

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: P961542

Luminaire Tested: **NAV-SB2A-827-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7979.6 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - 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

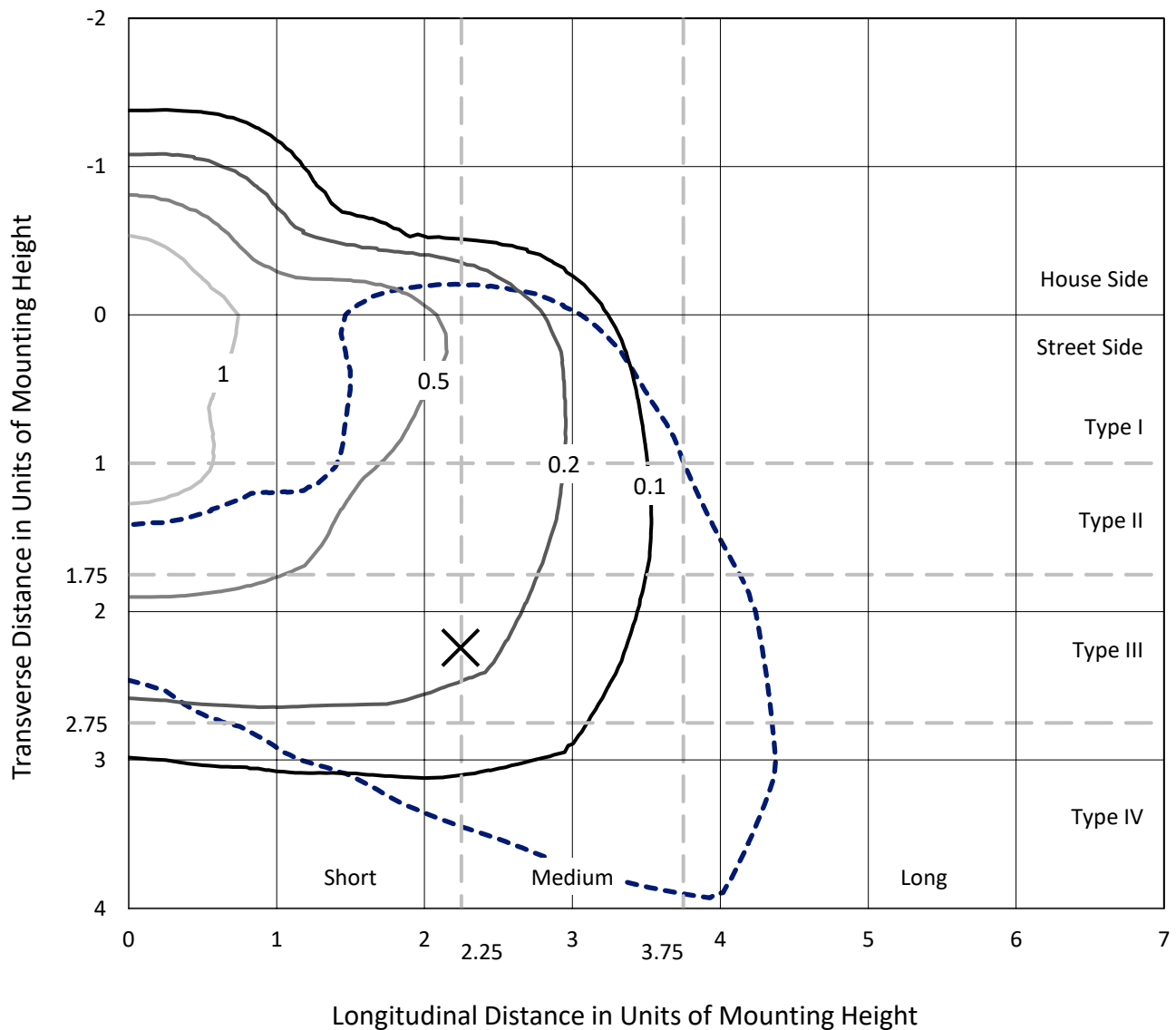


REPORT NUMBER: P961542

