

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: P962100

Luminaire Tested: **NAV-SB2B-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962100
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-SB2B-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10351.5 lumens
Efficiency: N/A
Efficacy: 140.1 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): 73.9
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

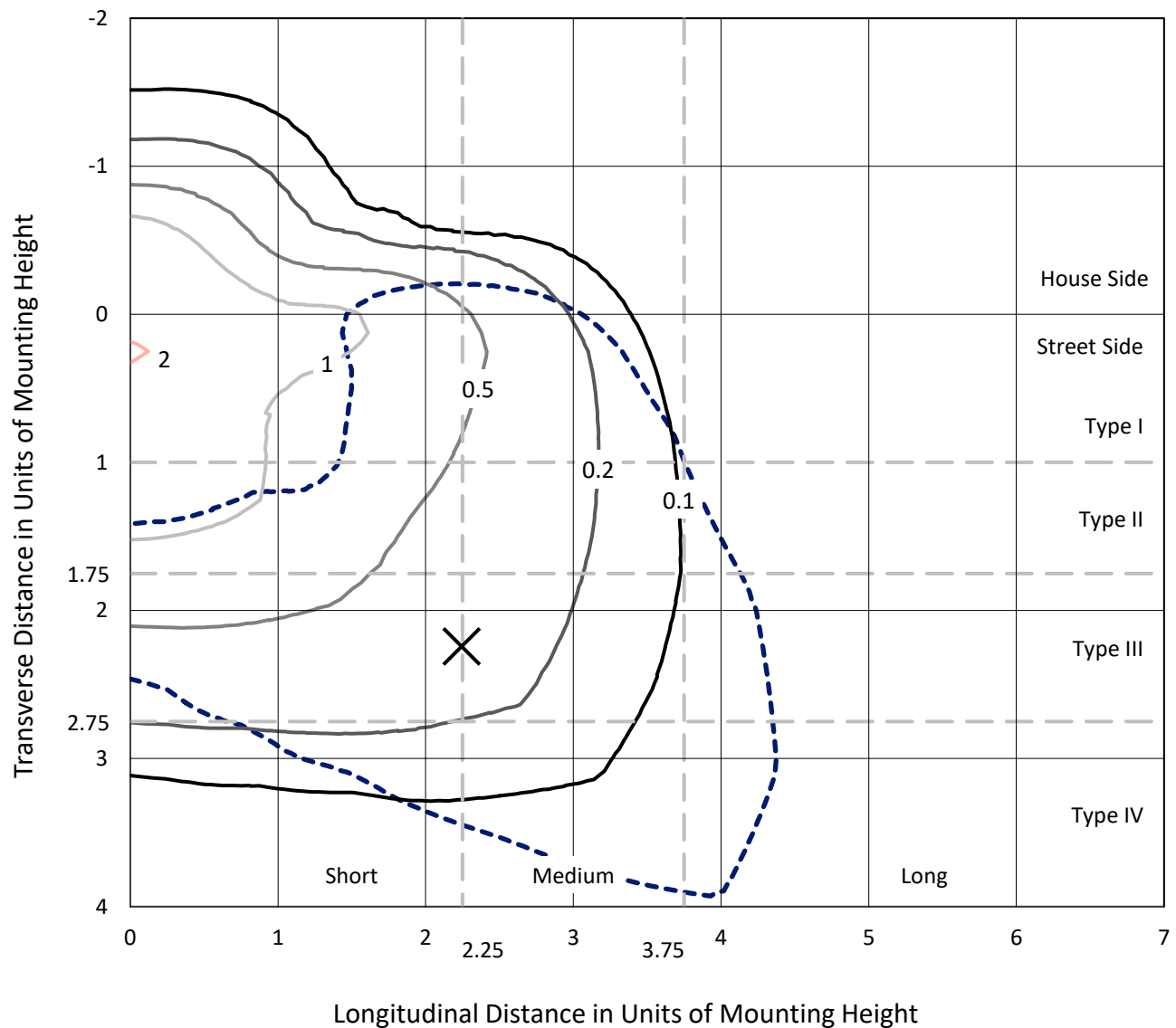


REPORT NUMBER: P962100

CATALOG NUMBER: NAV-SB2B-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

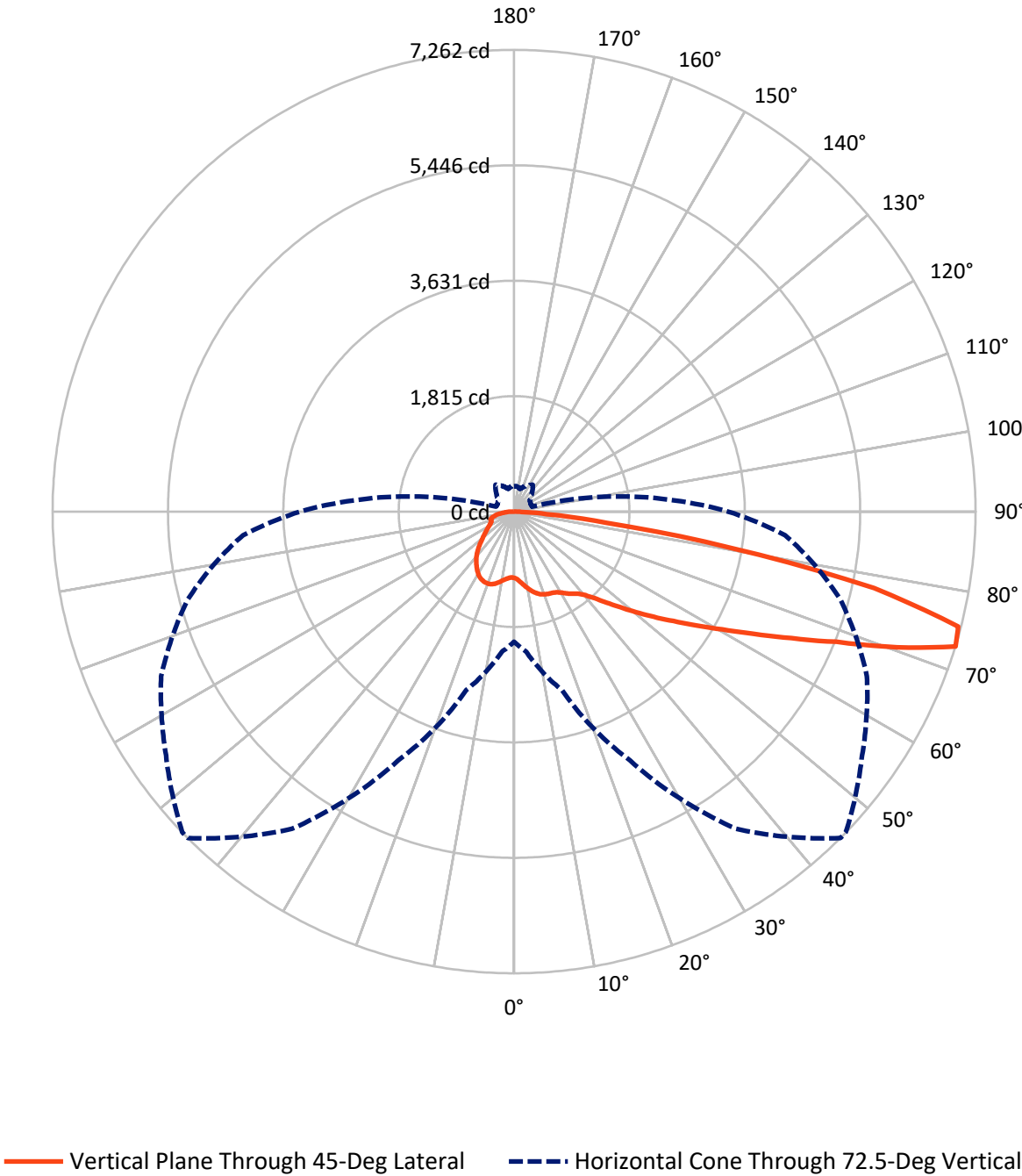
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
Type IV - Short - N/A

REPORT NUMBER: P962100
CATALOG NUMBER: NAV-SB2B-830-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P962100

