

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: P624514

Luminaire Tested: **IFLD-M-SA4E-927-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624514
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-927-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

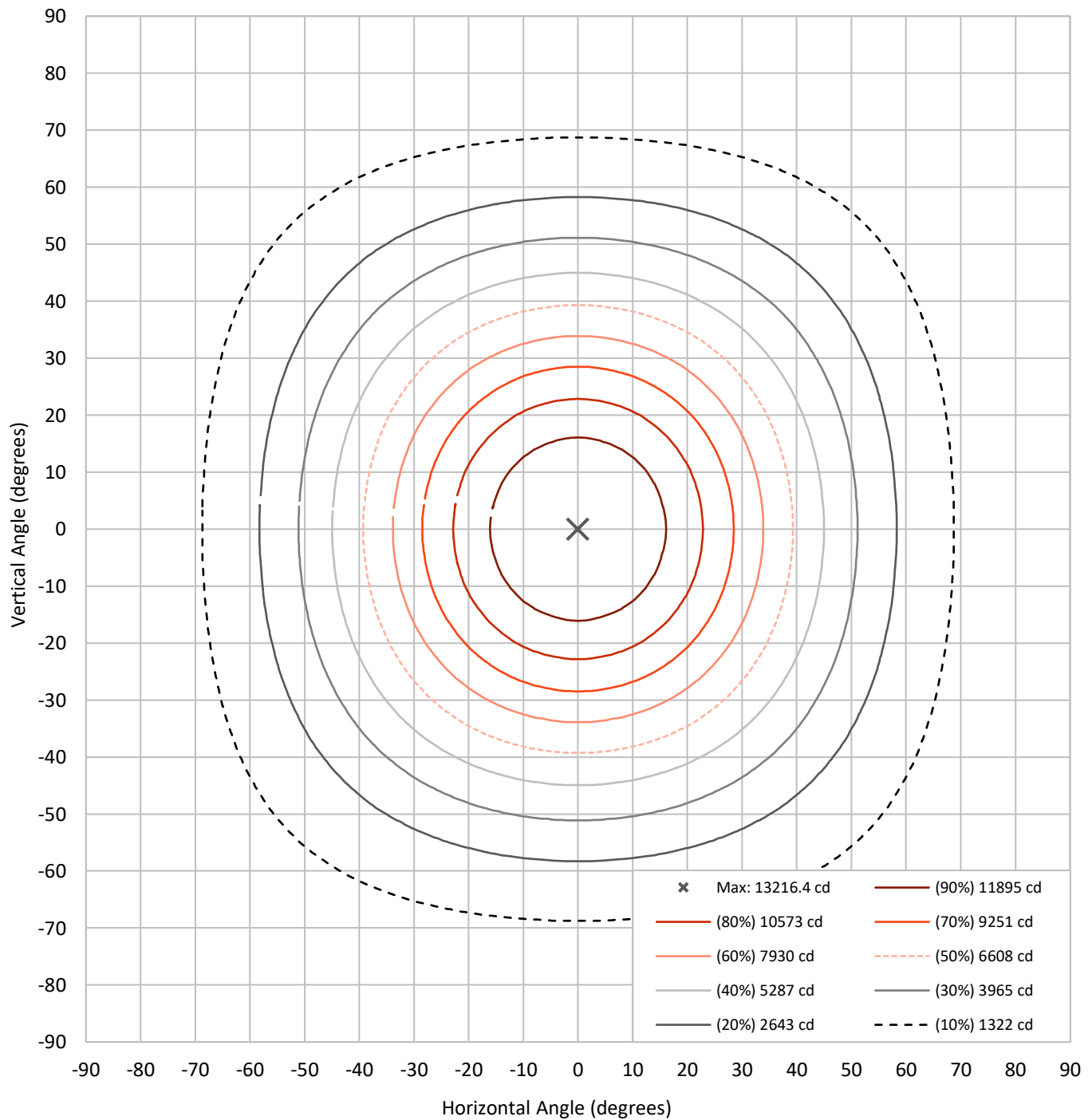
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23796.5 lumens	Max Intensity:	13216.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	75.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	10296.5 lumens	Field Lumens:	16860.2 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: P624514

