

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: P961554

Luminaire Tested: **NAV-SB2A-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961554
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8189.7 lumens
Efficiency: N/A
Efficacy: 142.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
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

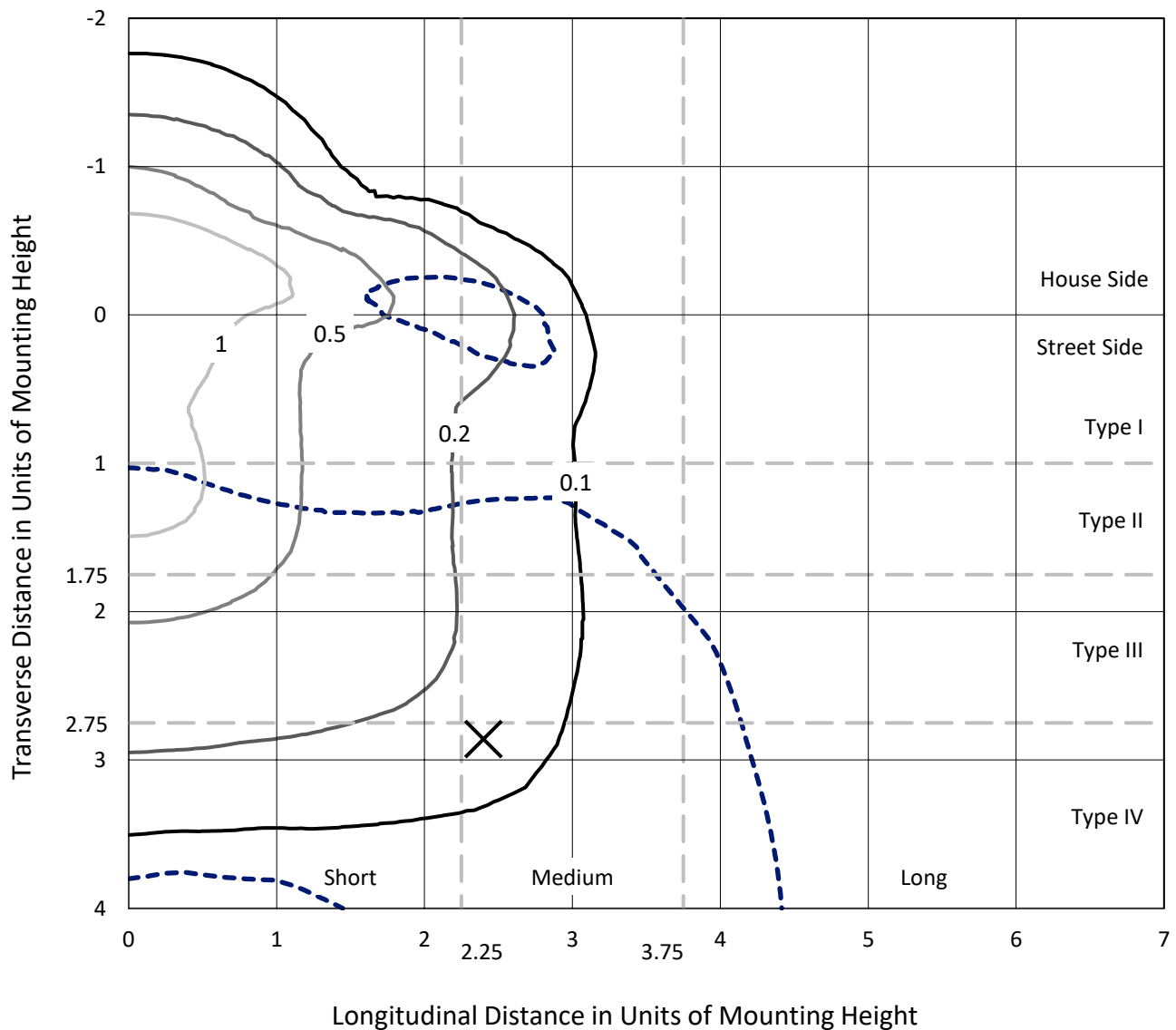


REPORT NUMBER: P961554

CATALOG NUMBER: NAV-SB2A-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

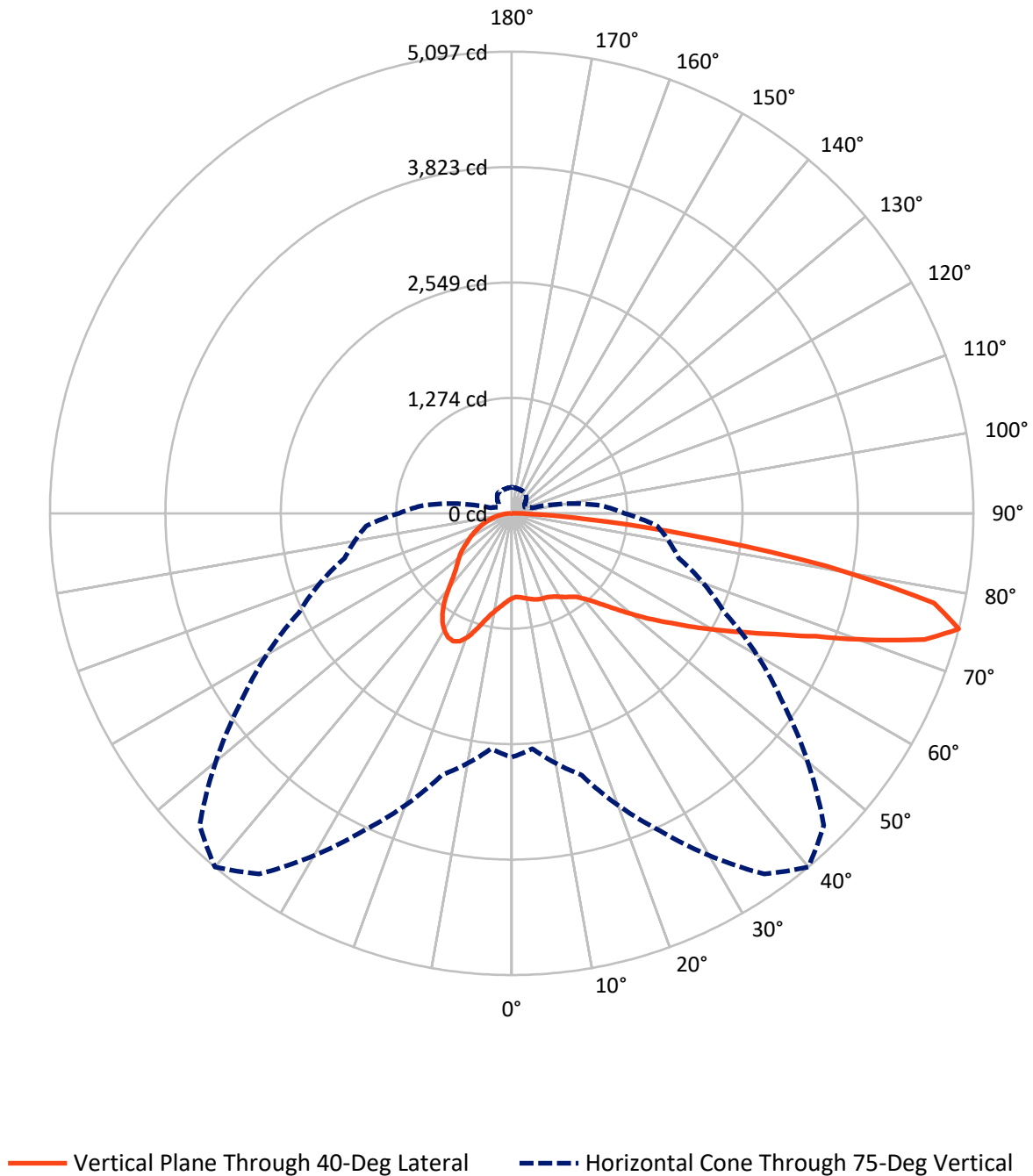
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type IV - Medium - N/A

