

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: P623855

Luminaire Tested: **IFLD-M-SA4A-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623855
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4A-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

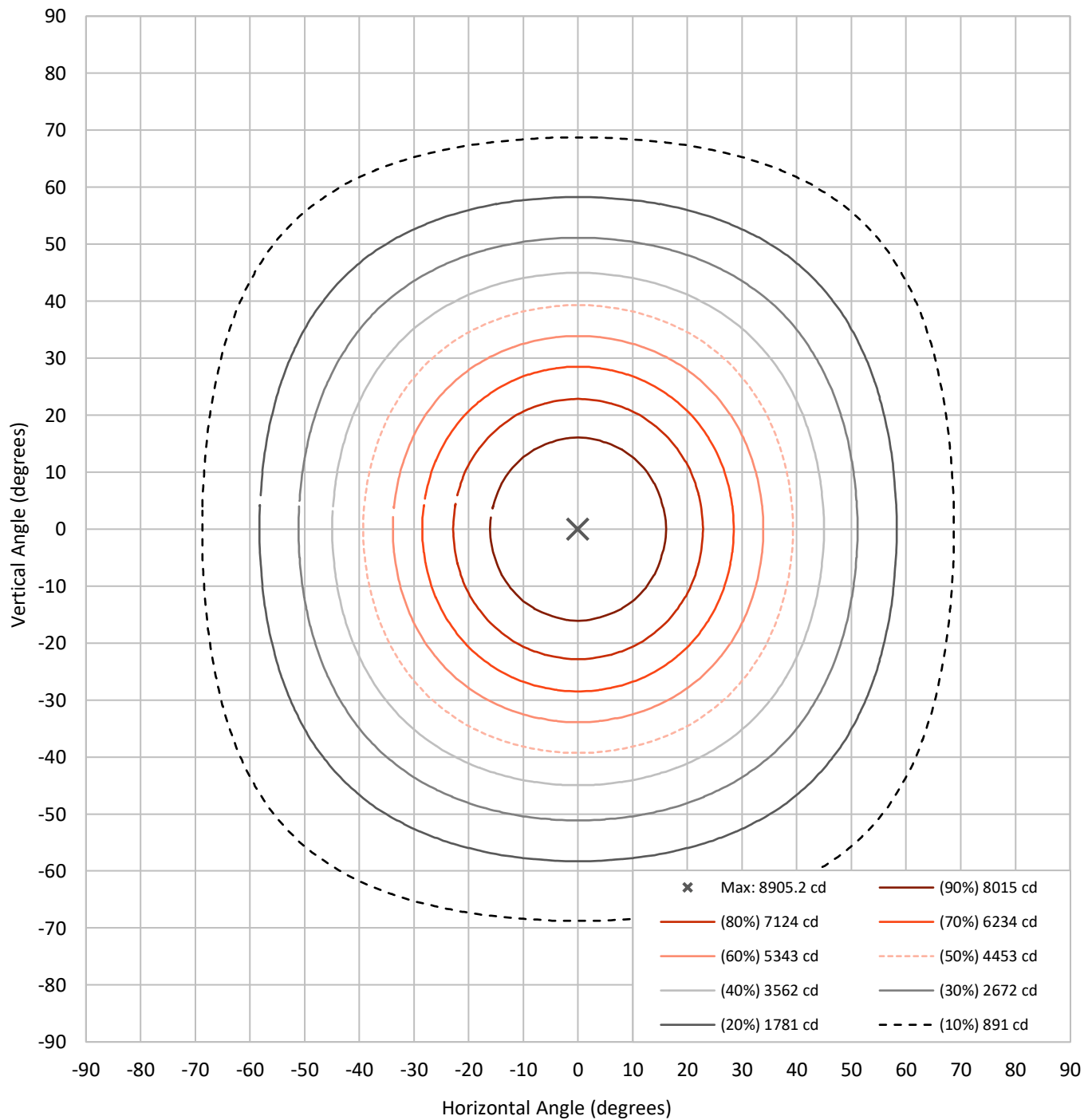
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	16034.1 lumens	Max Intensity:	8905.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	124.7 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:	6937.8 lumens	Field Lumens:	11360.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	128.6		
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		



