

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: P624601

Luminaire Tested: **IFLD-M-SA4E-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624601
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-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

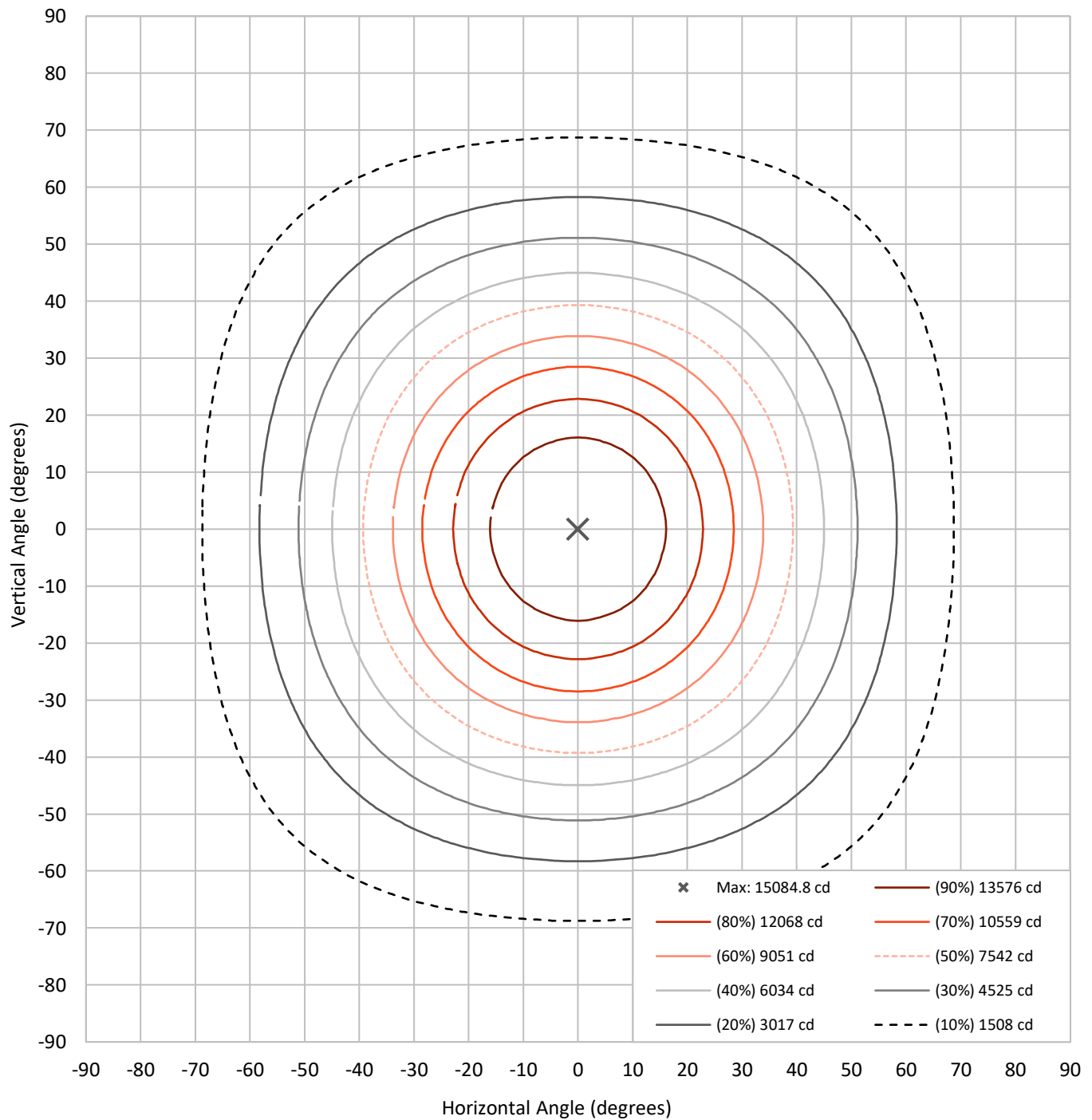
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27160.5 lumens	Max Intensity:	15084.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	86.3 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:	11752.1 lumens	Field Lumens:	19243.7 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	314.8		
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		



