

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: P959969

Luminaire Tested: **NAV-SB1B-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5156.8 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

Input Watts (W): 39.8
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



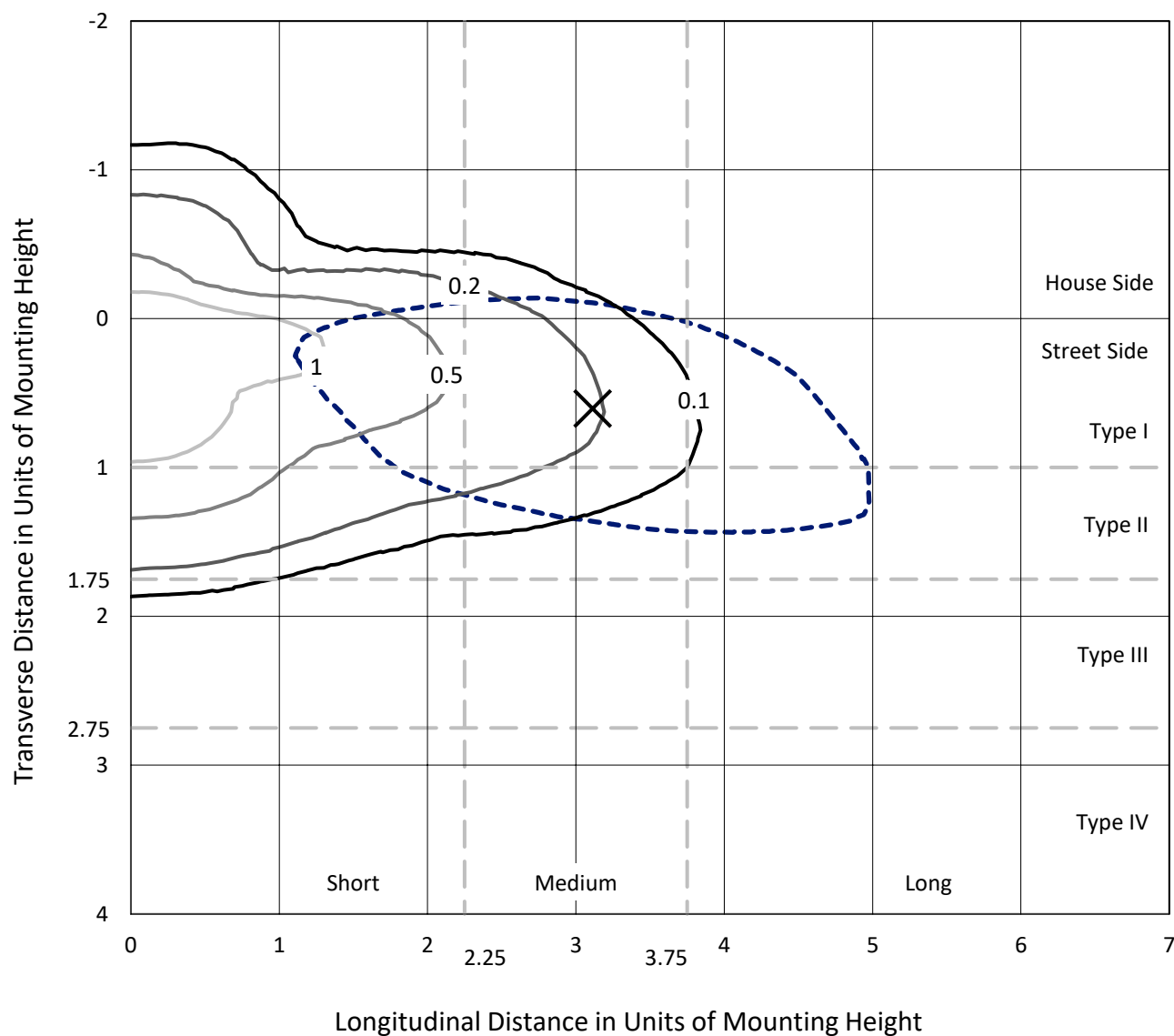
REPORT NUMBER: P959969

CATALOG NUMBER: NAV-SB1B-830-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