CATALOG NUMBER: NAV-SB2A-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

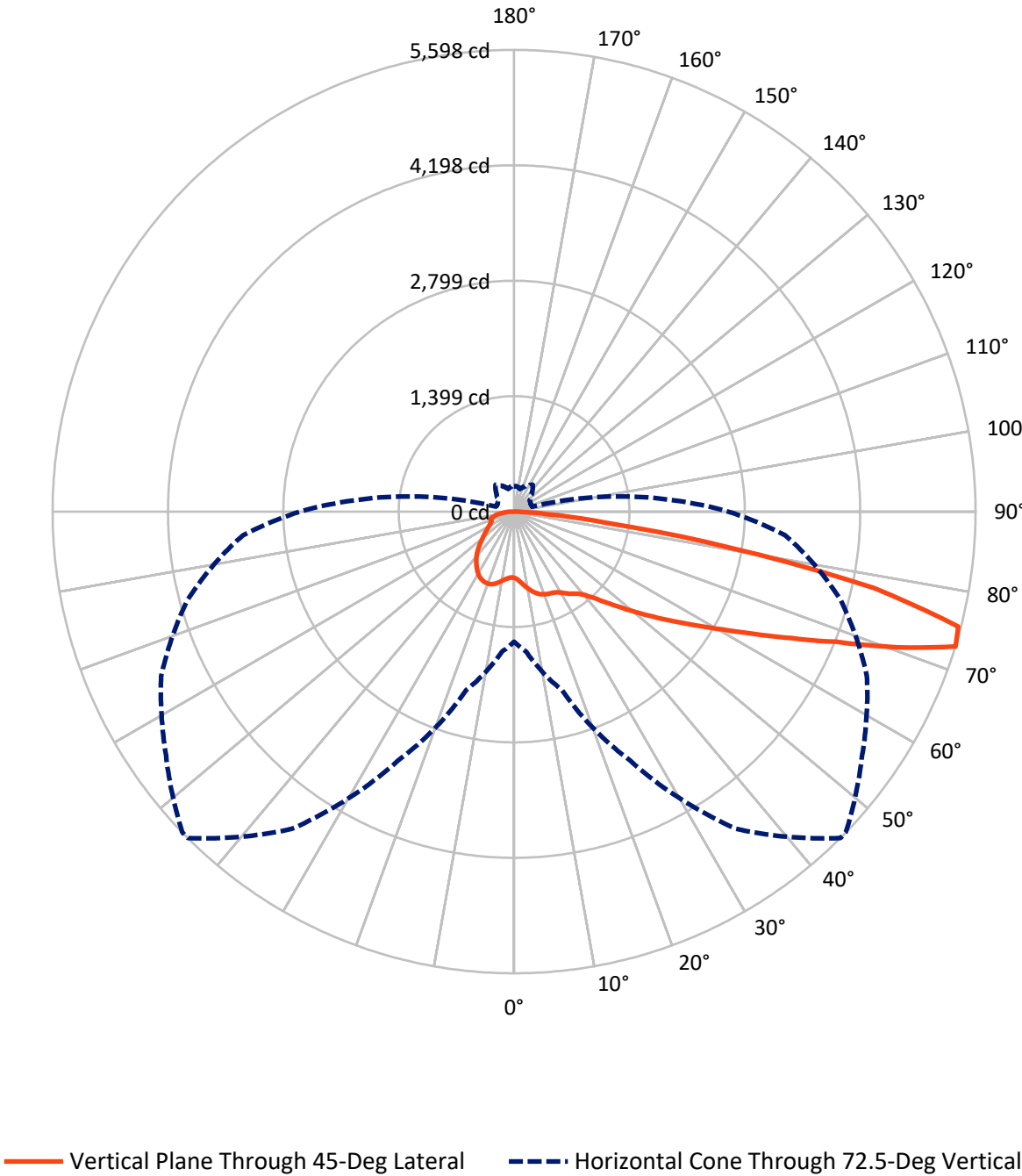


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc

Type IV - Short - N/A

REPORT NUMBER: P961542
CATALOG NUMBER: NAV-SB2A-827-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P961542

