

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: P961531

Luminaire Tested: **NAV-SB2A-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

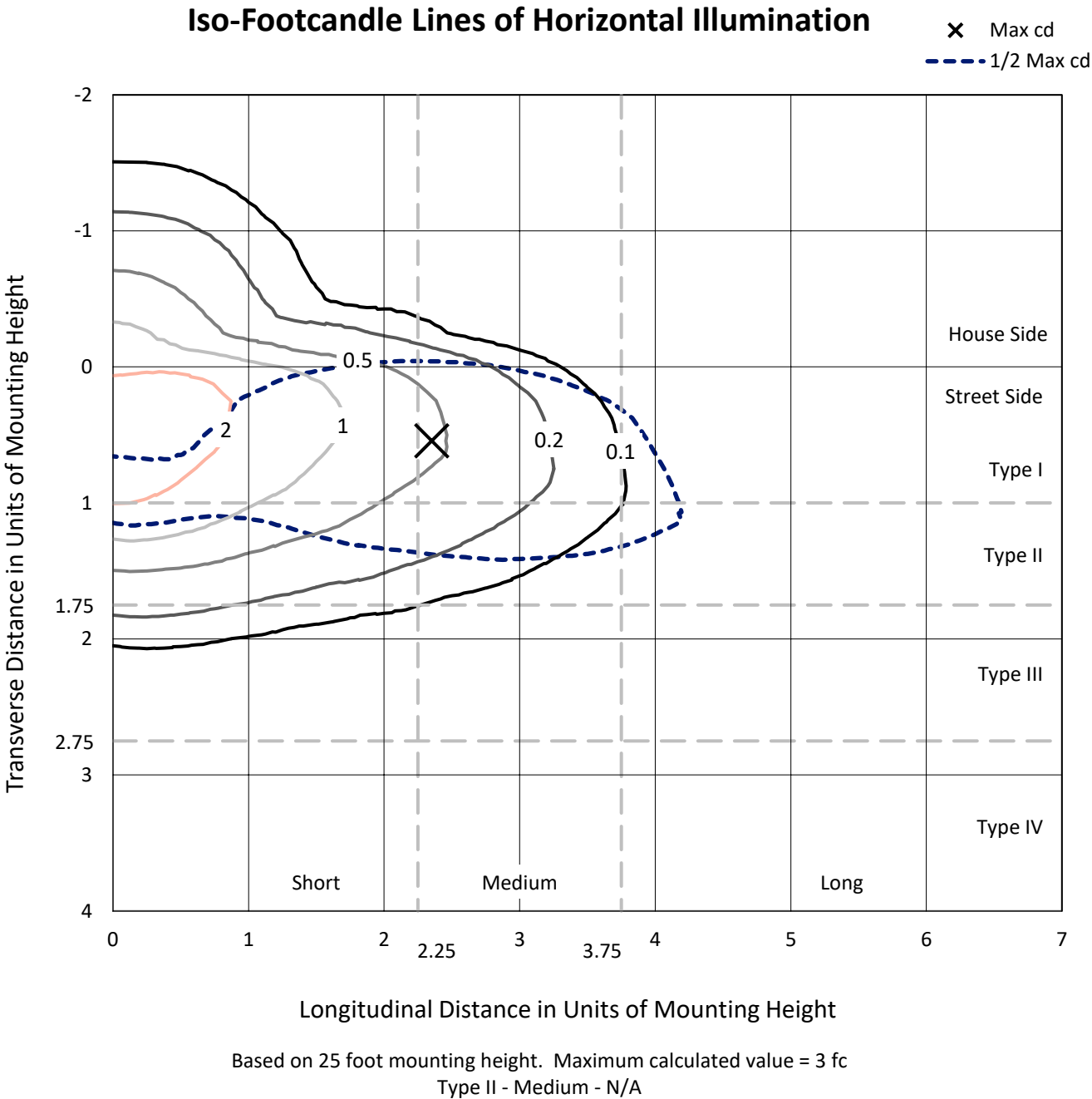
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8143.6 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