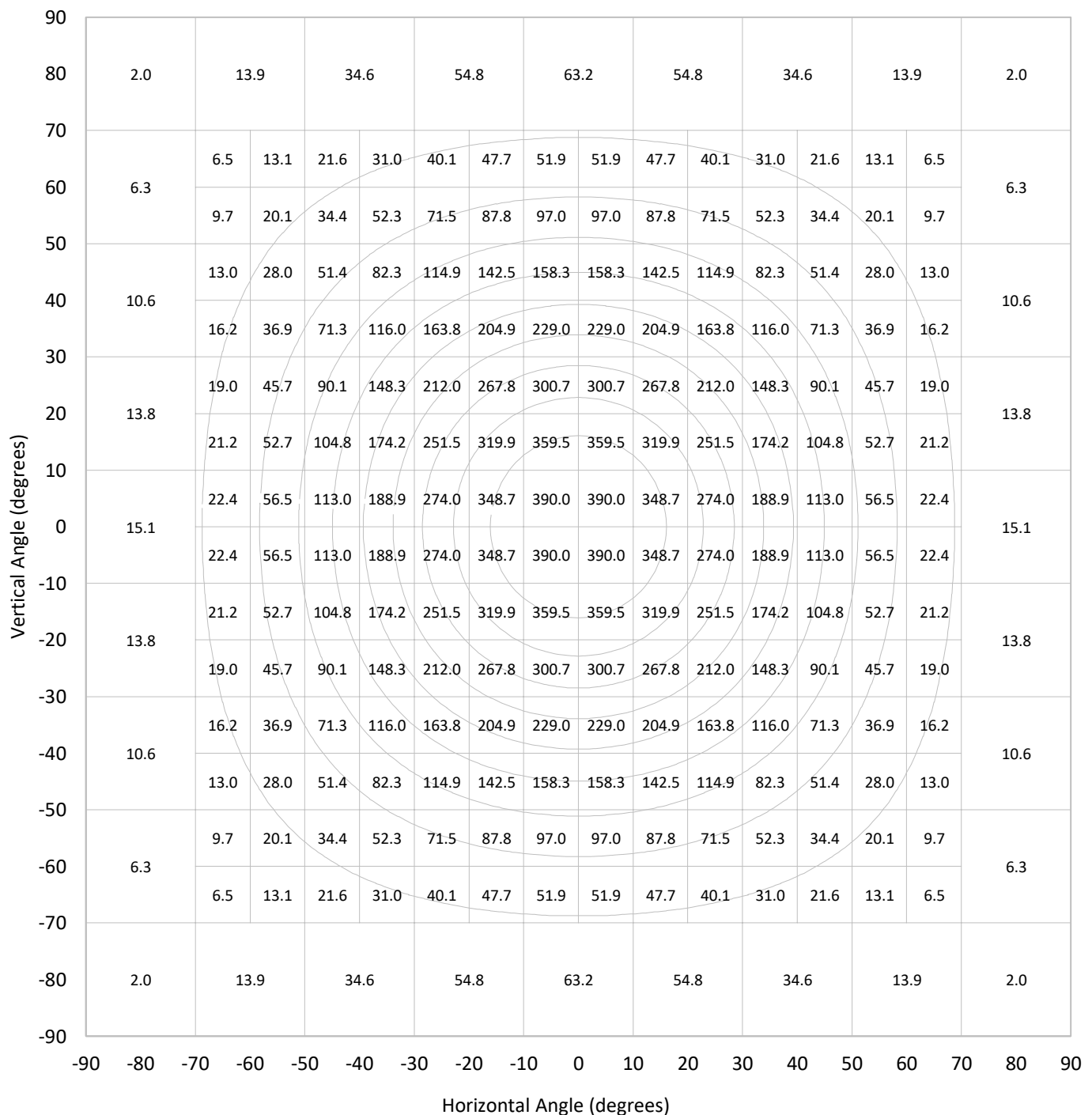
CATALOG NUMBER: IFLD-M-SA4E-927-U-77

Iso-Candela Plot



