

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: P624598

Luminaire Tested: **IFLD-M-SA4B-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624598
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-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

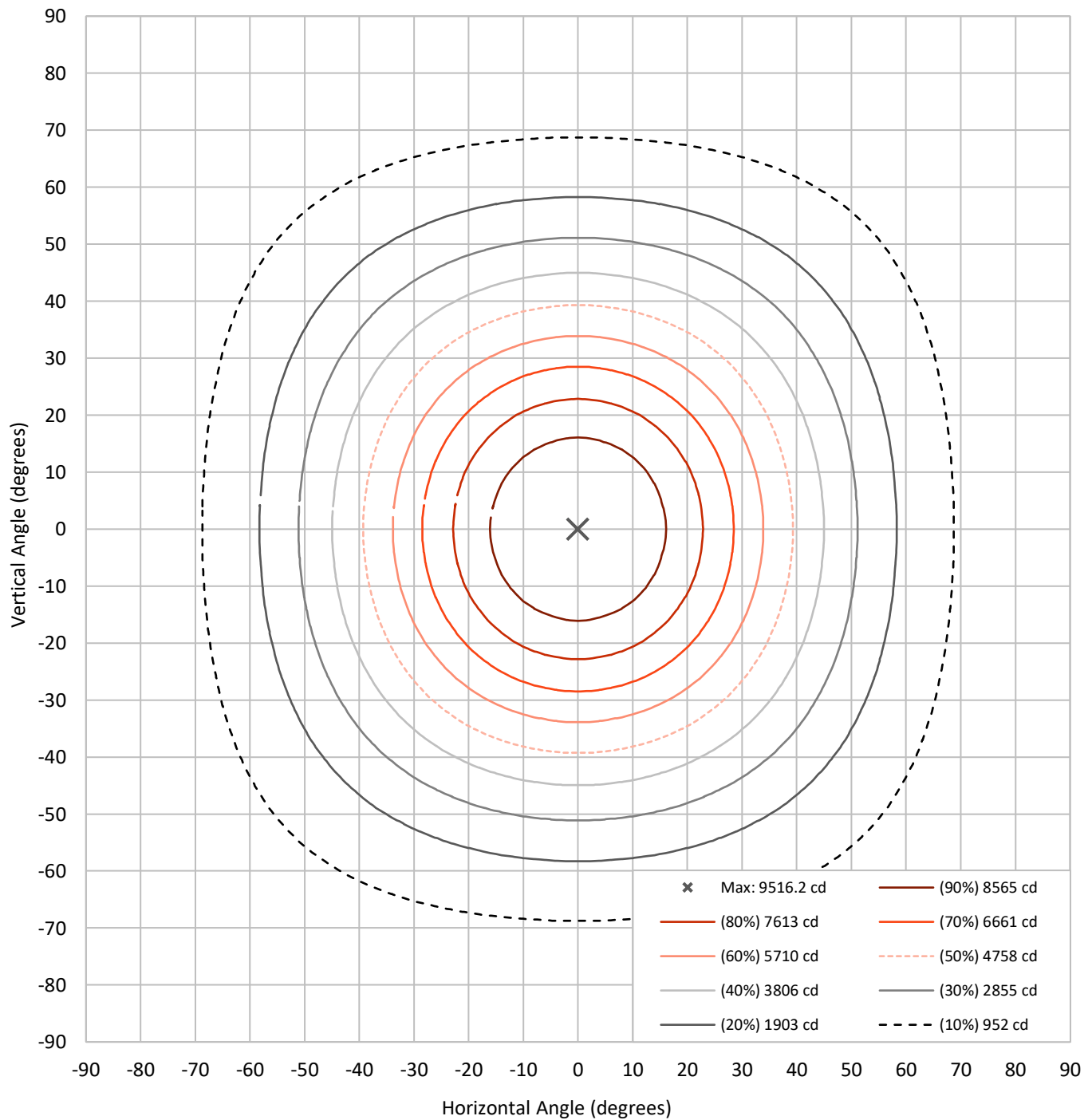
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17134.1 lumens	Max Intensity:	9516.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	103.2 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:	7413.7 lumens	Field Lumens:	12139.7 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		



