

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: P960511

Luminaire Tested: **NAV-SB1C-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6836.8 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

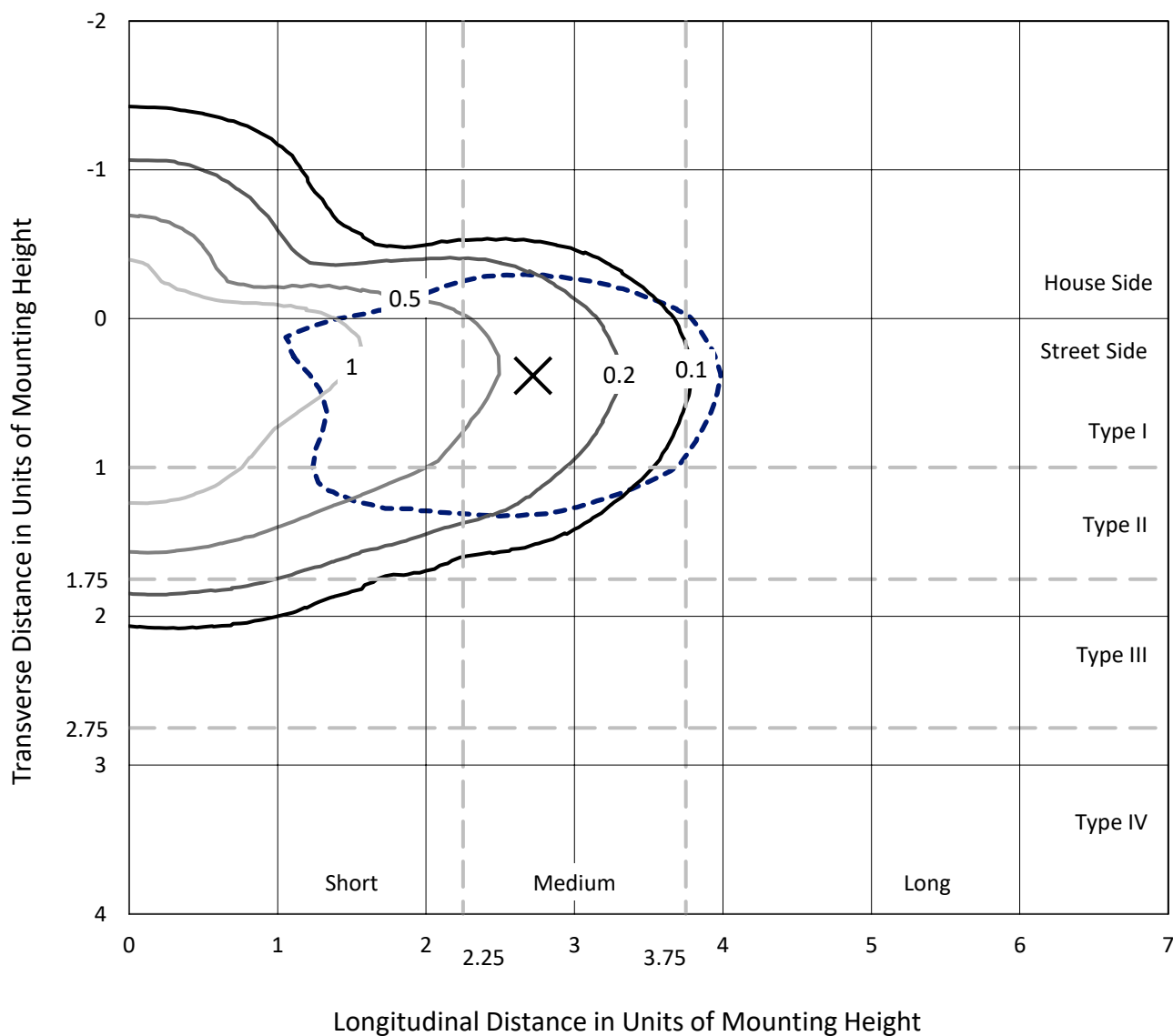
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P960511
CATALOG NUMBER: NAV-SB1C-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination

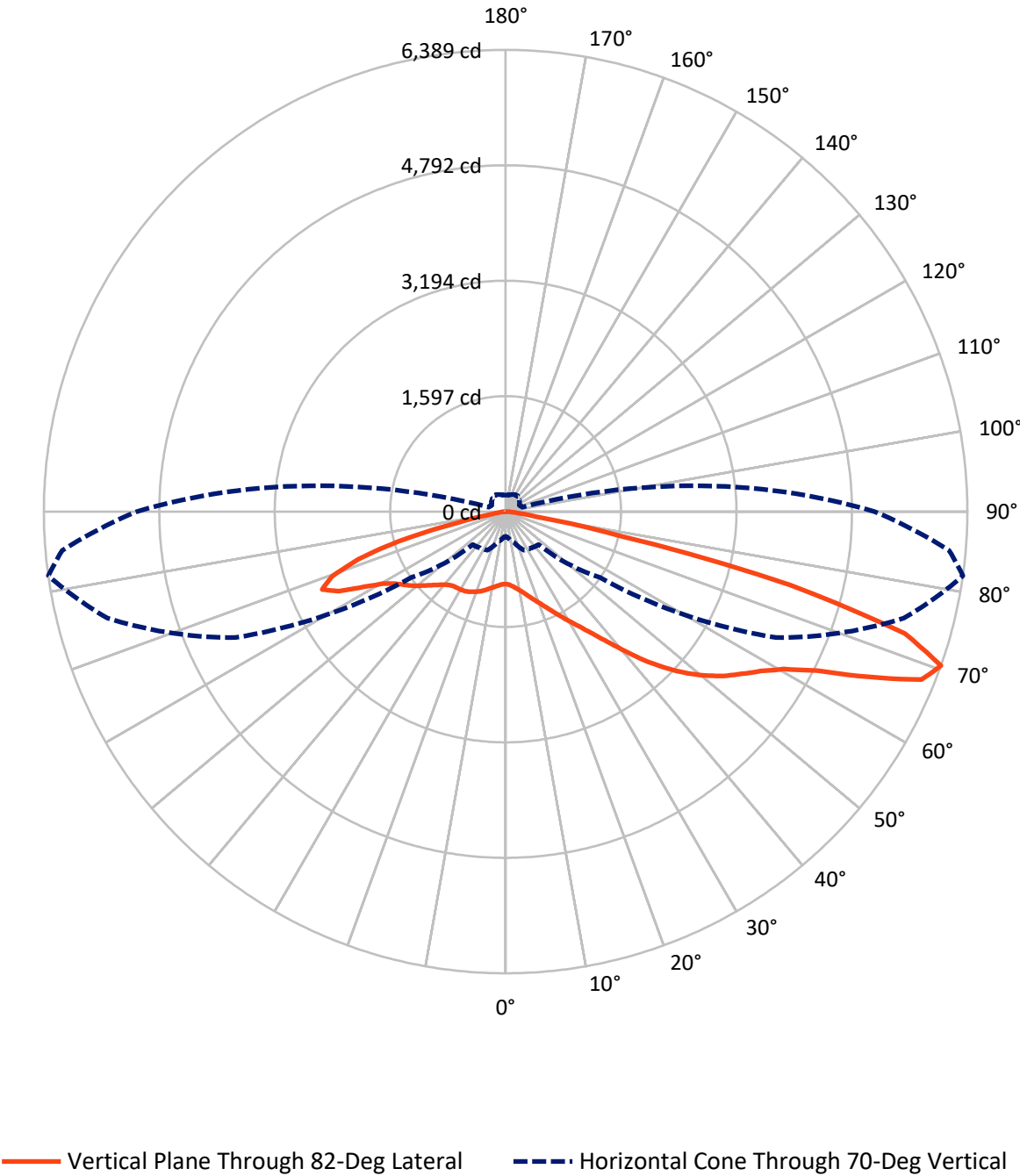
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
Type II - Medium - N/A

REPORT NUMBER: P960511
CATALOG NUMBER: NAV-SB1C-830-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P960511