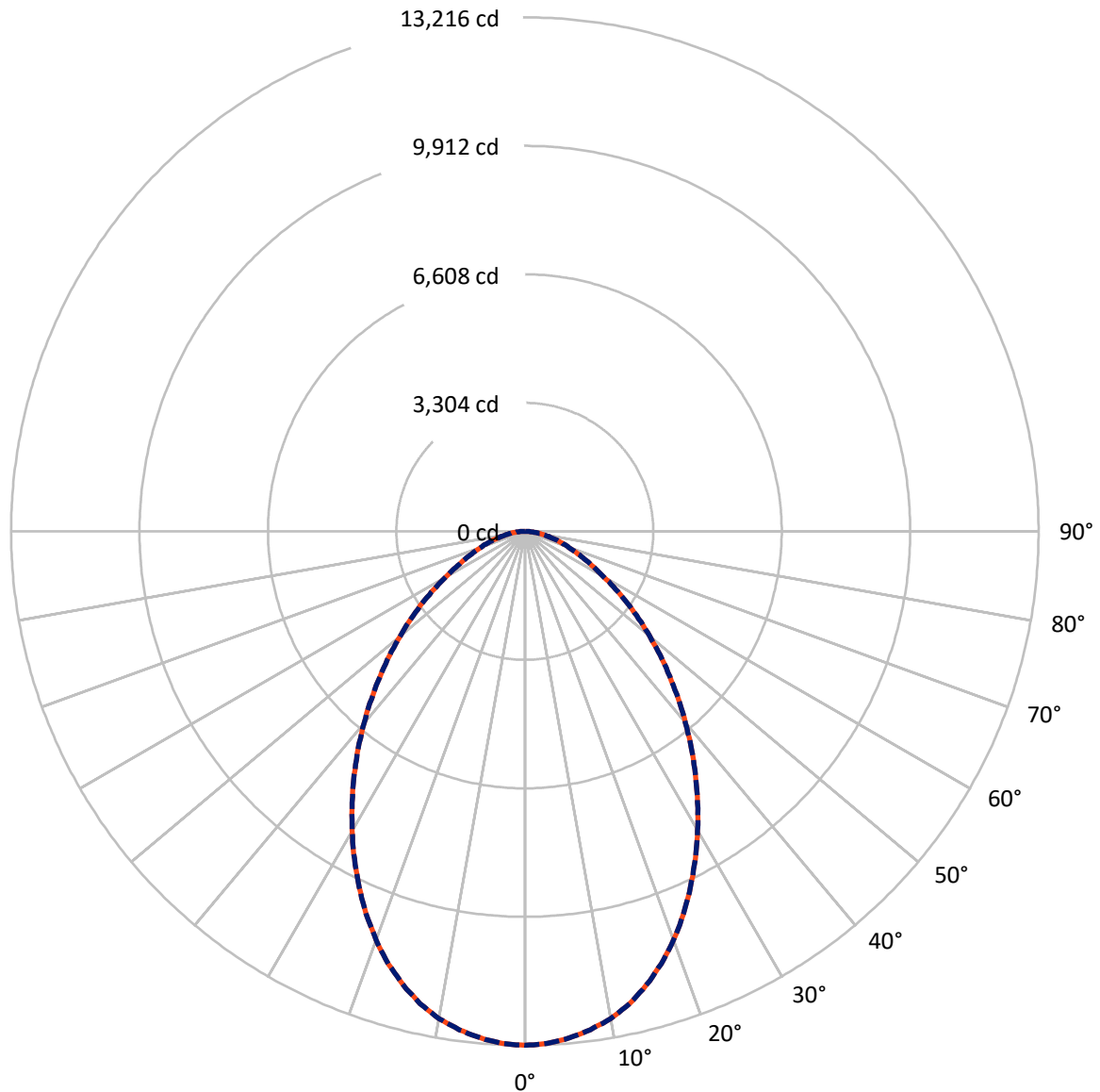
REPORT NUMBER: P624514
CATALOG NUMBER: IFLD-M-SA4E-927-U-77

