

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: P624600

Luminaire Tested: **IFLD-M-SA4D-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624600
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

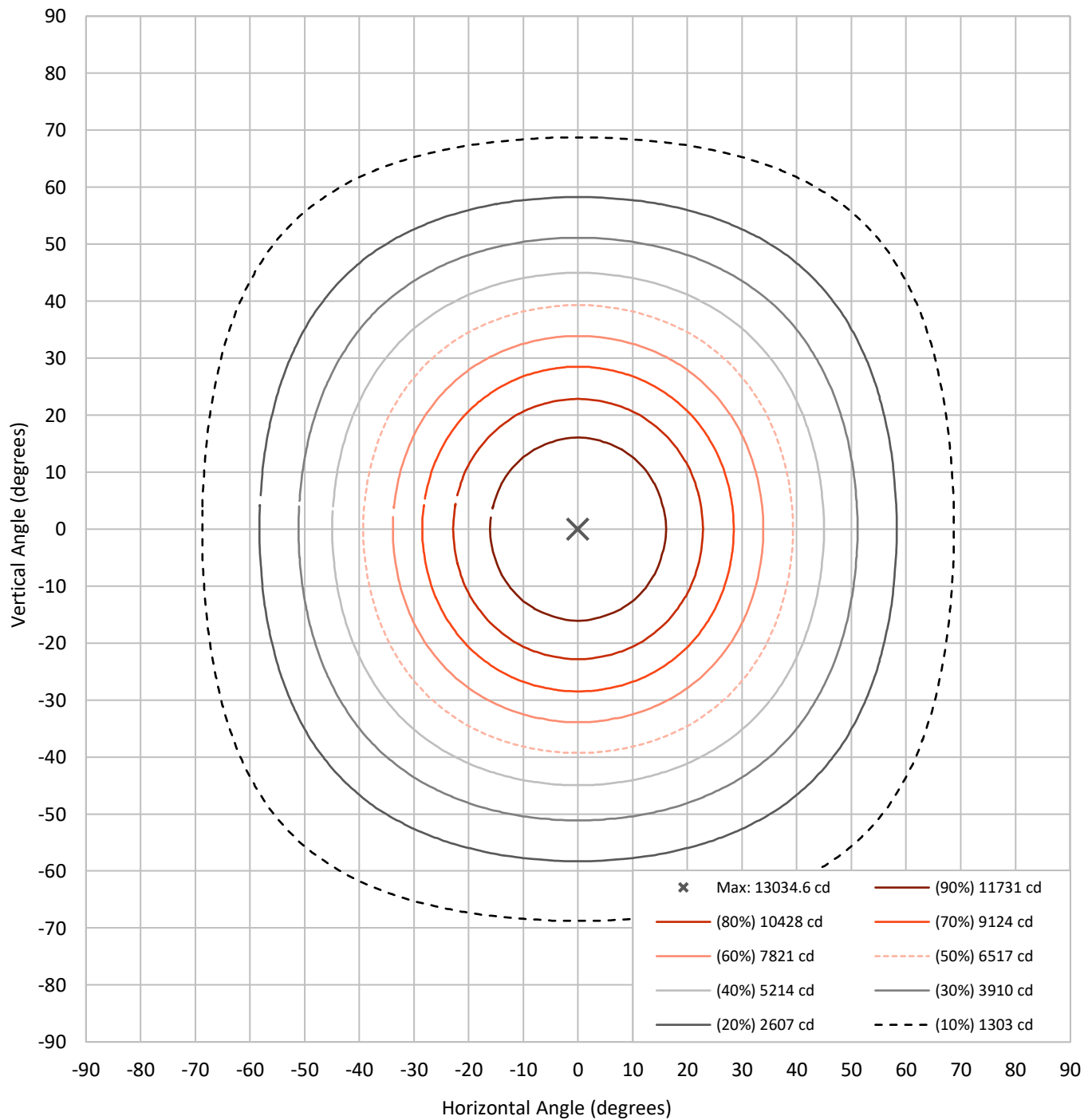
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23469.1 lumens	Max Intensity:	13034.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	94.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	10154.8 lumens	Field Lumens:	16628.2 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 249.7
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



