

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: P624032

Luminaire Tested: **IFLD-M-SA4D-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624032
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

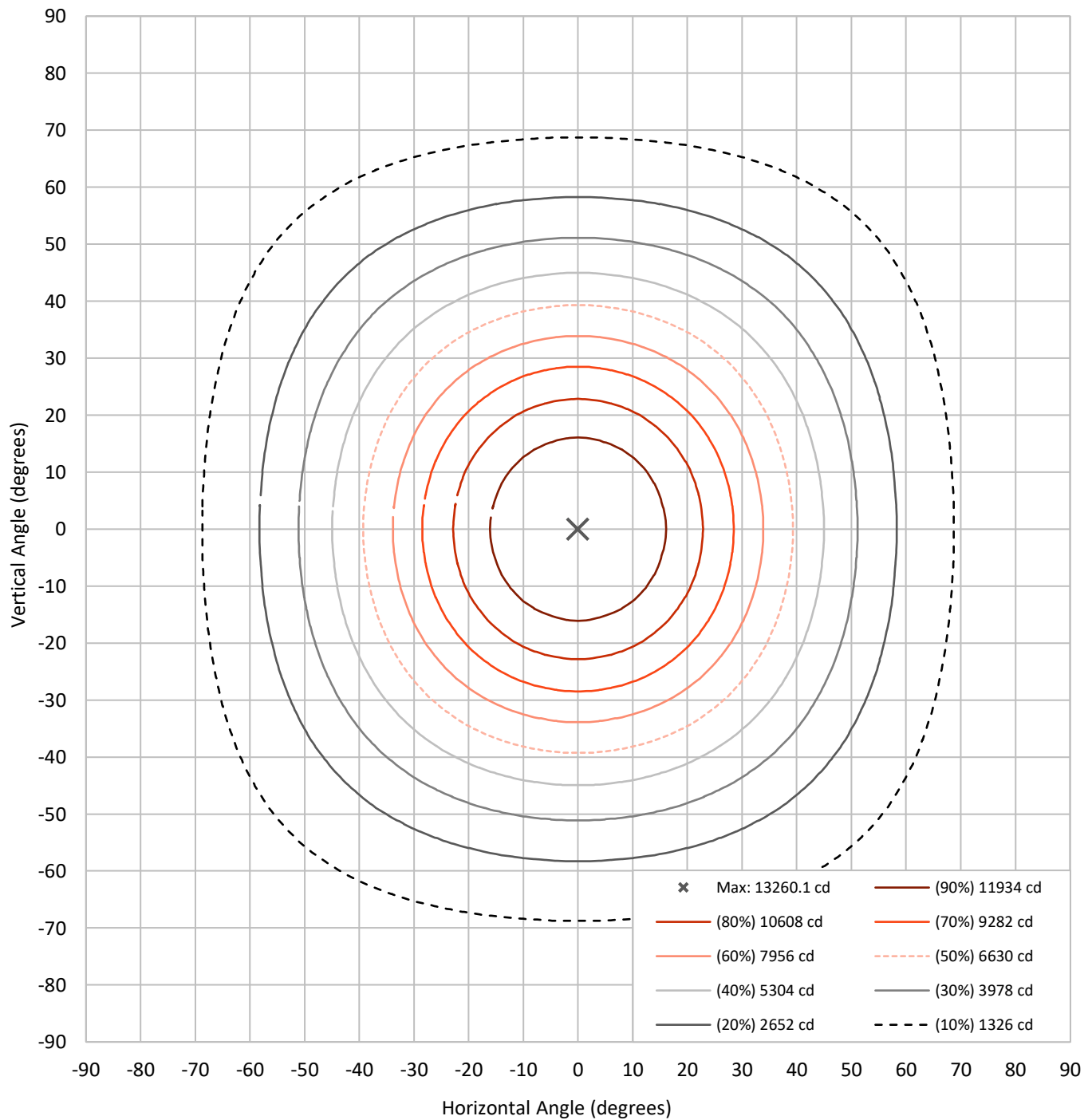
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23875.1 lumens	Max Intensity:	13260.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	95.6 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:	10330.5 lumens	Field Lumens:	16915.9 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		



