

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: P624033

Luminaire Tested: **IFLD-M-SA4E-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624033
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-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

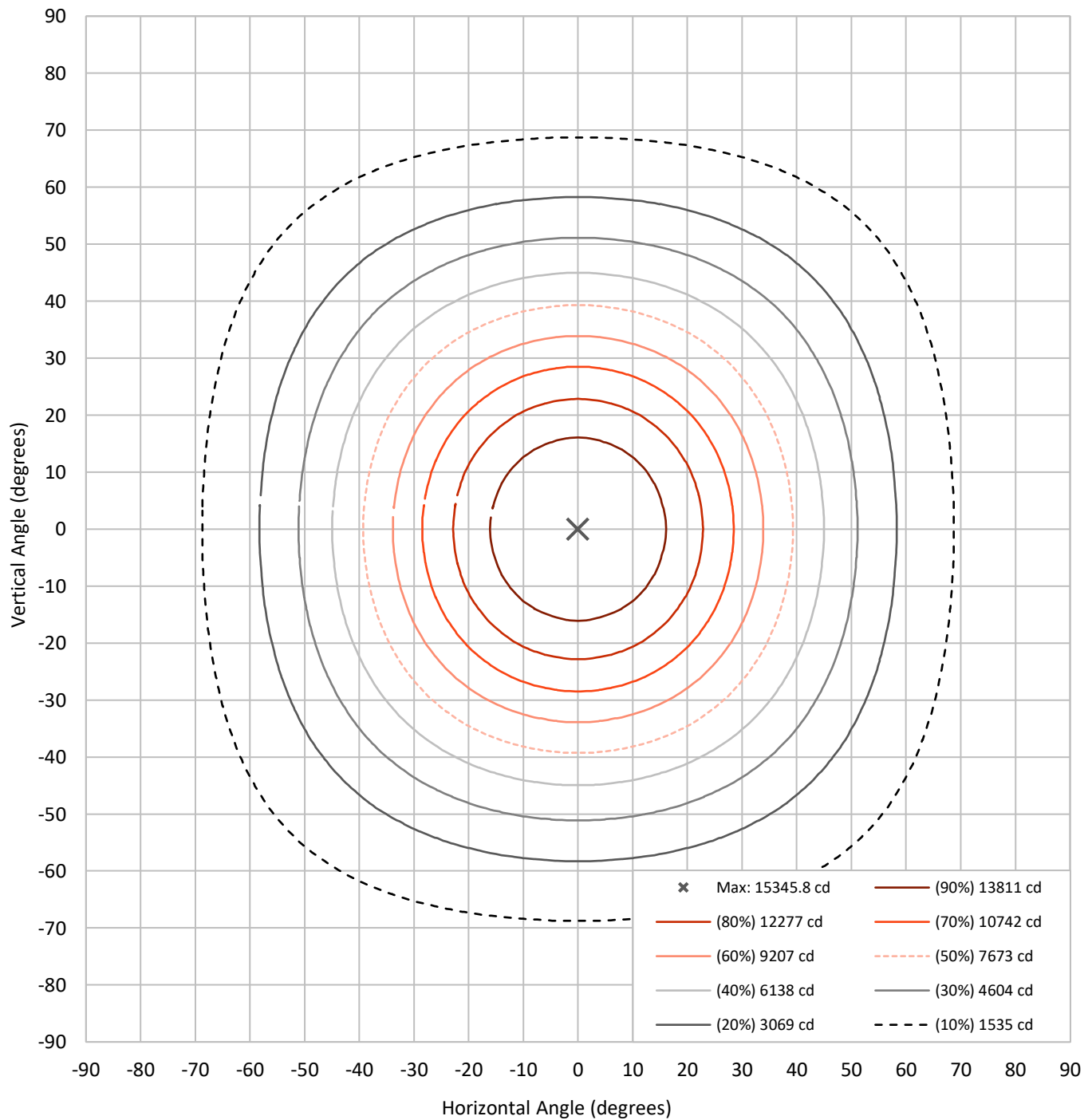
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27630.4 lumens	Max Intensity:	15345.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	87.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	11955.4 lumens	Field Lumens:	19576.6 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: P624033