REPORT NUMBER: P961554
CATALOG NUMBER: NAV-SB2A-830-U-SL4

Luminous Intensity Polar Plot



REPORT NUMBER: P961554

CATALOG NUMBER: NAV-SB2A-830-U-SL4

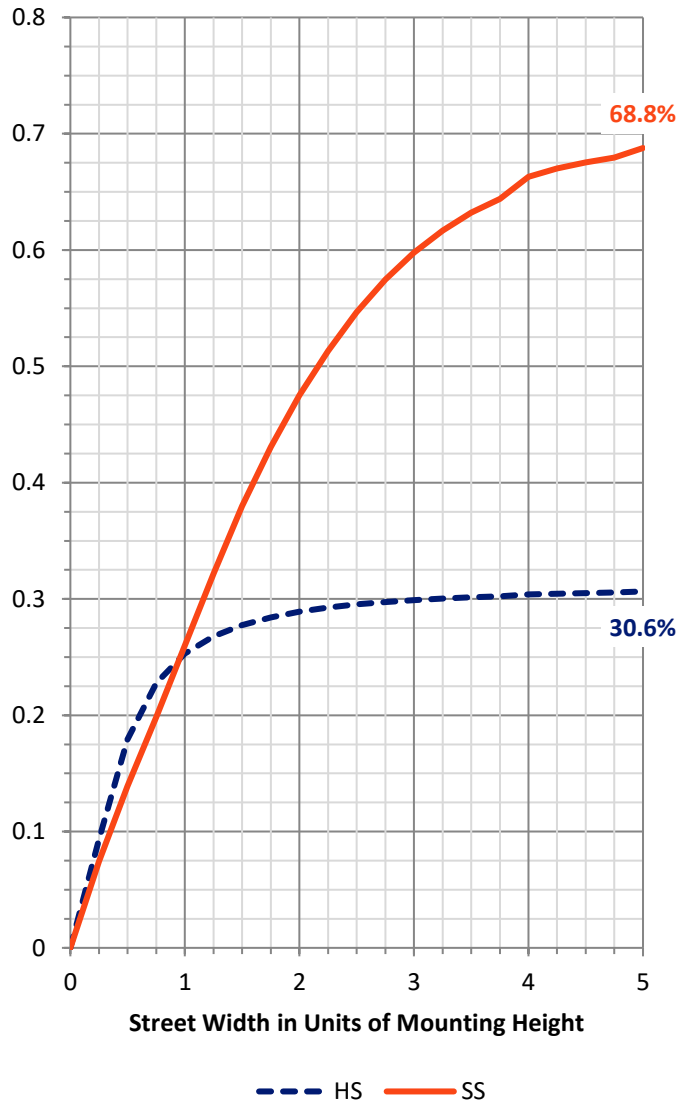
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2537.5	0.0	2537.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	5652.3	0.0	5652.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	8189.7	0.0	8189.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	1.1
10°-20°	313.9	3.8
20°-30°	573.1	7.0
30°-40°	812.8	9.9
40°-50°	1097.5	13.4
50°-60°	1476.4	18.0
60°-70°	1873.9	22.9
70°-80°	1700.7	20.8
80°-90°	247.9	3.0
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°	8189.7	100.0
0°-180°	8189.7	100.0