CATALOG NUMBER: NAV-SB2B-830-U-T4W

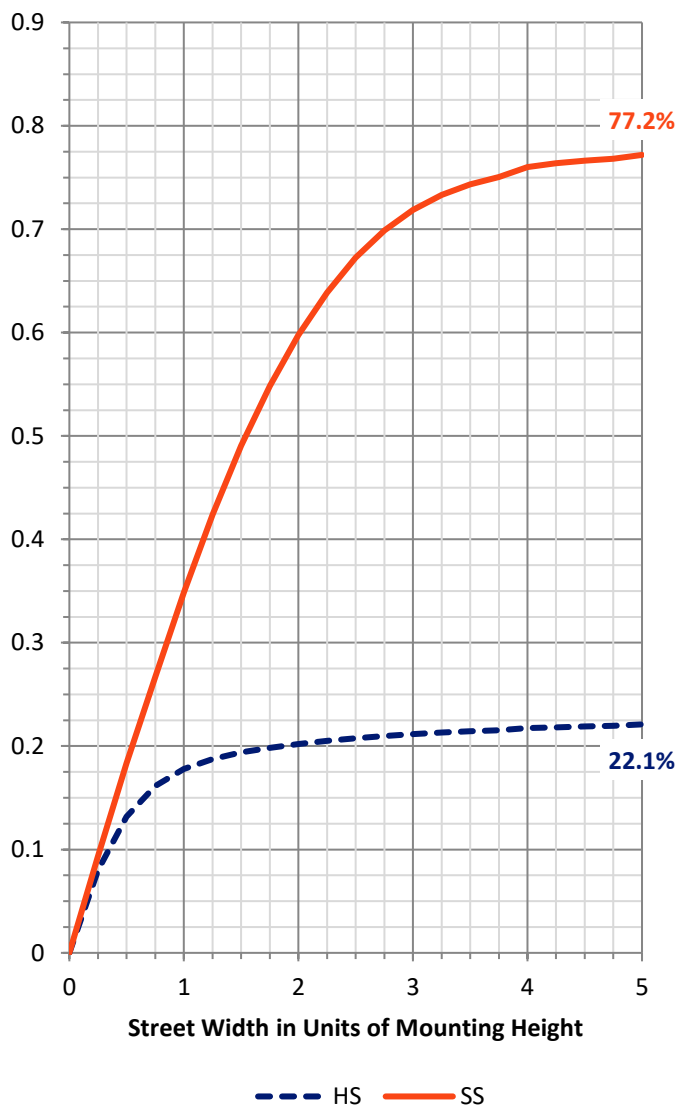
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2340.1	0.0	2340.1
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	8011.3	0.0	8011.3
	% Fixture	77.4	0.0	77.4
Total	Lumens	10351.5	0.0	10351.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	1.0
10°-20°	354.4	3.4
20°-30°	616.4	6.0
30°-40°	883.7	8.5
40°-50°	1244.3	12.0
50°-60°	1905.9	18.4
60°-70°	2761.0	26.7
70°-80°	2204.8	21.3
80°-90°	274.6	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°	10351.5	100.0
0°-180°	10351.5	100.0

