

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: P623857

Luminaire Tested: **IFLD-M-SA4C-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623857
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4C-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

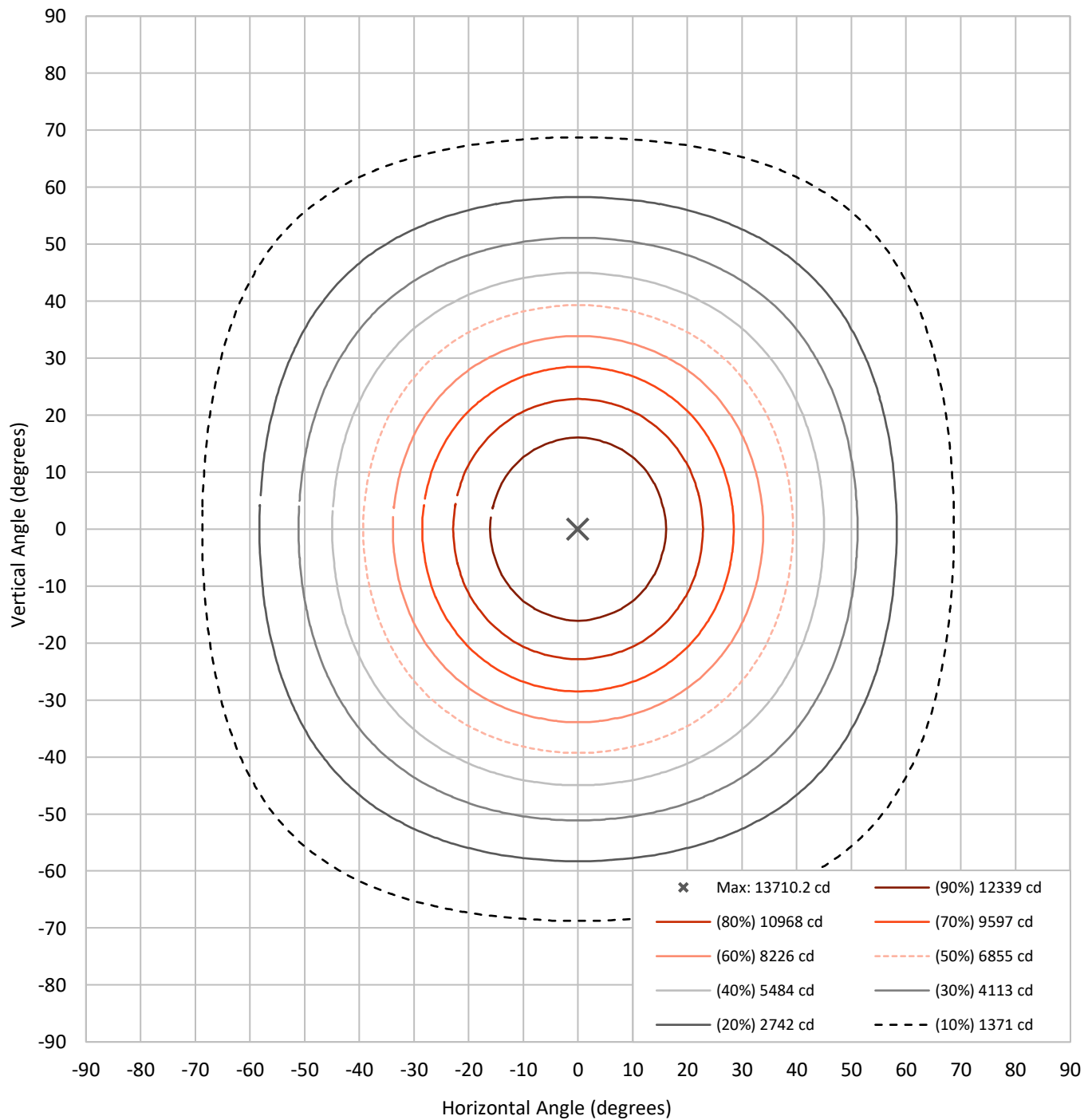
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	24685.5 lumens	Max Intensity:	13710.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	113.2 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:	10681.2 lumens	Field Lumens:	17490 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	218.1		
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		