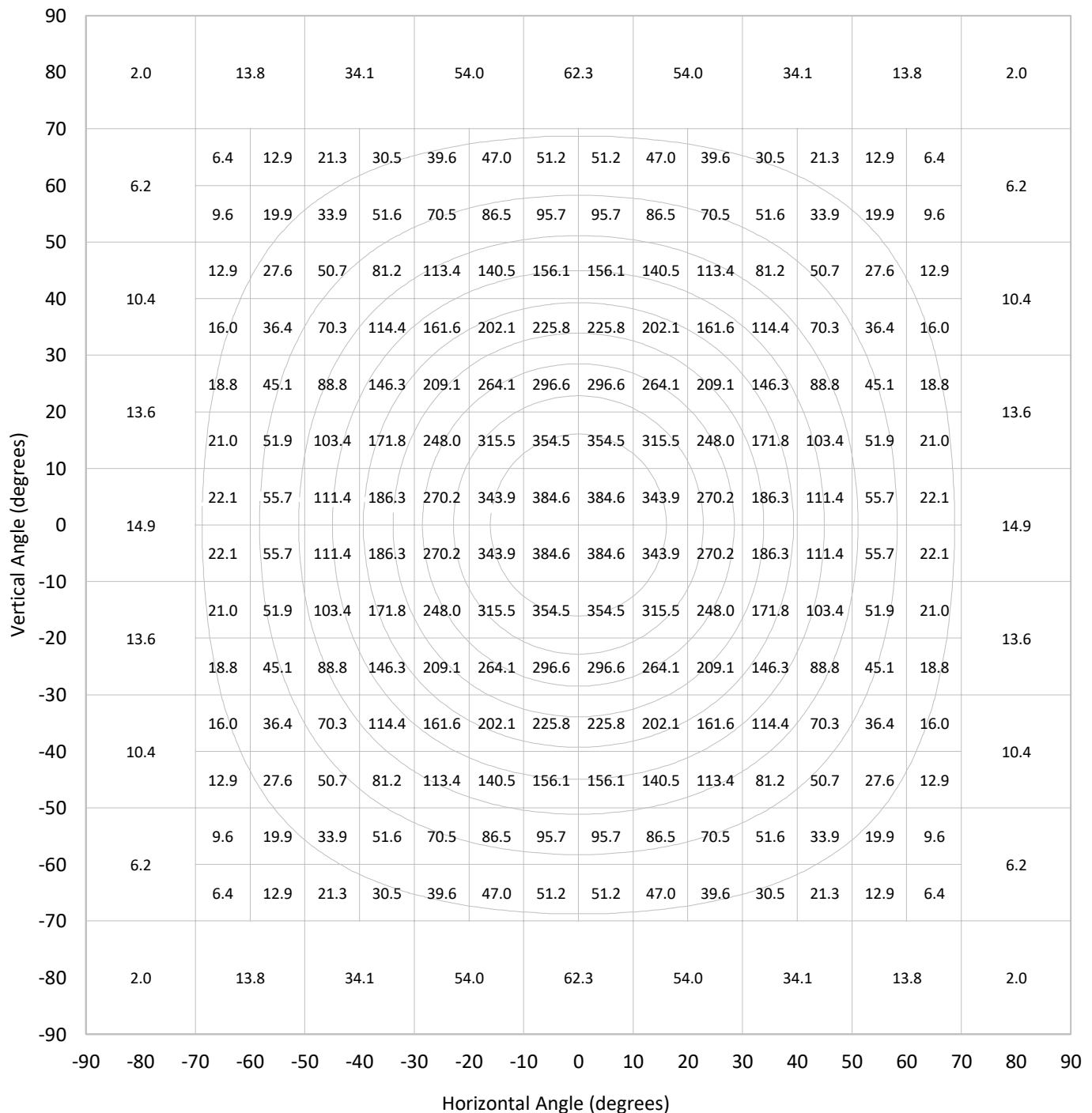
REPORT NUMBER: P624600
CATALOG NUMBER: IFLD-M-SA4D-940-U-77