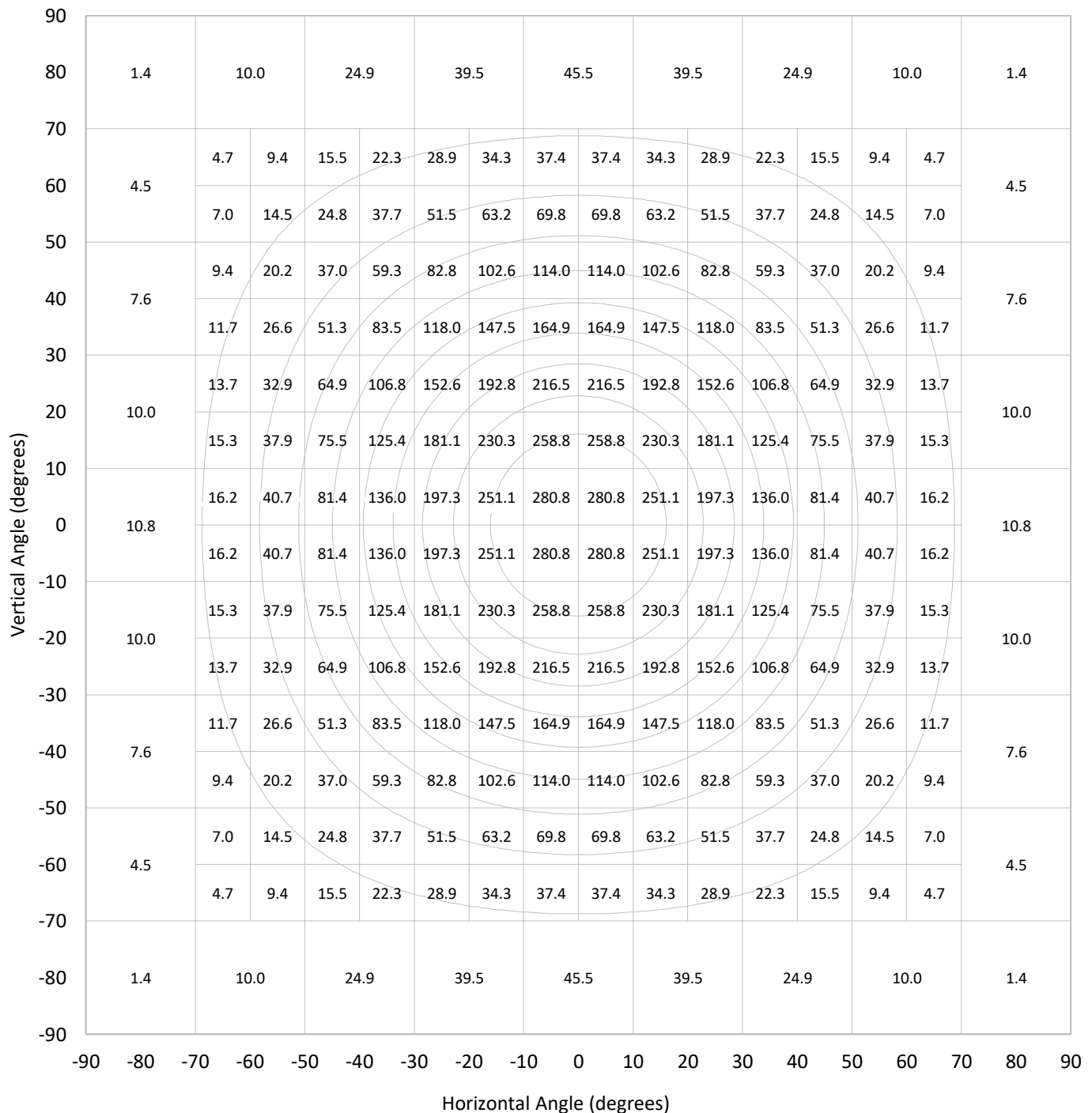
REPORT NUMBER: P624598
CATALOG NUMBER: IFLD-M-SA4B-940-U-77