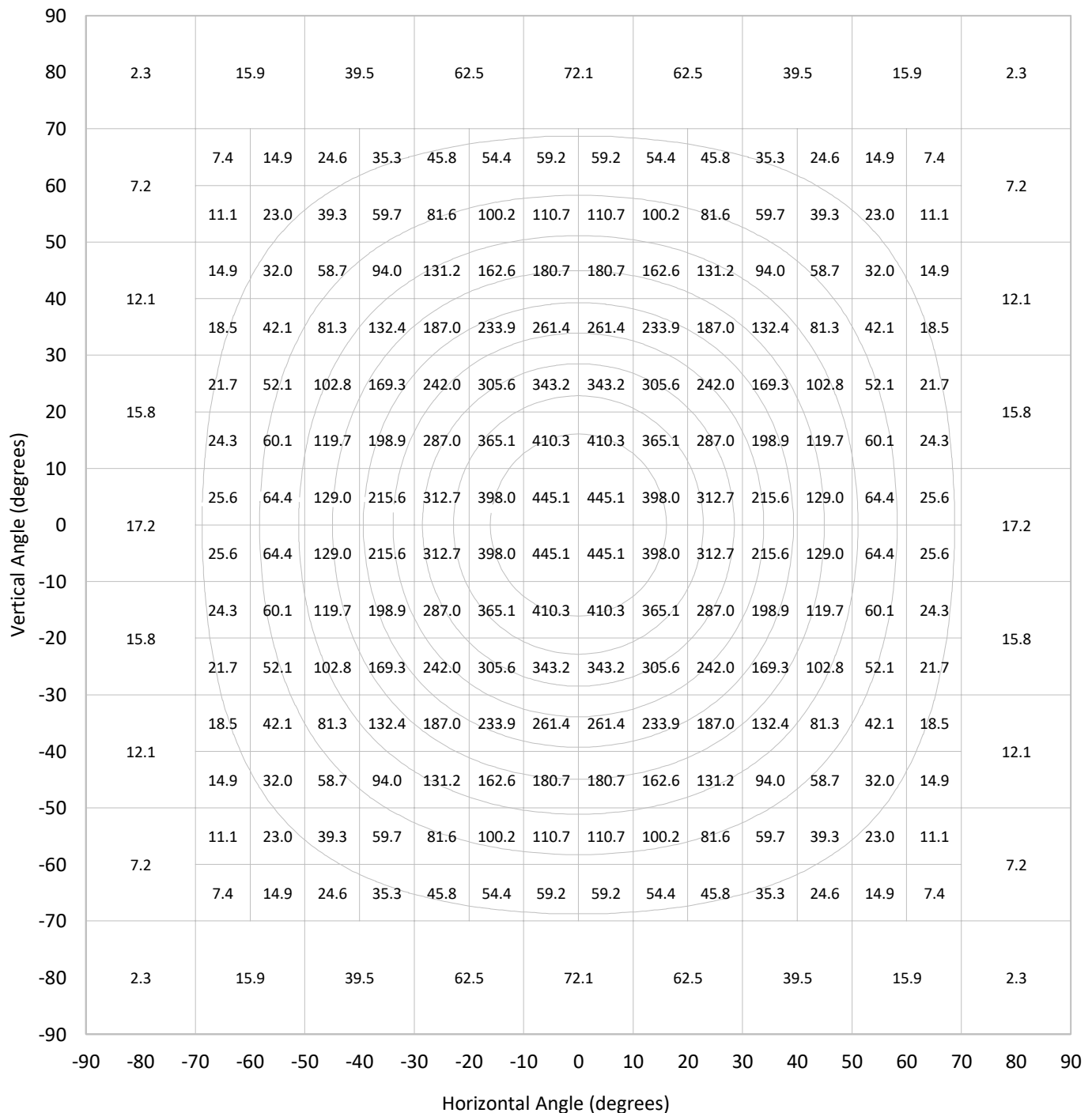
REPORT NUMBER: P624601
CATALOG NUMBER: IFLD-M-SA4E-940-U-77