Iso-Candela Plot



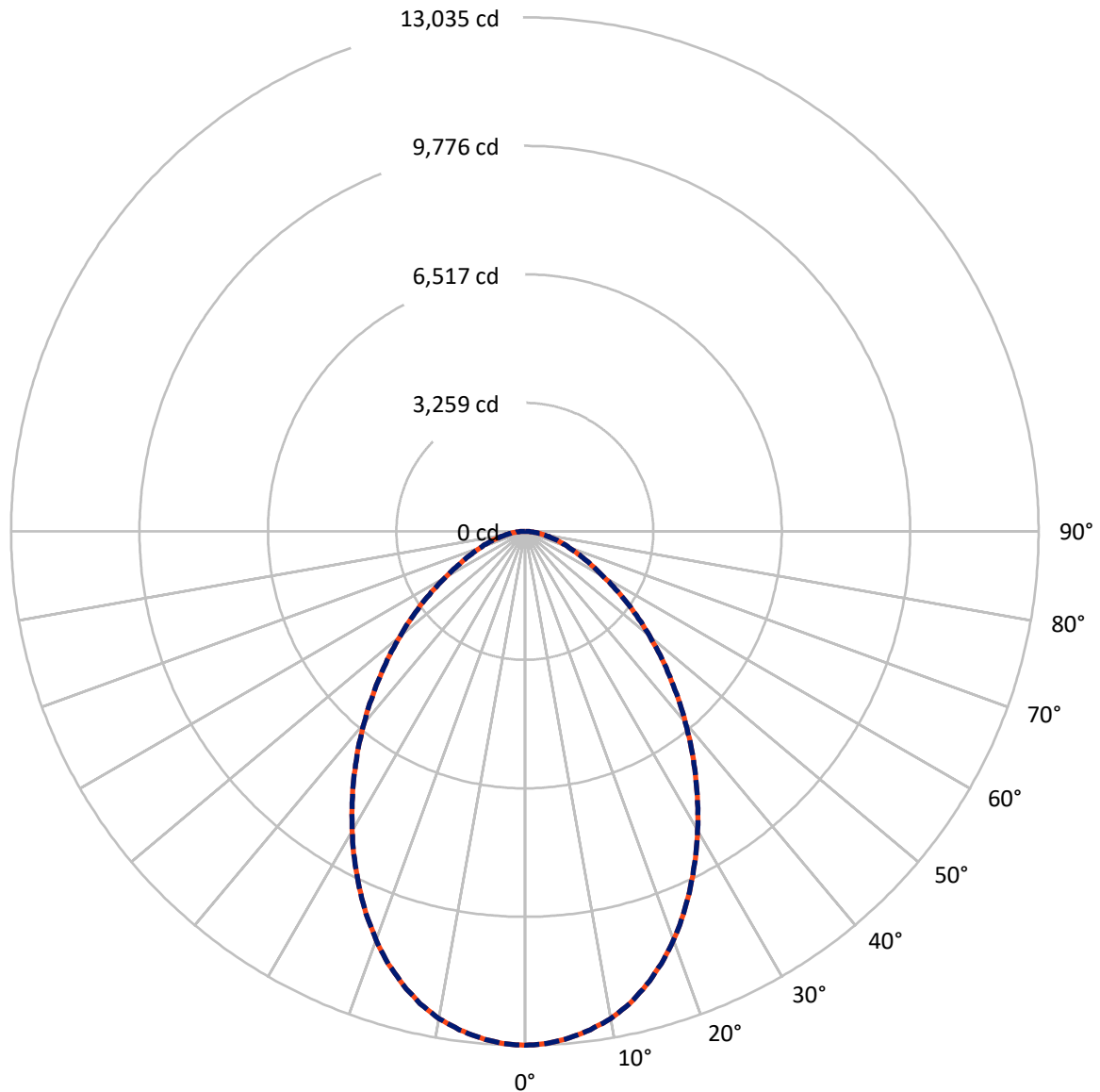
REPORT NUMBER: P624600
CATALOG NUMBER: IFLD-M-SA4D-940-U-77