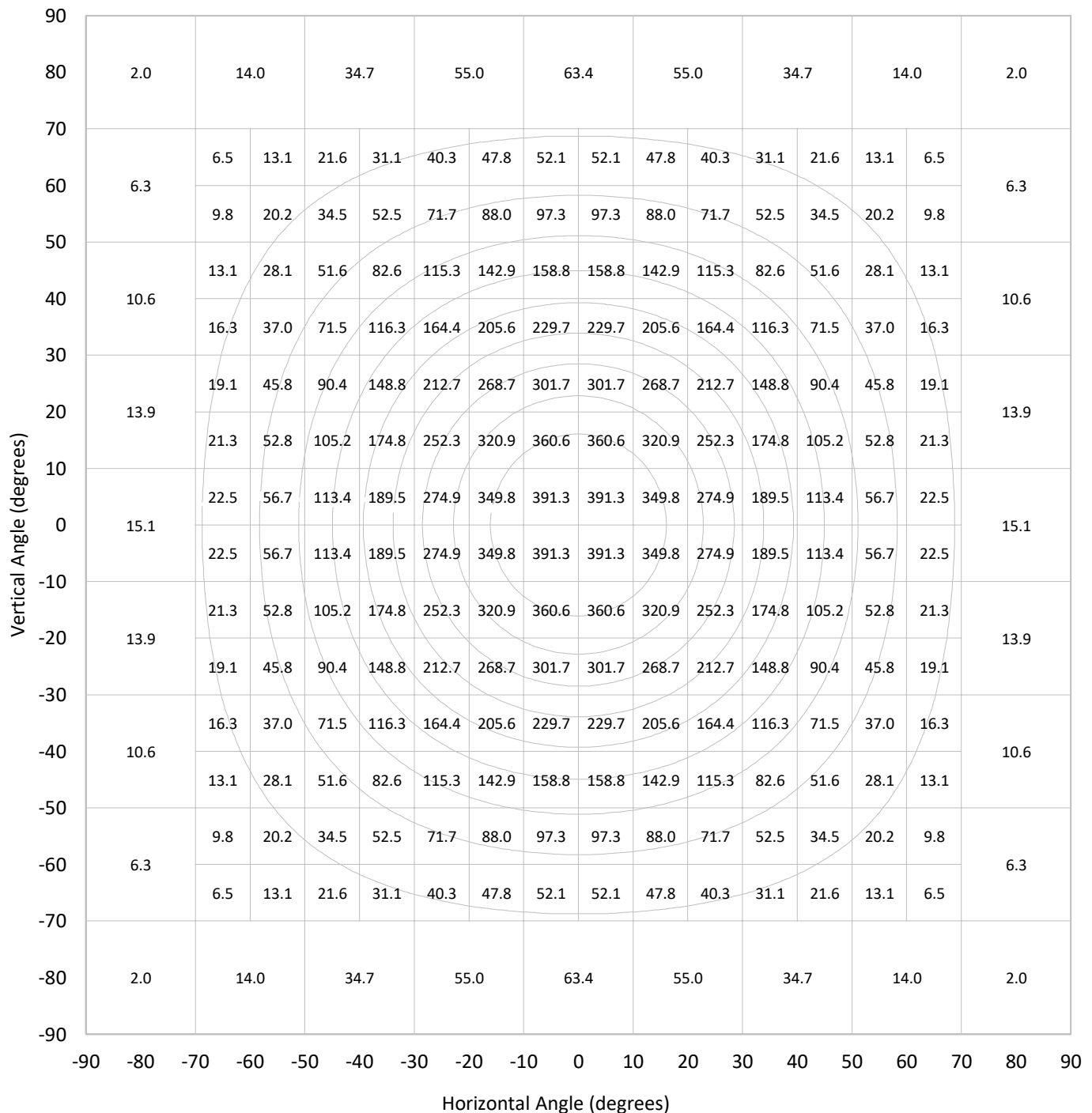
REPORT NUMBER: P624032
CATALOG NUMBER: IFLD-M-SA4D-827-U-77