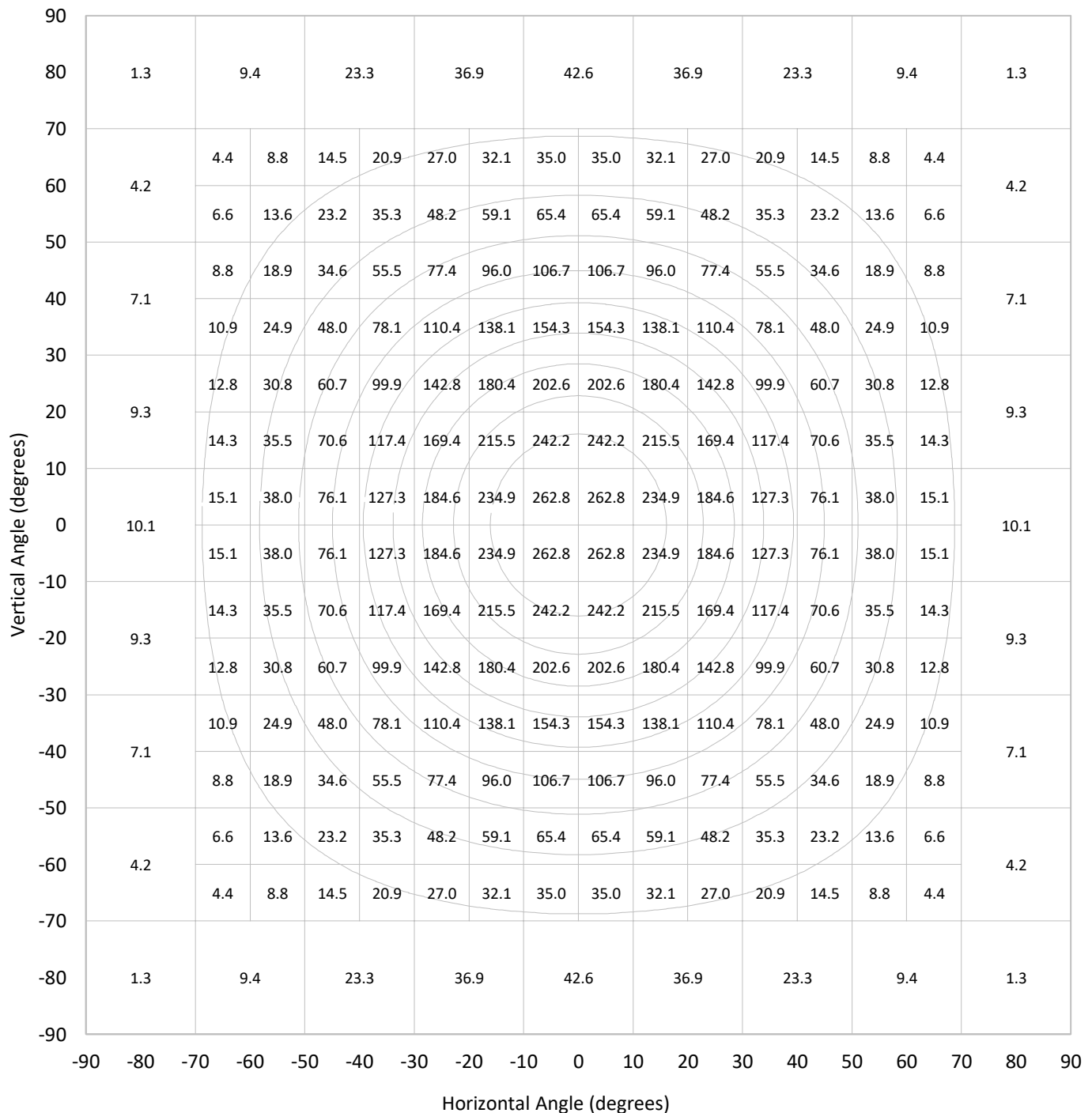
REPORT NUMBER: P623855
CATALOG NUMBER: IFLD-M-SA4A-727-U-77