Iso-Candela Plot



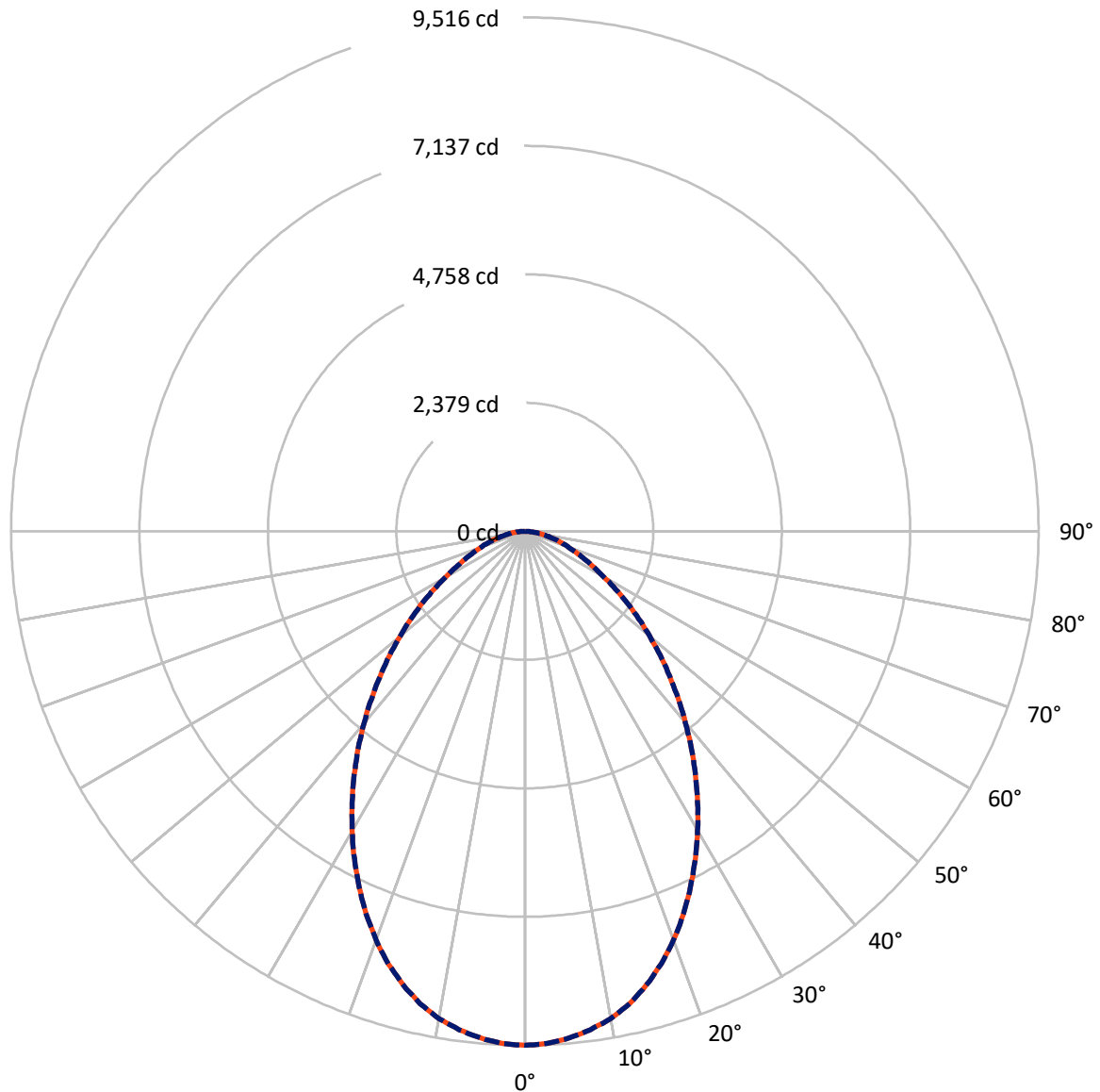
REPORT NUMBER: P624598
CATALOG NUMBER: IFLD-M-SA4B-940-U-77