Lumen Table



REPORT NUMBER: P624514
CATALOG NUMBER: IFLD-M-SA4E-927-U-77

Luminous Intensity Polar Plot

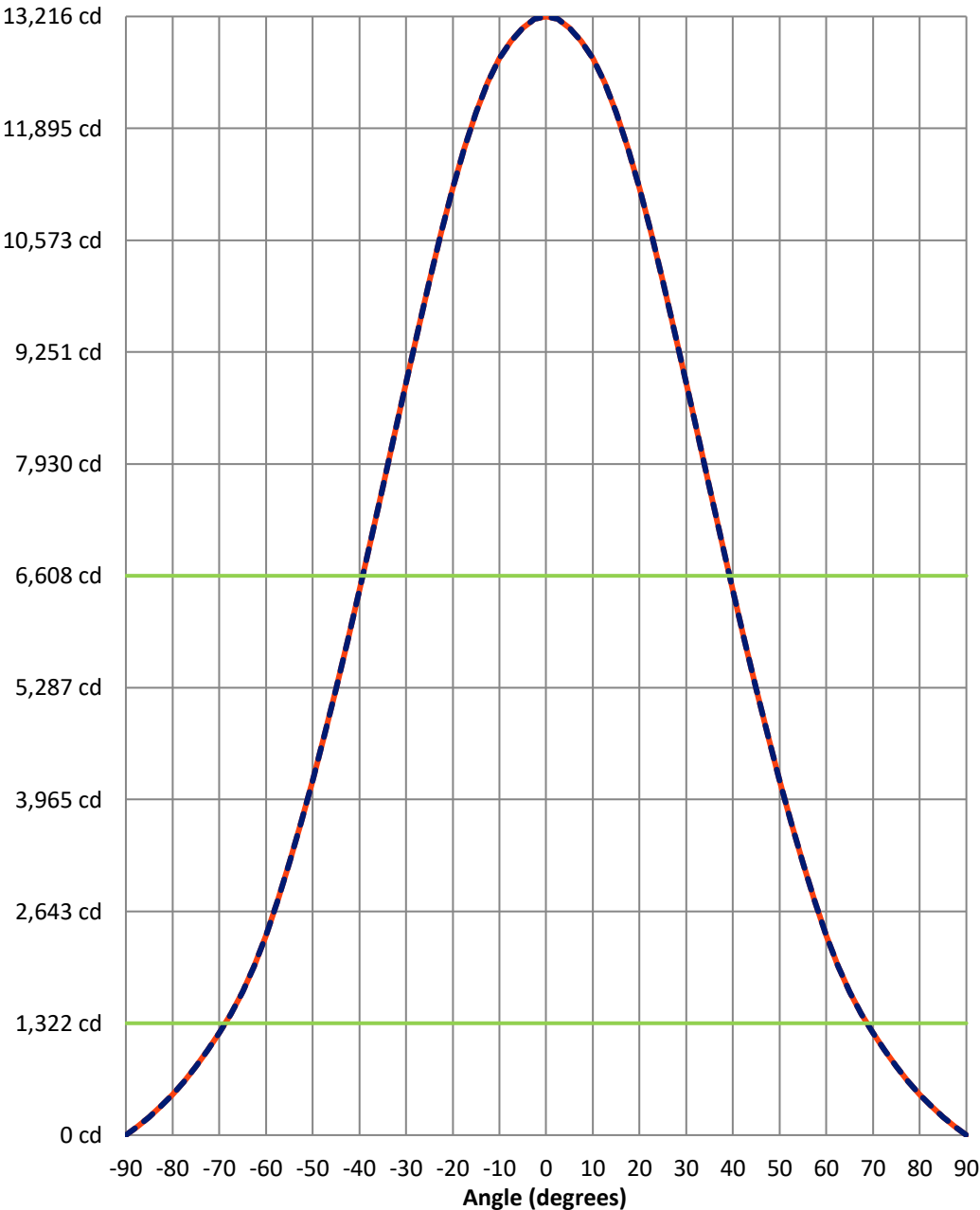


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



REPORT NUMBER: P624514
CATALOG NUMBER: IFLD-M-SA4E-927-U-77

Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 10296.5
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 16860.2
Efficiency: 70.9%

