

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P624030

Luminaire Tested: **IFLD-M-SA4B-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624030
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

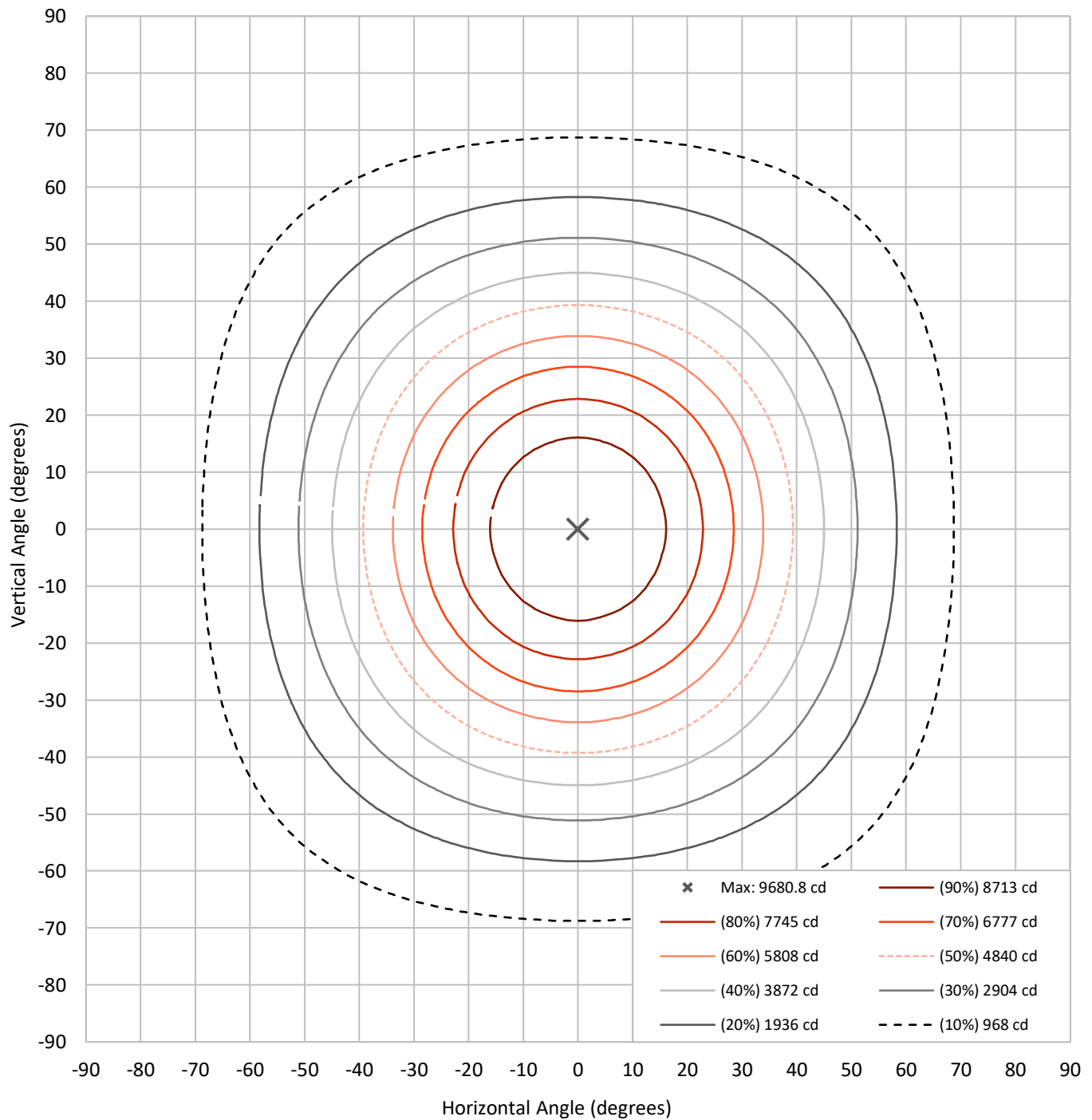
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17430.4 lumens	Max Intensity:	9680.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	104.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	7542 lumens	Field Lumens:	12349.7 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	166.1		
Input Voltage (V):	120		
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:	25 FT		