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

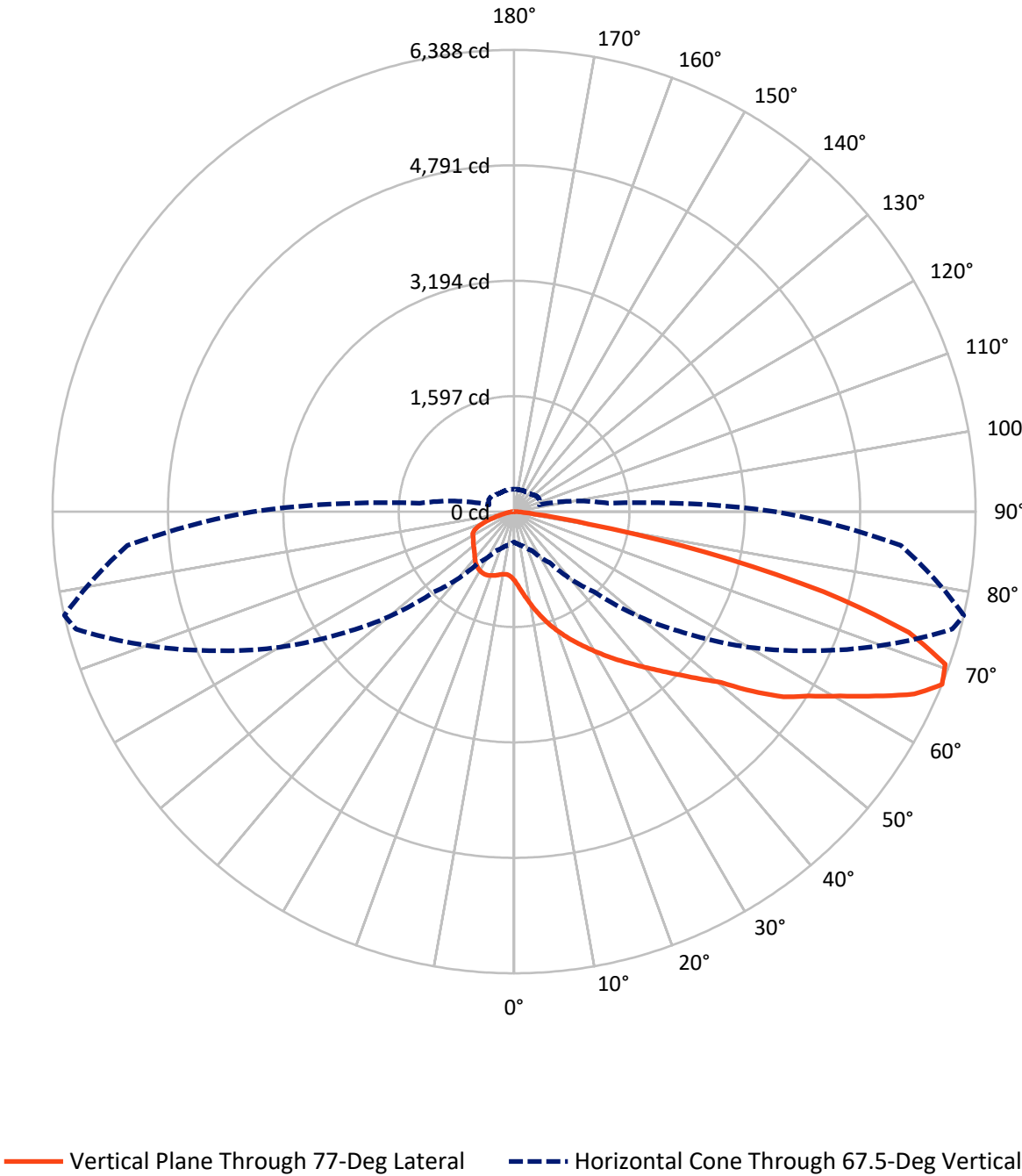


REPORT NUMBER: P961531
CATALOG NUMBER: NAV-SB2A-827-U-T2R



REPORT NUMBER: P961531
CATALOG NUMBER: NAV-SB2A-827-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P961531