Iso-Candela Plot



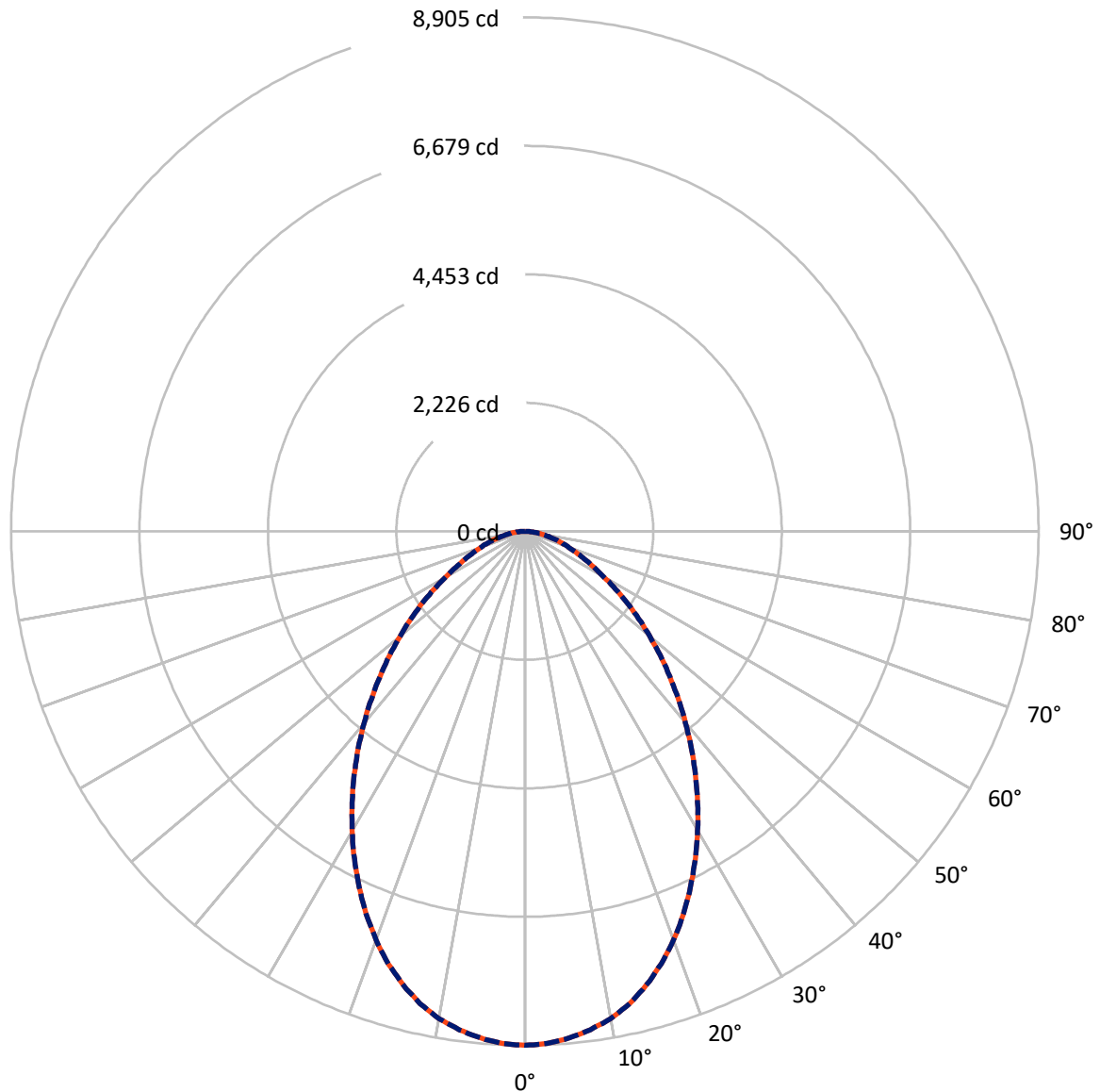
REPORT NUMBER: P623855
CATALOG NUMBER: IFLD-M-SA4A-727-U-77