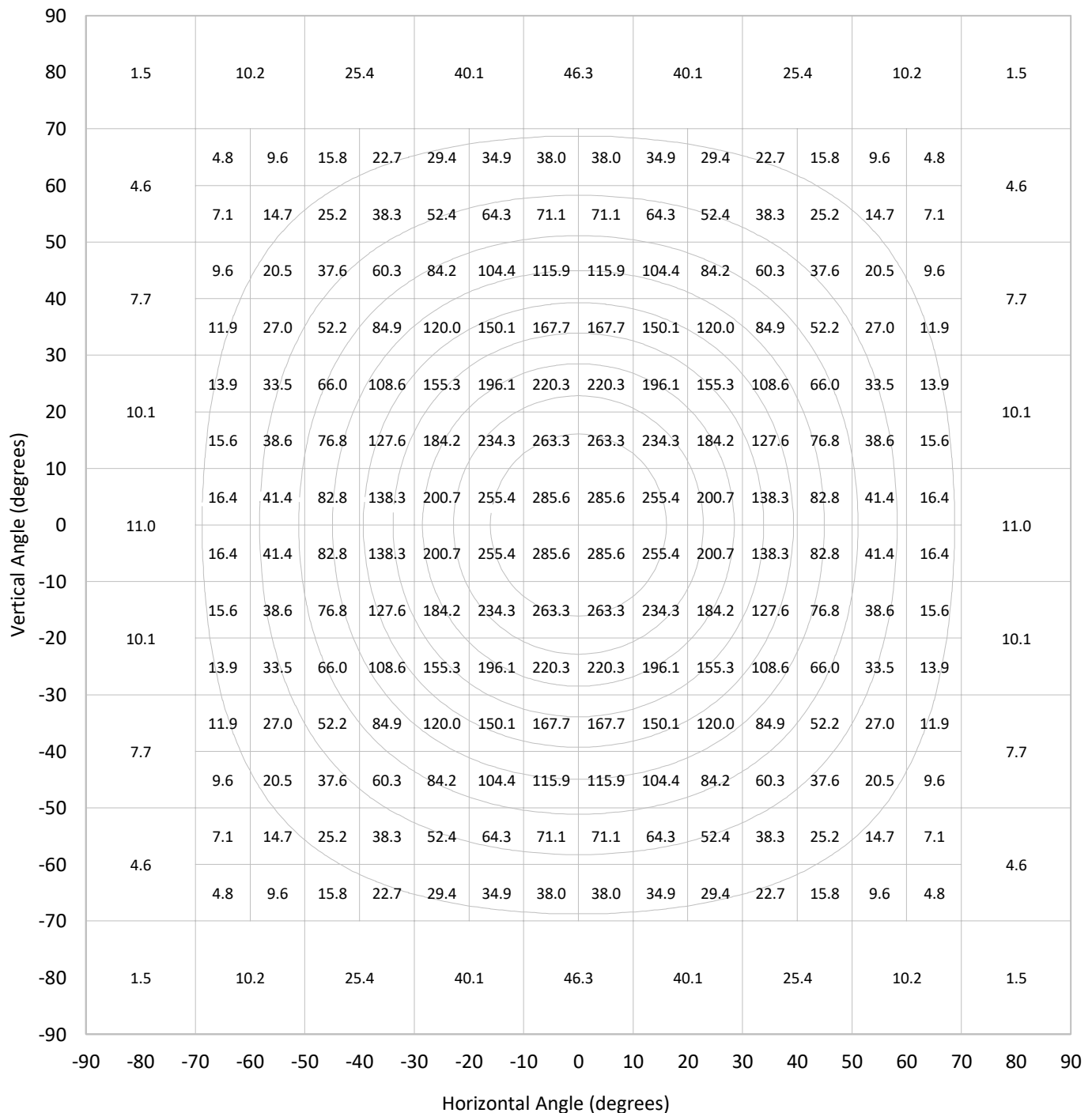
REPORT NUMBER: P624030
CATALOG NUMBER: IFLD-M-SA4B-827-U-77