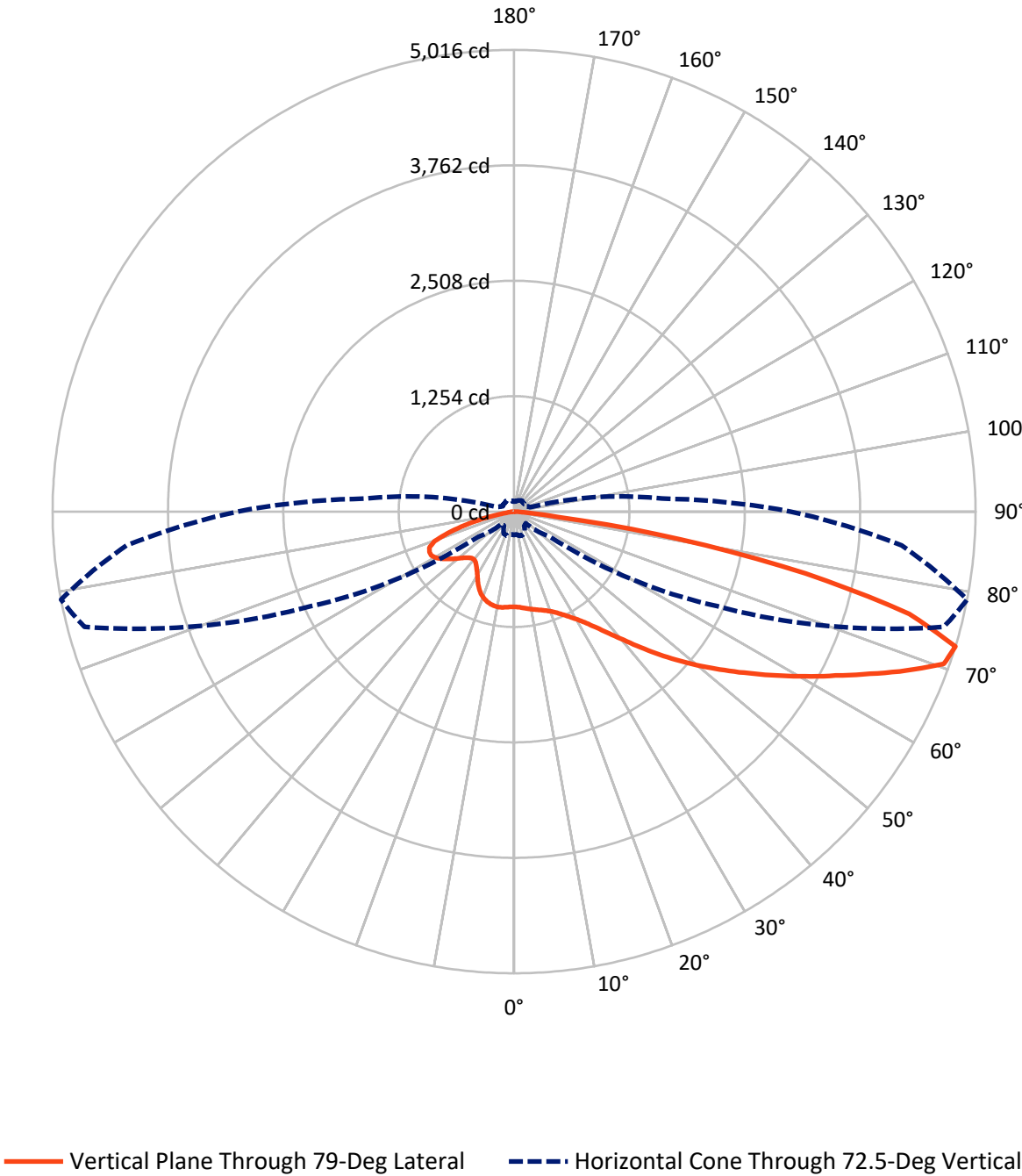
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
Type II - Medium - N/A

REPORT NUMBER: P959969
CATALOG NUMBER: NAV-SB1B-830-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P959969