Lumen Table



REPORT NUMBER: P623855
CATALOG NUMBER: IFLD-M-SA4A-727-U-77

Luminous Intensity Polar Plot

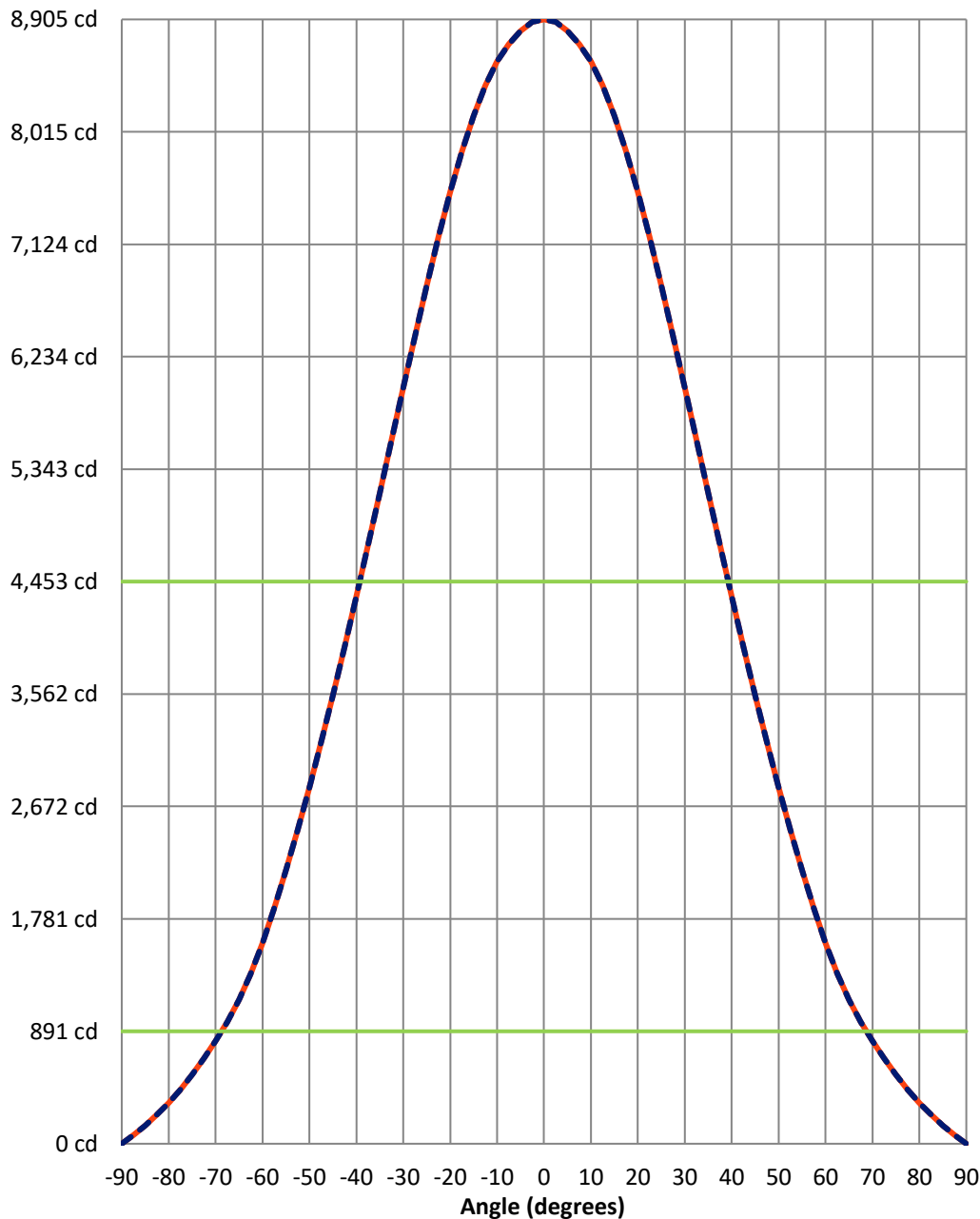


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P623855

CATALOG NUMBER: IFLD-M-SA4A-727-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 6937.8
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 11360.4
Efficiency: 70.9%

Spill:

Lumens: 4673.7
Efficiency: 29.1%

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



REPORT NUMBER: P623855

CATALOG NUMBER: IFLD-M-SA4A-727-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°	68.5	68.5	68.5	68.5	68.5	68.5	68.5	65.2	65.2	63.5	61.9
85°	143.8	143.8	143.8	143.8	143.8	140.4	138.8	137.1	135.4	132.1	130.4
82.5°	230.7	230.7	230.7	230.7	227.4	224.0	222.3	219.0	215.7	210.6	205.6
80°	322.6	322.6	322.6	322.6	317.6	314.3	309.3	305.9	300.9	294.2	287.5
77.5°	428.0	428.0	428.0	422.9	419.6	414.6	409.6	402.9	396.2	387.8	377.8
75°	546.7	546.7	546.7	540.0	534.9	529.9	521.6	513.2	503.2	491.5	478.1
72.5°	675.4	675.4	675.4	667.0	662.0	653.6	643.6	631.9	620.2	605.2	588.4
70°	814.1	814.1	814.1	804.1	795.7	787.4	774.0	760.6	743.9	727.2	707.1
67.5°	964.6	964.6	964.6	952.9	942.8	931.1	916.1	899.4	879.3	855.9	832.5
65°	1140.1	1140.1	1133.4	1123.4	1111.7	1095.0	1076.6	1053.2	1028.1	998.0	966.3
62.5°	1347.4	1347.4	1337.4	1325.7	1310.6	1288.9	1263.8	1233.7	1198.6	1160.2	1121.7
60°	1588.1	1588.1	1576.4	1561.4	1539.7	1512.9	1479.5	1441.0	1397.6	1349.1	1302.3
57.5°	1865.6	1865.6	1850.6	1830.5	1803.8	1770.3	1728.6	1680.1	1624.9	1564.7	1506.2
55°	2166.5	2166.5	2148.2	2124.8	2093.0	2052.9	2002.7	1945.9	1879.0	1810.5	1735.2
52.5°	2485.8	2485.8	2464.1	2437.4	2400.6	2353.8	2296.9	2230.1	2153.2	2072.9	1984.3
50°	2821.9	2821.9	2796.8	2766.7	2724.9	2669.7	2604.5	2527.6	2442.4	2348.8	2246.8
47.5°	3181.3	3181.3	3152.9	3117.8	3067.6	3004.1	2927.2	2838.6	2741.6	2636.3	2520.9
45°	3550.7	3550.7	3519.0	3478.8	3423.7	3351.8	3266.5	3181.3	3057.6	2935.5	2801.8
42.5°	3935.2	3935.2	3898.4	3853.3	3789.8	3711.2	3614.3	3503.9	3381.9	3244.8	3099.4
40°	4334.8	4334.8	4293.0	4241.1	4170.9	4080.7	3972.0	3848.3	3711.2	3559.1	3398.6
37.5°	4742.7	4742.7	4695.9	4639.0	4560.4	4460.1	4338.1	4201.0	4047.2	3878.4	3701.2
35°	5153.9	5153.9	5102.1	5040.2	4953.3	4843.0	4710.9	4558.8	4388.3	4204.4	4005.4
32.5°	5573.5	5573.5	5516.7	5446.5	5347.8	5225.8	5080.3	4914.8	4742.7	4528.7	4311.4
30°	5988.1	5988.1	5926.2	5849.3	5744.0	5610.3	5451.5	5269.3	5067.0	4848.0	4613.9
27.5°	6396.0	6379.3	6327.4	6245.5	6130.2	5988.1	5815.9	5618.6	5399.6	5158.9	4908.2
25°	6797.2	6778.8	6722.0	6631.7	6508.0	6352.5	6167.0	5956.3	5720.6	5466.5	5192.4
22.5°	7181.7	7161.6	7101.5	7004.5	6872.4	6703.6	6504.7	6279.0	6028.2	5755.7	5466.5
20°	7537.8	7516.0	7454.2	7352.2	7215.1	7036.3	6825.6	6583.2	6315.7	6028.2	5720.6
17.5°	7858.7	7837.0	7771.8	7666.5	7537.8	7338.8	7121.5	6865.7	6583.2	6279.0	5956.3
15°	8141.3	8117.9	8051.0	7945.7	7798.6	7611.3	7382.3	7121.5	6825.6	6504.7	6167.0
12.5°	8382.0	8358.6	8290.0	8184.7	8032.6	7845.4	7611.3	7338.8	7036.3	6703.6	6352.5
10°	8572.6	8549.2	8484.0	8383.7	8226.5	8032.6	7798.6	7537.8	7215.1	6872.4	6508.0
7.5°	8709.6	8687.9	8627.7	8527.4	8383.7	8184.7	7945.7	7666.5	7352.2	7004.5	6631.7
5°	8813.3	8788.2	8728.0	8627.7	8484.0	8290.0	8051.0	7771.8	7454.2	7101.5	6722.0
2.5°	8885.2	8855.1	8788.2	8687.9	8549.2	8358.6	8117.9	7837.0	7516.0	7161.6	6778.8
0°	8905.2	8885.2	8813.3	8709.6	8572.6	8382.0	8141.3	7858.7	7537.8	7181.7	6797.2