Spill:
Lumens: 6936.3
Efficiency: 29.1%

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

REPORT NUMBER: P624514

CATALOG NUMBER: IFLD-M-SA4E-927-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°	101.7	101.7	101.7	101.7	101.7	101.7	101.7	96.8	96.8	94.3	91.8
85°	213.4	213.4	213.4	213.4	213.4	208.4	205.9	203.4	201.0	196.0	193.5
82.5°	342.4	342.4	342.4	342.4	337.4	332.5	330.0	325.0	320.1	312.6	305.2
80°	478.8	478.8	478.8	478.8	471.4	466.4	459.0	454.0	446.6	436.7	426.7
77.5°	635.1	635.1	635.1	627.7	622.7	615.3	607.9	597.9	588.0	575.6	560.7
75°	811.3	811.3	811.3	801.4	793.9	786.5	774.1	761.7	746.8	729.4	709.6
72.5°	1002.3	1002.3	1002.3	989.9	982.5	970.1	955.2	937.8	920.5	898.1	873.3
70°	1208.3	1208.3	1208.3	1193.4	1181.0	1168.6	1148.7	1128.9	1104.1	1079.2	1049.5
67.5°	1431.6	1431.6	1431.6	1414.2	1399.3	1381.9	1359.6	1334.8	1305.0	1270.3	1235.6
65°	1692.1	1692.1	1682.1	1667.3	1649.9	1625.1	1597.8	1563.0	1525.8	1481.2	1434.0
62.5°	1999.7	1999.7	1984.8	1967.5	1945.1	1912.9	1875.7	1831.0	1778.9	1721.8	1664.8
60°	2357.0	2357.0	2339.6	2317.3	2285.0	2245.3	2195.7	2138.6	2074.1	2002.2	1932.7
57.5°	2768.8	2768.8	2746.5	2716.7	2677.0	2627.4	2565.4	2493.4	2411.6	2322.2	2235.4
55°	3215.4	3215.4	3188.1	3153.4	3106.2	3046.7	2972.3	2887.9	2788.7	2687.0	2575.3
52.5°	3689.3	3689.3	3657.0	3617.3	3562.8	3493.3	3408.9	3309.7	3195.6	3076.5	2945.0
50°	4188.0	4188.0	4150.8	4106.1	4044.1	3962.2	3865.4	3751.3	3624.8	3485.8	3334.5
47.5°	4721.4	4721.4	4679.2	4627.1	4552.7	4458.4	4344.3	4212.8	4068.9	3912.6	3741.4
45°	5269.7	5269.7	5222.6	5163.0	5081.1	4974.5	4847.9	4721.4	4537.8	4356.7	4158.2
42.5°	5840.3	5840.3	5785.8	5718.8	5624.5	5507.9	5364.0	5200.2	5019.1	4815.7	4599.8
40°	6433.3	6433.3	6371.3	6294.4	6190.2	6056.2	5894.9	5711.3	5507.9	5282.1	5043.9
37.5°	7038.7	7038.7	6969.2	6884.9	6768.2	6619.4	6438.3	6234.8	6006.6	5756.0	5493.0
35°	7649.0	7649.0	7572.1	7480.3	7351.3	7187.5	6991.5	6765.8	6512.7	6239.8	5944.5
32.5°	8271.7	8271.7	8187.4	8083.2	7936.8	7755.7	7539.8	7294.2	7038.7	6721.1	6398.6
30°	8887.0	8887.0	8795.2	8681.1	8524.8	8326.3	8090.6	7820.2	7520.0	7195.0	6847.6
27.5°	9492.4	9467.6	9390.7	9269.1	9097.9	8887.0	8631.5	8338.7	8013.7	7656.5	7284.3
25°	10087.9	10060.6	9976.2	9842.2	9658.6	9427.9	9152.5	8839.9	8490.1	8113.0	7706.1
22.5°	10658.5	10628.7	10539.4	10395.5	10199.5	9948.9	9653.7	9318.7	8946.6	8542.2	8113.0
20°	11187.0	11154.7	11062.9	10911.6	10708.1	10442.6	10130.0	9770.3	9373.3	8946.6	8490.1
17.5°	11663.3	11631.1	11534.3	11378.0	11187.0	10891.7	10569.2	10189.6	9770.3	9318.7	8839.9
15°	12082.6	12047.9	11948.6	11792.3	11574.0	11296.1	10956.2	10569.2	10130.0	9653.7	9152.5
12.5°	12439.9	12405.1	12303.4	12147.1	11921.3	11643.5	11296.1	10891.7	10442.6	9948.9	9427.9
10°	12722.7	12688.0	12591.2	12442.4	12209.1	11921.3	11574.0	11187.0	10708.1	10199.5	9658.6
7.5°	12926.2	12893.9	12804.6	12655.7	12442.4	12147.1	11792.3	11378.0	10911.6	10395.5	9842.2
5°	13080.0	13042.8	12953.4	12804.6	12591.2	12303.4	11948.6	11534.3	11062.9	10539.4	9976.2
2.5°	13186.7	13142.0	13042.8	12893.9	12688.0	12405.1	12047.9	11631.1	11154.7	10628.7	10060.6
0°	13216.4	13186.7	13080.0	12926.2	12722.7	12439.9	12082.6	11663.3	11187.0	10658.5	10087.9