Iso-Candela Plot



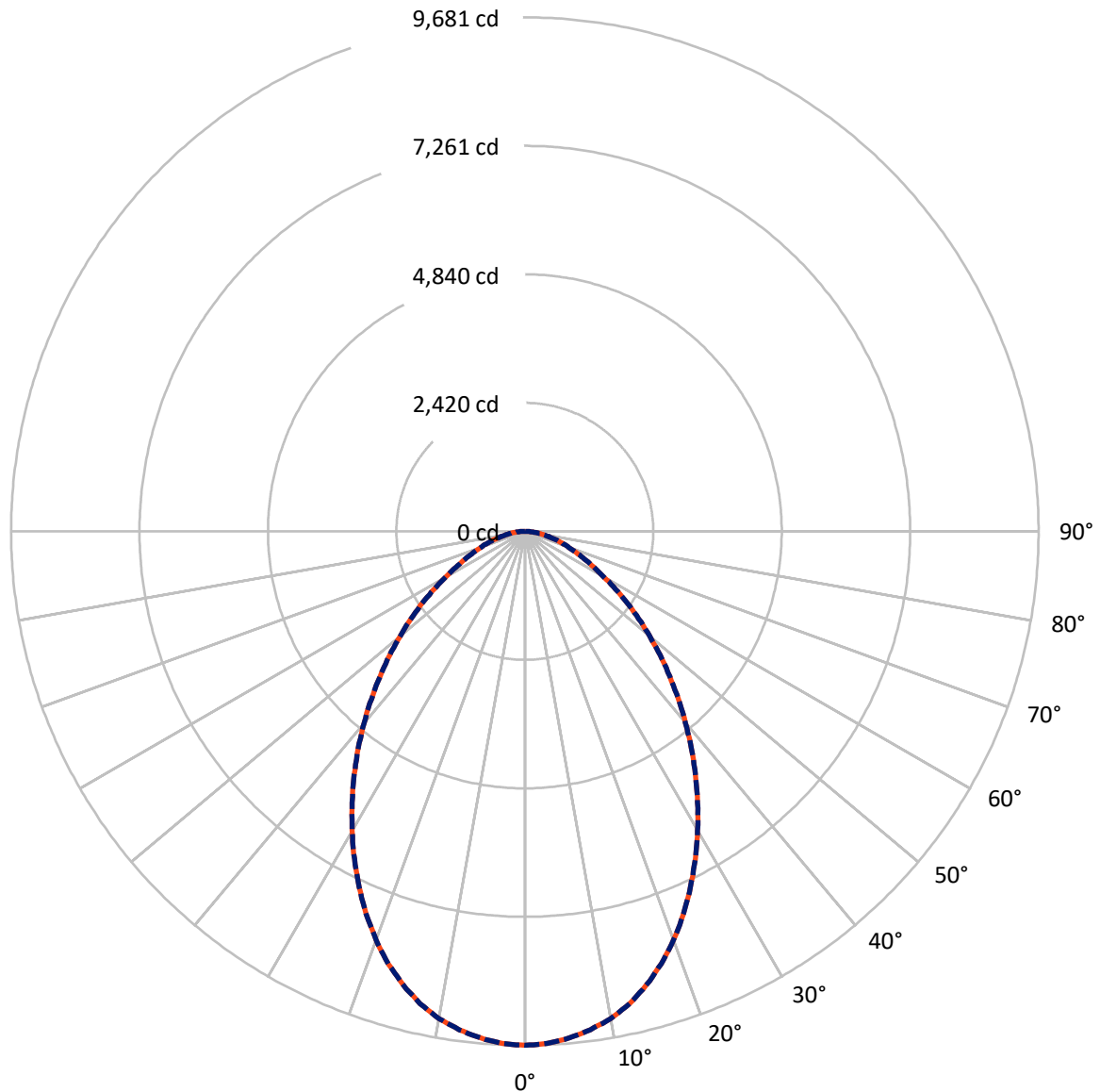
REPORT NUMBER: P624030
CATALOG NUMBER: IFLD-M-SA4B-827-U-77