Iso-Candela Plot



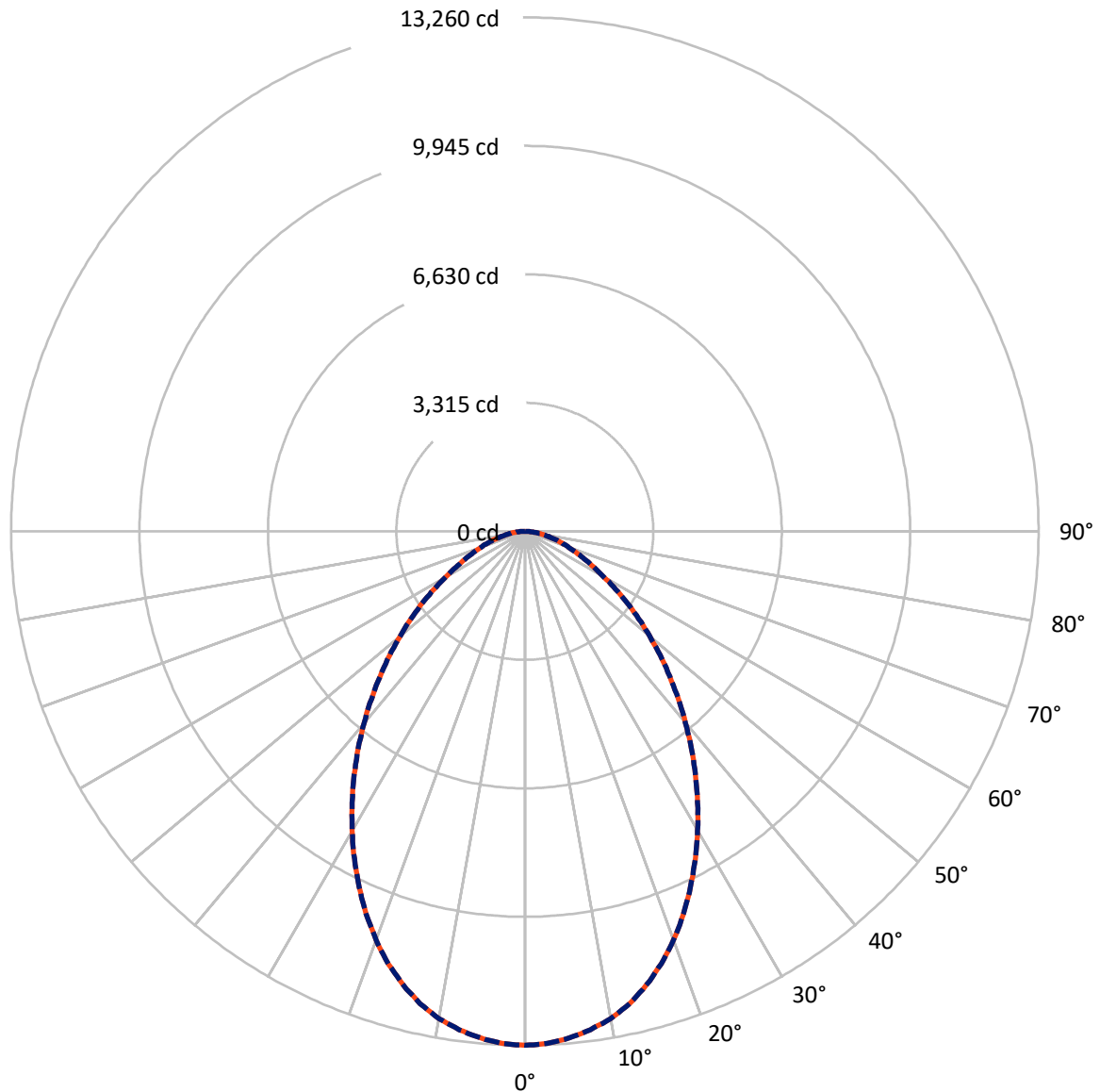
REPORT NUMBER: P624032
CATALOG NUMBER: IFLD-M-SA4D-827-U-77