REPORT NUMBER: P624514

CATALOG NUMBER: IFLD-M-SA4E-927-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°	89.3	89.3	86.8	84.4	81.9	76.9	74.4	71.9	69.5	64.5	62.0
85°	188.6	183.6	178.6	173.7	166.2	161.3	153.8	148.9	141.4	134.0	126.5
82.5°	297.7	290.3	280.4	272.9	263.0	250.6	240.7	228.3	215.8	205.9	193.5
80°	416.8	404.4	392.0	379.6	364.7	349.8	334.9	320.1	302.7	285.3	268.0
77.5°	545.8	528.5	511.1	491.2	473.9	454.0	434.2	414.3	392.0	369.7	347.3
75°	689.7	667.4	642.6	617.8	595.4	568.2	540.9	513.6	483.8	456.5	426.7
72.5°	846.0	818.7	789.0	759.2	726.9	692.2	657.5	620.3	585.5	550.8	513.6
70°	1014.7	982.5	945.3	908.1	868.4	826.2	784.0	739.3	694.7	650.0	605.4
67.5°	1195.9	1156.2	1111.5	1066.8	1017.2	967.6	918.0	865.9	811.3	756.7	704.6
65°	1389.4	1339.8	1287.7	1230.6	1173.5	1116.5	1056.9	994.9	932.9	868.4	811.3
62.5°	1605.2	1543.2	1476.2	1406.7	1342.2	1272.8	1208.3	1131.3	1056.9	985.0	913.0
60°	1855.8	1773.9	1692.1	1605.2	1523.4	1434.0	1354.6	1270.3	1185.9	1104.1	1019.7
57.5°	2136.2	2032.0	1932.7	1828.5	1719.4	1620.1	1518.4	1416.7	1322.4	1225.6	1133.8
55°	2453.7	2327.2	2203.2	2074.1	1947.6	1823.6	1694.5	1580.4	1463.8	1354.6	1248.0
52.5°	2801.1	2657.2	2503.4	2357.0	2195.7	2041.9	1898.0	1754.1	1617.6	1486.1	1364.6
50°	3173.2	3004.5	2828.4	2649.7	2466.1	2285.0	2111.4	1942.6	1783.9	1630.0	1486.1
47.5°	3560.3	3369.2	3168.3	2964.8	2768.8	2548.0	2339.6	2148.6	1957.5	1783.9	1617.6
45°	3957.2	3741.4	3520.6	3289.8	3059.1	2820.9	2590.2	2357.0	2148.6	1942.6	1754.1
42.5°	4366.6	4123.5	3877.8	3622.3	3366.8	3106.2	2845.7	2590.2	2339.6	2111.4	1898.0
40°	4788.4	4520.4	4240.1	3962.2	3689.3	3391.6	3106.2	2820.9	2548.0	2285.0	2041.9
37.5°	5210.2	4917.4	4614.7	4302.1	3989.5	3689.3	3366.8	3059.1	2768.8	2466.1	2195.7
35°	5634.4	5311.9	4984.4	4644.5	4302.1	3962.2	3622.3	3289.8	2964.8	2649.7	2357.0
32.5°	6061.2	5708.8	5346.6	4984.4	4614.7	4240.1	3877.8	3520.6	3168.3	2828.4	2503.4
30°	6480.4	6098.4	5708.8	5311.9	4917.4	4520.4	4123.5	3741.4	3369.2	3004.5	2657.2
27.5°	6889.8	6480.4	6061.2	5634.4	5210.2	4788.4	4366.6	3957.2	3560.3	3173.2	2801.1
25°	7284.3	6847.6	6398.6	5944.5	5493.0	5043.9	4599.8	4158.2	3741.4	3334.5	2945.0
22.5°	7656.5	7195.0	6721.1	6239.8	5756.0	5282.1	4815.7	4356.7	3912.6	3485.8	3076.5
20°	8013.7	7520.0	7038.7	6512.7	6006.6	5507.9	5019.1	4537.8	4068.9	3624.8	3195.6
17.5°	8338.7	7820.2	7294.2	6765.8	6234.8	5711.3	5200.2	4721.4	4212.8	3751.3	3309.7
15°	8631.5	8090.6	7539.8	6991.5	6438.3	5894.9	5364.0	4847.9	4344.3	3865.4	3408.9
12.5°	8887.0	8326.3	7755.7	7187.5	6619.4	6056.2	5507.9	4974.5	4458.4	3962.2	3493.3
10°	9097.9	8524.8	7936.8	7351.3	6768.2	6190.2	5624.5	5081.1	4552.7	4044.1	3562.8
7.5°	9269.1	8681.1	8083.2	7480.3	6884.9	6294.4	5718.8	5163.0	4627.1	4106.1	3617.3
5°	9390.7	8795.2	8187.4	7572.1	6969.2	6371.3	5785.8	5222.6	4679.2	4150.8	3657.0
2.5°	9467.6	8887.0	8271.7	7649.0	7038.7	6433.3	5840.3	5269.7	4721.4	4188.0	3689.3
0°	9492.4	8887.0	8271.7	7649.0	7038.7	6433.3	5840.3	5269.7	4721.4	4188.0	3689.3