CATALOG NUMBER: NAV-SB2A-827-U-T4W

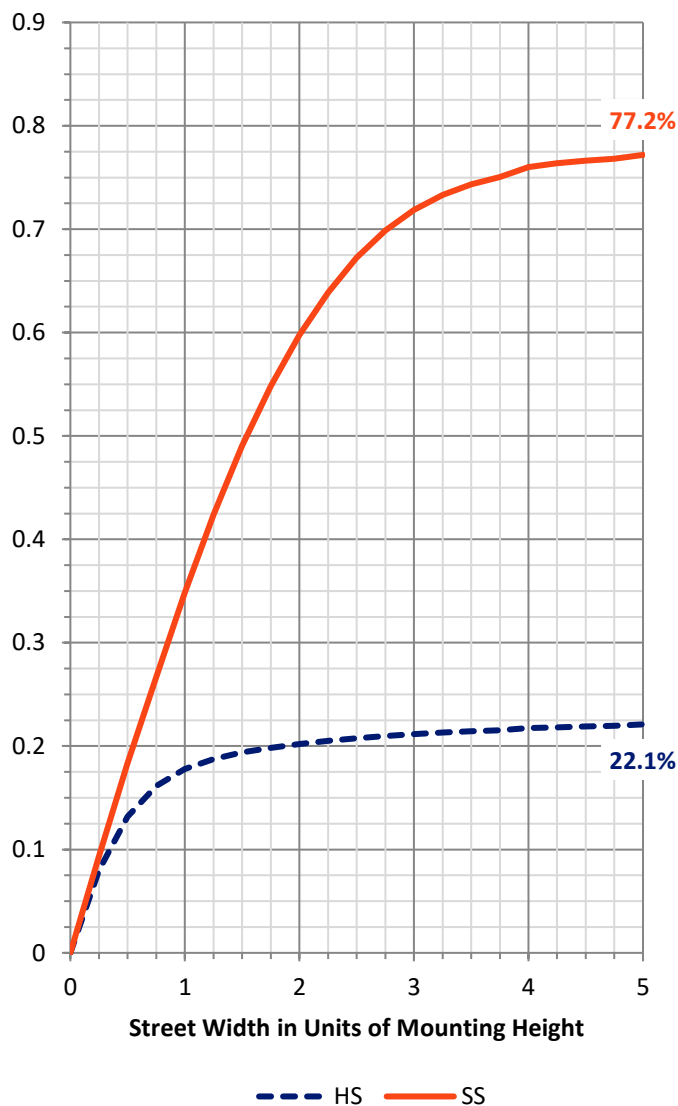
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1803.9	0.0	1803.9
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	6175.7	0.0	6175.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	7979.6	0.0	7979.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	1.0
10°-20°	273.2	3.4
20°-30°	475.2	6.0
30°-40°	681.2	8.5
40°-50°	959.2	12.0
50°-60°	1469.2	18.4
60°-70°	2128.4	26.7
70°-80°	1699.6	21.3
80°-90°	211.7	2.7
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°	7979.6	100.0
0°-180°	7979.6	100.0

