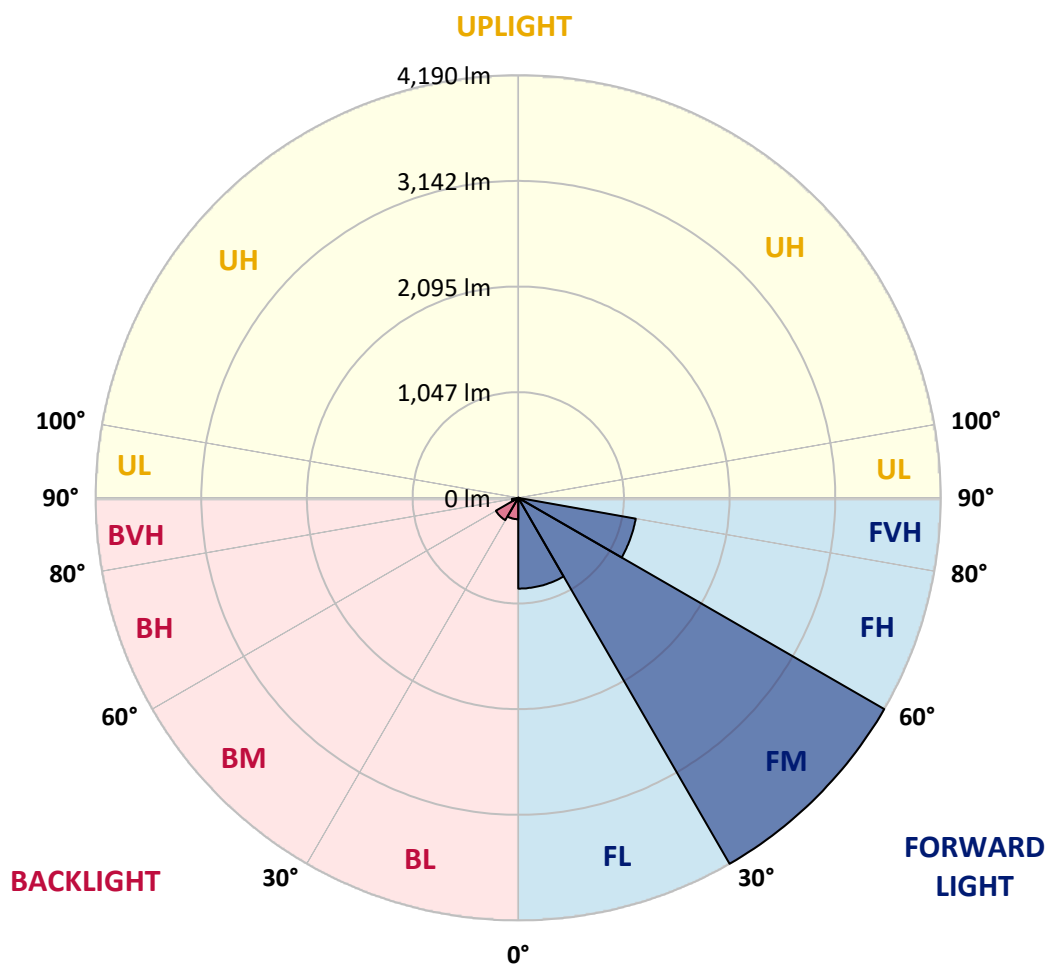
CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	900.3	13.2			
FM	(30°-60°)	4189.9	61.5			
FH	(60°-80°)	1183.0	17.4			G1/1800
FVH	(80°-90°)	11.6	0.2			G1/100
BL	(0°-30°)	212.5	3.1	B1/500		
BM	(30°-60°)	255.7	3.8	B1/1000		
BH	(60°-80°)	63.3	0.9	B0/110		G0/110
BVH	(80°-90°)	0.8	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-G1