CATALOG NUMBER: NAV-SB1B-830-U-SL2

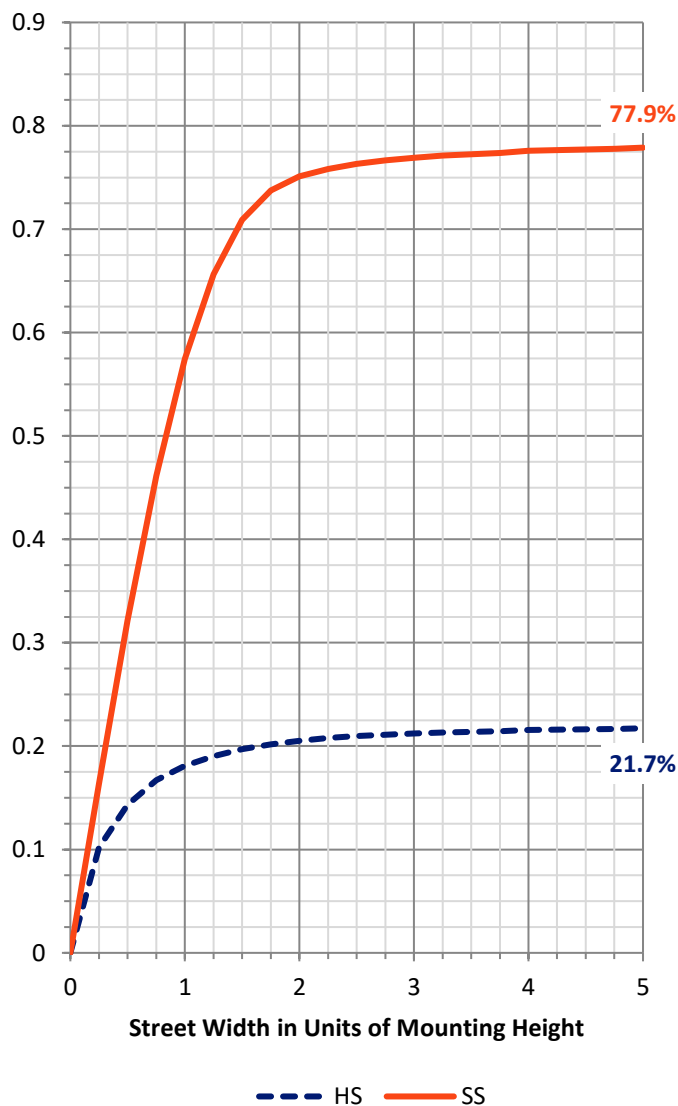
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1134.8	0.0	1134.8
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	4022.0	0.0	4022.0
	% Fixture	78.0	0.0	78.0
Total	Lumens	5156.8	0.0	5156.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	1.8
10°-20°	245.7	4.8
20°-30°	396.4	7.7
30°-40°	595.0	11.5
40°-50°	844.0	16.4
50°-60°	1065.8	20.7
60°-70°	1082.5	21.0
70°-80°	737.8	14.3
80°-90°	95.7	1.9
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°	5156.8	100.0
0°-180°	5156.8	100.0