Lumen Table



REPORT NUMBER: P624032
CATALOG NUMBER: IFLD-M-SA4D-827-U-77

Luminous Intensity Polar Plot

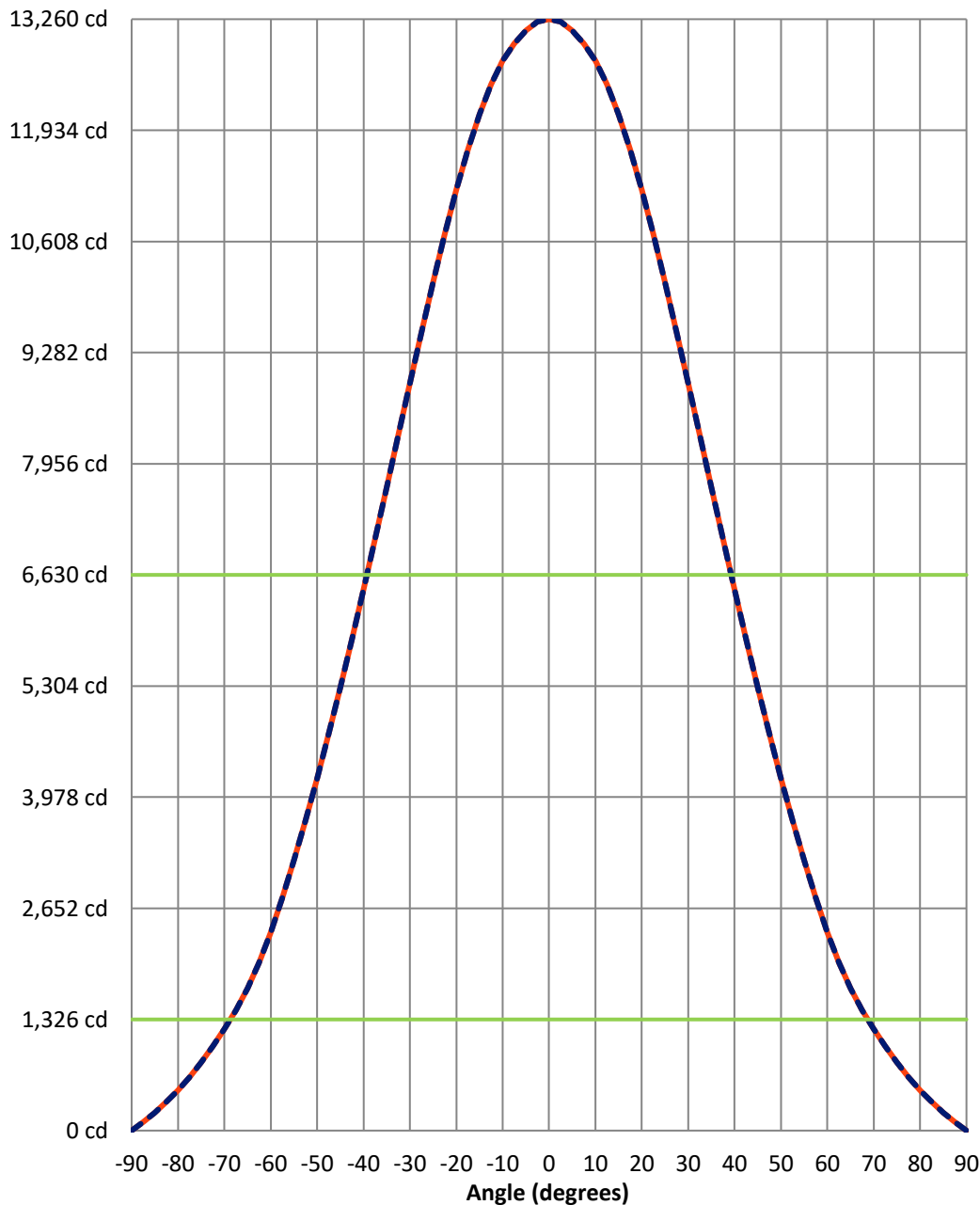


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624032

CATALOG NUMBER: IFLD-M-SA4D-827-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 10330.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 16915.9
Efficiency: 70.9%

Spill:

Lumens: 6959.2
Efficiency: 29.1%

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

REPORT NUMBER: P624032

CATALOG NUMBER: IFLD-M-SA4D-827-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°	102.1	102.1	102.1	102.1	102.1	102.1	102.1	97.1	97.1	94.6	92.1
85°	214.1	214.1	214.1	214.1	214.1	209.1	206.6	204.1	201.6	196.6	194.2
82.5°	343.5	343.5	343.5	343.5	338.5	333.6	331.1	326.1	321.1	313.6	306.2
80°	480.4	480.4	480.4	480.4	473.0	468.0	460.5	455.5	448.1	438.1	428.1
77.5°	637.2	637.2	637.2	629.8	624.8	617.3	609.9	599.9	589.9	577.5	562.6
75°	814.0	814.0	814.0	804.0	796.6	789.1	776.6	764.2	749.3	731.8	711.9
72.5°	1005.6	1005.6	1005.6	993.2	985.7	973.3	958.3	940.9	923.5	901.1	876.2
70°	1212.3	1212.3	1212.3	1197.3	1184.9	1172.4	1152.5	1132.6	1107.7	1082.8	1052.9
67.5°	1436.3	1436.3	1436.3	1418.9	1403.9	1386.5	1364.1	1339.2	1309.3	1274.5	1239.6
65°	1697.6	1697.6	1687.7	1672.8	1655.3	1630.4	1603.1	1568.2	1530.9	1486.1	1438.8
62.5°	2006.3	2006.3	1991.4	1974.0	1951.5	1919.2	1881.9	1837.0	1784.8	1727.5	1670.3
60°	2364.8	2364.8	2347.3	2324.9	2292.6	2252.7	2203.0	2145.7	2081.0	2008.8	1939.1
57.5°	2778.0	2778.0	2755.6	2725.7	2685.9	2636.1	2573.9	2501.7	2419.5	2329.9	2242.8
55°	3226.0	3226.0	3198.6	3163.8	3116.5	3056.8	2982.1	2897.5	2797.9	2695.8	2583.8
52.5°	3701.5	3701.5	3669.1	3629.3	3574.5	3504.8	3420.2	3320.6	3206.1	3086.6	2954.7
50°	4201.8	4201.8	4164.5	4119.7	4057.4	3975.3	3878.2	3763.7	3636.8	3497.4	3345.5
47.5°	4737.0	4737.0	4694.7	4642.4	4567.7	4473.1	4358.6	4226.7	4082.3	3925.5	3753.7
45°	5287.1	5287.1	5239.8	5180.1	5097.9	4990.9	4863.9	4737.0	4552.8	4371.1	4171.9
42.5°	5859.6	5859.6	5804.9	5737.7	5643.1	5526.1	5381.7	5217.4	5035.7	4831.6	4615.0
40°	6454.5	6454.5	6392.3	6315.2	6210.6	6076.2	5914.4	5730.2	5526.1	5299.6	5060.6
37.5°	7061.9	7061.9	6992.2	6907.6	6790.6	6641.2	6459.5	6255.4	6026.4	5775.0	5511.1
35°	7674.3	7674.3	7597.1	7505.0	7375.6	7211.3	7014.6	6788.1	6534.2	6260.4	5964.2
32.5°	8299.1	8299.1	8214.4	8109.9	7963.0	7781.3	7564.7	7318.3	7061.9	6743.3	6419.7
30°	8916.4	8916.4	8824.3	8709.8	8553.0	8353.8	8117.3	7846.0	7544.8	7218.7	6870.2
27.5°	9523.8	9498.9	9421.7	9299.7	9128.0	8916.4	8660.0	8366.3	8040.2	7681.7	7308.4
25°	10121.2	10093.8	10009.2	9874.7	9690.5	9459.0	9182.7	8869.1	8518.1	8139.8	7731.5
22.5°	10693.7	10663.8	10574.2	10429.8	10233.2	9981.8	9685.6	9349.5	8976.1	8570.4	8139.8
20°	11223.9	11191.5	11099.4	10947.6	10743.5	10477.1	10163.5	9802.6	9404.3	8976.1	8518.1
17.5°	11701.8	11669.5	11572.4	11415.6	11223.9	10927.7	10604.1	10223.2	9802.6	9349.5	8869.1
15°	12122.5	12087.7	11988.1	11831.3	11612.2	11333.4	10992.4	10604.1	10163.5	9685.6	9182.7
12.5°	12481.0	12446.1	12344.0	12187.2	11960.7	11681.9	11333.4	10927.7	10477.1	9981.8	9459.0
10°	12764.7	12729.9	12632.8	12483.4	12249.5	11960.7	11612.2	11223.9	10743.5	10233.2	9690.5
7.5°	12968.8	12936.5	12846.9	12697.5	12483.4	12187.2	11831.3	11415.6	10947.6	10429.8	9874.7
5°	13123.2	13085.8	12996.2	12846.9	12632.8	12344.0	11988.1	11572.4	11099.4	10574.2	10009.2
2.5°	13230.2	13185.4	13085.8	12936.5	12729.9	12446.1	12087.7	11669.5	11191.5	10663.8	10093.8
0°	13260.1	13230.2	13123.2	12968.8	12764.7	12481.0	12122.5	11701.8	11223.9	10693.7	10121.2