Lumen Table



REPORT NUMBER: P624030
CATALOG NUMBER: IFLD-M-SA4B-827-U-77

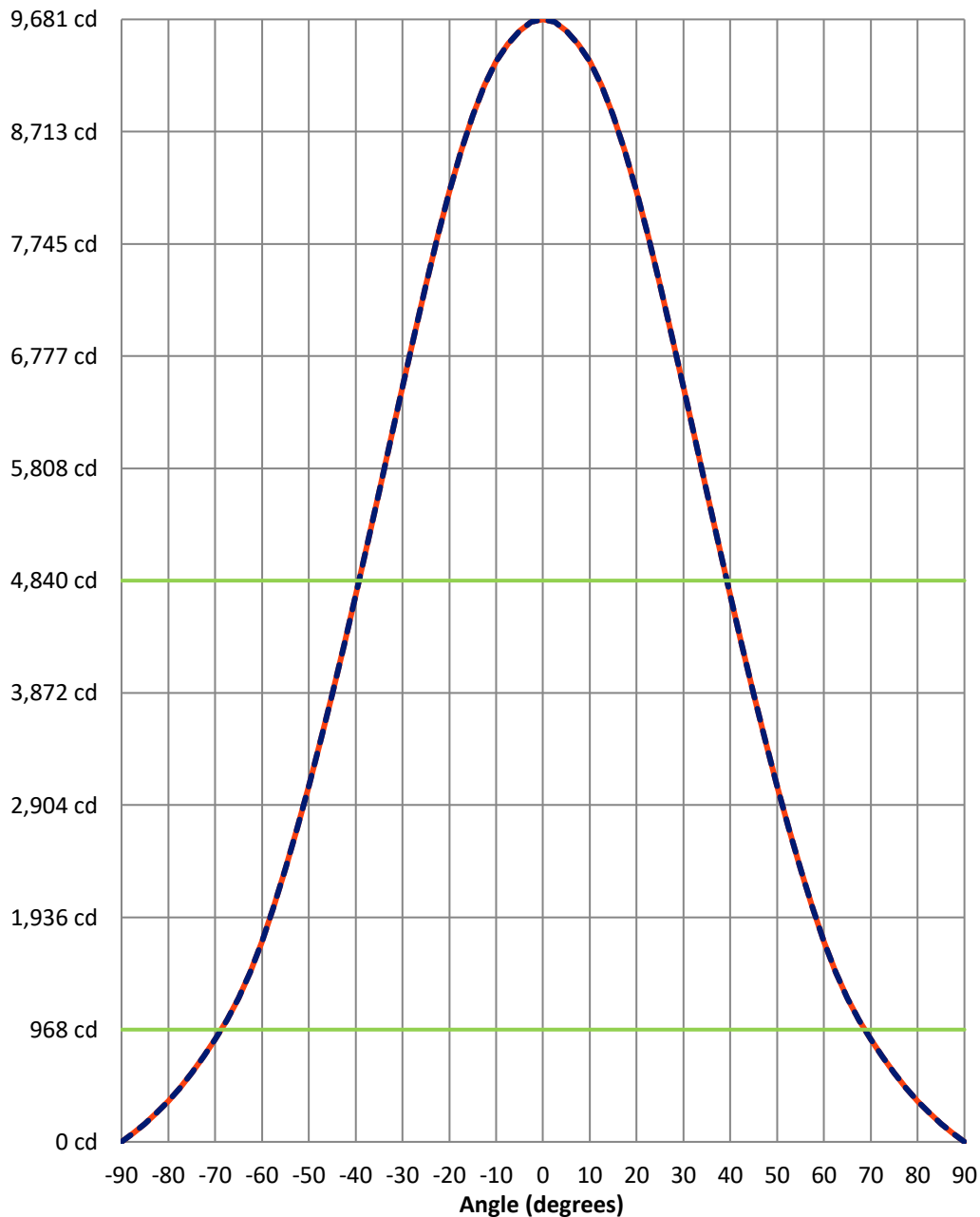
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624030
CATALOG NUMBER: IFLD-M-SA4B-827-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 7542
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 12349.7
Efficiency: 70.9%

Spill:

Lumens: 5080.7
Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg

REPORT NUMBER: P624030

CATALOG NUMBER: IFLD-M-SA4B-827-U-77

FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	74.5	74.5	74.5	74.5	74.5	74.5	74.5	70.9	70.9	69.1	67.2
85°	156.3	156.3	156.3	156.3	156.3	152.7	150.8	149.0	147.2	143.6	141.7
82.5°	250.8	250.8	250.8	250.8	247.2	243.5	241.7	238.1	234.4	229.0	223.5
80°	350.7	350.7	350.7	350.7	345.3	341.7	336.2	332.6	327.1	319.8	312.6
77.5°	465.2	465.2	465.2	459.8	456.1	450.7	445.2	438.0	430.7	421.6	410.7
75°	594.3	594.3	594.3	587.0	581.5	576.1	567.0	557.9	547.0	534.3	519.7
72.5°	734.2	734.2	734.2	725.1	719.7	710.6	699.7	686.9	674.2	657.9	639.7
70°	885.0	885.0	885.0	874.1	865.0	856.0	841.4	826.9	808.7	790.5	768.7
67.5°	1048.6	1048.6	1048.6	1035.9	1025.0	1012.2	995.9	977.7	955.9	930.5	905.0
65°	1239.4	1239.4	1232.1	1221.2	1208.5	1190.3	1170.3	1144.9	1117.6	1084.9	1050.4
62.5°	1464.7	1464.7	1453.8	1441.1	1424.8	1401.1	1373.9	1341.2	1303.0	1261.2	1219.4
60°	1726.4	1726.4	1713.7	1697.4	1673.7	1644.7	1608.3	1566.5	1519.3	1466.6	1415.7
57.5°	2028.1	2028.1	2011.8	1989.9	1960.9	1924.5	1879.1	1826.4	1766.4	1701.0	1637.4
55°	2355.2	2355.2	2335.2	2309.8	2275.3	2231.6	2177.1	2115.3	2042.6	1968.1	1886.4
52.5°	2702.3	2702.3	2678.7	2649.6	2609.6	2558.8	2497.0	2424.3	2340.7	2253.5	2157.1
50°	3067.6	3067.6	3040.3	3007.6	2962.2	2902.2	2831.4	2747.8	2655.1	2553.3	2442.5
47.5°	3458.3	3458.3	3427.4	3389.3	3334.8	3265.7	3182.1	3085.8	2980.4	2865.9	2740.5
45°	3860.0	3860.0	3825.4	3781.8	3721.8	3643.7	3551.0	3458.3	3323.8	3191.2	3045.8
42.5°	4277.9	4277.9	4238.0	4188.9	4119.8	4034.4	3929.0	3809.1	3676.4	3527.4	3369.3
40°	4712.3	4712.3	4666.8	4610.5	4534.2	4436.0	4317.9	4183.4	4034.4	3869.0	3694.6
37.5°	5155.7	5155.7	5104.8	5043.0	4957.6	4848.6	4715.9	4566.9	4399.7	4216.1	4023.5
35°	5602.7	5602.7	5546.4	5479.2	5384.7	5264.7	5121.2	4955.8	4770.4	4570.5	4354.3
32.5°	6058.9	6058.9	5997.1	5920.8	5813.6	5680.9	5522.8	5342.9	5155.7	4923.1	4686.8
30°	6509.6	6509.6	6442.3	6358.7	6244.3	6098.9	5926.2	5728.1	5508.2	5270.2	5015.8
27.5°	6953.0	6934.8	6878.5	6789.4	6664.1	6509.6	6322.4	6108.0	5869.9	5608.2	5335.6
25°	7389.2	7369.2	7307.4	7209.2	7074.8	6905.8	6704.0	6475.1	6218.8	5942.6	5644.5
22.5°	7807.1	7785.3	7719.9	7614.5	7470.9	7287.4	7071.1	6825.8	6553.2	6257.0	5942.6
20°	8194.2	8170.6	8103.4	7992.5	7843.5	7649.0	7420.1	7156.5	6865.8	6553.2	6218.8
17.5°	8543.1	8519.5	8448.6	8334.2	8194.2	7978.0	7741.7	7463.7	7156.5	6825.8	6475.1
15°	8850.3	8824.8	8752.1	8637.6	8477.7	8274.2	8025.2	7741.7	7420.1	7071.1	6704.0
12.5°	9112.0	9086.5	9012.0	8897.5	8732.1	8528.6	8274.2	7978.0	7649.0	7287.4	6905.8
10°	9319.1	9293.7	9222.8	9113.8	8943.0	8732.1	8477.7	8194.2	7843.5	7470.9	7074.8
7.5°	9468.2	9444.5	9379.1	9270.1	9113.8	8897.5	8637.6	8334.2	7992.5	7614.5	7209.2
5°	9580.8	9553.6	9488.1	9379.1	9222.8	9012.0	8752.1	8448.6	8103.4	7719.9	7307.4
2.5°	9659.0	9626.3	9553.6	9444.5	9293.7	9086.5	8824.8	8519.5	8170.6	7785.3	7369.2
0°	9680.8	9659.0	9580.8	9468.2	9319.1	9112.0	8850.3	8543.1	8194.2	7807.1	7389.2