Coefficient of Utilization



REPORT NUMBER: P959969

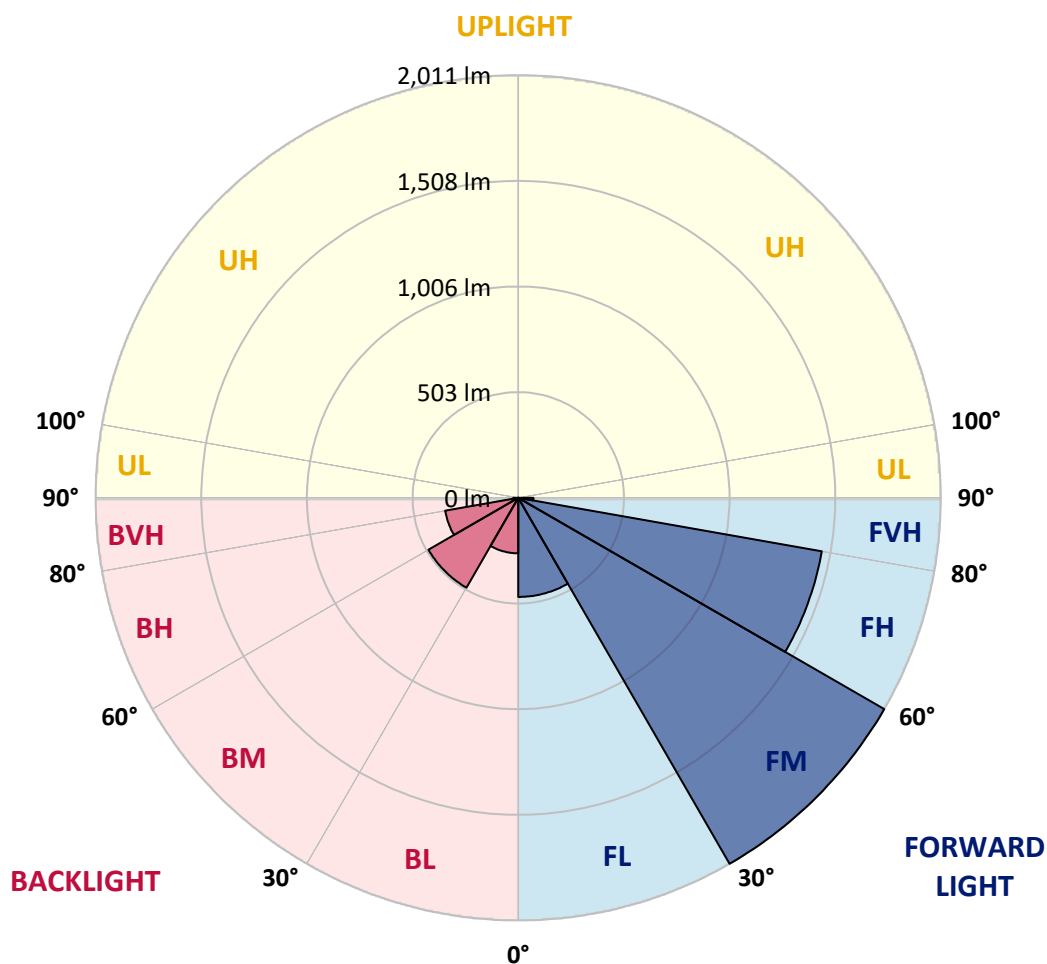
CATALOG NUMBER: NAV-SB1B-830-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	471.7	9.1			
FM	(30°-60°)	2011.3	39.0			
FH	(60°-80°)	1466.9	28.4			G1/1800
FVH	(80°-90°)	72.1	1.4			G1/100
BL	(0°-30°)	264.3	5.1	B1/500		
BM	(30°-60°)	493.5	9.6	B1/1000		
BH	(60°-80°)	353.3	6.9	B1/500		G1/500
BVH	(80°-90°)	23.6	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-G1