REPORT NUMBER: P623855

CATALOG NUMBER: IFLD-M-SA4A-727-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°	60.2	60.2	58.5	56.8	55.2	51.8	50.2	48.5	46.8	43.5	41.8
85°	127.1	123.7	120.4	117.0	112.0	108.7	103.6	100.3	95.3	90.3	85.3
82.5°	200.6	195.6	188.9	183.9	177.2	168.8	162.2	153.8	145.4	138.8	130.4
80°	280.8	272.5	264.1	255.8	245.7	235.7	225.7	215.7	203.9	192.2	180.5
77.5°	367.8	356.1	344.4	331.0	319.3	305.9	292.6	279.2	264.1	249.1	234.0
75°	464.7	449.7	433.0	416.3	401.2	382.8	364.4	346.0	326.0	307.6	287.5
72.5°	570.1	551.7	531.6	511.5	489.8	466.4	443.0	417.9	394.5	371.1	346.0
70°	683.7	662.0	636.9	611.8	585.1	556.7	528.3	498.2	468.1	438.0	407.9
67.5°	805.8	779.0	748.9	718.8	685.4	652.0	618.5	583.4	546.7	509.9	474.8
65°	936.2	902.7	867.6	829.2	790.7	752.3	712.2	670.4	628.6	585.1	546.7
62.5°	1081.6	1039.8	994.7	947.9	904.4	857.6	814.1	762.3	712.2	663.7	615.2
60°	1250.4	1195.3	1140.1	1081.6	1026.4	966.3	912.8	855.9	799.1	743.9	687.1
57.5°	1439.3	1369.1	1302.3	1232.1	1158.5	1091.6	1023.1	954.6	891.0	825.8	764.0
55°	1653.3	1568.1	1484.5	1397.6	1312.3	1228.7	1141.8	1064.9	986.3	912.8	840.9
52.5°	1887.4	1790.4	1686.8	1588.1	1479.5	1375.8	1278.9	1181.9	1090.0	1001.4	919.4
50°	2138.1	2024.4	1905.8	1785.4	1661.7	1539.7	1422.6	1309.0	1202.0	1098.3	1001.4
47.5°	2398.9	2270.2	2134.8	1997.7	1865.6	1716.9	1576.4	1447.7	1319.0	1202.0	1090.0
45°	2666.4	2520.9	2372.2	2216.7	2061.2	1900.7	1745.3	1588.1	1447.7	1309.0	1181.9
42.5°	2942.2	2778.4	2612.9	2440.7	2268.5	2093.0	1917.5	1745.3	1576.4	1422.6	1278.9
40°	3226.4	3045.9	2857.0	2669.7	2485.8	2285.2	2093.0	1900.7	1716.9	1539.7	1375.8
37.5°	3510.6	3313.3	3109.4	2898.8	2688.1	2485.8	2268.5	2061.2	1865.6	1661.7	1479.5
35°	3796.5	3579.1	3358.5	3129.5	2898.8	2669.7	2440.7	2216.7	1997.7	1785.4	1588.1
32.5°	4084.0	3846.6	3602.5	3358.5	3109.4	2857.0	2612.9	2372.2	2134.8	1905.8	1686.8
30°	4366.5	4109.1	3846.6	3579.1	3313.3	3045.9	2778.4	2520.9	2270.2	2024.4	1790.4
27.5°	4642.4	4366.5	4084.0	3796.5	3510.6	3226.4	2942.2	2666.4	2398.9	2138.1	1887.4
25°	4908.2	4613.9	4311.4	4005.4	3701.2	3398.6	3099.4	2801.8	2520.9	2246.8	1984.3
22.5°	5158.9	4848.0	4528.7	4204.4	3878.4	3559.1	3244.8	2935.5	2636.3	2348.8	2072.9
20°	5399.6	5067.0	4742.7	4388.3	4047.2	3711.2	3381.9	3057.6	2741.6	2442.4	2153.2
17.5°	5618.6	5269.3	4914.8	4558.8	4201.0	3848.3	3503.9	3181.3	2838.6	2527.6	2230.1
15°	5815.9	5451.5	5080.3	4710.9	4338.1	3972.0	3614.3	3266.5	2927.2	2604.5	2296.9
12.5°	5988.1	5610.3	5225.8	4843.0	4460.1	4080.7	3711.2	3351.8	3004.1	2669.7	2353.8
10°	6130.2	5744.0	5347.8	4953.3	4560.4	4170.9	3789.8	3423.7	3067.6	2724.9	2400.6
7.5°	6245.5	5849.3	5446.5	5040.2	4639.0	4241.1	3853.3	3478.8	3117.8	2766.7	2437.4
5°	6327.4	5926.2	5516.7	5102.1	4695.9	4293.0	3898.4	3519.0	3152.9	2796.8	2464.1
2.5°	6379.3	5988.1	5573.5	5153.9	4742.7	4334.8	3935.2	3550.7	3181.3	2821.9	2485.8
0°	6396.0	5988.1	5573.5	5153.9	4742.7	4334.8	3935.2	3550.7	3181.3	2821.9	2485.8