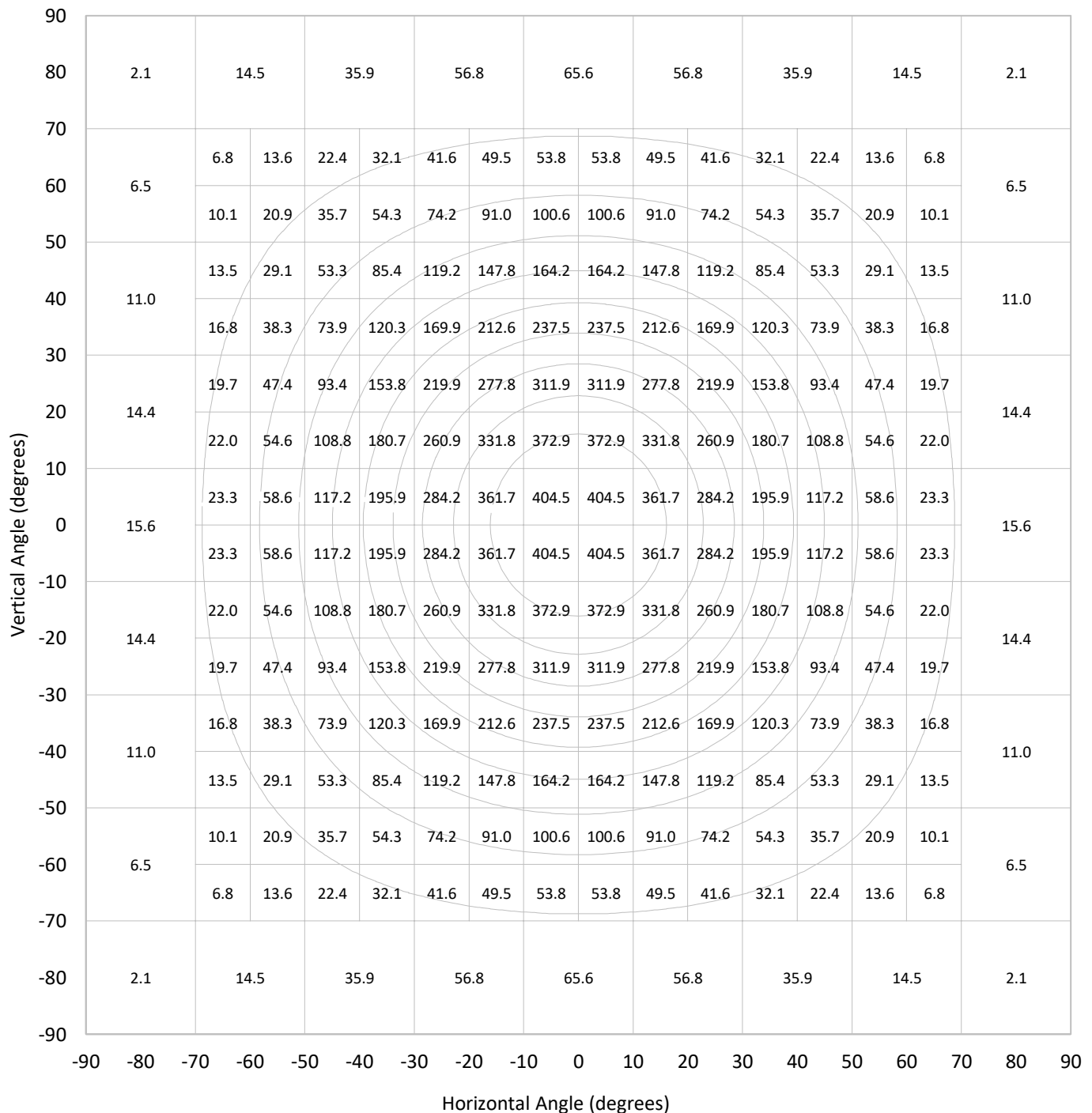
REPORT NUMBER: P623857
CATALOG NUMBER: IFLD-M-SA4C-727-U-77