Type II Medium



REPORT NUMBER: P959969

CATALOG NUMBER: NAV-SB1B-830-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1
2.5°	1035.8	1030.8	1033.8	1032.7	1034.1	1035.8	1036.3	1037.1	1039.8	1039.6	1039.2
5°	1033.5	1028.6	1032.7	1031.4	1034.9	1038.7	1042.0	1045.0	1049.4	1051.2	1048.6
7.5°	1028.9	1025.6	1029.7	1033.8	1040.4	1046.1	1050.7	1057.5	1063.8	1064.9	1066.8
10°	1001.9	999.5	1009.0	1019.7	1037.6	1053.2	1063.2	1071.2	1078.0	1079.1	1081.8
12.5°	973.7	970.8	981.4	995.9	1025.1	1053.2	1074.4	1084.9	1090.8	1094.4	1098.5
15°	969.1	966.7	972.7	985.2	1009.5	1045.8	1082.1	1101.2	1106.4	1110.5	1112.1
17.5°	991.5	986.9	989.3	993.7	1007.9	1039.0	1088.1	1119.7	1127.6	1132.0	1132.0
20°	1043.3	1036.8	1033.0	1024.3	1021.8	1040.1	1087.5	1142.1	1152.5	1157.9	1159.3
22.5°	1112.3	1108.0	1099.8	1077.7	1053.7	1053.5	1097.9	1170.8	1190.1	1195.3	1192.0
25°	1195.9	1189.3	1179.0	1148.9	1102.8	1079.9	1115.4	1207.2	1239.7	1241.1	1231.5
27.5°	1291.8	1282.1	1267.8	1228.3	1166.1	1121.4	1142.1	1249.3	1296.7	1296.2	1276.5
30°	1393.1	1383.2	1368.3	1320.2	1241.9	1177.3	1179.2	1294.6	1364.4	1361.4	1327.9
32.5°	1467.0	1459.6	1456.6	1419.5	1329.2	1243.3	1221.8	1344.8	1447.9	1445.1	1398.2
35°	1523.7	1514.1	1517.7	1498.9	1424.4	1317.2	1273.9	1404.6	1549.4	1549.1	1490.7
37.5°	1579.9	1571.4	1574.4	1561.9	1512.5	1411.0	1337.4	1477.6	1675.1	1681.1	1602.6
40°	1631.2	1622.2	1634.2	1622.5	1581.0	1510.8	1409.7	1560.3	1820.8	1832.2	1737.9
42.5°	1662.0	1655.0	1674.8	1675.1	1640.4	1595.2	1489.0	1651.4	1989.3	2014.9	1904.2
45°	1672.6	1670.2	1700.2	1706.4	1693.1	1644.0	1560.6	1750.7	2171.0	2216.9	2093.8
47.5°	1661.2	1656.5	1698.0	1721.2	1731.8	1667.0	1619.7	1858.1	2356.5	2423.6	2300.6
50°	1603.4	1594.4	1656.0	1704.9	1742.7	1681.9	1679.5	1982.2	2567.3	2640.7	2508.4
52.5°	1499.5	1492.6	1562.7	1647.6	1718.7	1689.3	1746.6	2117.9	2767.6	2862.5	2721.5
55°	1366.6	1357.6	1434.8	1545.5	1659.0	1686.8	1813.6	2269.5	3003.8	3100.1	2941.5
57.5°	1156.0	1138.1	1235.6	1366.6	1561.6	1683.9	1883.5	2420.3	3243.8	3359.2	3176.5
60°	848.9	822.2	941.9	1097.1	1371.2	1654.7	1969.9	2589.5	3531.8	3635.8	3432.8
62.5°	494.3	478.7	557.0	701.8	1033.5	1482.8	2018.5	2786.1	3815.0	3924.1	3684.9
65°	383.8	379.5	386.2	397.4	575.2	1110.2	1868.8	2977.8	4175.0	4251.4	3947.6
67.5°	351.1	347.8	350.8	329.7	291.8	618.4	1478.5	3026.4	4560.7	4607.2	4177.5
70°	312.0	308.2	318.1	300.0	229.7	281.3	955.3	2850.2	4867.6	4954.6	4352.4
72.5°	254.2	249.9	272.8	264.6	193.4	180.6	479.8	2431.5	4835.4	5016.0	4227.2
75°	195.3	192.8	220.2	226.9	157.6	142.1	230.2	1807.4	4255.3	4437.2	3643.2
77.5°	151.7	149.8	163.7	188.5	127.1	110.2	141.6	1146.5	3206.7	3238.6	2510.6
80°	113.8	108.2	121.2	146.0	99.0	80.5	96.0	668.6	2026.9	1837.4	1092.8
82.5°	71.2	68.5	79.1	97.4	69.8	55.4	62.4	369.3	812.3	478.5	210.8
85°	40.7	39.6	43.0	55.7	37.9	31.9	35.8	163.1	148.4	102.0	63.6
87.5°	16.4	15.8	19.7	24.8	13.9	11.7	12.5	39.3	32.7	30.2	21.0
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: P959969