REPORT NUMBER: P624032

CATALOG NUMBER: IFLD-M-SA4D-827-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°	89.6	89.6	87.1	84.6	82.1	77.2	74.7	72.2	69.7	64.7	62.2
85°	189.2	184.2	179.2	174.2	166.8	161.8	154.3	149.4	141.9	134.4	127.0
82.5°	298.7	291.2	281.3	273.8	263.9	251.4	241.5	229.0	216.6	206.6	194.2
80°	418.2	405.7	393.3	380.9	365.9	351.0	336.0	321.1	303.7	286.3	268.8
77.5°	547.6	530.2	512.8	492.9	475.4	455.5	435.6	415.7	393.3	370.9	348.5
75°	692.0	669.6	644.7	619.8	597.4	570.0	542.7	515.3	485.4	458.0	428.1
72.5°	848.8	821.4	791.6	761.7	729.3	694.5	659.6	622.3	587.5	552.6	515.3
70°	1018.1	985.7	948.4	911.1	871.2	828.9	786.6	741.8	697.0	652.2	607.4
67.5°	1199.8	1160.0	1115.2	1070.4	1020.6	970.8	921.0	868.7	814.0	759.2	706.9
65°	1394.0	1344.2	1291.9	1234.7	1177.4	1120.1	1060.4	998.2	935.9	871.2	814.0
62.5°	1610.5	1548.3	1481.1	1411.4	1346.7	1277.0	1212.3	1135.1	1060.4	988.2	916.0
60°	1861.9	1779.8	1697.6	1610.5	1528.4	1438.8	1359.1	1274.5	1189.8	1107.7	1023.1
57.5°	2143.2	2038.7	1939.1	1834.6	1725.0	1625.5	1523.4	1421.3	1326.8	1229.7	1137.6
55°	2461.8	2334.9	2210.4	2081.0	1954.0	1829.6	1700.1	1585.6	1468.6	1359.1	1252.1
52.5°	2810.3	2666.0	2511.6	2364.8	2203.0	2048.6	1904.3	1759.9	1623.0	1491.0	1369.1
50°	3183.7	3014.4	2837.7	2658.5	2474.3	2292.6	2118.3	1949.1	1789.7	1635.4	1491.0
47.5°	3572.0	3380.4	3178.7	2974.6	2778.0	2556.4	2347.3	2155.7	1964.0	1789.7	1623.0
45°	3970.3	3753.7	3532.2	3300.7	3069.2	2830.2	2598.7	2364.8	2155.7	1949.1	1759.9
42.5°	4381.0	4137.1	3890.7	3634.3	3377.9	3116.5	2855.1	2598.7	2347.3	2118.3	1904.3
40°	4804.2	4535.4	4254.1	3975.3	3701.5	3402.8	3116.5	2830.2	2556.4	2292.6	2048.6
37.5°	5227.4	4933.6	4630.0	4316.3	4002.7	3701.5	3377.9	3069.2	2778.0	2474.3	2203.0
35°	5653.0	5329.4	5000.8	4659.8	4316.3	3975.3	3634.3	3300.7	2974.6	2658.5	2364.8
32.5°	6081.2	5727.7	5364.3	5000.8	4630.0	4254.1	3890.7	3532.2	3178.7	2837.7	2511.6
30°	6501.8	6118.5	5727.7	5329.4	4933.6	4535.4	4137.1	3753.7	3380.4	3014.4	2666.0
27.5°	6912.6	6501.8	6081.2	5653.0	5227.4	4804.2	4381.0	3970.3	3572.0	3183.7	2810.3
25°	7308.4	6870.2	6419.7	5964.2	5511.1	5060.6	4615.0	4171.9	3753.7	3345.5	2954.7
22.5°	7681.7	7218.7	6743.3	6260.4	5775.0	5299.6	4831.6	4371.1	3925.5	3497.4	3086.6
20°	8040.2	7544.8	7061.9	6534.2	6026.4	5526.1	5035.7	4552.8	4082.3	3636.8	3206.1
17.5°	8366.3	7846.0	7318.3	6788.1	6255.4	5730.2	5217.4	4737.0	4226.7	3763.7	3320.6
15°	8660.0	8117.3	7564.7	7014.6	6459.5	5914.4	5381.7	4863.9	4358.6	3878.2	3420.2
12.5°	8916.4	8353.8	7781.3	7211.3	6641.2	6076.2	5526.1	4990.9	4473.1	3975.3	3504.8
10°	9128.0	8553.0	7963.0	7375.6	6790.6	6210.6	5643.1	5097.9	4567.7	4057.4	3574.5
7.5°	9299.7	8709.8	8109.9	7505.0	6907.6	6315.2	5737.7	5180.1	4642.4	4119.7	3629.3
5°	9421.7	8824.3	8214.4	7597.1	6992.2	6392.3	5804.9	5239.8	4694.7	4164.5	3669.1
2.5°	9498.9	8916.4	8299.1	7674.3	7061.9	6454.5	5859.6	5287.1	4737.0	4201.8	3701.5
0°	9523.8	8916.4	8299.1	7674.3	7061.9	6454.5	5859.6	5287.1	4737.0	4201.8	3701.5