Iso-Candela Plot



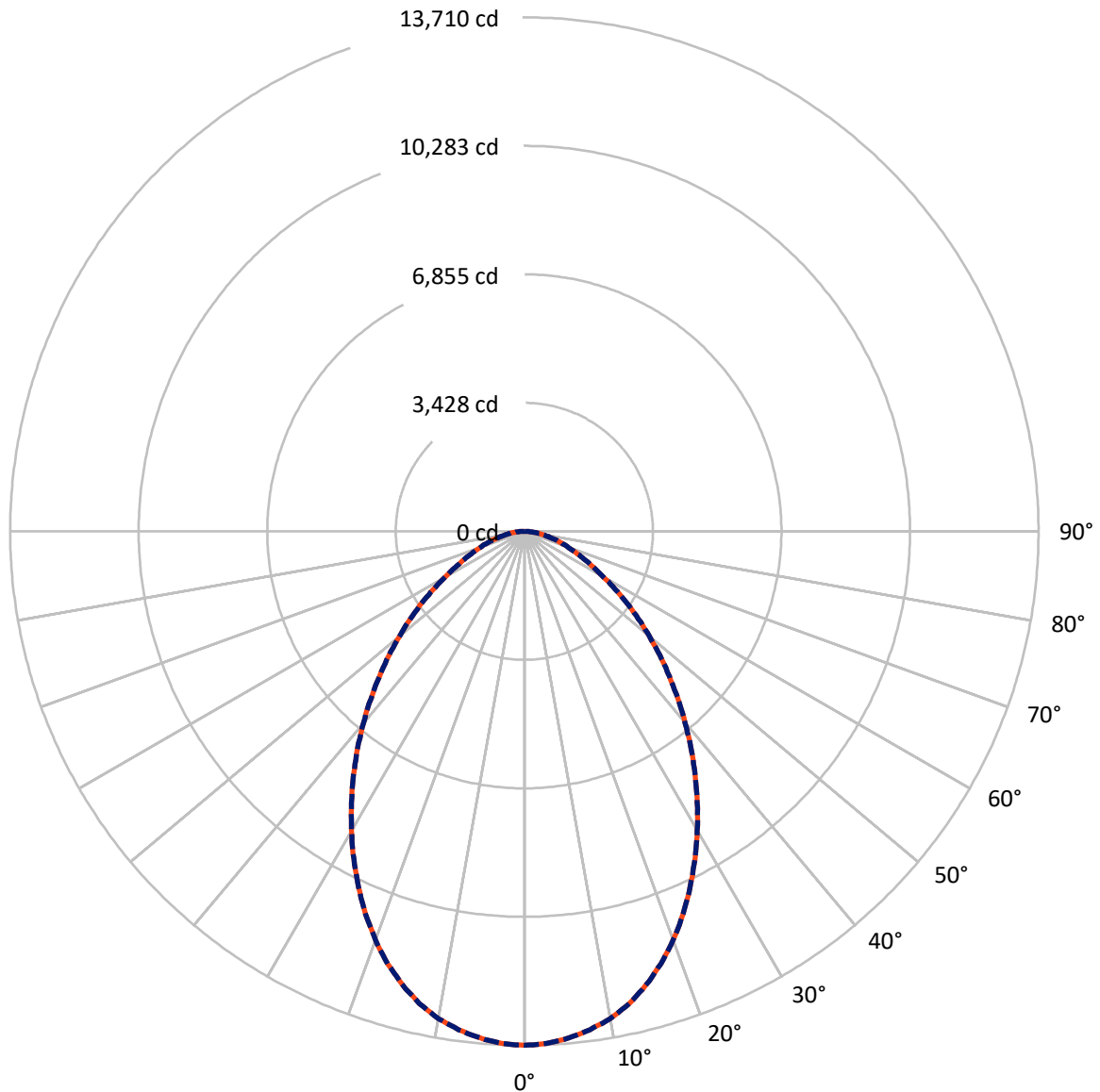
REPORT NUMBER: P623857
CATALOG NUMBER: IFLD-M-SA4C-727-U-77