Lumen Table



REPORT NUMBER: P624600
CATALOG NUMBER: IFLD-M-SA4D-940-U-77

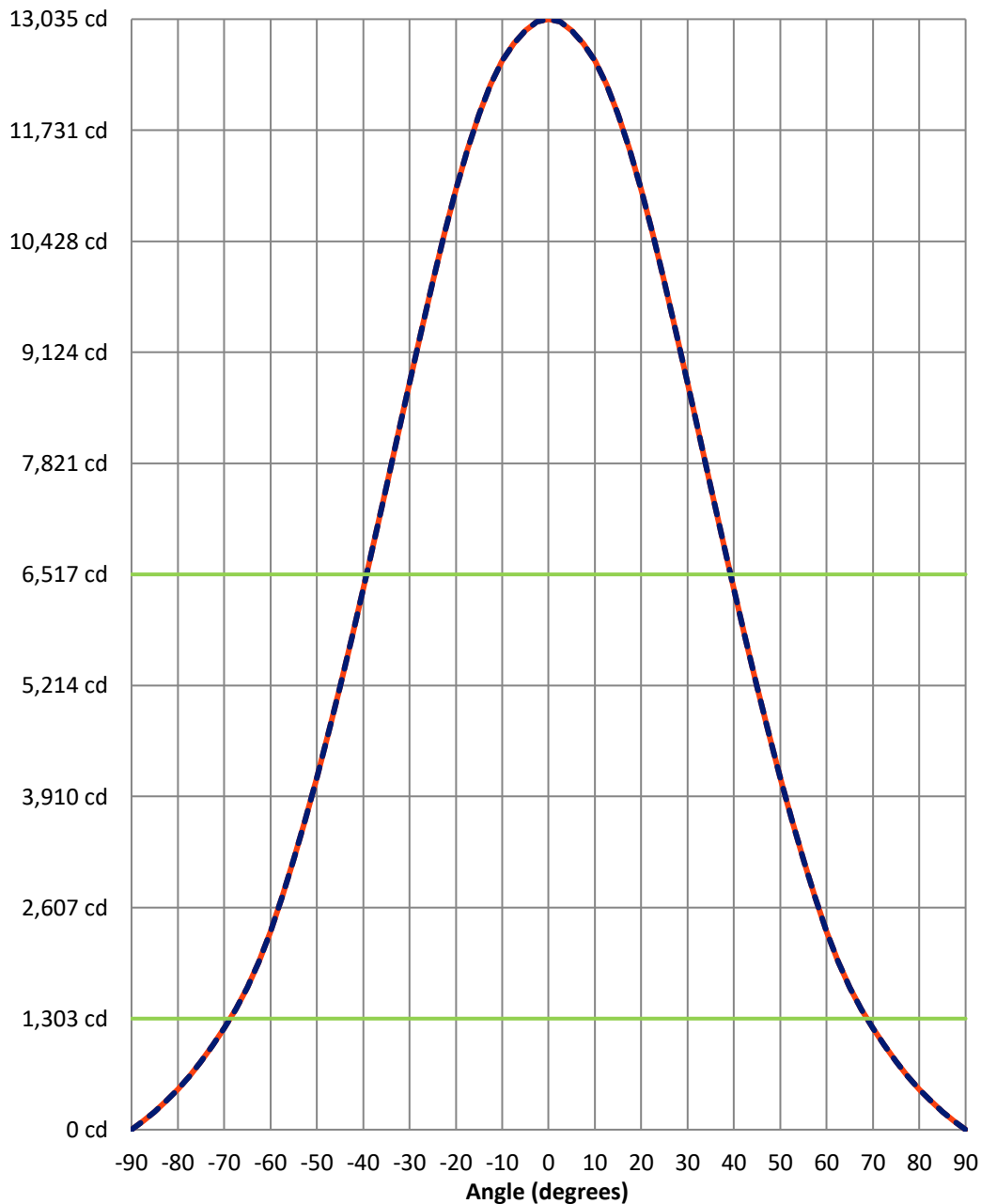
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624600
CATALOG NUMBER: IFLD-M-SA4D-940-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 10154.8
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 16628.2
Efficiency: 70.9%

Spill:

Lumens: 6840.9
Efficiency: 29.1%

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

REPORT NUMBER: P624600

CATALOG NUMBER: IFLD-M-SA4D-940-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°	100.3	100.3	100.3	100.3	100.3	100.3	100.3	95.4	95.4	93.0	90.5
85°	210.4	210.4	210.4	210.4	210.4	205.5	203.1	200.6	198.2	193.3	190.9
82.5°	337.7	337.7	337.7	337.7	332.8	327.9	325.4	320.5	315.6	308.3	301.0
80°	472.3	472.3	472.3	472.3	464.9	460.0	452.7	447.8	440.4	430.7	420.9
77.5°	626.4	626.4	626.4	619.1	614.2	606.8	599.5	589.7	579.9	567.7	553.0
75°	800.1	800.1	800.1	790.3	783.0	775.7	763.4	751.2	736.5	719.4	699.8
72.5°	988.5	988.5	988.5	976.3	969.0	956.7	942.1	924.9	907.8	885.8	861.3
70°	1191.6	1191.6	1191.6	1177.0	1164.7	1152.5	1132.9	1113.3	1088.9	1064.4	1035.0
67.5°	1411.9	1411.9	1411.9	1394.7	1380.0	1362.9	1340.9	1316.4	1287.1	1252.8	1218.6
65°	1668.8	1668.8	1659.0	1644.3	1627.2	1602.7	1575.8	1541.5	1504.8	1460.8	1414.3
62.5°	1972.2	1972.2	1957.5	1940.4	1918.4	1886.6	1849.9	1805.8	1754.4	1698.1	1641.9
60°	2324.5	2324.5	2307.4	2285.4	2253.6	2214.4	2165.5	2109.2	2045.6	1974.6	1906.1
57.5°	2730.7	2730.7	2708.7	2679.3	2640.2	2591.3	2530.1	2459.1	2378.4	2290.3	2204.7
55°	3171.2	3171.2	3144.3	3110.0	3063.5	3004.8	2931.4	2848.2	2750.3	2650.0	2539.9
52.5°	3638.5	3638.5	3606.7	3567.6	3513.7	3445.2	3362.0	3264.2	3151.6	3034.1	2904.5
50°	4130.4	4130.4	4093.7	4049.6	3988.4	3907.7	3812.3	3699.7	3574.9	3437.9	3288.6
47.5°	4656.4	4656.4	4614.8	4563.5	4490.0	4397.1	4284.5	4154.8	4012.9	3858.7	3689.9
45°	5197.2	5197.2	5150.7	5092.0	5011.2	4906.0	4781.2	4656.4	4475.4	4296.7	4101.0
42.5°	5760.0	5760.0	5706.2	5640.1	5547.1	5432.1	5290.2	5128.7	4950.1	4749.4	4536.5
40°	6344.8	6344.8	6283.6	6207.8	6105.0	5972.9	5813.8	5632.7	5432.1	5209.4	4974.5
37.5°	6941.8	6941.8	6873.3	6790.1	6675.1	6528.3	6349.7	6149.0	5923.9	5676.8	5417.4
35°	7543.8	7543.8	7467.9	7377.4	7250.1	7088.6	6895.3	6672.7	6423.1	6153.9	5862.8
32.5°	8157.9	8157.9	8074.7	7972.0	7827.6	7649.0	7436.1	7193.9	6941.8	6628.6	6310.5
30°	8764.8	8764.8	8674.2	8561.7	8407.5	8211.8	7979.3	7712.6	7416.5	7096.0	6753.4
27.5°	9361.8	9337.3	9261.5	9141.6	8972.8	8764.8	8512.7	8224.0	7903.5	7551.1	7184.1
25°	9949.1	9922.1	9839.0	9706.8	9525.8	9298.2	9026.6	8718.3	8373.3	8001.3	7600.0
22.5°	10511.9	10482.5	10394.4	10252.5	10059.2	9812.0	9520.9	9190.5	8823.5	8424.7	8001.3
20°	11033.0	11001.2	10910.7	10761.4	10560.8	10299.0	9990.7	9635.9	9244.4	8823.5	8373.3
17.5°	11502.8	11471.0	11375.6	11221.4	11033.0	10741.9	10423.8	10049.4	9635.9	9190.5	8718.3
15°	11916.4	11882.1	11784.2	11630.1	11414.8	11140.7	10805.5	10423.8	9990.7	9520.9	9026.6
12.5°	12268.7	12234.5	12134.1	11980.0	11757.3	11483.3	11140.7	10741.9	10299.0	9812.0	9298.2
10°	12547.7	12513.4	12418.0	12271.2	12041.2	11757.3	11414.8	11033.0	10560.8	10059.2	9525.8
7.5°	12748.3	12716.5	12628.4	12481.6	12271.2	11980.0	11630.1	11221.4	10761.4	10252.5	9706.8
5°	12900.0	12863.3	12775.2	12628.4	12418.0	12134.1	11784.2	11375.6	10910.7	10394.4	9839.0
2.5°	13005.2	12961.2	12863.3	12716.5	12513.4	12234.5	11882.1	11471.0	11001.2	10482.5	9922.1
0°	13034.6	13005.2	12900.0	12748.3	12547.7	12268.7	11916.4	11502.8	11033.0	10511.9	9949.1