CATALOG NUMBER: NAV-SB1C-830-U-T2

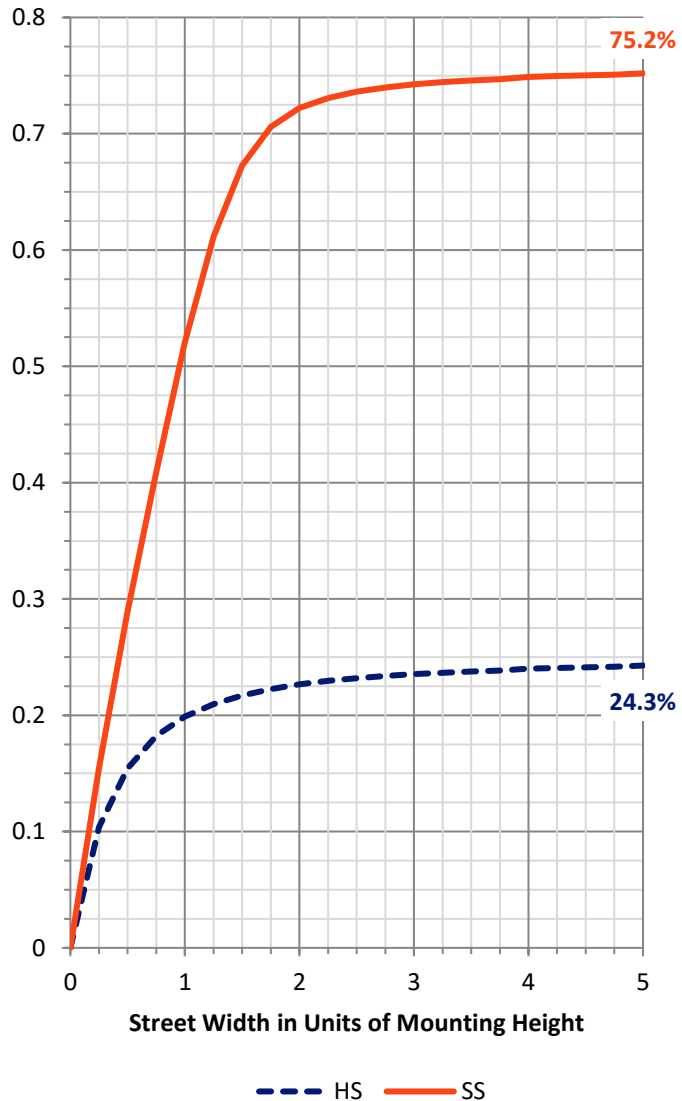
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1685.4	0.0	1685.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	5151.3	0.0	5151.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	6836.8	0.0	6836.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.4
10°-20°	271.9	4.0
20°-30°	454.9	6.7
30°-40°	710.6	10.4
40°-50°	1131.8	16.6
50°-60°	1575.0	23.0
60°-70°	1647.5	24.1
70°-80°	861.1	12.6
80°-90°	89.4	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°	6836.8	100.0
0°-180°	6836.8	100.0