REPORT NUMBER: P624032

CATALOG NUMBER: IFLD-M-SA4D-827-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°	59.7	54.8	49.8	47.3	42.3	39.8	34.8	29.9	27.4	22.4	17.4
85°	119.5	109.5	102.1	94.6	87.1	77.2	69.7	62.2	52.3	44.8	34.8
82.5°	181.7	169.3	156.8	144.4	131.9	119.5	104.5	92.1	79.7	67.2	52.3
80°	251.4	231.5	214.1	196.6	179.2	161.8	141.9	124.5	104.5	87.1	69.7
77.5°	323.6	301.2	276.3	251.4	226.5	204.1	179.2	156.8	134.4	109.5	87.1
75°	400.8	370.9	343.5	311.2	281.3	248.9	219.1	189.2	161.8	134.4	104.5
72.5°	480.4	443.1	405.7	370.9	333.6	296.2	261.4	224.0	189.2	156.8	124.5
70°	562.6	517.8	473.0	430.6	388.3	343.5	303.7	261.4	219.1	179.2	141.9
67.5°	649.7	597.4	545.1	490.4	443.1	393.3	343.5	296.2	248.9	204.1	161.8
65°	744.3	682.0	617.3	560.1	497.8	443.1	388.3	333.6	281.3	226.5	179.2
62.5°	841.4	769.2	697.0	624.8	560.1	490.4	430.6	370.9	311.2	251.4	196.6
60°	940.9	858.8	776.6	697.0	617.3	545.1	473.0	405.7	343.5	276.3	214.1
57.5°	1043.0	950.9	858.8	769.2	682.0	597.4	517.8	443.1	370.9	301.2	231.5
55°	1147.5	1043.0	940.9	841.4	744.3	649.7	562.6	480.4	400.8	323.6	251.4
52.5°	1252.1	1137.6	1023.1	916.0	814.0	706.9	607.4	515.3	428.1	348.5	268.8
50°	1359.1	1229.7	1107.7	988.2	871.2	759.2	652.2	552.6	458.0	370.9	286.3
47.5°	1468.6	1326.8	1189.8	1060.4	935.9	814.0	697.0	587.5	485.4	393.3	303.7
45°	1585.6	1421.3	1274.5	1135.1	998.2	868.7	741.8	622.3	515.3	415.7	321.1
42.5°	1700.1	1523.4	1359.1	1212.3	1060.4	921.0	786.6	659.6	542.7	435.6	336.0
40°	1829.6	1625.5	1438.8	1277.0	1120.1	970.8	828.9	694.5	570.0	455.5	351.0
37.5°	1954.0	1725.0	1528.4	1346.7	1177.4	1020.6	871.2	729.3	597.4	475.4	365.9
35°	2081.0	1834.6	1610.5	1411.4	1234.7	1070.4	911.1	761.7	619.8	492.9	380.9
32.5°	2210.4	1939.1	1697.6	1481.1	1291.9	1115.2	948.4	791.6	644.7	512.8	393.3
30°	2334.9	2038.7	1779.8	1548.3	1344.2	1160.0	985.7	821.4	669.6	530.2	405.7
27.5°	2461.8	2143.2	1861.9	1610.5	1394.0	1199.8	1018.1	848.8	692.0	547.6	418.2
25°	2583.8	2242.8	1939.1	1670.3	1438.8	1239.6	1052.9	876.2	711.9	562.6	428.1
22.5°	2695.8	2329.9	2008.8	1727.5	1486.1	1274.5	1082.8	901.1	731.8	577.5	438.1
20°	2797.9	2419.5	2081.0	1784.8	1530.9	1309.3	1107.7	923.5	749.3	589.9	448.1
17.5°	2897.5	2501.7	2145.7	1837.0	1568.2	1339.2	1132.6	940.9	764.2	599.9	455.5
15°	2982.1	2573.9	2203.0	1881.9	1603.1	1364.1	1152.5	958.3	776.6	609.9	460.5
12.5°	3056.8	2636.1	2252.7	1919.2	1630.4	1386.5	1172.4	973.3	789.1	617.3	468.0
10°	3116.5	2685.9	2292.6	1951.5	1655.3	1403.9	1184.9	985.7	796.6	624.8	473.0
7.5°	3163.8	2725.7	2324.9	1974.0	1672.8	1418.9	1197.3	993.2	804.0	629.8	480.4
5°	3198.6	2755.6	2347.3	1991.4	1687.7	1436.3	1212.3	1005.6	814.0	637.2	480.4
2.5°	3226.0	2778.0	2364.8	2006.3	1697.6	1436.3	1212.3	1005.6	814.0	637.2	480.4
0°	3226.0	2778.0	2364.8	2006.3	1697.6	1436.3	1212.3	1005.6	814.0	637.2	480.4