Lumen Table



REPORT NUMBER: P623857
CATALOG NUMBER: IFLD-M-SA4C-727-U-77

Luminous Intensity Polar Plot

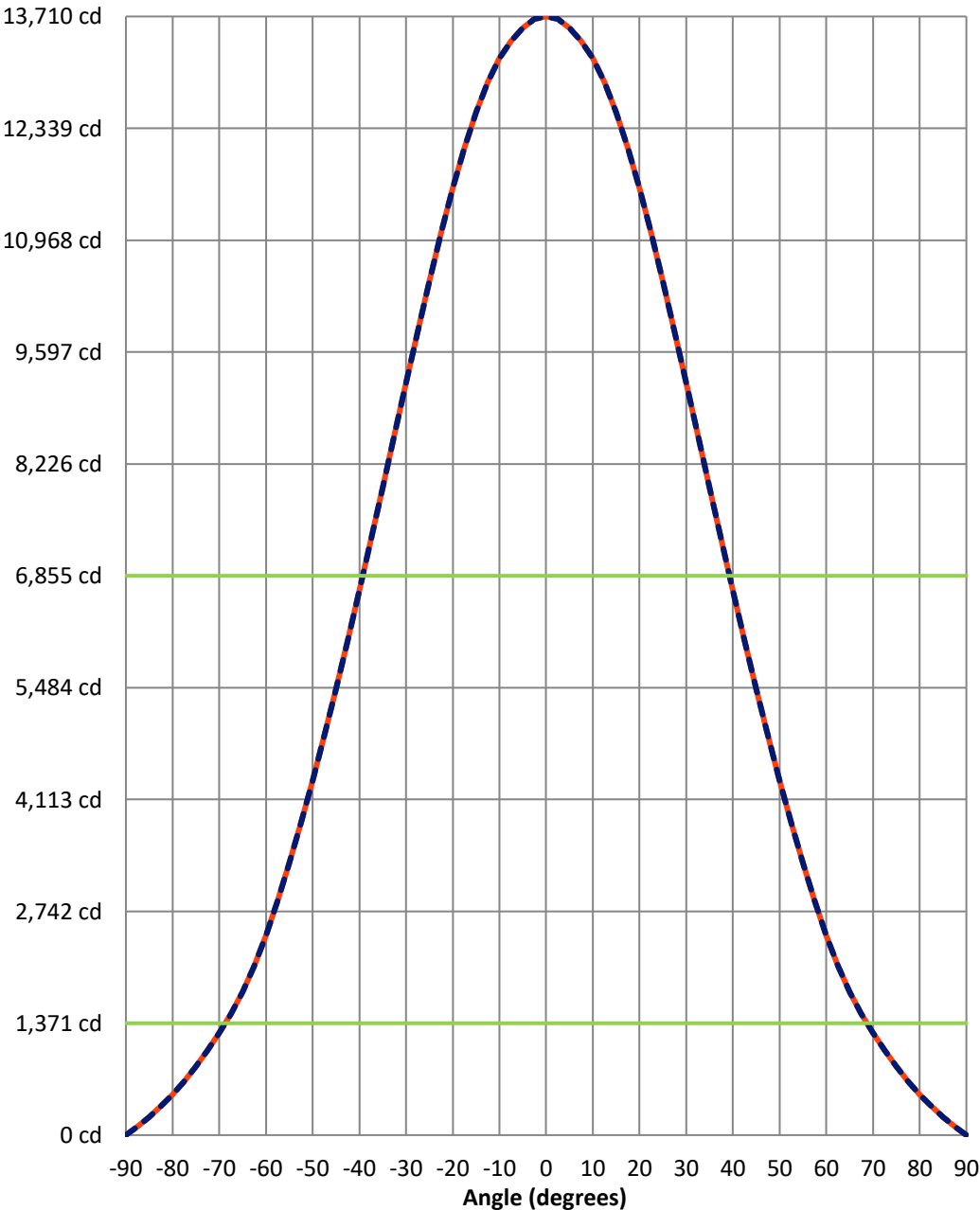


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



REPORT NUMBER: P623857
CATALOG NUMBER: IFLD-M-SA4C-727-U-77

Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 10681.2
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 17490
Efficiency: 70.9%