REPORT NUMBER: P624514

CATALOG NUMBER: IFLD-M-SA4E-927-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°	59.5	54.6	49.6	47.1	42.2	39.7	34.7	29.8	27.3	22.3	17.4
85°	119.1	109.2	101.7	94.3	86.8	76.9	69.5	62.0	52.1	44.7	34.7
82.5°	181.1	168.7	156.3	143.9	131.5	119.1	104.2	91.8	79.4	67.0	52.1
80°	250.6	230.7	213.4	196.0	178.6	161.3	141.4	124.1	104.2	86.8	69.5
77.5°	322.5	300.2	275.4	250.6	225.8	203.4	178.6	156.3	134.0	109.2	86.8
75°	399.4	369.7	342.4	310.1	280.4	248.1	218.3	188.6	161.3	134.0	104.2
72.5°	478.8	441.6	404.4	369.7	332.5	295.2	260.5	223.3	188.6	156.3	124.1
70°	560.7	516.1	471.4	429.2	387.0	342.4	302.7	260.5	218.3	178.6	141.4
67.5°	647.5	595.4	543.3	488.8	441.6	392.0	342.4	295.2	248.1	203.4	161.3
65°	741.8	679.8	615.3	558.2	496.2	441.6	387.0	332.5	280.4	225.8	178.6
62.5°	838.6	766.6	694.7	622.7	558.2	488.8	429.2	369.7	310.1	250.6	196.0
60°	937.8	856.0	774.1	694.7	615.3	543.3	471.4	404.4	342.4	275.4	213.4
57.5°	1039.6	947.8	856.0	766.6	679.8	595.4	516.1	441.6	369.7	300.2	230.7
55°	1143.8	1039.6	937.8	838.6	741.8	647.5	560.7	478.8	399.4	322.5	250.6
52.5°	1248.0	1133.8	1019.7	913.0	811.3	704.6	605.4	513.6	426.7	347.3	268.0
50°	1354.6	1225.6	1104.1	985.0	868.4	756.7	650.0	550.8	456.5	369.7	285.3
47.5°	1463.8	1322.4	1185.9	1056.9	932.9	811.3	694.7	585.5	483.8	392.0	302.7
45°	1580.4	1416.7	1270.3	1131.3	994.9	865.9	739.3	620.3	513.6	414.3	320.1
42.5°	1694.5	1518.4	1354.6	1208.3	1056.9	918.0	784.0	657.5	540.9	434.2	334.9
40°	1823.6	1620.1	1434.0	1272.8	1116.5	967.6	826.2	692.2	568.2	454.0	349.8
37.5°	1947.6	1719.4	1523.4	1342.2	1173.5	1017.2	868.4	726.9	595.4	473.9	364.7
35°	2074.1	1828.5	1605.2	1406.7	1230.6	1066.8	908.1	759.2	617.8	491.2	379.6
32.5°	2203.2	1932.7	1692.1	1476.2	1287.7	1111.5	945.3	789.0	642.6	511.1	392.0
30°	2327.2	2032.0	1773.9	1543.2	1339.8	1156.2	982.5	818.7	667.4	528.5	404.4
27.5°	2453.7	2136.2	1855.8	1605.2	1389.4	1195.9	1014.7	846.0	689.7	545.8	416.8
25°	2575.3	2235.4	1932.7	1664.8	1434.0	1235.6	1049.5	873.3	709.6	560.7	426.7
22.5°	2687.0	2322.2	2002.2	1721.8	1481.2	1270.3	1079.2	898.1	729.4	575.6	436.7
20°	2788.7	2411.6	2074.1	1778.9	1525.8	1305.0	1104.1	920.5	746.8	588.0	446.6
17.5°	2887.9	2493.4	2138.6	1831.0	1563.0	1334.8	1128.9	937.8	761.7	597.9	454.0
15°	2972.3	2565.4	2195.7	1875.7	1597.8	1359.6	1148.7	955.2	774.1	607.9	459.0
12.5°	3046.7	2627.4	2245.3	1912.9	1625.1	1381.9	1168.6	970.1	786.5	615.3	466.4
10°	3106.2	2677.0	2285.0	1945.1	1649.9	1399.3	1181.0	982.5	793.9	622.7	471.4
7.5°	3153.4	2716.7	2317.3	1967.5	1667.3	1414.2	1193.4	989.9	801.4	627.7	478.8
5°	3188.1	2746.5	2339.6	1984.8	1682.1	1431.6	1208.3	1002.3	811.3	635.1	478.8
2.5°	3215.4	2768.8	2357.0	1999.7	1692.1	1431.6	1208.3	1002.3	811.3	635.1	478.8
0°	3215.4	2768.8	2357.0	1999.7	1692.1	1431.6	1208.3	1002.3	811.3	635.1	478.8