Coefficient of Utilization



REPORT NUMBER: P961542

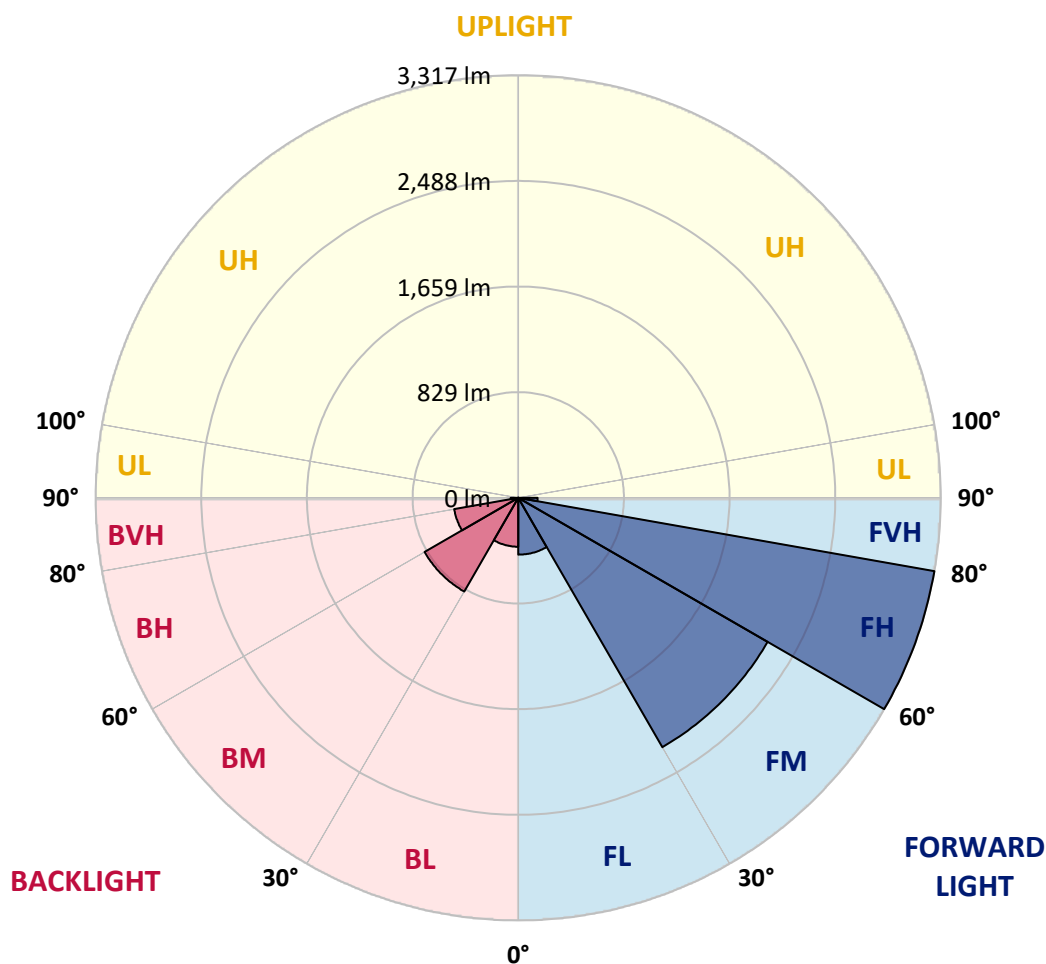
CATALOG NUMBER: NAV-SB2A-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	446.2	5.6			
FM	(30°-60°)	2260.2	28.3			
FH	(60°-80°)	3317.4	41.6			G2/5000
FVH	(80°-90°)	151.9	1.9			G2/225
BL	(0°-30°)	384.1	4.8	B1/500		
BM	(30°-60°)	849.4	10.6	B1/1000		
BH	(60°-80°)	510.6	6.4	B2/1000		G2/1000
BVH	(80°-90°)	59.8	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