Iso-Candela Plot



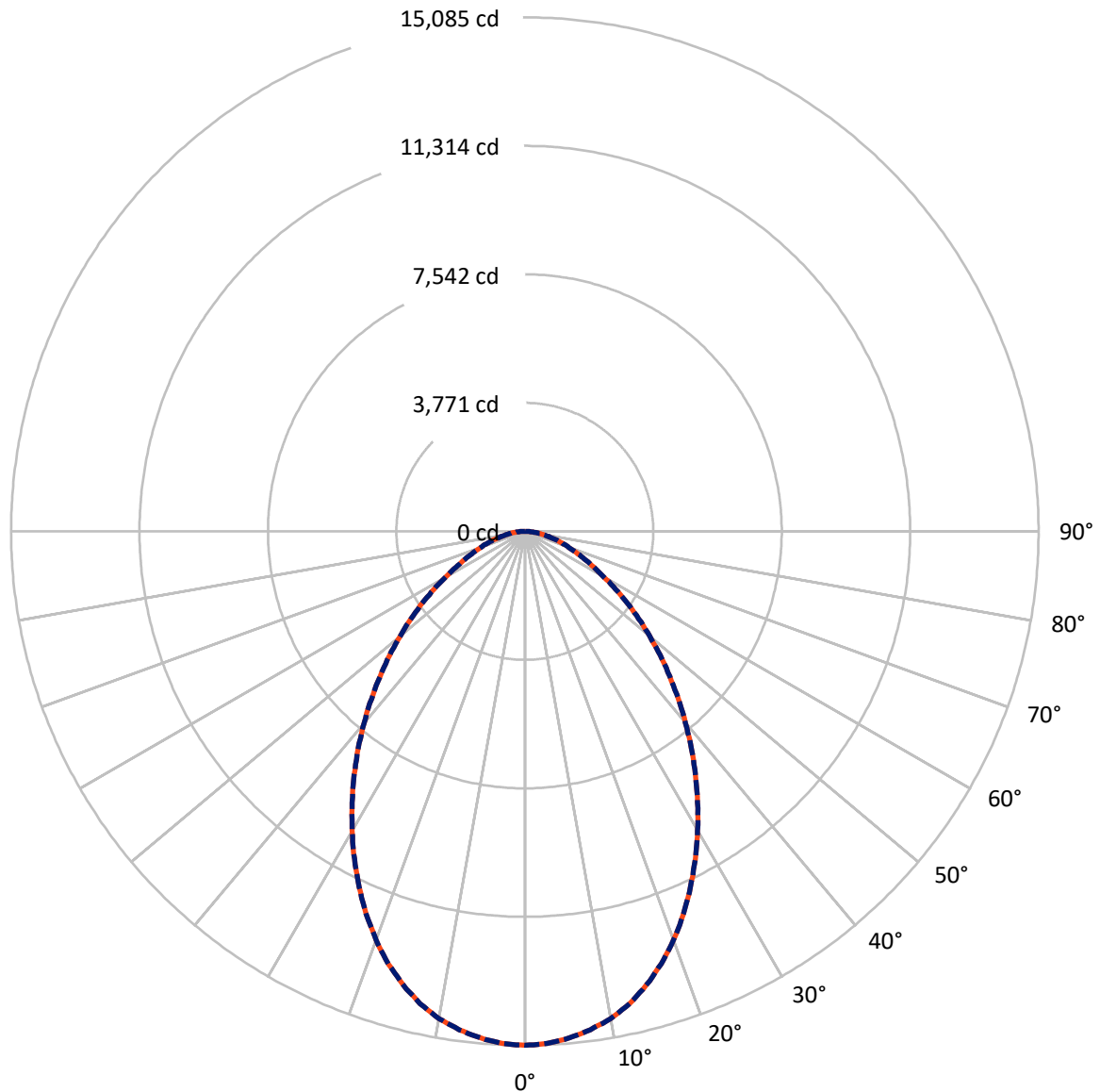
REPORT NUMBER: P624601
CATALOG NUMBER: IFLD-M-SA4E-940-U-77