REPORT NUMBER: P623855

CATALOG NUMBER: IFLD-M-SA4A-727-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°	40.1	36.8	33.4	31.8	28.4	26.7	23.4	20.1	18.4	15.0	11.7
85°	80.2	73.6	68.5	63.5	58.5	51.8	46.8	41.8	35.1	30.1	23.4
82.5°	122.0	113.7	105.3	97.0	88.6	80.2	70.2	61.9	53.5	45.1	35.1
80°	168.8	155.5	143.8	132.1	120.4	108.7	95.3	83.6	70.2	58.5	46.8
77.5°	217.3	202.3	185.6	168.8	152.1	137.1	120.4	105.3	90.3	73.6	58.5
75°	269.1	249.1	230.7	209.0	188.9	167.2	147.1	127.1	108.7	90.3	70.2
72.5°	322.6	297.6	272.5	249.1	224.0	198.9	175.5	150.5	127.1	105.3	83.6
70°	377.8	347.7	317.6	289.2	260.8	230.7	203.9	175.5	147.1	120.4	95.3
67.5°	436.3	401.2	366.1	329.3	297.6	264.1	230.7	198.9	167.2	137.1	108.7
65°	499.8	458.1	414.6	376.1	334.3	297.6	260.8	224.0	188.9	152.1	120.4
62.5°	565.0	516.6	468.1	419.6	376.1	329.3	289.2	249.1	209.0	168.8	132.1
60°	631.9	576.7	521.6	468.1	414.6	366.1	317.6	272.5	230.7	185.6	143.8
57.5°	700.4	638.6	576.7	516.6	458.1	401.2	347.7	297.6	249.1	202.3	155.5
55°	770.7	700.4	631.9	565.0	499.8	436.3	377.8	322.6	269.1	217.3	168.8
52.5°	840.9	764.0	687.1	615.2	546.7	474.8	407.9	346.0	287.5	234.0	180.5
50°	912.8	825.8	743.9	663.7	585.1	509.9	438.0	371.1	307.6	249.1	192.2
47.5°	986.3	891.0	799.1	712.2	628.6	546.7	468.1	394.5	326.0	264.1	203.9
45°	1064.9	954.6	855.9	762.3	670.4	583.4	498.2	417.9	346.0	279.2	215.7
42.5°	1141.8	1023.1	912.8	814.1	712.2	618.5	528.3	443.0	364.4	292.6	225.7
40°	1228.7	1091.6	966.3	857.6	752.3	652.0	556.7	466.4	382.8	305.9	235.7
37.5°	1312.3	1158.5	1026.4	904.4	790.7	685.4	585.1	489.8	401.2	319.3	245.7
35°	1397.6	1232.1	1081.6	947.9	829.2	718.8	611.8	511.5	416.3	331.0	255.8
32.5°	1484.5	1302.3	1140.1	994.7	867.6	748.9	636.9	531.6	433.0	344.4	264.1
30°	1568.1	1369.1	1195.3	1039.8	902.7	779.0	662.0	551.7	449.7	356.1	272.5
27.5°	1653.3	1439.3	1250.4	1081.6	936.2	805.8	683.7	570.1	464.7	367.8	280.8
25°	1735.2	1506.2	1302.3	1121.7	966.3	832.5	707.1	588.4	478.1	377.8	287.5
22.5°	1810.5	1564.7	1349.1	1160.2	998.0	855.9	727.2	605.2	491.5	387.8	294.2
20°	1879.0	1624.9	1397.6	1198.6	1028.1	879.3	743.9	620.2	503.2	396.2	300.9
17.5°	1945.9	1680.1	1441.0	1233.7	1053.2	899.4	760.6	631.9	513.2	402.9	305.9
15°	2002.7	1728.6	1479.5	1263.8	1076.6	916.1	774.0	643.6	521.6	409.6	309.3
12.5°	2052.9	1770.3	1512.9	1288.9	1095.0	931.1	787.4	653.6	529.9	414.6	314.3
10°	2093.0	1803.8	1539.7	1310.6	1111.7	942.8	795.7	662.0	534.9	419.6	317.6
7.5°	2124.8	1830.5	1561.4	1325.7	1123.4	952.9	804.1	667.0	540.0	422.9	322.6
5°	2148.2	1850.6	1576.4	1337.4	1133.4	964.6	814.1	675.4	546.7	428.0	322.6
2.5°	2166.5	1865.6	1588.1	1347.4	1140.1	964.6	814.1	675.4	546.7	428.0	322.6
0°	2166.5	1865.6	1588.1	1347.4	1140.1	964.6	814.1	675.4	546.7	428.0	322.6