Lumen Table



REPORT NUMBER: P624598
CATALOG NUMBER: IFLD-M-SA4B-940-U-77

Luminous Intensity Polar Plot

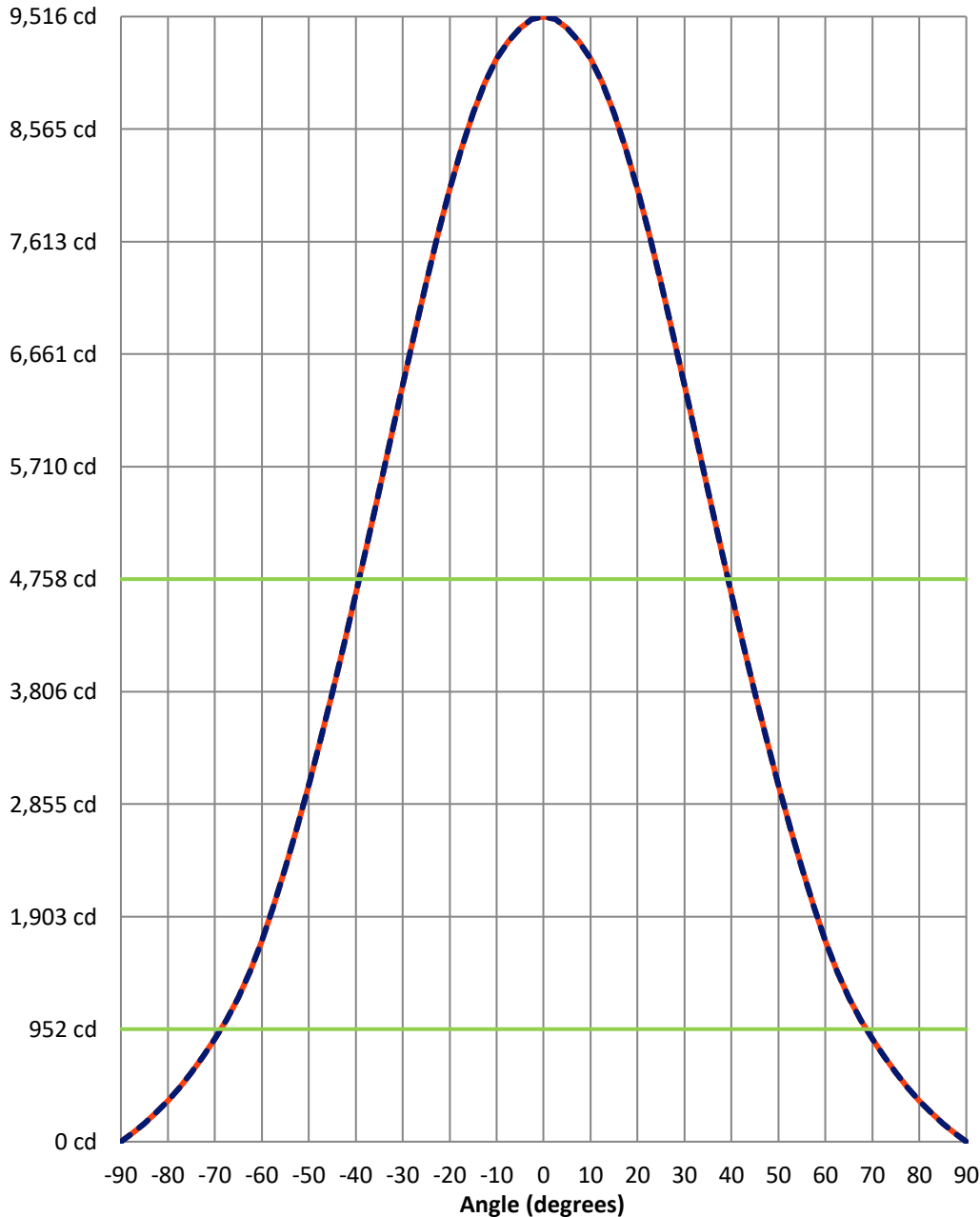


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



REPORT NUMBER: P624598
CATALOG NUMBER: IFLD-M-SA4B-940-U-77

Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 7413.7
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 12139.7
Efficiency: 70.9%