Spill:
Lumens: 7195.4
Efficiency: 29.1%

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



REPORT NUMBER: P623857

CATALOG NUMBER: IFLD-M-SA4C-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°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	100.4	100.4	97.8	95.2
85°	221.3	221.3	221.3	221.3	221.3	216.2	213.6	211.0	208.5	203.3	200.7
82.5°	355.2	355.2	355.2	355.2	350.0	344.9	342.3	337.2	332.0	324.3	316.6
80°	496.7	496.7	496.7	496.7	489.0	483.9	476.1	471.0	463.3	453.0	442.7
77.5°	658.9	658.9	658.9	651.1	646.0	638.3	630.6	620.3	610.0	597.1	581.7
75°	841.6	841.6	841.6	831.3	823.6	815.9	803.0	790.1	774.7	756.7	736.1
72.5°	1039.8	1039.8	1039.8	1026.9	1019.2	1006.3	990.9	972.9	954.8	931.7	905.9
70°	1253.4	1253.4	1253.4	1238.0	1225.1	1212.2	1191.6	1171.0	1145.3	1119.6	1088.7
67.5°	1485.0	1485.0	1485.0	1467.0	1451.6	1433.6	1410.4	1384.7	1353.8	1317.7	1281.7
65°	1755.3	1755.3	1745.0	1729.5	1711.5	1685.8	1657.5	1621.4	1582.8	1536.5	1487.6
62.5°	2074.4	2074.4	2059.0	2041.0	2017.8	1984.3	1945.7	1899.4	1845.4	1786.2	1727.0
60°	2445.0	2445.0	2427.0	2403.8	2370.4	2329.2	2277.7	2218.5	2151.6	2077.0	2004.9
57.5°	2872.3	2872.3	2849.1	2818.2	2777.0	2725.6	2661.2	2586.6	2501.7	2409.0	2318.9
55°	3335.5	3335.5	3307.2	3271.2	3222.3	3160.5	3083.3	2995.8	2892.9	2787.3	2671.5
52.5°	3827.1	3827.1	3793.7	3752.5	3695.9	3623.8	3536.3	3433.3	3314.9	3191.4	3055.0
50°	4344.4	4344.4	4305.8	4259.5	4195.2	4110.2	4009.8	3891.5	3760.2	3616.1	3459.1
47.5°	4897.8	4897.8	4854.0	4800.0	4722.8	4625.0	4506.6	4370.2	4220.9	4058.7	3881.2
45°	5466.6	5466.6	5417.7	5355.9	5271.0	5160.3	5029.0	4897.8	4707.3	4519.4	4313.5
42.5°	6058.5	6058.5	6001.9	5932.4	5834.6	5713.6	5564.4	5394.5	5206.6	4995.6	4771.7
40°	6673.6	6673.6	6609.3	6529.5	6421.4	6282.4	6115.1	5924.7	5713.6	5479.4	5232.4
37.5°	7301.6	7301.6	7229.6	7142.1	7021.1	6866.7	6678.8	6467.7	6231.0	5971.0	5698.2
35°	7934.8	7934.8	7855.0	7759.7	7625.9	7456.0	7252.7	7018.5	6756.0	6472.9	6166.6
32.5°	8580.8	8580.8	8493.3	8385.2	8233.3	8045.4	7821.5	7566.7	7301.6	6972.2	6637.6
30°	9219.0	9219.0	9123.8	9005.4	8843.3	8637.4	8392.9	8112.3	7800.9	7463.8	7103.5
27.5°	9847.0	9821.3	9741.5	9615.4	9437.8	9219.0	8954.0	8650.3	8313.1	7942.5	7556.4
25°	10464.7	10436.4	10348.9	10209.9	10019.5	9780.1	9494.4	9170.1	8807.2	8416.0	7994.0
22.5°	11056.7	11025.8	10933.1	10783.9	10580.5	10320.6	10014.3	9666.9	9280.8	8861.3	8416.0
20°	11604.9	11571.4	11476.2	11319.2	11108.2	10832.8	10508.5	10135.3	9723.5	9280.8	8807.2
17.5°	12099.0	12065.6	11965.2	11803.1	11604.9	11298.6	10964.0	10570.2	10135.3	9666.9	9170.1
15°	12534.0	12498.0	12395.0	12232.9	12006.4	11718.1	11365.5	10964.0	10508.5	10014.3	9494.4
12.5°	12904.6	12868.6	12763.0	12600.9	12366.7	12078.4	11718.1	11298.6	10832.8	10320.6	9780.1
10°	13198.0	13162.0	13061.6	12907.2	12665.2	12366.7	12006.4	11604.9	11108.2	10580.5	10019.5
7.5°	13409.1	13375.6	13282.9	13128.5	12907.2	12600.9	12232.9	11803.1	11319.2	10783.9	10209.9
5°	13568.6	13530.0	13437.4	13282.9	13061.6	12763.0	12395.0	11965.2	11476.2	10933.1	10348.9
2.5°	13679.3	13633.0	13530.0	13375.6	13162.0	12868.6	12498.0	12065.6	11571.4	11025.8	10436.4
0°	13710.2	13679.3	13568.6	13409.1	13198.0	12904.6	12534.0	12099.0	11604.9	11056.7	10464.7