REPORT NUMBER: P624600

CATALOG NUMBER: IFLD-M-SA4D-940-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°	88.1	88.1	85.6	83.2	80.7	75.9	73.4	71.0	68.5	63.6	61.2
85°	186.0	181.1	176.2	171.3	163.9	159.0	151.7	146.8	139.5	132.1	124.8
82.5°	293.6	286.3	276.5	269.2	259.4	247.1	237.3	225.1	212.9	203.1	190.9
80°	411.1	398.8	386.6	374.4	359.7	345.0	330.3	315.6	298.5	281.4	264.3
77.5°	538.3	521.2	504.1	484.5	467.4	447.8	428.2	408.6	386.6	364.6	342.6
75°	680.2	658.2	633.7	609.3	587.3	560.3	533.4	506.5	477.1	450.2	420.9
72.5°	834.4	807.5	778.1	748.7	716.9	682.7	648.4	611.7	577.5	543.2	506.5
70°	1000.8	969.0	932.3	895.6	856.4	814.8	773.2	729.2	685.1	641.1	597.0
67.5°	1179.4	1140.3	1096.2	1052.2	1003.2	954.3	905.4	854.0	800.1	746.3	694.9
65°	1370.3	1321.3	1269.9	1213.7	1157.4	1101.1	1042.4	981.2	920.0	856.4	800.1
62.5°	1583.1	1522.0	1455.9	1387.4	1323.8	1255.3	1191.6	1115.8	1042.4	971.4	900.5
60°	1830.3	1749.5	1668.8	1583.1	1502.4	1414.3	1336.0	1252.8	1169.6	1088.9	1005.7
57.5°	2106.8	2004.0	1906.1	1803.4	1695.7	1597.8	1497.5	1397.2	1304.2	1208.8	1118.2
55°	2420.0	2295.2	2172.8	2045.6	1920.8	1798.5	1671.2	1558.7	1443.7	1336.0	1230.8
52.5°	2762.5	2620.6	2468.9	2324.5	2165.5	2013.8	1871.9	1730.0	1595.4	1465.7	1345.8
50°	3129.6	2963.2	2789.5	2613.3	2432.2	2253.6	2082.3	1915.9	1759.3	1607.6	1465.7
47.5°	3511.3	3322.9	3124.7	2924.0	2730.7	2513.0	2307.4	2119.0	1930.6	1759.3	1595.4
45°	3902.8	3689.9	3472.1	3244.6	3017.0	2782.1	2554.6	2324.5	2119.0	1915.9	1730.0
42.5°	4306.5	4066.7	3824.5	3572.5	3320.4	3063.5	2806.6	2554.6	2307.4	2082.3	1871.9
40°	4722.5	4458.2	4181.7	3907.7	3638.5	3344.9	3063.5	2782.1	2513.0	2253.6	2013.8
37.5°	5138.5	4849.7	4551.2	4242.9	3934.6	3638.5	3320.4	3017.0	2730.7	2432.2	2165.5
35°	5556.9	5238.8	4915.8	4580.6	4242.9	3907.7	3572.5	3244.6	2924.0	2613.3	2324.5
32.5°	5977.8	5630.3	5273.1	4915.8	4551.2	4181.7	3824.5	3472.1	3124.7	2789.5	2468.9
30°	6391.3	6014.5	5630.3	5238.8	4849.7	4458.2	4066.7	3689.9	3322.9	2963.2	2620.6
27.5°	6795.0	6391.3	5977.8	5556.9	5138.5	4722.5	4306.5	3902.8	3511.3	3129.6	2762.5
25°	7184.1	6753.4	6310.5	5862.8	5417.4	4974.5	4536.5	4101.0	3689.9	3288.6	2904.5
22.5°	7551.1	7096.0	6628.6	6153.9	5676.8	5209.4	4749.4	4296.7	3858.7	3437.9	3034.1
20°	7903.5	7416.5	6941.8	6423.1	5923.9	5432.1	4950.1	4475.4	4012.9	3574.9	3151.6
17.5°	8224.0	7712.6	7193.9	6672.7	6149.0	5632.7	5128.7	4656.4	4154.8	3699.7	3264.2
15°	8512.7	7979.3	7436.1	6895.3	6349.7	5813.8	5290.2	4781.2	4284.5	3812.3	3362.0
12.5°	8764.8	8211.8	7649.0	7088.6	6528.3	5972.9	5432.1	4906.0	4397.1	3907.7	3445.2
10°	8972.8	8407.5	7827.6	7250.1	6675.1	6105.0	5547.1	5011.2	4490.0	3988.4	3513.7
7.5°	9141.6	8561.7	7972.0	7377.4	6790.1	6207.8	5640.1	5092.0	4563.5	4049.6	3567.6
5°	9261.5	8674.2	8074.7	7467.9	6873.3	6283.6	5706.2	5150.7	4614.8	4093.7	3606.7
2.5°	9337.3	8764.8	8157.9	7543.8	6941.8	6344.8	5760.0	5197.2	4656.4	4130.4	3638.5
0°	9361.8	8764.8	8157.9	7543.8	6941.8	6344.8	5760.0	5197.2	4656.4	4130.4	3638.5