Lumen Table



REPORT NUMBER: P624601
CATALOG NUMBER: IFLD-M-SA4E-940-U-77

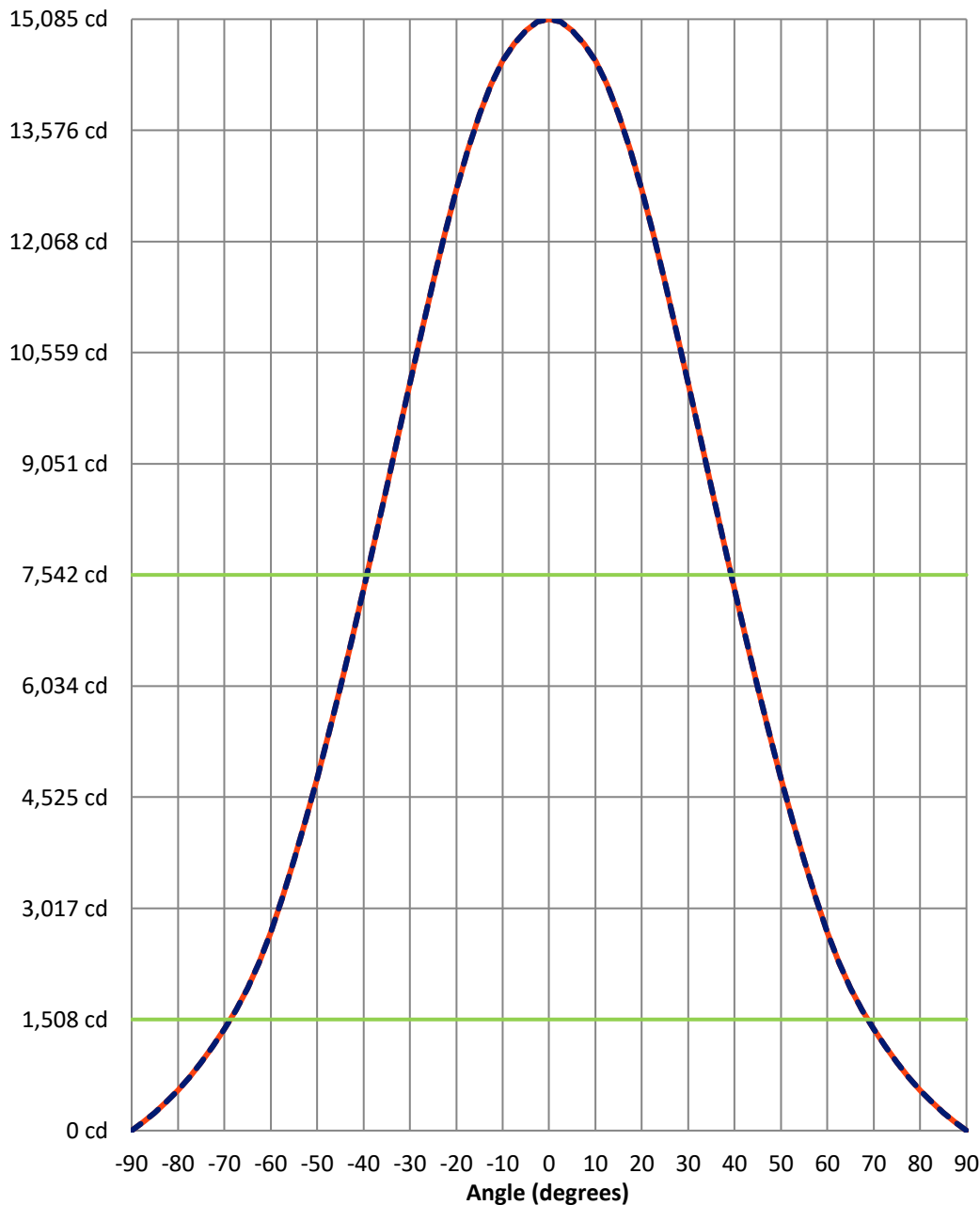
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624601
CATALOG NUMBER: IFLD-M-SA4E-940-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 11752.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 19243.7
Efficiency: 70.9%

Spill:

Lumens: 7916.9
Efficiency: 29.1%

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

REPORT NUMBER: P624601

CATALOG NUMBER: IFLD-M-SA4E-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°	116.1	116.1	116.1	116.1	116.1	116.1	116.1	110.4	110.4	107.6	104.8
85°	243.5	243.5	243.5	243.5	243.5	237.9	235.0	232.2	229.4	223.7	220.9
82.5°	390.8	390.8	390.8	390.8	385.1	379.5	376.6	371.0	365.3	356.8	348.3
80°	546.5	546.5	546.5	546.5	538.0	532.4	523.9	518.2	509.7	498.4	487.1
77.5°	724.9	724.9	724.9	716.4	710.8	702.3	693.8	682.5	671.1	657.0	640.0
75°	926.0	926.0	926.0	914.7	906.2	897.7	883.5	869.4	852.4	832.5	809.9
72.5°	1144.0	1144.0	1144.0	1129.9	1121.4	1107.2	1090.2	1070.4	1050.6	1025.1	996.8
70°	1379.1	1379.1	1379.1	1362.1	1347.9	1333.8	1311.1	1288.5	1260.1	1231.8	1197.8
67.5°	1633.9	1633.9	1633.9	1614.1	1597.1	1577.3	1551.8	1523.5	1489.5	1449.9	1410.2
65°	1931.3	1931.3	1919.9	1902.9	1883.1	1854.8	1823.7	1784.0	1741.5	1690.6	1636.8
62.5°	2282.4	2282.4	2265.4	2245.6	2220.1	2183.3	2140.8	2089.8	2030.4	1965.2	1900.1
60°	2690.2	2690.2	2670.4	2644.9	2608.1	2562.7	2506.1	2441.0	2367.4	2285.2	2205.9
57.5°	3160.3	3160.3	3134.8	3100.8	3055.5	2998.8	2928.0	2845.9	2752.5	2650.5	2551.4
55°	3670.0	3670.0	3638.8	3599.2	3545.4	3477.4	3392.5	3296.2	3182.9	3066.8	2939.4
52.5°	4210.8	4210.8	4174.0	4128.7	4066.4	3987.1	3890.8	3777.6	3647.3	3511.4	3361.3
50°	4780.0	4780.0	4737.5	4686.6	4615.8	4522.3	4411.9	4281.6	4137.2	3978.6	3805.9
47.5°	5388.8	5388.8	5340.7	5281.2	5196.3	5088.7	4958.4	4808.3	4644.1	4465.7	4270.3
45°	6014.7	6014.7	5960.9	5892.9	5799.5	5677.7	5533.3	5388.8	5179.3	4972.6	4746.0
42.5°	6666.0	6666.0	6603.7	6527.2	6419.6	6286.5	6122.3	5935.4	5728.7	5496.5	5250.1
40°	7342.8	7342.8	7272.0	7184.2	7065.3	6912.3	6728.3	6518.7	6286.5	6028.8	5757.0
37.5°	8033.7	8033.7	7954.4	7858.1	7725.1	7555.1	7348.4	7116.2	6855.7	6569.7	6269.5
35°	8730.3	8730.3	8642.5	8537.8	8390.5	8203.6	7979.9	7722.2	7433.4	7121.9	6784.9
32.5°	9441.1	9441.1	9344.8	9225.9	9058.8	8852.1	8605.7	8325.4	8033.7	7671.3	7303.1
30°	10143.4	10143.4	10038.6	9908.3	9729.9	9503.4	9234.4	8925.7	8583.1	8212.1	7815.7
27.5°	10834.3	10806.0	10718.2	10579.5	10384.1	10143.4	9851.7	9517.6	9146.6	8738.8	8314.1
25°	11514.0	11482.8	11386.5	11233.6	11024.1	10760.7	10446.4	10089.6	9690.3	9259.9	8795.5
22.5°	12165.3	12131.3	12029.3	11865.1	11641.4	11355.4	11018.4	10636.1	10211.3	9749.8	9259.9
20°	12768.4	12731.6	12626.8	12454.1	12221.9	11918.9	11562.1	11151.5	10698.4	10211.3	9690.3
17.5°	13312.1	13275.3	13164.9	12986.5	12768.4	12431.4	12063.3	11630.1	11151.5	10636.1	10089.6
15°	13790.7	13751.1	13637.8	13459.4	13210.2	12893.0	12505.1	12063.3	11562.1	11018.4	10446.4
12.5°	14198.5	14158.8	14042.7	13864.3	13606.6	13289.5	12893.0	12431.4	11918.9	11355.4	10760.7
10°	14521.3	14481.6	14371.2	14201.3	13935.1	13606.6	13210.2	12768.4	12221.9	11641.4	11024.1
7.5°	14753.5	14716.7	14614.7	14444.8	14201.3	13864.3	13459.4	12986.5	12454.1	11865.1	11233.6
5°	14929.1	14886.6	14784.6	14614.7	14371.2	14042.7	13637.8	13164.9	12626.8	12029.3	11386.5
2.5°	15050.8	14999.9	14886.6	14716.7	14481.6	14158.8	13751.1	13275.3	12731.6	12131.3	11482.8
0°	15084.8	15050.8	14929.1	14753.5	14521.3	14198.5	13790.7	13312.1	12768.4	12165.3	11514.0