CATALOG NUMBER: NAV-SB2A-827-U-T2R

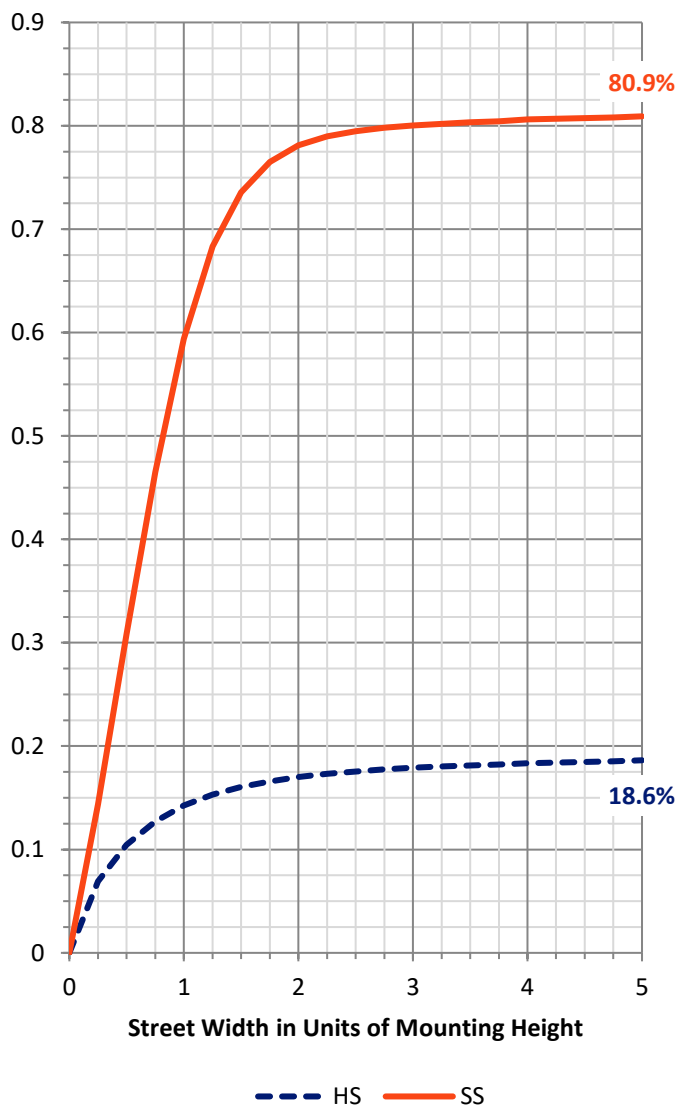
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1540.4	0.0	1540.4
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	6603.2	0.0	6603.2
	% Fixture	81.1	0.0	81.1
Total	Lumens	8143.6	0.0	8143.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.3
10°-20°	367.9	4.5
20°-30°	694.7	8.5
30°-40°	1119.2	13.7
40°-50°	1530.8	18.8
50°-60°	1726.8	21.2
60°-70°	1611.7	19.8
70°-80°	883.5	10.8
80°-90°	106.6	1.3
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°	8143.6	100.0
0°-180°	8143.6	100.0