Spill:
Lumens: 4994.3
Efficiency: 29.1%

REPORT NUMBER: P624598

CATALOG NUMBER: IFLD-M-SA4B-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°	73.2	73.2	73.2	73.2	73.2	73.2	73.2	69.7	69.7	67.9	66.1
85°	153.6	153.6	153.6	153.6	153.6	150.1	148.3	146.5	144.7	141.1	139.3
82.5°	246.5	246.5	246.5	246.5	243.0	239.4	237.6	234.0	230.4	225.1	219.7
80°	344.8	344.8	344.8	344.8	339.4	335.8	330.5	326.9	321.6	314.4	307.3
77.5°	457.3	457.3	457.3	452.0	448.4	443.0	437.7	430.5	423.4	414.4	403.7
75°	584.2	584.2	584.2	577.0	571.6	566.3	557.4	548.4	537.7	525.2	510.9
72.5°	721.7	721.7	721.7	712.8	707.4	698.5	687.8	675.3	662.8	646.7	628.8
70°	870.0	870.0	870.0	859.3	850.3	841.4	827.1	812.8	794.9	777.1	755.6
67.5°	1030.8	1030.8	1030.8	1018.2	1007.5	995.0	978.9	961.1	939.6	914.6	889.6
65°	1218.3	1218.3	1211.2	1200.5	1188.0	1170.1	1150.4	1125.4	1098.6	1066.5	1032.5
62.5°	1439.8	1439.8	1429.1	1416.6	1400.5	1377.3	1350.5	1318.4	1280.9	1239.8	1198.7
60°	1697.1	1697.1	1684.6	1668.5	1645.3	1616.7	1581.0	1539.9	1493.4	1441.6	1391.6
57.5°	1993.6	1993.6	1977.5	1956.1	1927.5	1891.8	1847.1	1795.3	1736.4	1672.1	1609.5
55°	2315.2	2315.2	2295.5	2270.5	2236.6	2193.7	2140.1	2079.4	2007.9	1934.7	1854.3
52.5°	2656.4	2656.4	2633.2	2604.6	2565.3	2515.3	2454.5	2383.1	2300.9	2215.1	2120.5
50°	3015.4	3015.4	2988.7	2956.5	2911.8	2852.9	2783.2	2701.0	2609.9	2509.9	2400.9
47.5°	3399.5	3399.5	3369.2	3331.6	3278.0	3210.2	3128.0	3033.3	2929.7	2817.2	2693.9
45°	3794.3	3794.3	3760.4	3717.5	3658.6	3581.7	3490.6	3399.5	3267.3	3136.9	2994.0
42.5°	4205.2	4205.2	4165.9	4117.7	4049.8	3965.8	3862.2	3744.3	3613.9	3467.4	3312.0
40°	4632.1	4632.1	4587.5	4532.1	4457.1	4360.6	4244.5	4112.3	3965.8	3803.2	3631.8
37.5°	5068.0	5068.0	5018.0	4957.3	4873.3	4766.1	4635.7	4489.2	4324.9	4144.5	3955.1
35°	5507.5	5507.5	5452.1	5386.0	5293.1	5175.2	5034.1	4871.5	4689.3	4492.8	4280.2
32.5°	5955.9	5955.9	5895.1	5820.1	5714.7	5584.3	5428.9	5252.0	5068.0	4839.4	4607.1
30°	6398.9	6398.9	6332.8	6250.6	6138.1	5995.2	5825.5	5630.7	5414.6	5180.6	4930.5
27.5°	6834.8	6816.9	6761.5	6674.0	6550.7	6398.9	6214.9	6004.1	5770.1	5512.8	5244.9
25°	7263.5	7243.9	7183.1	7086.7	6954.5	6788.3	6590.0	6364.9	6113.1	5841.5	5548.6
22.5°	7674.4	7652.9	7588.6	7485.0	7343.9	7163.5	6950.9	6709.7	6441.8	6150.6	5841.5
20°	8054.9	8031.7	7965.6	7856.6	7710.1	7519.0	7293.9	7034.9	6749.0	6441.8	6113.1
17.5°	8397.9	8374.7	8305.0	8192.4	8054.9	7842.3	7610.1	7336.8	7034.9	6709.7	6364.9
15°	8699.8	8674.8	8603.3	8490.8	8333.6	8133.5	7888.8	7610.1	7293.9	6950.9	6590.0
12.5°	8957.0	8932.0	8858.8	8746.2	8583.7	8383.6	8133.5	7842.3	7519.0	7163.5	6788.3
10°	9160.7	9135.7	9066.0	8958.8	8790.9	8583.7	8333.6	8054.9	7710.1	7343.9	6954.5
7.5°	9307.2	9283.9	9219.6	9112.4	8958.8	8746.2	8490.8	8192.4	7856.6	7485.0	7086.7
5°	9417.9	9391.1	9326.8	9219.6	9066.0	8858.8	8603.3	8305.0	7965.6	7588.6	7183.1
2.5°	9494.7	9462.6	9391.1	9283.9	9135.7	8932.0	8674.8	8374.7	8031.7	7652.9	7243.9
0°	9516.2	9494.7	9417.9	9307.2	9160.7	8957.0	8699.8	8397.9	8054.9	7674.4	7263.5