REPORT NUMBER: P624601

CATALOG NUMBER: IFLD-M-SA4E-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°	101.9	101.9	99.1	96.3	93.4	87.8	85.0	82.1	79.3	73.6	70.8
85°	215.2	209.6	203.9	198.2	189.7	184.1	175.6	169.9	161.4	152.9	144.4
82.5°	339.8	331.3	320.0	311.5	300.2	286.0	274.7	260.5	246.4	235.0	220.9
80°	475.7	461.6	447.4	433.3	416.3	399.3	382.3	365.3	345.5	325.7	305.8
77.5°	623.0	603.2	583.3	560.7	540.9	518.2	495.6	472.9	447.4	421.9	396.4
75°	787.2	761.7	733.4	705.1	679.6	648.5	617.3	586.2	552.2	521.0	487.1
72.5°	965.6	934.5	900.5	866.5	829.7	790.1	750.4	707.9	668.3	628.7	586.2
70°	1158.2	1121.4	1078.9	1036.4	991.1	943.0	894.8	843.9	792.9	741.9	691.0
67.5°	1364.9	1319.6	1268.6	1217.7	1161.0	1104.4	1047.8	988.3	926.0	863.7	804.2
65°	1585.8	1529.2	1469.7	1404.6	1339.4	1274.3	1206.3	1135.5	1064.7	991.1	926.0
62.5°	1832.2	1761.4	1684.9	1605.6	1532.0	1452.7	1379.1	1291.3	1206.3	1124.2	1042.1
60°	2118.2	2024.7	1931.3	1832.2	1738.7	1636.8	1546.1	1449.9	1353.6	1260.1	1163.9
57.5°	2438.1	2319.2	2205.9	2087.0	1962.4	1849.1	1733.0	1616.9	1509.3	1398.9	1294.1
55°	2800.6	2656.2	2514.6	2367.4	2222.9	2081.3	1934.1	1803.8	1670.7	1546.1	1424.4
52.5°	3197.1	3032.8	2857.3	2690.2	2506.1	2330.5	2166.3	2002.1	1846.3	1696.2	1557.5
50°	3621.8	3429.3	3228.2	3024.3	2814.8	2608.1	2409.8	2217.3	2036.0	1860.5	1696.2
47.5°	4063.6	3845.5	3616.2	3384.0	3160.3	2908.2	2670.4	2452.3	2234.3	2036.0	1846.3
45°	4516.7	4270.3	4018.3	3754.9	3491.6	3219.7	2956.4	2690.2	2452.3	2217.3	2002.1
42.5°	4983.9	4706.4	4426.0	4134.4	3842.7	3545.4	3248.0	2956.4	2670.4	2409.8	2166.3
40°	5465.3	5159.5	4839.5	4522.3	4210.8	3871.0	3545.4	3219.7	2908.2	2608.1	2330.5
37.5°	5946.7	5612.6	5267.1	4910.3	4553.5	4210.8	3842.7	3491.6	3160.3	2814.8	2506.1
35°	6430.9	6062.8	5689.0	5301.1	4910.3	4522.3	4134.4	3754.9	3384.0	3024.3	2690.2
32.5°	6918.0	6515.9	6102.5	5689.0	5267.1	4839.5	4426.0	4018.3	3616.2	3228.2	2857.3
30°	7396.6	6960.5	6515.9	6062.8	5612.6	5159.5	4706.4	4270.3	3845.5	3429.3	3032.8
27.5°	7863.8	7396.6	6918.0	6430.9	5946.7	5465.3	4983.9	4516.7	4063.6	3621.8	3197.1
25°	8314.1	7815.7	7303.1	6784.9	6269.5	5757.0	5250.1	4746.0	4270.3	3805.9	3361.3
22.5°	8738.8	8212.1	7671.3	7121.9	6569.7	6028.8	5496.5	4972.6	4465.7	3978.6	3511.4
20°	9146.6	8583.1	8033.7	7433.4	6855.7	6286.5	5728.7	5179.3	4644.1	4137.2	3647.3
17.5°	9517.6	8925.7	8325.4	7722.2	7116.2	6518.7	5935.4	5388.8	4808.3	4281.6	3777.6
15°	9851.7	9234.4	8605.7	7979.9	7348.4	6728.3	6122.3	5533.3	4958.4	4411.9	3890.8
12.5°	10143.4	9503.4	8852.1	8203.6	7555.1	6912.3	6286.5	5677.7	5088.7	4522.3	3987.1
10°	10384.1	9729.9	9058.8	8390.5	7725.1	7065.3	6419.6	5799.5	5196.3	4615.8	4066.4
7.5°	10579.5	9908.3	9225.9	8537.8	7858.1	7184.2	6527.2	5892.9	5281.2	4686.6	4128.7
5°	10718.2	10038.6	9344.8	8642.5	7954.4	7272.0	6603.7	5960.9	5340.7	4737.5	4174.0
2.5°	10806.0	10143.4	9441.1	8730.3	8033.7	7342.8	6666.0	6014.7	5388.8	4780.0	4210.8
0°	10834.3	10143.4	9441.1	8730.3	8033.7	7342.8	6666.0	6014.7	5388.8	4780.0	4210.8