REPORT NUMBER: P624032

CATALOG NUMBER: IFLD-M-SA4D-827-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.4	10.0	5.0	0.0
85°	27.4	17.4	10.0	0.0
82.5°	39.8	27.4	12.4	0.0
80°	52.3	34.8	17.4	0.0
77.5°	67.2	44.8	22.4	0.0
75°	79.7	52.3	27.4	0.0
72.5°	92.1	62.2	29.9	0.0
70°	104.5	69.7	34.8	0.0
67.5°	119.5	77.2	39.8	0.0
65°	131.9	87.1	42.3	0.0
62.5°	144.4	94.6	47.3	0.0
60°	156.8	102.1	49.8	0.0
57.5°	169.3	109.5	54.8	0.0
55°	181.7	119.5	59.7	0.0
52.5°	194.2	127.0	62.2	0.0
50°	206.6	134.4	64.7	0.0
47.5°	216.6	141.9	69.7	0.0
45°	229.0	149.4	72.2	0.0
42.5°	241.5	154.3	74.7	0.0
40°	251.4	161.8	77.2	0.0
37.5°	263.9	166.8	82.1	0.0
35°	273.8	174.2	84.6	0.0
32.5°	281.3	179.2	87.1	0.0
30°	291.2	184.2	89.6	0.0
27.5°	298.7	189.2	89.6	0.0
25°	306.2	194.2	92.1	0.0
22.5°	313.6	196.6	94.6	0.0
20°	321.1	201.6	97.1	0.0
17.5°	326.1	204.1	97.1	0.0
15°	331.1	206.6	102.1	0.0
12.5°	333.6	209.1	102.1	0.0
10°	338.5	214.1	102.1	0.0
7.5°	343.5	214.1	102.1	0.0
5°	343.5	214.1	102.1	0.0
2.5°	343.5	214.1	102.1	0.0
0°	343.5	214.1	102.1	0.0

(END OF REPORT)