REPORT NUMBER: P624030

CATALOG NUMBER: IFLD-M-SA4B-827-U-77

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	65.4	65.4	63.6	61.8	60.0	56.3	54.5	52.7	50.9	47.2	45.4
85°	138.1	134.5	130.8	127.2	121.8	118.1	112.7	109.0	103.6	98.1	92.7
82.5°	218.1	212.6	205.4	199.9	192.6	183.5	176.3	167.2	158.1	150.8	141.7
80°	305.3	296.2	287.1	278.0	267.1	256.2	245.3	234.4	221.7	209.0	196.3
77.5°	399.8	387.1	374.4	359.8	347.1	332.6	318.0	303.5	287.1	270.8	254.4
75°	505.2	488.9	470.7	452.5	436.2	416.2	396.2	376.2	354.4	334.4	312.6
72.5°	619.7	599.7	577.9	556.1	532.5	507.0	481.6	454.3	428.9	403.4	376.2
70°	743.3	719.7	692.4	665.1	636.1	605.2	574.3	541.6	508.8	476.1	443.4
67.5°	875.9	846.9	814.2	781.4	745.1	708.7	672.4	634.2	594.3	554.3	516.1
65°	1017.7	981.3	943.2	901.4	859.6	817.8	774.2	728.7	683.3	636.1	594.3
62.5°	1175.8	1130.4	1081.3	1030.4	983.2	932.3	885.0	828.7	774.2	721.5	668.8
60°	1359.3	1299.4	1239.4	1175.8	1115.8	1050.4	992.2	930.5	868.7	808.7	746.9
57.5°	1564.7	1488.4	1415.7	1339.4	1259.4	1186.7	1112.2	1037.7	968.6	897.7	830.5
55°	1797.3	1704.6	1613.8	1519.3	1426.6	1335.7	1241.2	1157.6	1072.2	992.2	914.1
52.5°	2051.7	1946.3	1833.7	1726.4	1608.3	1495.6	1390.2	1284.8	1184.9	1088.6	999.5
50°	2324.3	2200.8	2071.7	1940.9	1806.4	1673.7	1546.5	1422.9	1306.6	1194.0	1088.6
47.5°	2607.8	2467.9	2320.7	2171.7	2028.1	1866.4	1713.7	1573.8	1433.9	1306.6	1184.9
45°	2898.6	2740.5	2578.8	2409.7	2240.7	2066.3	1897.3	1726.4	1573.8	1422.9	1284.8
42.5°	3198.5	3020.4	2840.4	2653.3	2466.1	2275.3	2084.4	1897.3	1713.7	1546.5	1390.2
40°	3507.4	3311.1	3105.8	2902.2	2702.3	2484.3	2275.3	2066.3	1866.4	1673.7	1495.6
37.5°	3816.3	3601.9	3380.2	3151.2	2922.2	2702.3	2466.1	2240.7	2028.1	1806.4	1608.3
35°	4127.1	3890.8	3651.0	3402.0	3151.2	2902.2	2653.3	2409.7	2171.7	1940.9	1726.4
32.5°	4439.7	4181.6	3916.3	3651.0	3380.2	3105.8	2840.4	2578.8	2320.7	2071.7	1833.7
30°	4746.8	4466.9	4181.6	3890.8	3601.9	3311.1	3020.4	2740.5	2467.9	2200.8	1946.3
27.5°	5046.7	4746.8	4439.7	4127.1	3816.3	3507.4	3198.5	2898.6	2607.8	2324.3	2051.7
25°	5335.6	5015.8	4686.8	4354.3	4023.5	3694.6	3369.3	3045.8	2740.5	2442.5	2157.1
22.5°	5608.2	5270.2	4923.1	4570.5	4216.1	3869.0	3527.4	3191.2	2865.9	2553.3	2253.5
20°	5869.9	5508.2	5155.7	4770.4	4399.7	4034.4	3676.4	3323.8	2980.4	2655.1	2340.7
17.5°	6108.0	5728.1	5342.9	4955.8	4566.9	4183.4	3809.1	3458.3	3085.8	2747.8	2424.3
15°	6322.4	5926.2	5522.8	5121.2	4715.9	4317.9	3929.0	3551.0	3182.1	2831.4	2497.0
12.5°	6509.6	6098.9	5680.9	5264.7	4848.6	4436.0	4034.4	3643.7	3265.7	2902.2	2558.8
10°	6664.1	6244.3	5813.6	5384.7	4957.6	4534.2	4119.8	3721.8	3334.8	2962.2	2609.6
7.5°	6789.4	6358.7	5920.8	5479.2	5043.0	4610.5	4188.9	3781.8	3389.3	3007.6	2649.6
5°	6878.5	6442.3	5997.1	5546.4	5104.8	4666.8	4238.0	3825.4	3427.4	3040.3	2678.7
2.5°	6934.8	6509.6	6058.9	5602.7	5155.7	4712.3	4277.9	3860.0	3458.3	3067.6	2702.3
0°	6953.0	6509.6	6058.9	5602.7	5155.7	4712.3	4277.9	3860.0	3458.3	3067.6	2702.3