Coefficient of Utilization



REPORT NUMBER: P962100

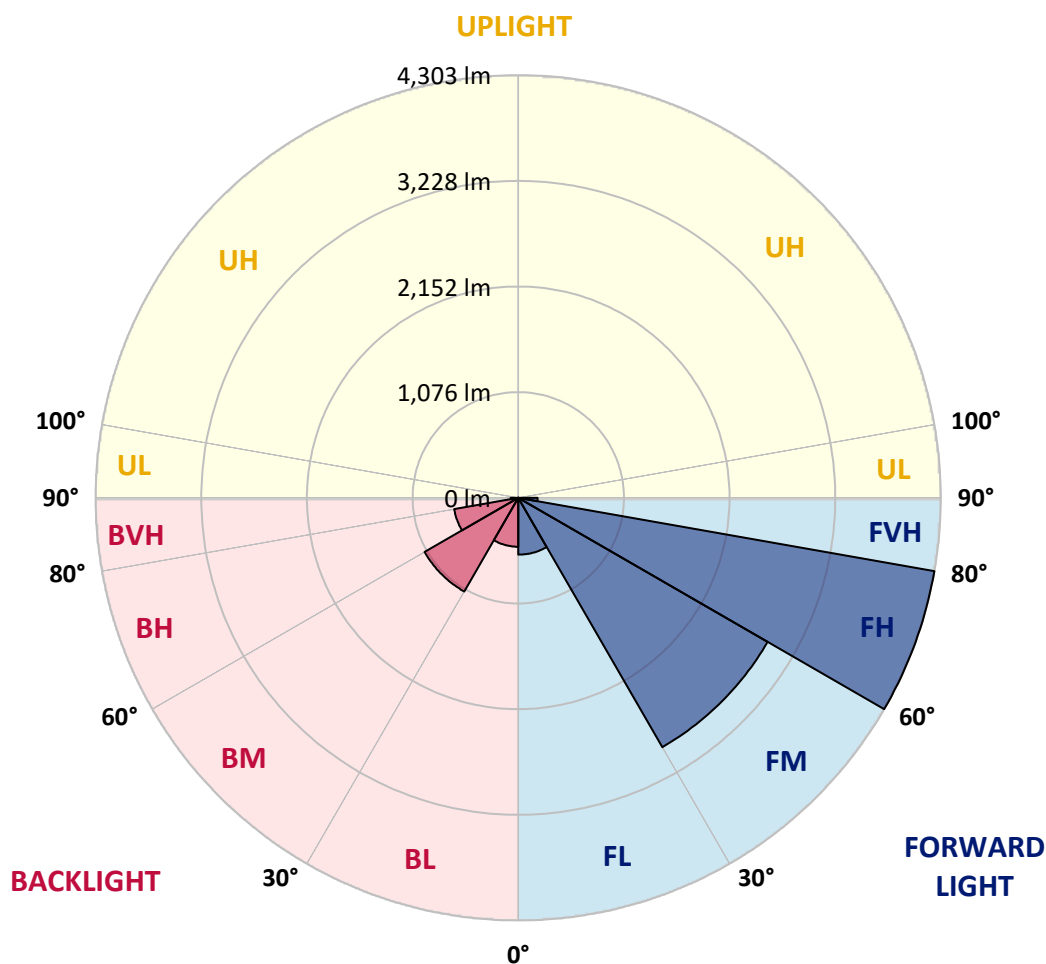
CATALOG NUMBER: NAV-SB2B-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	578.9	5.6			
FM	(30°-60°)	2932.1	28.3			
FH	(60°-80°)	4303.4	41.6			G2/5000
FVH	(80°-90°)	197.0	1.9			G2/225
BL	(0°-30°)	498.2	4.8	B1/500		
BM	(30°-60°)	1101.9	10.6	B2/2500		
BH	(60°-80°)	662.4	6.4	B2/1000		G2/1000
BVH	(80°-90°)	77.6	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: P962100