REPORT NUMBER: P623857

CATALOG NUMBER: IFLD-M-SA4C-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°	92.7	92.7	90.1	87.5	84.9	79.8	77.2	74.6	72.1	66.9	64.3
85°	195.6	190.5	185.3	180.2	172.4	167.3	159.6	154.4	146.7	139.0	131.3
82.5°	308.8	301.1	290.8	283.1	272.8	259.9	249.7	236.8	223.9	213.6	200.7
80°	432.4	419.5	406.6	393.8	378.3	362.9	347.5	332.0	314.0	296.0	278.0
77.5°	566.2	548.2	530.2	509.6	491.6	471.0	450.4	429.8	406.6	383.5	360.3
75°	715.5	692.3	666.6	640.9	617.7	589.4	561.1	532.8	501.9	473.6	442.7
72.5°	877.6	849.3	818.4	787.6	754.1	718.1	682.0	643.4	607.4	571.4	532.8
70°	1052.6	1019.2	980.6	942.0	900.8	857.0	813.3	767.0	720.6	674.3	628.0
67.5°	1240.5	1199.4	1153.0	1106.7	1055.2	1003.7	952.3	898.2	841.6	785.0	730.9
65°	1441.3	1389.8	1335.8	1276.6	1217.4	1158.2	1096.4	1032.1	967.7	900.8	841.6
62.5°	1665.2	1600.9	1531.4	1459.3	1392.4	1320.3	1253.4	1173.6	1096.4	1021.8	947.1
60°	1925.1	1840.2	1755.3	1665.2	1580.3	1487.6	1405.2	1317.7	1230.2	1145.3	1057.8
57.5°	2216.0	2107.9	2004.9	1896.8	1783.6	1680.6	1575.1	1469.6	1371.8	1271.4	1176.2
55°	2545.4	2414.1	2285.5	2151.6	2020.4	1891.7	1757.8	1639.5	1518.5	1405.2	1294.6
52.5°	2905.7	2756.4	2596.9	2445.0	2277.7	2118.2	1968.9	1819.6	1678.1	1541.7	1415.5
50°	3291.8	3116.8	2934.0	2748.7	2558.3	2370.4	2190.2	2015.2	1850.5	1690.9	1541.7
47.5°	3693.3	3495.1	3286.6	3075.6	2872.3	2643.2	2427.0	2228.8	2030.7	1850.5	1678.1
45°	4105.1	3881.2	3652.1	3412.7	3173.4	2926.3	2687.0	2445.0	2228.8	2015.2	1819.6
42.5°	4529.7	4277.5	4022.7	3757.6	3492.5	3222.3	2952.1	2687.0	2427.0	2190.2	1968.9
40°	4967.3	4689.3	4398.5	4110.2	3827.1	3518.3	3222.3	2926.3	2643.2	2370.4	2118.2
37.5°	5404.8	5101.1	4787.1	4462.8	4138.5	3827.1	3492.5	3173.4	2872.3	2558.3	2277.7
35°	5844.9	5510.3	5170.6	4818.0	4462.8	4110.2	3757.6	3412.7	3075.6	2748.7	2445.0
32.5°	6287.6	5922.1	5546.4	5170.6	4787.1	4398.5	4022.7	3652.1	3286.6	2934.0	2596.9
30°	6722.5	6326.2	5922.1	5510.3	5101.1	4689.3	4277.5	3881.2	3495.1	3116.8	2756.4
27.5°	7147.2	6722.5	6287.6	5844.9	5404.8	4967.3	4529.7	4105.1	3693.3	3291.8	2905.7
25°	7556.4	7103.5	6637.6	6166.6	5698.2	5232.4	4771.7	4313.5	3881.2	3459.1	3055.0
22.5°	7942.5	7463.8	6972.2	6472.9	5971.0	5479.4	4995.6	4519.4	4058.7	3616.1	3191.4
20°	8313.1	7800.9	7301.6	6756.0	6231.0	5713.6	5206.6	4707.3	4220.9	3760.2	3314.9
17.5°	8650.3	8112.3	7566.7	7018.5	6467.7	5924.7	5394.5	4897.8	4370.2	3891.5	3433.3
15°	8954.0	8392.9	7821.5	7252.7	6678.8	6115.1	5564.4	5029.0	4506.6	4009.8	3536.3
12.5°	9219.0	8637.4	8045.4	7456.0	6866.7	6282.4	5713.6	5160.3	4625.0	4110.2	3623.8
10°	9437.8	8843.3	8233.3	7625.9	7021.1	6421.4	5834.6	5271.0	4722.8	4195.2	3695.9
7.5°	9615.4	9005.4	8385.2	7759.7	7142.1	6529.5	5932.4	5355.9	4800.0	4259.5	3752.5
5°	9741.5	9123.8	8493.3	7855.0	7229.6	6609.3	6001.9	5417.7	4854.0	4305.8	3793.7
2.5°	9821.3	9219.0	8580.8	7934.8	7301.6	6673.6	6058.5	5466.6	4897.8	4344.4	3827.1
0°	9847.0	9219.0	8580.8	7934.8	7301.6	6673.6	6058.5	5466.6	4897.8	4344.4	3827.1