Coefficient of Utilization



REPORT NUMBER: P960511

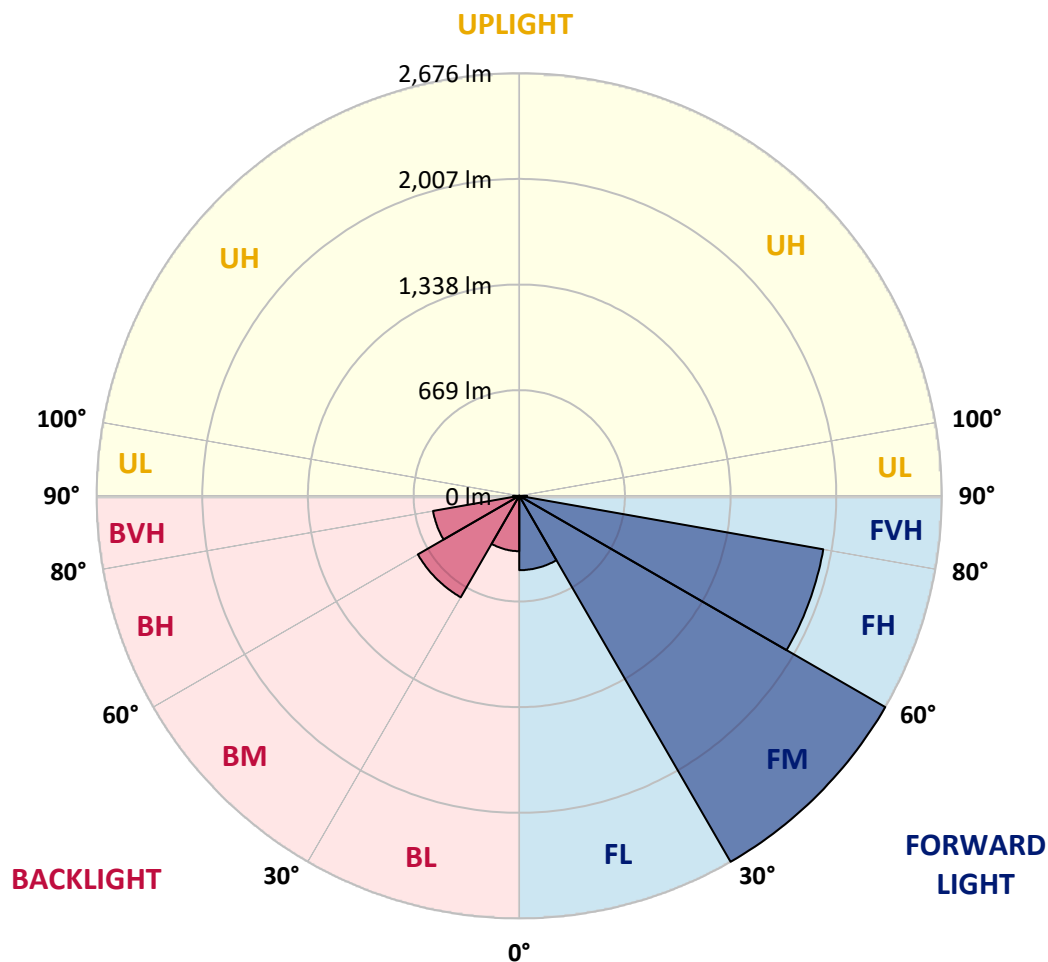
CATALOG NUMBER: NAV-SB1C-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	470.8	6.9			
FM	(30°-60°)	2675.8	39.1			
FH	(60°-80°)	1954.6	28.6			G2/5000
FVH	(80°-90°)	50.1	0.7			G1/100
BL	(0°-30°)	350.6	5.1	B1/500		
BM	(30°-60°)	741.5	10.8	B1/1000		
BH	(60°-80°)	553.9	8.1	B2/1000		G2/1000
BVH	(80°-90°)	39.4	0.6			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 II Medium