CATALOG NUMBER: NAV-SB2B-830-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3
2.5°	1085.2	1092.2	1085.7	1079.7	1077.0	1069.9	1069.4	1065.0	1062.2	1054.6	1052.5
5°	1160.9	1170.2	1159.3	1147.3	1136.4	1119.0	1116.7	1104.2	1090.1	1073.7	1064.5
7.5°	1246.6	1254.7	1242.2	1224.3	1205.1	1176.2	1175.7	1152.8	1130.4	1102.6	1086.8
10°	1321.3	1332.2	1315.3	1290.8	1266.8	1234.0	1230.2	1204.1	1175.7	1139.7	1115.7
12.5°	1387.2	1394.9	1378.5	1348.6	1320.7	1288.0	1283.1	1254.2	1222.6	1181.7	1151.2
15°	1439.6	1449.5	1427.6	1395.4	1366.0	1333.8	1329.4	1303.3	1271.6	1228.6	1189.3
17.5°	1473.9	1482.1	1459.8	1423.8	1395.4	1368.7	1365.4	1343.7	1315.8	1272.2	1230.2
20°	1487.1	1495.8	1472.3	1435.8	1409.6	1388.9	1387.2	1371.4	1352.4	1312.5	1270.0
22.5°	1500.2	1508.3	1477.7	1439.6	1416.8	1403.6	1403.1	1392.7	1385.1	1352.4	1310.9
25°	1553.1	1555.2	1514.3	1459.2	1426.5	1415.1	1414.5	1414.0	1417.3	1391.6	1355.0
27.5°	1598.8	1598.3	1563.4	1511.6	1460.8	1436.8	1436.3	1441.8	1452.1	1430.9	1400.9
30°	1665.9	1659.9	1618.5	1564.5	1518.1	1481.0	1477.7	1472.8	1481.0	1464.1	1446.7
32.5°	1808.2	1789.1	1722.1	1626.1	1565.6	1537.2	1532.9	1502.3	1505.6	1495.3	1486.5
35°	2012.2	1987.1	1897.7	1742.8	1624.4	1584.1	1582.0	1543.2	1536.7	1527.5	1530.6
37.5°	2254.8	2223.7	2119.6	1911.8	1725.9	1638.7	1635.4	1600.4	1573.8	1563.9	1582.5
40°	2498.6	2459.3	2373.2	2118.0	1875.3	1729.7	1719.3	1666.4	1635.9	1619.6	1658.9
42.5°	2735.2	2702.5	2628.9	2349.2	2059.6	1862.7	1839.9	1749.4	1726.4	1711.1	1782.1
45°	2944.6	2915.2	2861.2	2596.2	2275.6	2043.8	2021.4	1873.7	1866.6	1866.6	1969.1
47.5°	3114.8	3108.2	3051.0	2848.2	2530.2	2250.0	2211.2	2046.5	2065.6	2095.1	2234.7
50°	3303.5	3285.4	3224.4	3096.2	2829.6	2486.0	2454.5	2258.7	2330.1	2410.8	2618.6
52.5°	3476.9	3486.6	3418.5	3354.7	3167.7	2749.5	2693.8	2509.0	2663.3	2796.9	3068.4
55°	3655.2	3655.8	3636.7	3627.9	3522.1	3040.7	2979.6	2809.9	3055.3	3221.2	3593.0
57.5°	3822.6	3823.7	3852.1	3928.9	3933.3	3376.6	3307.3	3179.7	3491.0	3660.1	4133.9
60°	3972.0	3979.7	4057.1	4237.0	4294.9	3761.5	3696.0	3616.5	3941.4	4111.6	4702.7
62.5°	4022.2	4050.0	4222.3	4478.0	4652.0	4233.8	4169.4	4121.9	4414.8	4572.9	5178.2
65°	3937.1	4000.9	4334.1	4677.1	5019.5	4794.8	4731.1	4679.2	4906.7	5055.5	5568.7
67.5°	3728.2	3810.6	4327.5	4886.0	5465.6	5470.0	5410.6	5288.9	5433.9	5491.2	5695.7
70°	3178.0	3301.3	3946.4	4964.0	5977.7	6393.1	6335.9	6022.9	5960.2	5683.2	5338.0
72.5°	2047.6	2213.4	2906.0	4322.1	6091.6	7261.8	7258.5	6685.5	6126.5	5310.2	4281.2
75°	747.0	848.5	1350.1	2712.9	5113.3	7217.6	7239.0	6572.0	5592.7	4101.8	2667.0
77.5°	272.1	297.8	440.6	1042.6	3144.8	5791.1	5835.3	5254.0	3980.7	2058.5	1056.8
80°	142.9	157.0	225.8	404.6	1347.5	3439.3	3508.5	3122.5	1870.9	620.0	316.8
82.5°	79.0	85.6	126.5	219.8	606.9	1470.7	1512.2	1233.5	658.2	262.8	130.9
85°	42.5	45.3	59.4	119.9	296.6	509.8	521.3	368.6	262.3	154.4	63.2
87.5°	12.5	15.3	19.7	38.1	116.1	114.5	117.3	73.1	103.6	78.0	20.7
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: P962100