REPORT NUMBER: P961542

CATALOG NUMBER: NAV-SB2A-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0
2.5°	836.5	841.9	836.9	832.3	830.2	824.7	824.3	820.9	818.9	812.9	811.3
5°	894.9	902.1	893.7	884.5	876.1	862.5	860.9	851.3	840.3	827.7	820.5
7.5°	960.9	967.3	957.6	943.7	929.0	906.7	906.3	888.7	871.5	849.9	837.7
10°	1018.5	1026.9	1013.9	995.0	976.5	951.3	948.3	928.1	906.3	878.5	860.1
12.5°	1069.4	1075.3	1062.7	1039.6	1018.1	992.9	989.1	966.8	942.5	910.9	887.3
15°	1109.8	1117.4	1100.5	1075.7	1053.0	1028.2	1024.8	1004.7	980.3	947.1	916.8
17.5°	1136.2	1142.6	1125.3	1097.6	1075.7	1055.1	1052.6	1035.8	1014.3	980.7	948.3
20°	1146.4	1153.0	1135.0	1106.8	1086.6	1070.6	1069.4	1057.2	1042.5	1011.8	979.0
22.5°	1156.4	1162.8	1139.2	1109.8	1092.1	1082.0	1081.6	1073.6	1067.7	1042.5	1010.5
25°	1197.2	1198.8	1167.4	1124.8	1099.6	1090.8	1090.4	1090.0	1092.5	1072.8	1044.6
27.5°	1232.5	1232.0	1205.2	1165.2	1126.2	1107.6	1107.2	1111.4	1119.4	1103.0	1079.9
30°	1284.2	1279.6	1247.6	1206.0	1170.2	1141.7	1139.2	1135.4	1141.7	1128.6	1115.2
32.5°	1393.9	1379.2	1327.5	1253.5	1206.8	1185.0	1181.6	1158.0	1160.6	1152.6	1145.9
35°	1551.1	1531.8	1462.9	1343.5	1252.2	1221.2	1219.4	1189.6	1184.6	1177.4	1180.0
37.5°	1738.2	1714.2	1634.0	1473.7	1330.4	1263.2	1260.6	1233.8	1213.2	1205.6	1219.9
40°	1926.1	1895.8	1829.4	1632.7	1445.7	1333.4	1325.4	1284.6	1261.1	1248.4	1278.7
42.5°	2108.5	2083.3	2026.5	1810.9	1587.7	1435.9	1418.3	1348.5	1330.9	1319.1	1373.7
45°	2270.0	2247.2	2205.6	2001.3	1754.2	1575.5	1558.3	1444.3	1438.9	1438.9	1517.9
47.5°	2401.1	2396.0	2351.9	2195.5	1950.5	1734.4	1704.6	1577.6	1592.3	1615.0	1722.6
50°	2546.5	2532.7	2485.6	2386.8	2181.2	1916.4	1892.0	1741.2	1796.2	1858.4	2018.5
52.5°	2680.2	2687.8	2635.3	2586.1	2441.9	2119.5	2076.5	1934.1	2053.1	2156.0	2365.4
55°	2817.6	2818.1	2803.4	2796.6	2715.1	2344.0	2296.8	2166.1	2355.2	2483.1	2769.8
57.5°	2946.8	2947.6	2969.4	3028.7	3032.1	2602.9	2549.5	2451.1	2691.1	2821.4	3186.7
60°	3061.9	3067.8	3127.5	3266.2	3310.7	2899.6	2849.2	2787.8	3038.4	3169.5	3625.2
62.5°	3100.5	3122.0	3254.9	3452.0	3586.1	3263.7	3214.1	3177.5	3403.2	3525.2	3991.8
65°	3035.0	3084.2	3341.0	3605.4	3869.4	3696.3	3647.1	3607.1	3782.4	3897.2	4292.7
67.5°	2874.0	2937.4	3336.0	3766.5	4213.3	4216.6	4170.8	4077.0	4188.9	4233.0	4390.7
70°	2449.9	2544.9	3042.1	3826.5	4608.0	4928.3	4884.1	4642.8	4594.6	4381.0	4114.9
72.5°	1578.5	1706.2	2240.1	3331.8	4695.8	5597.9	5595.4	5153.6	4722.8	4093.4	3300.3
75°	575.8	654.1	1040.8	2091.3	3941.7	5563.9	5580.3	5066.2	4311.3	3161.9	2055.9
77.5°	209.7	229.5	339.7	803.7	2424.2	4464.2	4498.3	4050.2	3068.6	1586.9	814.7
80°	110.1	121.1	174.0	311.9	1038.7	2651.2	2704.6	2407.0	1442.3	478.0	244.3
82.5°	61.0	66.0	97.5	169.4	467.8	1133.8	1165.6	950.9	507.4	202.6	100.9
85°	32.8	34.8	45.8	92.5	228.7	393.1	401.9	284.1	202.2	119.0	48.8
87.5°	9.6	11.8	15.2	29.4	89.6	88.3	90.4	56.4	79.8	60.1	16.0
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: P961542