REPORT NUMBER: P624598

CATALOG NUMBER: IFLD-M-SA4B-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°	64.3	64.3	62.5	60.7	59.0	55.4	53.6	51.8	50.0	46.4	44.7
85°	135.8	132.2	128.6	125.0	119.7	116.1	110.8	107.2	101.8	96.5	91.1
82.5°	214.4	209.0	201.9	196.5	189.4	180.4	173.3	164.3	155.4	148.3	139.3
80°	300.1	291.2	282.3	273.3	262.6	251.9	241.2	230.4	217.9	205.4	192.9
77.5°	393.0	380.5	368.0	353.7	341.2	326.9	312.6	298.3	282.3	266.2	250.1
75°	496.6	480.5	462.7	444.8	428.7	409.1	389.4	369.8	348.3	328.7	307.3
72.5°	609.2	589.5	568.1	546.6	523.4	498.4	473.4	446.6	421.6	396.6	369.8
70°	730.6	707.4	680.6	653.8	625.2	594.9	564.5	532.3	500.2	468.0	435.9
67.5°	861.0	832.5	800.3	768.2	732.4	696.7	661.0	623.5	584.2	544.9	507.3
65°	1000.4	964.7	927.1	886.1	845.0	803.9	761.0	716.3	671.7	625.2	584.2
62.5°	1155.8	1111.1	1062.9	1012.9	966.4	916.4	870.0	814.6	761.0	709.2	657.4
60°	1336.2	1277.3	1218.3	1155.8	1096.9	1032.5	975.4	914.6	853.9	794.9	734.2
57.5°	1538.1	1463.1	1391.6	1316.6	1238.0	1166.5	1093.3	1020.0	952.2	882.5	816.4
55°	1766.8	1675.6	1586.3	1493.4	1402.3	1313.0	1220.1	1137.9	1054.0	975.4	898.6
52.5°	2016.8	1913.2	1802.5	1697.1	1581.0	1470.2	1366.6	1263.0	1164.7	1070.1	982.5
50°	2284.8	2163.3	2036.5	1907.9	1775.7	1645.3	1520.2	1398.8	1284.4	1173.7	1070.1
47.5°	2563.5	2425.9	2281.2	2134.8	1993.6	1834.6	1684.6	1547.0	1409.5	1284.4	1164.7
45°	2849.3	2693.9	2534.9	2368.8	2202.6	2031.1	1865.0	1697.1	1547.0	1398.8	1263.0
42.5°	3144.1	2969.0	2792.1	2608.1	2424.1	2236.6	2049.0	1865.0	1684.6	1520.2	1366.6
40°	3447.8	3254.8	3053.0	2852.9	2656.4	2442.0	2236.6	2031.1	1834.6	1645.3	1470.2
37.5°	3751.4	3540.6	3322.7	3097.6	2872.5	2656.4	2424.1	2202.6	1993.6	1775.7	1581.0
35°	4056.9	3824.7	3588.9	3344.1	3097.6	2852.9	2608.1	2368.8	2134.8	1907.9	1697.1
32.5°	4364.2	4110.5	3849.7	3588.9	3322.7	3053.0	2792.1	2534.9	2281.2	2036.5	1802.5
30°	4666.1	4391.0	4110.5	3824.7	3540.6	3254.8	2969.0	2693.9	2425.9	2163.3	1913.2
27.5°	4960.8	4666.1	4364.2	4056.9	3751.4	3447.8	3144.1	2849.3	2563.5	2284.8	2016.8
25°	5244.9	4930.5	4607.1	4280.2	3955.1	3631.8	3312.0	2994.0	2693.9	2400.9	2120.5
22.5°	5512.8	5180.6	4839.4	4492.8	4144.5	3803.2	3467.4	3136.9	2817.2	2509.9	2215.1
20°	5770.1	5414.6	5068.0	4689.3	4324.9	3965.8	3613.9	3267.3	2929.7	2609.9	2300.9
17.5°	6004.1	5630.7	5252.0	4871.5	4489.2	4112.3	3744.3	3399.5	3033.3	2701.0	2383.1
15°	6214.9	5825.5	5428.9	5034.1	4635.7	4244.5	3862.2	3490.6	3128.0	2783.2	2454.5
12.5°	6398.9	5995.2	5584.3	5175.2	4766.1	4360.6	3965.8	3581.7	3210.2	2852.9	2515.3
10°	6550.7	6138.1	5714.7	5293.1	4873.3	4457.1	4049.8	3658.6	3278.0	2911.8	2565.3
7.5°	6674.0	6250.6	5820.1	5386.0	4957.3	4532.1	4117.7	3717.5	3331.6	2956.5	2604.6
5°	6761.5	6332.8	5895.1	5452.1	5018.0	4587.5	4165.9	3760.4	3369.2	2988.7	2633.2
2.5°	6816.9	6398.9	5955.9	5507.5	5068.0	4632.1	4205.2	3794.3	3399.5	3015.4	2656.4
0°	6834.8	6398.9	5955.9	5507.5	5068.0	4632.1	4205.2	3794.3	3399.5	3015.4	2656.4