CATALOG NUMBER: NAV-SB2B-830-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3	1044.3
2.5°	1049.2	1047.6	1041.5	1038.8	1035.6	1034.9	1037.7	1038.2	1038.8	1039.4	1041.5
5°	1059.0	1053.5	1048.1	1044.8	1045.9	1046.4	1051.9	1055.8	1058.4	1060.7	1061.7
7.5°	1078.1	1073.7	1064.5	1063.8	1065.5	1070.4	1077.5	1086.3	1091.1	1095.0	1096.0
10°	1106.4	1098.3	1087.3	1089.0	1092.2	1099.3	1114.1	1121.1	1129.3	1136.4	1134.8
12.5°	1135.3	1128.2	1115.7	1116.7	1122.3	1134.8	1148.9	1157.6	1163.2	1168.6	1170.8
15°	1172.9	1160.4	1146.8	1146.8	1156.6	1170.2	1176.8	1183.9	1187.2	1193.1	1195.4
17.5°	1211.7	1195.4	1177.3	1176.2	1188.2	1194.7	1198.6	1199.7	1200.8	1207.3	1209.5
20°	1250.4	1232.4	1206.7	1204.6	1207.3	1206.2	1205.7	1204.6	1206.2	1214.4	1217.7
22.5°	1288.5	1267.8	1232.4	1222.6	1214.9	1204.6	1204.1	1203.5	1204.6	1212.8	1218.2
25°	1333.3	1308.2	1260.8	1231.3	1205.7	1191.5	1193.1	1193.7	1194.7	1201.3	1210.0
27.5°	1381.8	1354.0	1286.9	1228.6	1182.2	1172.4	1169.7	1171.4	1175.2	1185.5	1195.9
30°	1430.4	1397.6	1310.9	1217.7	1152.8	1139.2	1130.4	1134.3	1146.3	1156.6	1168.1
32.5°	1474.5	1441.8	1330.0	1193.7	1115.2	1093.9	1082.4	1087.3	1099.3	1103.1	1116.7
35°	1526.3	1489.2	1338.1	1155.5	1074.3	1041.5	1026.2	1019.2	1025.2	1021.3	1033.4
37.5°	1584.1	1545.4	1337.1	1105.4	1026.2	988.6	967.4	940.6	928.1	915.0	923.2
40°	1669.7	1614.1	1324.0	1044.8	966.8	932.4	894.3	849.0	820.7	795.1	796.7
42.5°	1786.5	1709.5	1300.0	978.3	899.7	867.6	815.8	762.9	718.2	675.7	671.8
45°	1960.4	1834.4	1270.0	907.4	827.3	795.6	739.4	680.0	629.2	574.7	568.3
47.5°	2211.2	2002.3	1241.7	826.7	750.9	722.0	671.3	616.2	556.2	503.3	497.3
50°	2555.8	2243.4	1215.4	748.1	675.7	653.8	613.5	557.3	496.8	454.3	451.5
52.5°	2994.2	2571.1	1204.6	672.4	605.3	597.1	565.0	512.6	455.3	419.3	416.7
55°	3497.6	2963.2	1204.6	599.8	543.7	546.4	524.1	475.5	425.9	393.7	390.4
57.5°	4011.2	3360.2	1182.7	532.8	491.3	502.8	488.6	446.1	401.4	368.1	362.6
60°	4484.6	3692.8	1094.4	471.7	445.0	463.0	453.7	417.2	362.6	334.9	330.5
62.5°	4848.4	3880.4	924.3	423.1	406.8	427.5	422.6	378.9	355.6	344.1	340.3
65°	5030.5	3849.9	706.7	380.1	374.6	406.8	396.5	394.8	376.3	363.2	358.9
67.5°	4918.7	3587.0	512.6	348.5	356.1	387.8	427.5	434.1	399.7	374.1	369.7
70°	4428.4	3111.5	381.7	318.5	332.6	388.3	487.5	454.3	392.1	362.1	357.2
72.5°	3368.9	2320.3	296.1	286.8	302.1	390.9	514.2	445.0	370.2	400.3	397.0
75°	1926.6	1273.9	237.8	248.2	263.9	365.3	500.6	421.0	353.3	367.6	367.6
77.5°	734.5	489.6	196.3	209.9	212.2	319.0	478.8	419.3	336.4	328.3	299.4
80°	254.6	191.4	162.5	166.9	164.1	283.5	459.1	364.8	275.4	246.5	238.3
82.5°	104.1	95.4	128.7	123.2	116.6	220.3	370.8	298.3	225.2	199.1	196.9
85°	45.3	60.6	85.1	74.7	67.6	152.7	297.1	252.5	190.3	164.1	163.6
87.5°	9.2	22.9	36.0	33.8	34.8	102.0	211.0	179.4	134.7	100.9	79.0
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)