CATALOG NUMBER: NAV-SB2A-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0	805.0
2.5°	808.7	807.5	802.9	800.8	798.3	797.9	799.9	800.3	800.8	801.2	802.9
5°	816.3	812.1	807.9	805.4	806.3	806.7	810.9	813.8	815.9	817.6	818.5
7.5°	831.1	827.7	820.5	820.1	821.3	825.1	830.7	837.3	841.1	844.1	844.9
10°	852.9	846.6	838.2	839.5	841.9	847.5	858.7	864.3	870.5	876.1	874.7
12.5°	875.1	869.7	860.1	860.9	865.1	874.7	885.7	892.5	896.7	900.9	902.5
15°	904.2	894.5	884.1	884.1	891.5	902.1	907.1	912.6	915.1	919.7	921.5
17.5°	934.1	921.5	907.5	906.7	915.9	921.0	923.9	924.8	925.7	930.7	932.3
20°	963.9	950.0	930.3	928.5	930.7	929.9	929.4	928.5	929.9	936.1	938.7
22.5°	993.3	977.3	950.0	942.5	936.5	928.5	928.1	927.7	928.5	934.9	939.1
25°	1027.8	1008.4	971.9	949.1	929.4	918.5	919.7	920.1	921.0	926.1	932.7
27.5°	1065.2	1043.8	992.1	947.1	911.3	903.7	901.7	902.9	905.9	913.9	921.9
30°	1102.6	1077.4	1010.5	938.7	888.7	878.1	871.5	874.3	883.6	891.5	900.4
32.5°	1136.6	1111.4	1025.3	920.1	859.7	843.3	834.5	838.2	847.5	850.3	860.9
35°	1176.6	1148.0	1031.6	890.7	828.1	802.9	791.1	785.7	790.3	787.3	796.6
37.5°	1221.2	1191.3	1030.7	852.1	791.1	762.1	745.7	725.1	715.4	705.4	711.7
40°	1287.1	1244.2	1020.6	805.4	745.3	718.8	689.4	654.5	632.6	612.8	614.2
42.5°	1377.1	1317.8	1002.1	754.1	693.6	668.8	628.8	588.0	553.6	520.8	517.9
45°	1511.2	1414.1	979.0	699.5	637.7	613.3	570.0	524.2	485.1	443.1	438.0
47.5°	1704.6	1543.5	957.1	637.2	578.8	556.6	517.4	475.0	428.8	388.0	383.3
50°	1970.3	1729.4	937.0	576.8	520.8	504.0	472.9	429.6	382.9	350.1	348.1
52.5°	2308.2	1982.0	928.5	518.3	466.6	460.3	435.5	395.1	351.0	323.3	321.1
55°	2696.2	2284.2	928.5	462.4	419.1	421.2	404.0	366.5	328.3	303.5	300.9
57.5°	3092.1	2590.3	911.7	410.7	378.7	387.6	376.7	343.9	309.3	283.7	279.5
60°	3457.0	2846.6	843.7	363.6	343.0	356.9	349.7	321.5	279.5	258.1	254.7
62.5°	3737.5	2991.3	712.5	326.2	313.5	329.5	325.7	292.1	274.1	265.3	262.3
65°	3877.8	2967.8	544.8	292.9	288.7	313.5	305.6	304.3	290.1	279.9	276.6
67.5°	3791.7	2765.1	395.1	268.7	274.5	298.9	329.5	334.6	308.1	288.3	285.1
70°	3413.8	2398.6	294.3	245.5	256.5	299.3	375.8	350.1	302.3	279.1	275.3
72.5°	2596.9	1788.6	228.3	221.1	232.9	301.3	396.4	343.0	285.5	308.5	306.1
75°	1485.1	982.0	183.3	191.3	203.5	281.7	385.9	324.5	272.3	283.3	283.3
77.5°	566.2	377.5	151.3	161.8	163.5	245.9	369.1	323.3	259.3	253.1	230.7
80°	196.3	147.5	125.3	128.6	126.5	218.6	353.9	281.3	212.3	190.0	183.7
82.5°	80.3	73.6	99.2	95.0	90.0	169.8	285.9	229.9	173.6	153.4	151.7
85°	34.8	46.6	65.6	57.6	52.2	117.7	229.1	194.6	146.7	126.5	126.1
87.5°	7.2	17.6	27.8	26.0	26.9	78.6	162.7	138.3	103.8	77.8	61.0
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)