REPORT NUMBER: P623857

CATALOG NUMBER: IFLD-M-SA4C-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°	61.8	56.6	51.5	48.9	43.8	41.2	36.0	30.9	28.3	23.2	18.0
85°	123.5	113.2	105.5	97.8	90.1	79.8	72.1	64.3	54.0	46.3	36.0
82.5°	187.9	175.0	162.1	149.3	136.4	123.5	108.1	95.2	82.4	69.5	54.0
80°	259.9	239.4	221.3	203.3	185.3	167.3	146.7	128.7	108.1	90.1	72.1
77.5°	334.6	311.4	285.7	259.9	234.2	211.0	185.3	162.1	139.0	113.2	90.1
75°	414.4	383.5	355.2	321.7	290.8	257.4	226.5	195.6	167.3	139.0	108.1
72.5°	496.7	458.1	419.5	383.5	344.9	306.3	270.2	231.6	195.6	162.1	128.7
70°	581.7	535.3	489.0	445.3	401.5	355.2	314.0	270.2	226.5	185.3	146.7
67.5°	671.7	617.7	563.6	507.0	458.1	406.6	355.2	306.3	257.4	211.0	167.3
65°	769.5	705.2	638.3	579.1	514.7	458.1	401.5	344.9	290.8	234.2	185.3
62.5°	869.9	795.3	720.6	646.0	579.1	507.0	445.3	383.5	321.7	259.9	203.3
60°	972.9	887.9	803.0	720.6	638.3	563.6	489.0	419.5	355.2	285.7	221.3
57.5°	1078.4	983.2	887.9	795.3	705.2	617.7	535.3	458.1	383.5	311.4	239.4
55°	1186.5	1078.4	972.9	869.9	769.5	671.7	581.7	496.7	414.4	334.6	259.9
52.5°	1294.6	1176.2	1057.8	947.1	841.6	730.9	628.0	532.8	442.7	360.3	278.0
50°	1405.2	1271.4	1145.3	1021.8	900.8	785.0	674.3	571.4	473.6	383.5	296.0
47.5°	1518.5	1371.8	1230.2	1096.4	967.7	841.6	720.6	607.4	501.9	406.6	314.0
45°	1639.5	1469.6	1317.7	1173.6	1032.1	898.2	767.0	643.4	532.8	429.8	332.0
42.5°	1757.8	1575.1	1405.2	1253.4	1096.4	952.3	813.3	682.0	561.1	450.4	347.5
40°	1891.7	1680.6	1487.6	1320.3	1158.2	1003.7	857.0	718.1	589.4	471.0	362.9
37.5°	2020.4	1783.6	1580.3	1392.4	1217.4	1055.2	900.8	754.1	617.7	491.6	378.3
35°	2151.6	1896.8	1665.2	1459.3	1276.6	1106.7	942.0	787.6	640.9	509.6	393.8
32.5°	2285.5	2004.9	1755.3	1531.4	1335.8	1153.0	980.6	818.4	666.6	530.2	406.6
30°	2414.1	2107.9	1840.2	1600.9	1389.8	1199.4	1019.2	849.3	692.3	548.2	419.5
27.5°	2545.4	2216.0	1925.1	1665.2	1441.3	1240.5	1052.6	877.6	715.5	566.2	432.4
25°	2671.5	2318.9	2004.9	1727.0	1487.6	1281.7	1088.7	905.9	736.1	581.7	442.7
22.5°	2787.3	2409.0	2077.0	1786.2	1536.5	1317.7	1119.6	931.7	756.7	597.1	453.0
20°	2892.9	2501.7	2151.6	1845.4	1582.8	1353.8	1145.3	954.8	774.7	610.0	463.3
17.5°	2995.8	2586.6	2218.5	1899.4	1621.4	1384.7	1171.0	972.9	790.1	620.3	471.0
15°	3083.3	2661.2	2277.7	1945.7	1657.5	1410.4	1191.6	990.9	803.0	630.6	476.1
12.5°	3160.5	2725.6	2329.2	1984.3	1685.8	1433.6	1212.2	1006.3	815.9	638.3	483.9
10°	3222.3	2777.0	2370.4	2017.8	1711.5	1451.6	1225.1	1019.2	823.6	646.0	489.0
7.5°	3271.2	2818.2	2403.8	2041.0	1729.5	1467.0	1238.0	1026.9	831.3	651.1	496.7
5°	3307.2	2849.1	2427.0	2059.0	1745.0	1485.0	1253.4	1039.8	841.6	658.9	496.7
2.5°	3335.5	2872.3	2445.0	2074.4	1755.3	1485.0	1253.4	1039.8	841.6	658.9	496.7
0°	3335.5	2872.3	2445.0	2074.4	1755.3	1485.0	1253.4	1039.8	841.6	658.9	496.7