REPORT NUMBER: P624601

CATALOG NUMBER: IFLD-M-SA4E-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°	68.0	62.3	56.6	53.8	48.1	45.3	39.6	34.0	31.1	25.5	19.8
85°	135.9	124.6	116.1	107.6	99.1	87.8	79.3	70.8	59.5	51.0	39.6
82.5°	206.7	192.6	178.4	164.2	150.1	135.9	118.9	104.8	90.6	76.5	59.5
80°	286.0	263.4	243.5	223.7	203.9	184.1	161.4	141.6	118.9	99.1	79.3
77.5°	368.1	342.6	314.3	286.0	257.7	232.2	203.9	178.4	152.9	124.6	99.1
75°	455.9	421.9	390.8	354.0	320.0	283.2	249.2	215.2	184.1	152.9	118.9
72.5°	546.5	504.1	461.6	421.9	379.5	337.0	297.3	254.9	215.2	178.4	141.6
70°	640.0	589.0	538.0	489.9	441.8	390.8	345.5	297.3	249.2	203.9	161.4
67.5°	739.1	679.6	620.2	557.9	504.1	447.4	390.8	337.0	283.2	232.2	184.1
65°	846.7	775.9	702.3	637.1	566.4	504.1	441.8	379.5	320.0	257.7	203.9
62.5°	957.1	875.0	792.9	710.8	637.1	557.9	489.9	421.9	354.0	286.0	223.7
60°	1070.4	977.0	883.5	792.9	702.3	620.2	538.0	461.6	390.8	314.3	243.5
57.5°	1186.5	1081.7	977.0	875.0	775.9	679.6	589.0	504.1	421.9	342.6	263.4
55°	1305.4	1186.5	1070.4	957.1	846.7	739.1	640.0	546.5	455.9	368.1	286.0
52.5°	1424.4	1294.1	1163.9	1042.1	926.0	804.2	691.0	586.2	487.1	396.4	305.8
50°	1546.1	1398.9	1260.1	1124.2	991.1	863.7	741.9	628.7	521.0	421.9	325.7
47.5°	1670.7	1509.3	1353.6	1206.3	1064.7	926.0	792.9	668.3	552.2	447.4	345.5
45°	1803.8	1616.9	1449.9	1291.3	1135.5	988.3	843.9	707.9	586.2	472.9	365.3
42.5°	1934.1	1733.0	1546.1	1379.1	1206.3	1047.8	894.8	750.4	617.3	495.6	382.3
40°	2081.3	1849.1	1636.8	1452.7	1274.3	1104.4	943.0	790.1	648.5	518.2	399.3
37.5°	2222.9	1962.4	1738.7	1532.0	1339.4	1161.0	991.1	829.7	679.6	540.9	416.3
35°	2367.4	2087.0	1832.2	1605.6	1404.6	1217.7	1036.4	866.5	705.1	560.7	433.3
32.5°	2514.6	2205.9	1931.3	1684.9	1469.7	1268.6	1078.9	900.5	733.4	583.3	447.4
30°	2656.2	2319.2	2024.7	1761.4	1529.2	1319.6	1121.4	934.5	761.7	603.2	461.6
27.5°	2800.6	2438.1	2118.2	1832.2	1585.8	1364.9	1158.2	965.6	787.2	623.0	475.7
25°	2939.4	2551.4	2205.9	1900.1	1636.8	1410.2	1197.8	996.8	809.9	640.0	487.1
22.5°	3066.8	2650.5	2285.2	1965.2	1690.6	1449.9	1231.8	1025.1	832.5	657.0	498.4
20°	3182.9	2752.5	2367.4	2030.4	1741.5	1489.5	1260.1	1050.6	852.4	671.1	509.7
17.5°	3296.2	2845.9	2441.0	2089.8	1784.0	1523.5	1288.5	1070.4	869.4	682.5	518.2
15°	3392.5	2928.0	2506.1	2140.8	1823.7	1551.8	1311.1	1090.2	883.5	693.8	523.9
12.5°	3477.4	2998.8	2562.7	2183.3	1854.8	1577.3	1333.8	1107.2	897.7	702.3	532.4
10°	3545.4	3055.5	2608.1	2220.1	1883.1	1597.1	1347.9	1121.4	906.2	710.8	538.0
7.5°	3599.2	3100.8	2644.9	2245.6	1902.9	1614.1	1362.1	1129.9	914.7	716.4	546.5
5°	3638.8	3134.8	2670.4	2265.4	1919.9	1633.9	1379.1	1144.0	926.0	724.9	546.5
2.5°	3670.0	3160.3	2690.2	2282.4	1931.3	1633.9	1379.1	1144.0	926.0	724.9	546.5
0°	3670.0	3160.3	2690.2	2282.4	1931.3	1633.9	1379.1	1144.0	926.0	724.9	546.5