Coefficient of Utilization



REPORT NUMBER: P961554

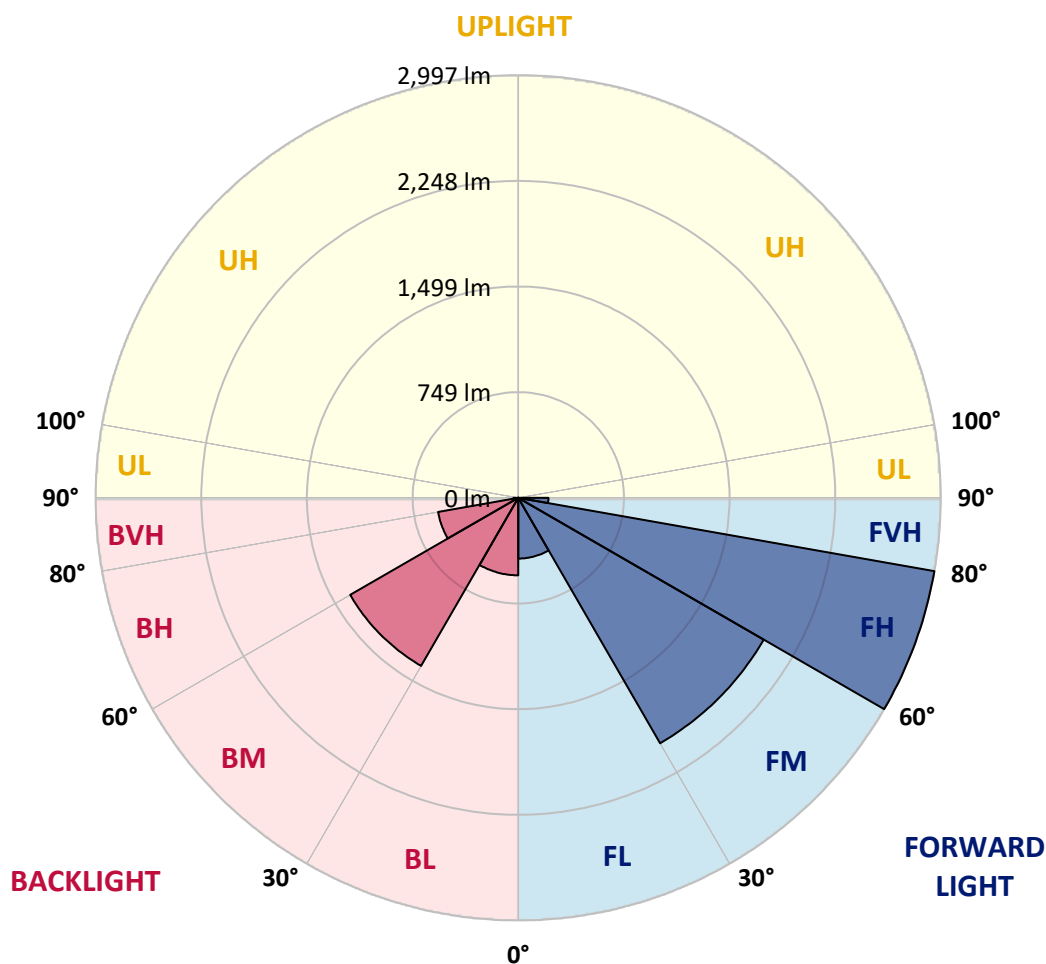
CATALOG NUMBER: NAV-SB2A-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	430.8	5.3			
FM	(30°-60°)	2010.4	24.5			
FH	(60°-80°)	2997.3	36.6			G2/5000
FVH	(80°-90°)	213.8	2.6			G2/225
BL	(0°-30°)	549.6	6.7	B2/1000		
BM	(30°-60°)	1376.3	16.8	B2/2500		
BH	(60°-80°)	577.3	7.0	B2/1000		G2/1000
BVH	(80°-90°)	34.1	0.4			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 Medium