Type II Short



REPORT NUMBER: P961515

CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	2038.3	2012.7	2008.9	2003.9	1955.1	1918.6	1865.6	1807.6	1742.4	1676.0	1646.6
5°	2354.9	2334.7	2331.0	2307.4	2251.9	2189.7	2095.5	1976.6	1855.0	1712.2	1650.8
7.5°	2416.2	2412.4	2429.8	2428.8	2421.4	2372.2	2292.7	2151.1	1968.6	1756.7	1661.7
10°	2142.7	2152.3	2203.5	2248.5	2370.0	2440.6	2423.4	2306.6	2085.5	1807.6	1673.9
12.5°	1893.4	1882.0	1918.6	1969.4	2110.7	2320.8	2477.6	2436.4	2219.1	1865.2	1692.0
15°	1737.0	1732.4	1753.0	1776.4	1884.1	2095.9	2414.6	2542.0	2347.8	1933.3	1719.3
17.5°	1686.9	1683.2	1689.4	1695.4	1765.2	1929.0	2264.5	2606.7	2471.0	2011.0	1749.6
20°	1727.7	1722.6	1721.8	1717.2	1746.2	1858.0	2128.7	2611.3	2581.5	2081.7	1775.6
22.5°	1846.6	1840.8	1820.2	1801.7	1804.2	1867.7	2068.2	2565.1	2664.7	2147.7	1792.0
25°	2062.3	2052.7	2009.8	1947.6	1908.0	1935.0	2077.5	2504.2	2744.1	2199.3	1784.0
27.5°	2332.2	2319.6	2264.5	2172.1	2081.7	2048.9	2144.3	2462.0	2810.1	2238.9	1766.8
30°	2596.6	2580.2	2526.0	2454.1	2322.1	2218.7	2264.9	2480.6	2888.8	2280.1	1744.1
32.5°	2882.0	2866.5	2794.6	2705.5	2596.2	2457.0	2430.2	2571.0	2985.0	2337.6	1728.2
35°	3243.1	3218.7	3116.6	2995.2	2879.1	2738.3	2653.8	2726.9	3113.2	2425.6	1737.0
37.5°	3654.2	3621.4	3511.3	3343.6	3192.3	3034.6	2926.2	2941.3	3301.1	2543.2	1764.3
40°	4041.8	4012.0	3910.3	3752.2	3562.2	3370.9	3255.3	3221.7	3560.5	2686.5	1812.2
42.5°	4274.2	4247.4	4204.5	4137.7	3977.5	3782.5	3636.6	3563.8	3867.4	2858.1	1870.6
45°	4287.4	4263.8	4321.4	4399.1	4367.6	4237.8	4059.9	3926.7	4175.5	3019.0	1931.2
47.5°	4078.8	4062.9	4237.8	4509.3	4644.7	4699.3	4535.3	4259.2	4429.8	3134.7	1956.0
50°	3510.5	3504.6	3864.5	4363.0	4750.2	5103.7	5036.8	4568.5	4627.0	3194.4	1932.4
52.5°	3043.8	3022.4	3232.2	3894.7	4596.7	5316.4	5527.0	4872.0	4764.8	3205.7	1877.4
55°	2308.6	2289.7	2552.9	3111.2	4101.9	5240.7	5885.5	5185.3	4863.6	3176.7	1778.6
57.5°	1238.4	1226.6	1559.1	2070.7	3206.6	4786.8	5950.3	5516.4	4946.9	3099.8	1640.3
60°	482.2	480.1	604.4	1004.7	1948.8	3894.3	5623.7	5715.3	4999.0	3005.2	1524.7
62.5°	291.7	298.1	318.3	451.1	860.9	2419.2	4870.8	5489.2	5033.9	2918.6	1429.3
65°	241.3	241.7	244.3	309.9	412.4	1012.3	3666.8	4745.1	4947.7	2764.3	1293.9
67.5°	206.8	210.6	220.3	245.9	290.9	443.9	2111.1	3675.6	4423.5	2405.4	1082.9
70°	163.1	168.1	180.3	202.2	224.5	277.9	780.2	2445.6	3379.3	1813.0	818.9
72.5°	137.5	137.0	143.3	164.4	178.2	195.5	300.1	1370.4	1964.0	865.5	405.3
75°	106.4	110.6	118.6	137.5	145.9	141.7	162.7	500.6	703.7	262.3	137.9
77.5°	83.2	86.6	93.8	112.2	120.6	100.4	93.8	179.1	226.1	94.2	62.2
80°	37.4	40.4	63.9	82.8	98.4	69.4	50.8	91.6	100.4	42.8	31.6
82.5°	6.8	11.4	37.4	43.8	50.4	45.0	26.4	47.5	49.2	17.2	11.0
85°	0.4	0.8	13.0	16.0	20.2	14.8	8.0	19.0	16.4	5.8	4.2
87.5°	0.0	0.0	0.0	0.4	0.4	2.2	2.6	3.4	2.6	2.2	1.6
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: P961515