REPORT NUMBER: P623855

CATALOG NUMBER: IFLD-M-SA4A-727-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.4	6.7	3.3	0.0
85°	18.4	11.7	6.7	0.0
82.5°	26.7	18.4	8.4	0.0
80°	35.1	23.4	11.7	0.0
77.5°	45.1	30.1	15.0	0.0
75°	53.5	35.1	18.4	0.0
72.5°	61.9	41.8	20.1	0.0
70°	70.2	46.8	23.4	0.0
67.5°	80.2	51.8	26.7	0.0
65°	88.6	58.5	28.4	0.0
62.5°	97.0	63.5	31.8	0.0
60°	105.3	68.5	33.4	0.0
57.5°	113.7	73.6	36.8	0.0
55°	122.0	80.2	40.1	0.0
52.5°	130.4	85.3	41.8	0.0
50°	138.8	90.3	43.5	0.0
47.5°	145.4	95.3	46.8	0.0
45°	153.8	100.3	48.5	0.0
42.5°	162.2	103.6	50.2	0.0
40°	168.8	108.7	51.8	0.0
37.5°	177.2	112.0	55.2	0.0
35°	183.9	117.0	56.8	0.0
32.5°	188.9	120.4	58.5	0.0
30°	195.6	123.7	60.2	0.0
27.5°	200.6	127.1	60.2	0.0
25°	205.6	130.4	61.9	0.0
22.5°	210.6	132.1	63.5	0.0
20°	215.7	135.4	65.2	0.0
17.5°	219.0	137.1	65.2	0.0
15°	222.3	138.8	68.5	0.0
12.5°	224.0	140.4	68.5	0.0
10°	227.4	143.8	68.5	0.0
7.5°	230.7	143.8	68.5	0.0
5°	230.7	143.8	68.5	0.0
2.5°	230.7	143.8	68.5	0.0
0°	230.7	143.8	68.5	0.0

(END OF REPORT)