REPORT NUMBER: P624600

CATALOG NUMBER: IFLD-M-SA4D-940-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°	58.7	53.8	48.9	46.5	41.6	39.2	34.3	29.4	26.9	22.0	17.1
85°	117.5	107.7	100.3	93.0	85.6	75.9	68.5	61.2	51.4	44.0	34.3
82.5°	178.6	166.4	154.2	141.9	129.7	117.5	102.8	90.5	78.3	66.1	51.4
80°	247.1	227.6	210.4	193.3	176.2	159.0	139.5	122.3	102.8	85.6	68.5
77.5°	318.1	296.1	271.6	247.1	222.7	200.6	176.2	154.2	132.1	107.7	85.6
75°	393.9	364.6	337.7	305.9	276.5	244.7	215.3	186.0	159.0	132.1	102.8
72.5°	472.3	435.5	398.8	364.6	327.9	291.2	256.9	220.2	186.0	154.2	122.3
70°	553.0	509.0	464.9	423.3	381.7	337.7	298.5	256.9	215.3	176.2	139.5
67.5°	638.6	587.3	535.9	482.0	435.5	386.6	337.7	291.2	244.7	200.6	159.0
65°	731.6	670.4	606.8	550.6	489.4	435.5	381.7	327.9	276.5	222.7	176.2
62.5°	827.0	756.1	685.1	614.2	550.6	482.0	423.3	364.6	305.9	247.1	193.3
60°	924.9	844.2	763.4	685.1	606.8	535.9	464.9	398.8	337.7	271.6	210.4
57.5°	1025.2	934.7	844.2	756.1	670.4	587.3	509.0	435.5	364.6	296.1	227.6
55°	1128.0	1025.2	924.9	827.0	731.6	638.6	553.0	472.3	393.9	318.1	247.1
52.5°	1230.8	1118.2	1005.7	900.5	800.1	694.9	597.0	506.5	420.9	342.6	264.3
50°	1336.0	1208.8	1088.9	971.4	856.4	746.3	641.1	543.2	450.2	364.6	281.4
47.5°	1443.7	1304.2	1169.6	1042.4	920.0	800.1	685.1	577.5	477.1	386.6	298.5
45°	1558.7	1397.2	1252.8	1115.8	981.2	854.0	729.2	611.7	506.5	408.6	315.6
42.5°	1671.2	1497.5	1336.0	1191.6	1042.4	905.4	773.2	648.4	533.4	428.2	330.3
40°	1798.5	1597.8	1414.3	1255.3	1101.1	954.3	814.8	682.7	560.3	447.8	345.0
37.5°	1920.8	1695.7	1502.4	1323.8	1157.4	1003.2	856.4	716.9	587.3	467.4	359.7
35°	2045.6	1803.4	1583.1	1387.4	1213.7	1052.2	895.6	748.7	609.3	484.5	374.4
32.5°	2172.8	1906.1	1668.8	1455.9	1269.9	1096.2	932.3	778.1	633.7	504.1	386.6
30°	2295.2	2004.0	1749.5	1522.0	1321.3	1140.3	969.0	807.5	658.2	521.2	398.8
27.5°	2420.0	2106.8	1830.3	1583.1	1370.3	1179.4	1000.8	834.4	680.2	538.3	411.1
25°	2539.9	2204.7	1906.1	1641.9	1414.3	1218.6	1035.0	861.3	699.8	553.0	420.9
22.5°	2650.0	2290.3	1974.6	1698.1	1460.8	1252.8	1064.4	885.8	719.4	567.7	430.7
20°	2750.3	2378.4	2045.6	1754.4	1504.8	1287.1	1088.9	907.8	736.5	579.9	440.4
17.5°	2848.2	2459.1	2109.2	1805.8	1541.5	1316.4	1113.3	924.9	751.2	589.7	447.8
15°	2931.4	2530.1	2165.5	1849.9	1575.8	1340.9	1132.9	942.1	763.4	599.5	452.7
12.5°	3004.8	2591.3	2214.4	1886.6	1602.7	1362.9	1152.5	956.7	775.7	606.8	460.0
10°	3063.5	2640.2	2253.6	1918.4	1627.2	1380.0	1164.7	969.0	783.0	614.2	464.9
7.5°	3110.0	2679.3	2285.4	1940.4	1644.3	1394.7	1177.0	976.3	790.3	619.1	472.3
5°	3144.3	2708.7	2307.4	1957.5	1659.0	1411.9	1191.6	988.5	800.1	626.4	472.3
2.5°	3171.2	2730.7	2324.5	1972.2	1668.8	1411.9	1191.6	988.5	800.1	626.4	472.3
0°	3171.2	2730.7	2324.5	1972.2	1668.8	1411.9	1191.6	988.5	800.1	626.4	472.3