Coefficient of Utilization



REPORT NUMBER: P961531

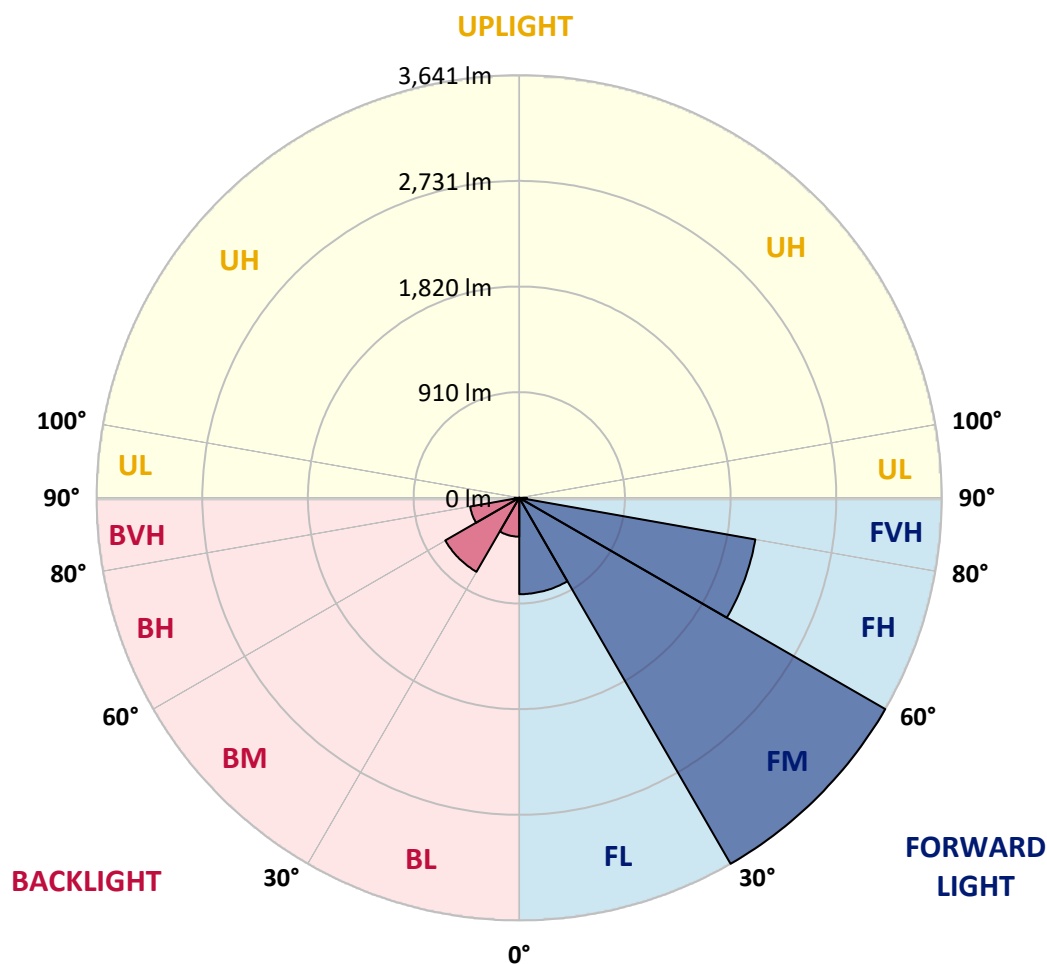
CATALOG NUMBER: NAV-SB2A-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	830.1	10.2			
FM	(30°-60°)	3640.9	44.7			
FH	(60°-80°)	2065.5	25.4			G2/5000
FVH	(80°-90°)	66.6	0.8			G1/100
BL	(0°-30°)	334.9	4.1	B1/500		
BM	(30°-60°)	735.8	9.0	B1/1000		
BH	(60°-80°)	429.8	5.3	B1/500		G1/500
BVH	(80°-90°)	39.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