REPORT NUMBER: P624598

CATALOG NUMBER: IFLD-M-SA4B-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°	42.9	39.3	35.7	33.9	30.4	28.6	25.0	21.4	19.7	16.1	12.5
85°	85.7	78.6	73.2	67.9	62.5	55.4	50.0	44.7	37.5	32.2	25.0
82.5°	130.4	121.5	112.5	103.6	94.7	85.7	75.0	66.1	57.2	48.2	37.5
80°	180.4	166.1	153.6	141.1	128.6	116.1	101.8	89.3	75.0	62.5	50.0
77.5°	232.2	216.2	198.3	180.4	162.6	146.5	128.6	112.5	96.5	78.6	62.5
75°	287.6	266.2	246.5	223.3	201.9	178.6	157.2	135.8	116.1	96.5	75.0
72.5°	344.8	318.0	291.2	266.2	239.4	212.6	187.6	160.8	135.8	112.5	89.3
70°	403.7	371.6	339.4	309.0	278.7	246.5	217.9	187.6	157.2	128.6	101.8
67.5°	466.3	428.7	391.2	351.9	318.0	282.3	246.5	212.6	178.6	146.5	116.1
65°	534.1	489.5	443.0	401.9	357.3	318.0	278.7	239.4	201.9	162.6	128.6
62.5°	603.8	552.0	500.2	448.4	401.9	351.9	309.0	266.2	223.3	180.4	141.1
60°	675.3	616.3	557.4	500.2	443.0	391.2	339.4	291.2	246.5	198.3	153.6
57.5°	748.5	682.4	616.3	552.0	489.5	428.7	371.6	318.0	266.2	216.2	166.1
55°	823.5	748.5	675.3	603.8	534.1	466.3	403.7	344.8	287.6	232.2	180.4
52.5°	898.6	816.4	734.2	657.4	584.2	507.3	435.9	369.8	307.3	250.1	192.9
50°	975.4	882.5	794.9	709.2	625.2	544.9	468.0	396.6	328.7	266.2	205.4
47.5°	1054.0	952.2	853.9	761.0	671.7	584.2	500.2	421.6	348.3	282.3	217.9
45°	1137.9	1020.0	914.6	814.6	716.3	623.5	532.3	446.6	369.8	298.3	230.4
42.5°	1220.1	1093.3	975.4	870.0	761.0	661.0	564.5	473.4	389.4	312.6	241.2
40°	1313.0	1166.5	1032.5	916.4	803.9	696.7	594.9	498.4	409.1	326.9	251.9
37.5°	1402.3	1238.0	1096.9	966.4	845.0	732.4	625.2	523.4	428.7	341.2	262.6
35°	1493.4	1316.6	1155.8	1012.9	886.1	768.2	653.8	546.6	444.8	353.7	273.3
32.5°	1586.3	1391.6	1218.3	1062.9	927.1	800.3	680.6	568.1	462.7	368.0	282.3
30°	1675.6	1463.1	1277.3	1111.1	964.7	832.5	707.4	589.5	480.5	380.5	291.2
27.5°	1766.8	1538.1	1336.2	1155.8	1000.4	861.0	730.6	609.2	496.6	393.0	300.1
25°	1854.3	1609.5	1391.6	1198.7	1032.5	889.6	755.6	628.8	510.9	403.7	307.3
22.5°	1934.7	1672.1	1441.6	1239.8	1066.5	914.6	777.1	646.7	525.2	414.4	314.4
20°	2007.9	1736.4	1493.4	1280.9	1098.6	939.6	794.9	662.8	537.7	423.4	321.6
17.5°	2079.4	1795.3	1539.9	1318.4	1125.4	961.1	812.8	675.3	548.4	430.5	326.9
15°	2140.1	1847.1	1581.0	1350.5	1150.4	978.9	827.1	687.8	557.4	437.7	330.5
12.5°	2193.7	1891.8	1616.7	1377.3	1170.1	995.0	841.4	698.5	566.3	443.0	335.8
10°	2236.6	1927.5	1645.3	1400.5	1188.0	1007.5	850.3	707.4	571.6	448.4	339.4
7.5°	2270.5	1956.1	1668.5	1416.6	1200.5	1018.2	859.3	712.8	577.0	452.0	344.8
5°	2295.5	1977.5	1684.6	1429.1	1211.2	1030.8	870.0	721.7	584.2	457.3	344.8
2.5°	2315.2	1993.6	1697.1	1439.8	1218.3	1030.8	870.0	721.7	584.2	457.3	344.8
0°	2315.2	1993.6	1697.1	1439.8	1218.3	1030.8	870.0	721.7	584.2	457.3	344.8