REPORT NUMBER: P961554

CATALOG NUMBER: NAV-SB2A-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5
2.5°	922.2	927.4	926.1	924.3	924.3	924.8	924.3	927.4	930.4	933.5	938.3
5°	931.7	937.0	934.3	932.1	930.4	930.0	928.6	928.2	930.0	933.9	940.4
7.5°	950.4	955.6	951.7	947.8	944.3	942.6	940.8	938.3	937.0	939.1	948.2
10°	971.3	976.5	971.7	964.7	959.1	956.9	955.2	952.5	950.9	952.1	962.2
12.5°	992.1	997.3	990.8	981.2	973.9	972.5	970.4	969.5	969.1	968.6	978.7
15°	1011.7	1016.0	1007.8	996.4	988.6	986.5	984.3	985.6	987.8	990.4	1001.6
17.5°	1026.8	1031.3	1019.1	1004.3	996.9	996.0	994.8	999.1	1005.1	1011.7	1025.5
20°	1040.8	1045.1	1029.5	1009.5	1000.8	1000.8	1001.2	1010.3	1019.1	1028.6	1047.8
22.5°	1060.3	1063.7	1044.7	1017.3	1004.7	1005.5	1009.0	1018.1	1029.0	1042.0	1068.6
25°	1089.4	1092.0	1068.6	1032.1	1017.7	1020.4	1023.4	1027.8	1038.1	1053.4	1089.0
27.5°	1136.3	1138.5	1107.6	1058.1	1036.4	1040.8	1045.1	1042.0	1046.8	1059.8	1105.5
30°	1202.3	1203.7	1164.6	1099.0	1068.2	1070.3	1071.1	1058.5	1049.4	1059.8	1117.2
32.5°	1280.5	1280.1	1233.6	1148.5	1104.1	1102.0	1094.6	1069.9	1048.6	1057.7	1127.6
35°	1401.7	1397.0	1337.0	1218.0	1145.0	1131.5	1114.2	1082.5	1052.9	1055.5	1136.7
37.5°	1602.4	1587.6	1504.7	1331.8	1205.8	1171.5	1145.8	1102.9	1062.5	1054.6	1147.6
40°	1828.7	1810.0	1718.8	1487.7	1297.0	1241.9	1200.6	1132.0	1078.1	1058.5	1163.7
42.5°	2097.1	2070.7	1972.5	1671.5	1412.6	1332.7	1270.6	1168.9	1101.2	1071.1	1185.4
45°	2426.9	2391.6	2252.6	1878.6	1558.1	1451.7	1368.7	1225.0	1136.3	1095.5	1218.0
47.5°	2760.0	2768.7	2571.0	2115.8	1732.8	1598.5	1491.7	1309.2	1187.6	1134.6	1270.6
50°	3114.1	3120.1	2887.7	2378.6	1930.8	1764.4	1629.7	1403.4	1258.8	1190.2	1349.2
52.5°	3390.3	3391.1	3175.2	2653.6	2137.1	1946.9	1778.8	1511.2	1341.3	1264.0	1453.9
55°	3563.2	3561.0	3376.9	2913.8	2374.3	2138.5	1943.8	1633.6	1442.1	1350.9	1585.5
57.5°	3688.7	3682.2	3515.9	3137.5	2627.1	2364.8	2130.6	1772.6	1561.2	1454.3	1758.8
60°	3736.4	3732.5	3610.0	3330.7	2893.0	2614.9	2346.0	1928.2	1696.3	1576.3	1981.6
62.5°	3754.7	3762.1	3702.6	3518.0	3177.4	2892.0	2582.8	2114.1	1848.3	1714.5	2216.6
65°	3819.0	3832.5	3820.3	3763.0	3498.8	3216.6	2896.9	2335.2	2014.2	1862.6	2462.0
67.5°	3946.2	3959.8	3965.0	4056.1	3891.5	3620.9	3288.6	2610.6	2208.4	2016.4	2646.7
70°	3943.3	3939.4	4031.4	4289.4	4383.3	4180.9	3816.8	2949.4	2439.9	2144.1	2670.1
72.5°	3589.2	3558.0	3775.6	4286.9	4792.5	4765.5	4461.9	3386.4	2639.7	2159.7	2316.9
75°	2692.7	2609.2	2993.7	3863.3	4860.7	5097.3	4871.9	3657.4	2592.3	1908.2	1612.4
77.5°	1151.5	1067.6	1520.7	2860.0	4350.2	4765.1	4495.8	3190.9	2069.4	1261.9	791.8
80°	301.5	301.0	459.6	1296.6	2958.6	3518.8	3087.1	2060.7	1182.3	450.9	218.5
82.5°	124.6	121.7	168.9	504.3	1445.6	1974.7	1611.5	919.1	427.0	122.1	72.6
85°	46.4	46.0	82.1	174.1	509.9	814.5	589.5	235.0	106.4	59.6	32.6
87.5°	13.0	12.6	17.8	60.4	124.2	188.5	100.8	38.6	29.9	23.5	9.5
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: P961554