REPORT NUMBER: P960511

CATALOG NUMBER: NAV-SB1C-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1026.3	1032.1	1030.3	1028.5	1028.5	1025.9	1025.6	1021.9	1019.1	1014.3	1013.2
5°	1039.4	1045.5	1044.8	1046.2	1050.9	1052.1	1053.2	1050.9	1045.2	1039.4	1036.8
7.5°	1027.8	1034.6	1036.8	1045.5	1060.1	1073.1	1082.9	1086.9	1081.5	1073.1	1069.1
10°	988.6	996.2	1003.8	1024.5	1050.2	1081.1	1107.2	1122.8	1121.7	1113.8	1106.8
12.5°	909.1	917.1	933.5	973.6	1020.9	1075.2	1123.9	1156.5	1167.8	1161.9	1150.0
15°	845.6	852.5	864.9	906.2	967.5	1050.2	1130.1	1193.5	1222.2	1218.9	1204.4
17.5°	843.8	846.8	854.3	873.9	921.1	1011.1	1123.5	1229.8	1284.6	1284.2	1266.1
20°	875.8	876.8	881.2	885.2	912.0	981.3	1106.8	1259.9	1354.6	1354.6	1335.1
22.5°	920.0	919.3	923.6	920.0	933.1	978.8	1096.3	1286.4	1432.6	1438.4	1413.8
25°	986.4	982.8	981.6	973.3	975.9	1002.3	1107.9	1316.5	1525.1	1537.1	1506.2
27.5°	1074.9	1069.1	1065.1	1045.9	1039.4	1050.9	1143.5	1352.8	1628.1	1648.8	1609.7
30°	1190.2	1179.8	1173.9	1140.6	1116.9	1118.8	1197.2	1401.1	1735.8	1769.3	1719.5
32.5°	1347.7	1331.4	1315.8	1261.1	1217.8	1203.7	1266.5	1467.8	1852.7	1906.0	1842.2
35°	1524.1	1511.0	1494.2	1409.8	1343.4	1310.7	1360.1	1561.1	1989.4	2074.0	1991.0
37.5°	1693.8	1682.5	1690.5	1576.7	1491.0	1443.5	1482.7	1686.2	2158.1	2283.0	2177.4
40°	1869.4	1860.7	1861.8	1753.0	1653.2	1599.8	1631.4	1843.3	2351.6	2531.4	2401.6
42.5°	2060.2	2053.7	2032.0	1935.4	1823.3	1773.7	1802.7	2024.7	2559.0	2814.4	2647.6
45°	2273.9	2269.9	2249.6	2139.0	2010.5	1954.7	1993.8	2224.9	2767.6	3080.7	2894.6
47.5°	2458.6	2461.8	2459.3	2366.0	2232.9	2150.9	2197.7	2433.9	2961.7	3331.0	3131.5
50°	2547.4	2564.4	2589.5	2560.4	2477.7	2394.3	2403.4	2635.6	3146.7	3565.8	3358.6
52.5°	2501.0	2533.3	2601.4	2647.9	2679.9	2662.4	2638.1	2835.9	3320.9	3777.6	3573.4
55°	2328.0	2373.3	2486.4	2598.6	2761.5	2888.0	2920.0	3057.9	3490.6	3964.1	3776.5
57.5°	2012.7	2086.3	2187.9	2414.7	2688.9	2997.3	3248.6	3365.9	3670.6	4163.2	3989.1
60°	1472.1	1570.8	1697.1	2034.4	2435.0	2938.9	3528.4	3838.9	3926.4	4421.1	4265.8
62.5°	942.2	1003.1	1119.2	1436.9	1897.3	2639.6	3613.9	4430.3	4359.8	4844.2	4680.9
65°	645.0	684.2	790.5	968.9	1226.5	1964.8	3384.8	4873.6	5048.4	5514.6	5390.5
67.5°	468.7	498.5	589.2	745.5	799.2	1162.7	2626.5	4853.3	5717.8	6205.3	6012.3
70°	341.7	362.7	439.0	589.2	614.9	646.9	1591.1	4125.5	5703.2	6388.8	6157.8
72.5°	253.2	267.7	318.9	457.2	497.7	436.8	787.6	2998.3	4900.7	5778.6	5593.3
75°	183.2	194.1	231.9	349.7	398.3	332.7	392.9	1752.2	3418.5	4064.9	4097.5
77.5°	140.0	148.4	173.0	256.1	318.9	249.6	243.7	806.1	1620.9	1628.8	1720.3
80°	112.4	117.9	131.3	180.3	244.5	186.9	158.9	325.4	512.2	433.5	454.9
82.5°	82.7	91.7	111.0	126.6	174.9	128.7	96.9	164.3	194.9	167.6	169.0
85°	47.2	53.3	67.1	90.7	111.7	78.7	55.6	72.9	90.7	74.4	66.4
87.5°	16.7	21.7	23.6	35.6	48.6	32.7	21.4	21.0	29.7	22.1	18.6
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: P960511