CATALOG NUMBER: NAV-SB2A-827-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8	1642.8
2.5°	1616.3	1556.7	1498.7	1451.1	1423.3	1376.3	1345.2	1340.1	1327.1	1338.4
5°	1585.2	1478.5	1370.4	1273.7	1194.2	1091.7	1015.2	982.8	954.7	964.3
7.5°	1570.5	1401.9	1233.8	1068.6	898.7	734.8	612.8	562.0	523.4	528.8
10°	1550.7	1322.5	1058.9	806.7	579.2	417.4	333.3	302.3	285.1	285.5
12.5°	1535.6	1227.4	855.9	546.9	352.7	266.5	240.5	232.9	227.9	228.3
15°	1528.1	1115.6	655.4	364.5	252.3	225.7	219.5	216.1	212.7	212.3
17.5°	1515.5	991.2	479.6	266.1	220.7	211.5	206.0	202.2	198.0	197.1
20°	1496.5	850.0	350.5	224.9	206.8	199.7	192.1	187.1	182.0	181.2
22.5°	1461.6	700.8	269.5	208.1	196.7	188.7	179.5	173.6	168.6	167.7
25°	1396.9	560.8	227.0	197.6	187.9	178.2	168.1	160.2	155.5	154.7
27.5°	1314.9	440.5	206.0	187.9	176.5	167.7	156.4	148.8	144.6	143.8
30°	1218.2	339.3	193.8	177.0	163.1	155.5	145.4	139.1	136.6	136.6
32.5°	1114.0	271.1	188.7	166.0	151.3	142.9	134.9	132.4	131.6	131.2
35°	1016.0	235.4	186.2	157.2	140.8	132.8	129.5	129.9	131.6	131.6
37.5°	929.1	224.1	185.0	150.9	131.6	124.4	126.5	130.3	128.6	128.6
40°	850.4	225.3	184.1	146.3	124.0	119.8	124.0	121.1	116.8	116.4
42.5°	790.3	235.9	182.4	142.5	119.4	116.4	114.8	110.1	109.7	110.6
45°	746.6	245.1	182.0	140.8	114.4	108.9	106.8	102.2	110.6	112.6
47.5°	694.8	245.1	182.0	134.9	105.9	103.8	100.4	95.4	103.8	105.9
50°	628.0	229.5	174.9	128.2	99.2	98.0	92.0	85.8	84.0	85.4
52.5°	543.6	201.3	156.8	119.0	92.5	90.0	82.8	78.2	77.0	77.0
55°	447.3	168.6	132.4	105.5	85.4	80.7	75.6	73.6	72.3	71.4
57.5°	363.6	138.3	106.4	93.8	78.6	72.7	71.0	68.5	66.4	65.2
60°	298.5	108.9	87.8	83.2	71.9	66.4	66.0	62.6	57.2	56.4
62.5°	230.3	79.8	74.0	72.3	65.2	60.6	59.7	53.0	44.6	42.8
65°	162.7	62.2	59.7	63.4	58.0	53.8	51.7	41.6	32.8	31.6
67.5°	114.4	52.2	47.0	55.5	50.4	45.0	43.8	35.3	27.4	26.4
70°	81.6	42.4	38.6	47.5	40.4	39.6	37.0	29.4	22.2	21.4
72.5°	57.6	32.4	29.8	41.2	27.8	34.0	30.2	22.7	16.8	16.0
75°	42.4	23.2	21.0	24.0	20.2	25.6	21.4	15.2	10.6	10.0
77.5°	31.1	14.8	12.6	11.8	11.8	16.0	11.8	6.4	4.6	4.2
80°	21.8	6.8	5.8	5.0	4.6	3.8	1.6	0.8	0.4	0.4
82.5°	13.0	3.0	3.0	2.2	1.2	0.0	0.0	0.0	0.0	0.0
85°	3.0	1.2	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	0.4	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

(END OF REPORT)