CATALOG NUMBER: NAV-SB2A-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5	936.5
2.5°	939.5	941.8	945.7	948.6	952.5	956.9	963.0	966.9	970.8	973.4	971.7
5°	943.4	948.2	958.3	968.2	979.9	990.8	1003.4	1012.5	1019.9	1022.1	1023.0
7.5°	952.1	960.0	976.9	993.8	1012.5	1030.3	1048.6	1064.3	1076.8	1081.6	1082.0
10°	967.4	977.7	1001.6	1025.5	1050.3	1077.7	1101.2	1123.7	1141.5	1148.9	1149.3
12.5°	986.5	999.5	1030.7	1063.7	1098.1	1135.9	1166.2	1194.1	1216.3	1226.2	1226.2
15°	1011.3	1028.2	1068.2	1112.4	1162.9	1215.3	1254.0	1284.8	1309.6	1321.8	1320.9
17.5°	1038.1	1060.8	1111.1	1178.0	1250.1	1319.2	1364.4	1386.9	1412.6	1424.3	1423.8
20°	1064.3	1092.0	1164.1	1261.5	1357.4	1430.8	1467.3	1473.4	1475.2	1476.4	1479.9
22.5°	1091.1	1128.5	1230.6	1366.5	1469.4	1520.3	1525.5	1499.5	1463.0	1446.1	1450.8
25°	1120.6	1170.2	1317.4	1482.6	1565.9	1572.0	1532.1	1468.6	1399.5	1367.9	1372.6
27.5°	1149.3	1218.4	1421.7	1593.3	1635.4	1582.0	1496.0	1406.1	1322.7	1289.2	1293.1
30°	1178.0	1273.6	1536.8	1690.1	1667.2	1557.2	1439.1	1338.8	1254.9	1219.8	1223.6
32.5°	1207.1	1337.8	1669.3	1760.1	1661.5	1504.7	1368.3	1263.1	1189.3	1152.4	1157.1
35°	1240.1	1417.0	1794.9	1798.3	1623.7	1427.3	1274.9	1172.8	1108.5	1079.0	1085.5
37.5°	1283.1	1517.3	1905.6	1807.9	1557.7	1313.9	1158.9	1066.0	1013.0	999.5	1009.0
40°	1336.6	1638.1	1990.3	1792.6	1459.9	1176.3	1032.1	957.8	927.8	930.9	941.3
42.5°	1406.1	1773.1	2049.8	1753.6	1324.0	1034.2	920.9	887.9	902.2	914.4	925.7
45°	1496.4	1913.4	2086.7	1687.2	1170.2	913.9	855.3	863.0	873.9	875.2	884.0
47.5°	1611.9	2055.4	2111.1	1586.8	1013.4	829.2	813.5	815.3	813.1	804.0	811.0
50°	1756.1	2193.6	2132.8	1453.9	880.1	776.2	755.4	749.3	719.3	689.8	693.7
52.5°	1920.3	2320.4	2141.9	1288.8	776.2	732.0	698.0	659.8	603.8	594.7	597.7
55°	2102.8	2437.7	2118.5	1085.9	688.9	675.1	623.7	577.7	571.6	563.9	565.1
57.5°	2320.9	2564.1	2070.7	859.7	599.4	608.5	558.6	563.9	553.0	540.8	538.6
60°	2559.3	2694.8	1986.9	653.3	506.9	525.6	541.7	541.2	538.2	528.2	524.7
62.5°	2774.0	2780.8	1821.7	500.4	425.7	461.4	505.2	504.7	502.1	496.5	494.4
65°	2901.6	2767.8	1546.4	394.0	358.7	408.4	455.6	459.1	459.6	459.1	459.1
67.5°	2879.0	2615.4	1168.5	313.6	303.6	354.4	406.6	411.3	414.8	415.7	416.6
70°	2623.6	2280.4	761.9	250.2	254.5	307.1	360.1	364.9	367.9	371.4	373.1
72.5°	2045.1	1676.7	436.1	202.4	211.6	266.3	314.1	319.7	321.4	328.0	330.6
75°	1246.2	986.0	235.4	159.4	173.7	227.7	268.4	275.0	278.0	285.8	286.7
77.5°	592.4	427.0	134.2	124.2	139.9	185.9	226.7	234.1	225.9	230.2	226.7
80°	200.3	158.6	84.7	94.7	106.8	145.0	181.5	188.9	171.6	170.7	168.9
82.5°	69.9	64.3	53.8	62.9	69.1	103.8	137.2	146.8	127.7	127.3	121.2
85°	27.4	26.0	29.9	34.3	41.3	63.9	90.3	95.1	78.6	63.4	62.5
87.5°	5.6	6.0	7.4	7.8	12.6	22.1	32.6	40.0	31.7	27.0	24.8
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)