REPORT NUMBER: P624514

CATALOG NUMBER: IFLD-M-SA4E-927-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.4	9.9	5.0	0.0
85°	27.3	17.4	9.9	0.0
82.5°	39.7	27.3	12.4	0.0
80°	52.1	34.7	17.4	0.0
77.5°	67.0	44.7	22.3	0.0
75°	79.4	52.1	27.3	0.0
72.5°	91.8	62.0	29.8	0.0
70°	104.2	69.5	34.7	0.0
67.5°	119.1	76.9	39.7	0.0
65°	131.5	86.8	42.2	0.0
62.5°	143.9	94.3	47.1	0.0
60°	156.3	101.7	49.6	0.0
57.5°	168.7	109.2	54.6	0.0
55°	181.1	119.1	59.5	0.0
52.5°	193.5	126.5	62.0	0.0
50°	205.9	134.0	64.5	0.0
47.5°	215.8	141.4	69.5	0.0
45°	228.3	148.9	71.9	0.0
42.5°	240.7	153.8	74.4	0.0
40°	250.6	161.3	76.9	0.0
37.5°	263.0	166.2	81.9	0.0
35°	272.9	173.7	84.4	0.0
32.5°	280.4	178.6	86.8	0.0
30°	290.3	183.6	89.3	0.0
27.5°	297.7	188.6	89.3	0.0
25°	305.2	193.5	91.8	0.0
22.5°	312.6	196.0	94.3	0.0
20°	320.1	201.0	96.8	0.0
17.5°	325.0	203.4	96.8	0.0
15°	330.0	205.9	101.7	0.0
12.5°	332.5	208.4	101.7	0.0
10°	337.4	213.4	101.7	0.0
7.5°	342.4	213.4	101.7	0.0
5°	342.4	213.4	101.7	0.0
2.5°	342.4	213.4	101.7	0.0
0°	342.4	213.4	101.7	0.0

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