CATALOG NUMBER: NAV-SB1C-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1009.6	1007.8	1000.5	990.8	980.6	970.8	967.5	960.6	955.9	953.4	956.3
5°	1029.9	1024.1	1007.1	985.3	962.5	937.8	920.3	904.4	892.8	881.9	886.2
7.5°	1058.9	1048.8	1019.4	981.3	940.6	899.6	869.2	846.0	830.4	820.2	822.5
10°	1092.6	1077.1	1032.1	975.2	912.4	853.6	817.7	797.8	787.9	782.5	783.9
12.5°	1131.5	1109.4	1045.2	961.0	869.2	802.1	777.5	771.6	772.0	772.3	773.1
15°	1179.4	1148.5	1055.6	930.2	813.0	762.6	758.2	767.6	777.5	782.2	781.8
17.5°	1233.5	1189.9	1057.5	879.3	757.9	737.2	750.9	771.3	786.2	792.6	794.2
20°	1291.5	1231.9	1044.5	807.5	712.5	716.5	741.2	767.3	783.6	791.9	794.2
22.5°	1357.9	1276.9	1013.2	732.1	675.5	694.0	723.0	748.5	765.5	773.8	776.0
25°	1433.7	1327.4	964.2	668.6	643.6	668.6	697.6	718.6	732.5	740.0	742.2
27.5°	1517.8	1380.0	898.9	618.2	615.6	642.5	666.5	682.8	690.0	695.8	698.0
30°	1602.4	1427.9	819.9	580.0	591.3	616.7	633.8	641.0	643.2	644.3	646.9
32.5°	1693.8	1469.2	736.8	548.5	568.2	591.7	601.9	605.2	594.9	588.0	590.2
35°	1804.4	1513.5	655.5	523.5	545.3	565.6	568.9	565.9	553.9	539.8	540.6
37.5°	1941.2	1568.7	590.6	505.7	523.9	537.3	533.3	532.6	533.6	516.9	518.0
40°	2108.8	1640.5	543.0	491.9	506.5	509.3	498.0	504.3	509.7	484.3	485.0
42.5°	2295.0	1727.2	513.0	482.5	491.9	485.0	467.6	474.5	473.8	440.4	440.0
45°	2484.7	1821.5	502.5	475.6	478.5	464.7	445.5	447.3	432.0	402.0	403.0
47.5°	2673.3	1922.7	509.0	469.8	461.9	446.2	431.3	423.3	400.9	378.3	378.3
50°	2858.3	2029.0	532.9	458.2	439.0	429.9	419.0	404.9	380.9	361.7	360.3
52.5°	3029.9	2136.0	559.8	439.0	410.3	415.7	408.9	392.6	368.9	349.3	349.7
55°	3192.5	2243.0	570.3	412.5	383.5	403.4	399.4	369.3	341.0	325.0	323.6
57.5°	3369.5	2371.8	558.7	378.7	361.7	389.3	374.0	340.6	324.3	312.3	311.3
60°	3614.7	2573.9	533.6	337.0	341.0	368.2	342.1	328.3	310.6	297.1	296.4
62.5°	4022.1	2950.9	493.3	295.7	316.7	337.0	326.9	313.0	294.9	281.9	281.9
65°	4624.3	3474.6	417.6	263.4	289.5	306.6	310.6	296.7	277.9	264.1	264.9
67.5°	5132.2	3803.4	316.0	236.6	261.6	281.9	293.2	279.7	259.7	246.3	246.7
70°	5104.3	3564.6	241.3	210.0	236.9	257.6	272.0	261.6	240.2	227.4	228.6
72.5°	4533.6	2982.0	195.2	183.2	211.9	232.2	249.6	241.6	219.9	207.5	207.5
75°	3330.6	2116.8	156.0	156.0	180.7	205.7	224.9	219.9	199.9	191.2	188.6
77.5°	1403.9	888.1	122.3	129.6	150.2	176.7	200.6	202.4	185.0	195.9	177.7
80°	373.3	244.9	93.3	102.0	117.9	145.9	174.5	173.7	154.9	144.7	134.6
82.5°	142.2	96.5	66.4	71.9	85.3	111.7	138.2	142.6	123.7	107.0	107.0
85°	54.7	41.3	41.0	43.2	49.7	74.0	104.4	108.1	93.3	79.1	81.6
87.5°	14.1	12.3	15.3	14.6	22.9	39.6	59.9	62.0	57.0	33.0	47.2
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)