REPORT NUMBER: P624601

CATALOG NUMBER: IFLD-M-SA4E-940-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.2	11.3	5.7	0.0
85°	31.1	19.8	11.3	0.0
82.5°	45.3	31.1	14.2	0.0
80°	59.5	39.6	19.8	0.0
77.5°	76.5	51.0	25.5	0.0
75°	90.6	59.5	31.1	0.0
72.5°	104.8	70.8	34.0	0.0
70°	118.9	79.3	39.6	0.0
67.5°	135.9	87.8	45.3	0.0
65°	150.1	99.1	48.1	0.0
62.5°	164.2	107.6	53.8	0.0
60°	178.4	116.1	56.6	0.0
57.5°	192.6	124.6	62.3	0.0
55°	206.7	135.9	68.0	0.0
52.5°	220.9	144.4	70.8	0.0
50°	235.0	152.9	73.6	0.0
47.5°	246.4	161.4	79.3	0.0
45°	260.5	169.9	82.1	0.0
42.5°	274.7	175.6	85.0	0.0
40°	286.0	184.1	87.8	0.0
37.5°	300.2	189.7	93.4	0.0
35°	311.5	198.2	96.3	0.0
32.5°	320.0	203.9	99.1	0.0
30°	331.3	209.6	101.9	0.0
27.5°	339.8	215.2	101.9	0.0
25°	348.3	220.9	104.8	0.0
22.5°	356.8	223.7	107.6	0.0
20°	365.3	229.4	110.4	0.0
17.5°	371.0	232.2	110.4	0.0
15°	376.6	235.0	116.1	0.0
12.5°	379.5	237.9	116.1	0.0
10°	385.1	243.5	116.1	0.0
7.5°	390.8	243.5	116.1	0.0
5°	390.8	243.5	116.1	0.0
2.5°	390.8	243.5	116.1	0.0
0°	390.8	243.5	116.1	0.0

(END OF REPORT)