REPORT NUMBER: P624030

CATALOG NUMBER: IFLD-M-SA4B-827-U-77

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	43.6	40.0	36.3	34.5	30.9	29.1	25.4	21.8	20.0	16.4	12.7
85°	87.2	80.0	74.5	69.1	63.6	56.3	50.9	45.4	38.2	32.7	25.4
82.5°	132.7	123.6	114.5	105.4	96.3	87.2	76.3	67.2	58.2	49.1	38.2
80°	183.5	169.0	156.3	143.6	130.8	118.1	103.6	90.9	76.3	63.6	50.9
77.5°	236.2	219.9	201.7	183.5	165.4	149.0	130.8	114.5	98.1	80.0	63.6
75°	292.6	270.8	250.8	227.2	205.4	181.7	159.9	138.1	118.1	98.1	76.3
72.5°	350.7	323.5	296.2	270.8	243.5	216.3	190.8	163.6	138.1	114.5	90.9
70°	410.7	378.0	345.3	314.4	283.5	250.8	221.7	190.8	159.9	130.8	103.6
67.5°	474.3	436.2	398.0	358.0	323.5	287.1	250.8	216.3	181.7	149.0	118.1
65°	543.4	497.9	450.7	408.9	363.5	323.5	283.5	243.5	205.4	165.4	130.8
62.5°	614.2	561.5	508.8	456.1	408.9	358.0	314.4	270.8	227.2	183.5	143.6
60°	686.9	627.0	567.0	508.8	450.7	398.0	345.3	296.2	250.8	201.7	156.3
57.5°	761.5	694.2	627.0	561.5	497.9	436.2	378.0	323.5	270.8	219.9	169.0
55°	837.8	761.5	686.9	614.2	543.4	474.3	410.7	350.7	292.6	236.2	183.5
52.5°	914.1	830.5	746.9	668.8	594.3	516.1	443.4	376.2	312.6	254.4	196.3
50°	992.2	897.7	808.7	721.5	636.1	554.3	476.1	403.4	334.4	270.8	209.0
47.5°	1072.2	968.6	868.7	774.2	683.3	594.3	508.8	428.9	354.4	287.1	221.7
45°	1157.6	1037.7	930.5	828.7	728.7	634.2	541.6	454.3	376.2	303.5	234.4
42.5°	1241.2	1112.2	992.2	885.0	774.2	672.4	574.3	481.6	396.2	318.0	245.3
40°	1335.7	1186.7	1050.4	932.3	817.8	708.7	605.2	507.0	416.2	332.6	256.2
37.5°	1426.6	1259.4	1115.8	983.2	859.6	745.1	636.1	532.5	436.2	347.1	267.1
35°	1519.3	1339.4	1175.8	1030.4	901.4	781.4	665.1	556.1	452.5	359.8	278.0
32.5°	1613.8	1415.7	1239.4	1081.3	943.2	814.2	692.4	577.9	470.7	374.4	287.1
30°	1704.6	1488.4	1299.4	1130.4	981.3	846.9	719.7	599.7	488.9	387.1	296.2
27.5°	1797.3	1564.7	1359.3	1175.8	1017.7	875.9	743.3	619.7	505.2	399.8	305.3
25°	1886.4	1637.4	1415.7	1219.4	1050.4	905.0	768.7	639.7	519.7	410.7	312.6
22.5°	1968.1	1701.0	1466.6	1261.2	1084.9	930.5	790.5	657.9	534.3	421.6	319.8
20°	2042.6	1766.4	1519.3	1303.0	1117.6	955.9	808.7	674.2	547.0	430.7	327.1
17.5°	2115.3	1826.4	1566.5	1341.2	1144.9	977.7	826.9	686.9	557.9	438.0	332.6
15°	2177.1	1879.1	1608.3	1373.9	1170.3	995.9	841.4	699.7	567.0	445.2	336.2
12.5°	2231.6	1924.5	1644.7	1401.1	1190.3	1012.2	856.0	710.6	576.1	450.7	341.7
10°	2275.3	1960.9	1673.7	1424.8	1208.5	1025.0	865.0	719.7	581.5	456.1	345.3
7.5°	2309.8	1989.9	1697.4	1441.1	1221.2	1035.9	874.1	725.1	587.0	459.8	350.7
5°	2335.2	2011.8	1713.7	1453.8	1232.1	1048.6	885.0	734.2	594.3	465.2	350.7
2.5°	2355.2	2028.1	1726.4	1464.7	1239.4	1048.6	885.0	734.2	594.3	465.2	350.7
0°	2355.2	2028.1	1726.4	1464.7	1239.4	1048.6	885.0	734.2	594.3	465.2	350.7