REPORT NUMBER: P624600

CATALOG NUMBER: IFLD-M-SA4D-940-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.2	9.8	4.9	0.0
85°	26.9	17.1	9.8	0.0
82.5°	39.2	26.9	12.2	0.0
80°	51.4	34.3	17.1	0.0
77.5°	66.1	44.0	22.0	0.0
75°	78.3	51.4	26.9	0.0
72.5°	90.5	61.2	29.4	0.0
70°	102.8	68.5	34.3	0.0
67.5°	117.5	75.9	39.2	0.0
65°	129.7	85.6	41.6	0.0
62.5°	141.9	93.0	46.5	0.0
60°	154.2	100.3	48.9	0.0
57.5°	166.4	107.7	53.8	0.0
55°	178.6	117.5	58.7	0.0
52.5°	190.9	124.8	61.2	0.0
50°	203.1	132.1	63.6	0.0
47.5°	212.9	139.5	68.5	0.0
45°	225.1	146.8	71.0	0.0
42.5°	237.3	151.7	73.4	0.0
40°	247.1	159.0	75.9	0.0
37.5°	259.4	163.9	80.7	0.0
35°	269.2	171.3	83.2	0.0
32.5°	276.5	176.2	85.6	0.0
30°	286.3	181.1	88.1	0.0
27.5°	293.6	186.0	88.1	0.0
25°	301.0	190.9	90.5	0.0
22.5°	308.3	193.3	93.0	0.0
20°	315.6	198.2	95.4	0.0
17.5°	320.5	200.6	95.4	0.0
15°	325.4	203.1	100.3	0.0
12.5°	327.9	205.5	100.3	0.0
10°	332.8	210.4	100.3	0.0
7.5°	337.7	210.4	100.3	0.0
5°	337.7	210.4	100.3	0.0
2.5°	337.7	210.4	100.3	0.0
0°	337.7	210.4	100.3	0.0

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