REPORT NUMBER: P961531

CATALOG NUMBER: NAV-SB2A-827-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5
2.5°	1196.4	1204.8	1194.2	1194.2	1159.0	1140.4	1105.2	1078.2	1029.9	1021.5	989.5
5°	1414.1	1424.6	1409.9	1403.6	1362.0	1323.8	1264.4	1206.0	1119.9	1111.0	1035.8
7.5°	1582.7	1596.1	1583.1	1576.3	1539.3	1496.5	1427.1	1345.6	1224.2	1206.8	1098.0
10°	1720.2	1722.2	1718.0	1720.6	1691.6	1656.3	1585.3	1490.2	1338.4	1314.9	1173.2
12.5°	1798.0	1807.6	1816.0	1831.2	1826.0	1804.2	1740.3	1626.9	1459.5	1429.3	1255.2
15°	1834.4	1851.4	1870.2	1905.1	1933.3	1938.8	1890.0	1773.6	1582.7	1546.1	1338.0
17.5°	1847.6	1863.4	1893.4	1943.8	2004.3	2045.1	2023.2	1916.0	1704.6	1662.6	1425.1
20°	1913.6	1918.2	1936.2	1984.2	2049.7	2117.4	2133.8	2053.1	1825.2	1777.8	1515.1
22.5°	2054.8	2045.5	2050.5	2072.4	2119.5	2185.1	2222.5	2174.1	1949.2	1894.6	1605.8
25°	2288.1	2261.1	2234.3	2209.1	2233.0	2270.0	2312.5	2295.2	2079.1	2009.8	1697.5
27.5°	2582.8	2550.0	2490.6	2407.8	2378.9	2391.9	2410.8	2407.4	2199.3	2129.1	1792.0
30°	2872.8	2834.5	2763.9	2644.1	2567.6	2533.2	2518.8	2509.2	2330.1	2255.3	1887.4
32.5°	3104.4	3074.2	3004.8	2870.7	2759.7	2700.9	2653.4	2618.9	2466.8	2391.9	1988.4
35°	3307.1	3278.9	3199.4	3053.2	2932.5	2869.9	2807.7	2734.1	2608.8	2533.2	2096.8
37.5°	3492.0	3463.9	3354.9	3202.8	3081.4	3038.0	2982.5	2857.7	2751.3	2679.9	2211.5
40°	3608.9	3602.6	3500.9	3328.5	3202.4	3181.0	3162.4	3001.0	2909.4	2842.9	2337.7
42.5°	3638.7	3652.6	3571.9	3430.3	3310.0	3292.7	3336.1	3163.3	3086.8	3023.3	2480.6
45°	3566.8	3606.8	3553.8	3457.5	3386.5	3377.3	3489.9	3340.7	3283.1	3225.1	2652.9
47.5°	3384.9	3452.5	3430.7	3417.1	3407.1	3447.1	3625.2	3529.0	3505.5	3455.0	2849.7
50°	3017.4	3145.6	3183.9	3268.8	3366.3	3501.3	3748.4	3734.6	3765.2	3714.4	3089.2
52.5°	2382.2	2558.8	2780.7	2993.4	3241.0	3483.2	3883.8	4029.7	4159.1	4131.4	3470.1
55°	1966.5	2045.9	2216.6	2606.7	2998.1	3407.1	3944.7	4268.0	4550.1	4525.3	3759.0
57.5°	1647.0	1718.0	1823.2	2148.9	2630.7	3234.3	3982.5	4413.4	4817.8	4815.3	4043.9
60°	1304.4	1379.6	1487.3	1718.0	2201.5	2935.9	3974.1	4579.1	5159.6	5180.7	4391.6
62.5°	917.7	1000.5	1119.9	1335.1	1763.0	2549.1	3802.6	4698.9	5562.0	5619.0	4809.9
65°	603.2	657.8	747.8	933.7	1313.6	2051.8	3475.2	4714.5	5992.4	6089.0	5202.5
67.5°	422.9	443.9	496.9	597.8	865.9	1573.5	2953.5	4553.5	6279.5	6388.3	5372.7
70°	329.9	340.5	367.4	407.7	544.0	1058.1	2263.3	4134.7	6218.1	6331.6	5194.9
72.5°	285.1	295.1	305.1	310.3	364.9	653.2	1533.1	3457.1	5640.1	5717.0	4516.9
75°	258.5	261.1	269.5	267.7	278.3	423.7	884.9	2518.8	4450.0	4423.6	3334.3
77.5°	217.3	220.7	234.5	232.5	247.1	289.7	459.5	1625.5	2885.0	2705.1	1856.0
80°	184.1	185.8	200.9	198.4	214.8	209.7	234.5	828.5	1223.6	1036.6	535.2
82.5°	63.9	79.0	153.4	158.1	163.9	127.0	135.4	337.9	373.7	286.3	112.2
85°	31.1	33.2	78.2	111.0	110.6	63.9	66.0	120.6	117.7	92.5	37.4
87.5°	5.0	6.4	9.2	43.3	34.4	16.8	22.7	23.6	24.4	21.0	8.4
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: P961531