CATALOG NUMBER: NAV-SB1B-830-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1	1035.1
2.5°	1038.2	1038.2	1034.3	1028.4	1021.5	1017.2	1010.0	1008.2	1000.8	998.7	1002.1
5°	1050.7	1048.6	1036.8	1019.9	996.7	975.4	952.0	937.3	916.6	909.2	914.6
7.5°	1066.5	1060.6	1040.4	1003.3	954.7	906.9	857.3	819.7	783.7	770.9	772.5
10°	1081.0	1072.6	1038.2	973.2	889.3	806.6	727.4	672.1	630.1	612.9	616.7
12.5°	1095.4	1079.9	1023.7	923.3	796.2	684.1	599.8	556.8	530.8	510.0	516.9
15°	1109.0	1087.3	1001.3	856.5	694.2	580.5	518.2	483.9	463.2	449.6	452.0
17.5°	1124.9	1093.6	967.8	771.7	597.1	508.7	458.0	437.3	433.2	431.5	432.7
20°	1147.0	1099.3	923.6	676.7	525.6	451.4	425.3	423.3	423.1	422.3	425.0
22.5°	1170.8	1106.1	865.2	590.5	464.8	415.7	411.0	407.2	404.8	404.6	407.5
25°	1198.8	1108.2	792.1	519.9	413.0	398.8	393.3	387.7	386.0	386.0	387.7
27.5°	1226.1	1101.0	707.0	458.5	383.8	383.2	376.2	374.2	374.0	374.7	377.0
30°	1253.4	1087.0	622.5	401.8	366.8	366.8	364.4	365.8	366.8	369.6	371.6
32.5°	1290.2	1072.3	551.9	359.8	352.2	349.4	351.9	354.6	355.7	359.3	362.2
35°	1344.2	1061.9	495.6	336.9	336.9	333.3	334.7	334.2	331.7	330.0	333.8
37.5°	1415.7	1061.4	449.3	326.3	324.1	323.5	323.8	320.2	310.7	299.2	299.5
40°	1501.6	1076.0	413.5	318.9	317.2	320.5	318.9	309.3	283.1	263.2	262.7
42.5°	1617.0	1118.1	390.6	309.9	314.8	318.9	312.3	279.3	261.6	248.3	247.6
45°	1752.9	1186.3	378.8	300.3	310.2	315.1	283.4	269.0	254.8	238.7	237.6
47.5°	1906.7	1272.2	376.2	291.3	299.8	302.8	271.1	264.6	248.5	231.0	229.7
50°	2074.2	1373.9	383.6	280.6	284.7	274.4	267.0	261.1	244.4	227.2	225.3
52.5°	2247.4	1486.0	398.2	266.2	269.8	258.3	265.4	260.2	241.9	218.7	217.1
55°	2417.6	1599.0	412.5	249.3	254.5	243.8	260.8	257.0	230.7	204.6	203.3
57.5°	2590.5	1711.3	426.3	234.3	239.7	229.9	253.4	248.3	218.2	191.5	191.0
60°	2770.3	1820.5	432.9	219.9	223.7	217.1	242.2	233.2	204.1	178.1	177.3
62.5°	2938.6	1911.3	422.3	205.4	207.9	205.1	227.4	215.5	189.8	163.1	162.9
65°	3107.4	1965.3	389.5	191.3	191.8	190.4	206.7	196.4	173.2	150.1	148.4
67.5°	3260.4	1995.6	337.4	175.9	174.6	174.0	187.4	175.7	157.1	136.9	135.3
70°	3292.9	1918.7	257.8	158.0	158.0	156.6	166.2	154.2	139.4	123.0	122.5
72.5°	3007.6	1614.0	183.1	137.5	139.7	136.9	144.8	134.8	121.4	110.5	107.2
75°	2425.3	1183.6	133.1	116.4	120.3	115.6	123.0	115.9	104.4	104.2	93.8
77.5°	1666.3	731.8	96.6	96.0	98.7	92.8	101.2	97.4	87.0	82.4	77.2
80°	711.1	291.8	70.4	74.2	74.2	68.8	78.5	79.6	70.6	68.5	68.5
82.5°	141.6	82.9	49.4	51.0	48.0	46.3	55.7	61.6	85.1	94.6	94.9
85°	42.5	30.5	29.7	27.8	24.6	24.8	32.7	61.9	76.4	43.7	37.6
87.5°	11.7	7.7	7.9	6.3	5.2	6.9	11.2	46.9	25.6	10.9	9.2
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)