REPORT NUMBER: P624030

CATALOG NUMBER: IFLD-M-SA4B-827-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.1	7.3	3.6	0.0
85°	20.0	12.7	7.3	0.0
82.5°	29.1	20.0	9.1	0.0
80°	38.2	25.4	12.7	0.0
77.5°	49.1	32.7	16.4	0.0
75°	58.2	38.2	20.0	0.0
72.5°	67.2	45.4	21.8	0.0
70°	76.3	50.9	25.4	0.0
67.5°	87.2	56.3	29.1	0.0
65°	96.3	63.6	30.9	0.0
62.5°	105.4	69.1	34.5	0.0
60°	114.5	74.5	36.3	0.0
57.5°	123.6	80.0	40.0	0.0
55°	132.7	87.2	43.6	0.0
52.5°	141.7	92.7	45.4	0.0
50°	150.8	98.1	47.2	0.0
47.5°	158.1	103.6	50.9	0.0
45°	167.2	109.0	52.7	0.0
42.5°	176.3	112.7	54.5	0.0
40°	183.5	118.1	56.3	0.0
37.5°	192.6	121.8	60.0	0.0
35°	199.9	127.2	61.8	0.0
32.5°	205.4	130.8	63.6	0.0
30°	212.6	134.5	65.4	0.0
27.5°	218.1	138.1	65.4	0.0
25°	223.5	141.7	67.2	0.0
22.5°	229.0	143.6	69.1	0.0
20°	234.4	147.2	70.9	0.0
17.5°	238.1	149.0	70.9	0.0
15°	241.7	150.8	74.5	0.0
12.5°	243.5	152.7	74.5	0.0
10°	247.2	156.3	74.5	0.0
7.5°	250.8	156.3	74.5	0.0
5°	250.8	156.3	74.5	0.0
2.5°	250.8	156.3	74.5	0.0
0°	250.8	156.3	74.5	0.0

(END OF REPORT)