REPORT NUMBER: P624598

CATALOG NUMBER: IFLD-M-SA4B-940-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.9	7.1	3.6	0.0
85°	19.7	12.5	7.1	0.0
82.5°	28.6	19.7	8.9	0.0
80°	37.5	25.0	12.5	0.0
77.5°	48.2	32.2	16.1	0.0
75°	57.2	37.5	19.7	0.0
72.5°	66.1	44.7	21.4	0.0
70°	75.0	50.0	25.0	0.0
67.5°	85.7	55.4	28.6	0.0
65°	94.7	62.5	30.4	0.0
62.5°	103.6	67.9	33.9	0.0
60°	112.5	73.2	35.7	0.0
57.5°	121.5	78.6	39.3	0.0
55°	130.4	85.7	42.9	0.0
52.5°	139.3	91.1	44.7	0.0
50°	148.3	96.5	46.4	0.0
47.5°	155.4	101.8	50.0	0.0
45°	164.3	107.2	51.8	0.0
42.5°	173.3	110.8	53.6	0.0
40°	180.4	116.1	55.4	0.0
37.5°	189.4	119.7	59.0	0.0
35°	196.5	125.0	60.7	0.0
32.5°	201.9	128.6	62.5	0.0
30°	209.0	132.2	64.3	0.0
27.5°	214.4	135.8	64.3	0.0
25°	219.7	139.3	66.1	0.0
22.5°	225.1	141.1	67.9	0.0
20°	230.4	144.7	69.7	0.0
17.5°	234.0	146.5	69.7	0.0
15°	237.6	148.3	73.2	0.0
12.5°	239.4	150.1	73.2	0.0
10°	243.0	153.6	73.2	0.0
7.5°	246.5	153.6	73.2	0.0
5°	246.5	153.6	73.2	0.0
2.5°	246.5	153.6	73.2	0.0
0°	246.5	153.6	73.2	0.0

(END OF REPORT)