REPORT NUMBER: P623857

CATALOG NUMBER: IFLD-M-SA4C-727-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.9	10.3	5.1	0.0
85°	28.3	18.0	10.3	0.0
82.5°	41.2	28.3	12.9	0.0
80°	54.0	36.0	18.0	0.0
77.5°	69.5	46.3	23.2	0.0
75°	82.4	54.0	28.3	0.0
72.5°	95.2	64.3	30.9	0.0
70°	108.1	72.1	36.0	0.0
67.5°	123.5	79.8	41.2	0.0
65°	136.4	90.1	43.8	0.0
62.5°	149.3	97.8	48.9	0.0
60°	162.1	105.5	51.5	0.0
57.5°	175.0	113.2	56.6	0.0
55°	187.9	123.5	61.8	0.0
52.5°	200.7	131.3	64.3	0.0
50°	213.6	139.0	66.9	0.0
47.5°	223.9	146.7	72.1	0.0
45°	236.8	154.4	74.6	0.0
42.5°	249.7	159.6	77.2	0.0
40°	259.9	167.3	79.8	0.0
37.5°	272.8	172.4	84.9	0.0
35°	283.1	180.2	87.5	0.0
32.5°	290.8	185.3	90.1	0.0
30°	301.1	190.5	92.7	0.0
27.5°	308.8	195.6	92.7	0.0
25°	316.6	200.7	95.2	0.0
22.5°	324.3	203.3	97.8	0.0
20°	332.0	208.5	100.4	0.0
17.5°	337.2	211.0	100.4	0.0
15°	342.3	213.6	105.5	0.0
12.5°	344.9	216.2	105.5	0.0
10°	350.0	221.3	105.5	0.0
7.5°	355.2	221.3	105.5	0.0
5°	355.2	221.3	105.5	0.0
2.5°	355.2	221.3	105.5	0.0
0°	355.2	221.3	105.5	0.0

(END OF REPORT)