CATALOG NUMBER: NAV-SB2A-827-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5	955.5
2.5°	966.0	944.9	900.9	860.1	828.1	797.4	780.2	765.5	757.1	755.4	755.4
5°	992.1	948.7	868.5	800.8	756.7	723.9	706.6	695.7	690.2	686.9	686.4
7.5°	1029.5	966.0	851.7	774.7	728.5	705.0	696.2	694.4	694.0	694.4	695.7
10°	1081.2	994.1	850.0	768.4	729.8	716.7	716.3	716.7	718.4	718.8	719.2
12.5°	1137.1	1023.2	856.7	773.9	745.7	738.6	737.3	736.9	738.2	739.0	739.4
15°	1198.0	1061.4	868.1	785.7	763.4	755.8	754.6	752.0	751.6	751.2	750.8
17.5°	1260.6	1099.3	880.7	798.3	774.7	764.2	759.6	753.7	749.1	747.8	749.1
20°	1324.2	1136.7	889.5	804.6	775.6	760.9	751.6	741.5	733.6	728.9	730.6
22.5°	1391.8	1175.8	894.9	802.9	768.0	747.8	731.0	719.2	707.0	699.0	699.5
25°	1457.9	1209.8	894.5	794.1	753.3	727.6	706.2	691.1	674.2	665.8	665.8
27.5°	1521.3	1240.6	884.1	778.5	732.3	703.7	678.0	660.0	643.6	635.6	635.2
30°	1586.9	1266.2	867.7	755.8	707.5	676.0	647.8	632.2	617.6	610.0	609.6
32.5°	1652.1	1289.7	844.5	727.6	678.9	648.6	620.8	606.6	597.8	597.8	598.2
35°	1721.0	1306.1	813.8	694.8	648.6	619.6	597.8	589.4	588.6	583.4	582.2
37.5°	1793.7	1316.6	776.4	661.2	618.8	591.4	584.8	574.6	566.2	555.3	553.6
40°	1870.2	1327.1	731.4	626.4	587.2	572.2	569.2	555.8	531.8	504.9	501.1
42.5°	1963.1	1334.2	684.8	591.4	554.0	549.0	553.2	530.1	491.8	471.7	472.1
45°	2070.7	1346.0	641.9	557.0	520.0	520.0	537.6	507.4	475.9	463.2	465.4
47.5°	2210.3	1373.4	602.0	519.2	488.5	496.9	503.2	480.1	462.4	446.9	446.4
50°	2412.0	1438.9	560.8	480.9	464.5	481.3	472.5	459.0	438.5	425.8	424.6
52.5°	2662.6	1477.6	524.2	446.4	443.9	460.7	448.1	435.5	419.9	403.1	399.7
55°	2833.3	1484.7	493.5	421.2	430.0	428.3	423.7	412.4	404.0	381.7	382.1
57.5°	3024.2	1499.1	468.3	406.1	421.2	402.7	401.1	391.3	380.5	365.3	360.3
60°	3252.4	1521.3	446.4	400.2	413.7	385.9	377.5	373.7	362.7	355.2	357.3
62.5°	3501.3	1541.5	424.1	401.1	404.8	369.5	356.9	355.7	348.9	346.3	346.3
65°	3671.0	1486.5	396.4	400.2	390.9	352.7	336.7	336.3	330.9	329.9	329.5
67.5°	3611.8	1312.0	359.0	388.4	376.7	335.9	318.3	316.5	309.3	309.9	309.9
70°	3315.1	1063.1	307.3	359.4	359.0	320.7	298.9	293.5	283.7	285.5	287.1
72.5°	2758.5	787.8	237.9	311.1	330.9	306.9	276.6	267.7	255.6	257.3	256.9
75°	1992.1	535.6	173.2	236.7	287.9	290.5	254.7	239.6	224.9	227.4	228.3
77.5°	1019.4	303.5	127.4	163.1	226.1	264.0	235.0	214.8	211.5	235.0	231.6
80°	332.5	152.2	88.3	114.4	148.4	216.1	206.0	182.9	182.0	187.5	161.0
82.5°	99.2	64.3	56.8	75.2	82.0	165.6	177.8	138.3	119.0	125.3	129.5
85°	34.0	31.1	32.4	37.4	39.1	97.1	124.4	91.6	86.6	95.4	94.2
87.5°	8.0	11.0	9.2	8.4	8.4	23.6	48.4	38.2	53.0	35.3	34.0
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)