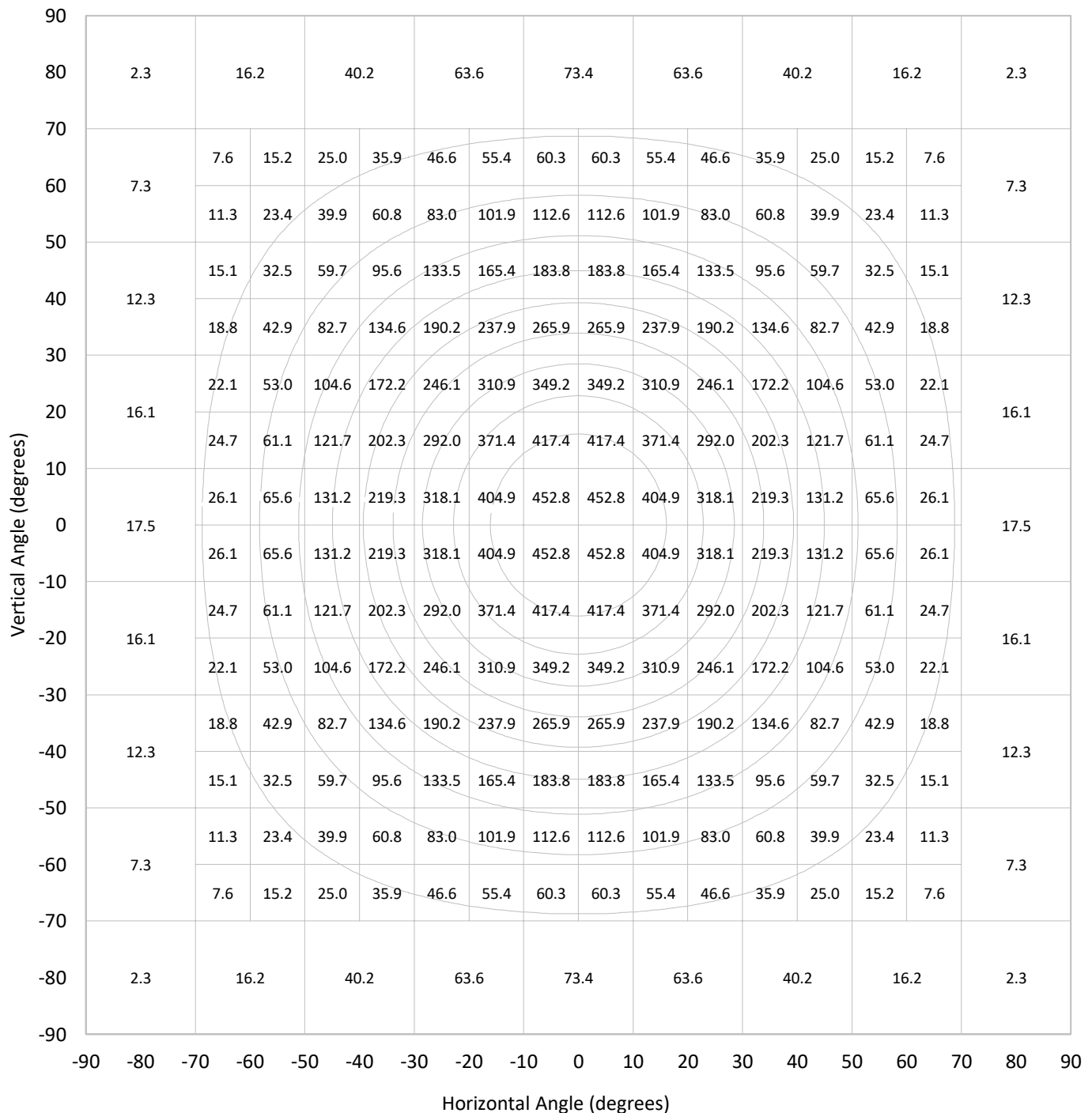
CATALOG NUMBER: IFLD-M-SA4E-827-U-77

Iso-Candela Plot



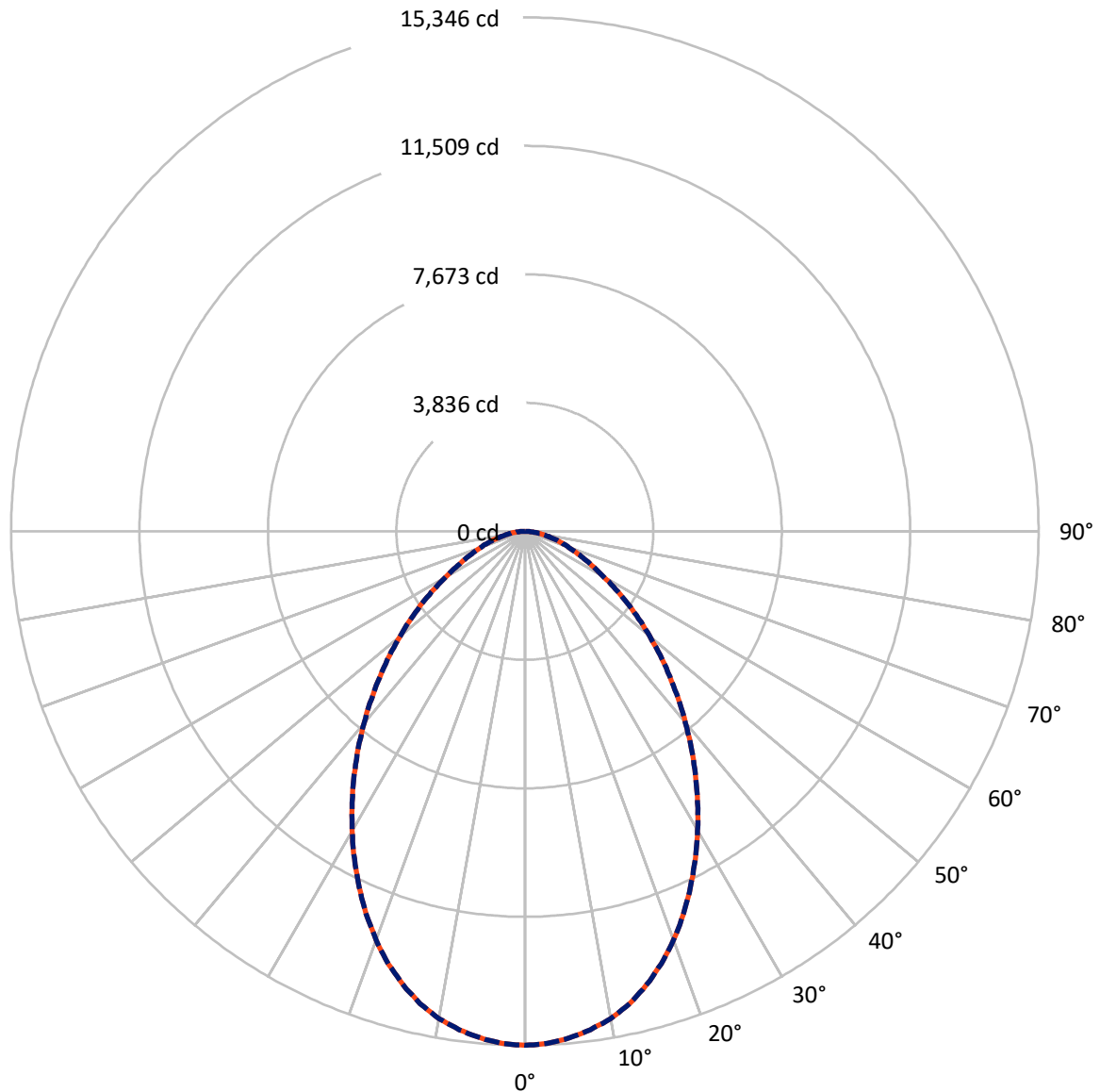
REPORT NUMBER: P624033
CATALOG NUMBER: IFLD-M-SA4E-827-U-77

Lumen Table



REPORT NUMBER: P624033
CATALOG NUMBER: IFLD-M-SA4E-827-U-77

Luminous Intensity Polar Plot

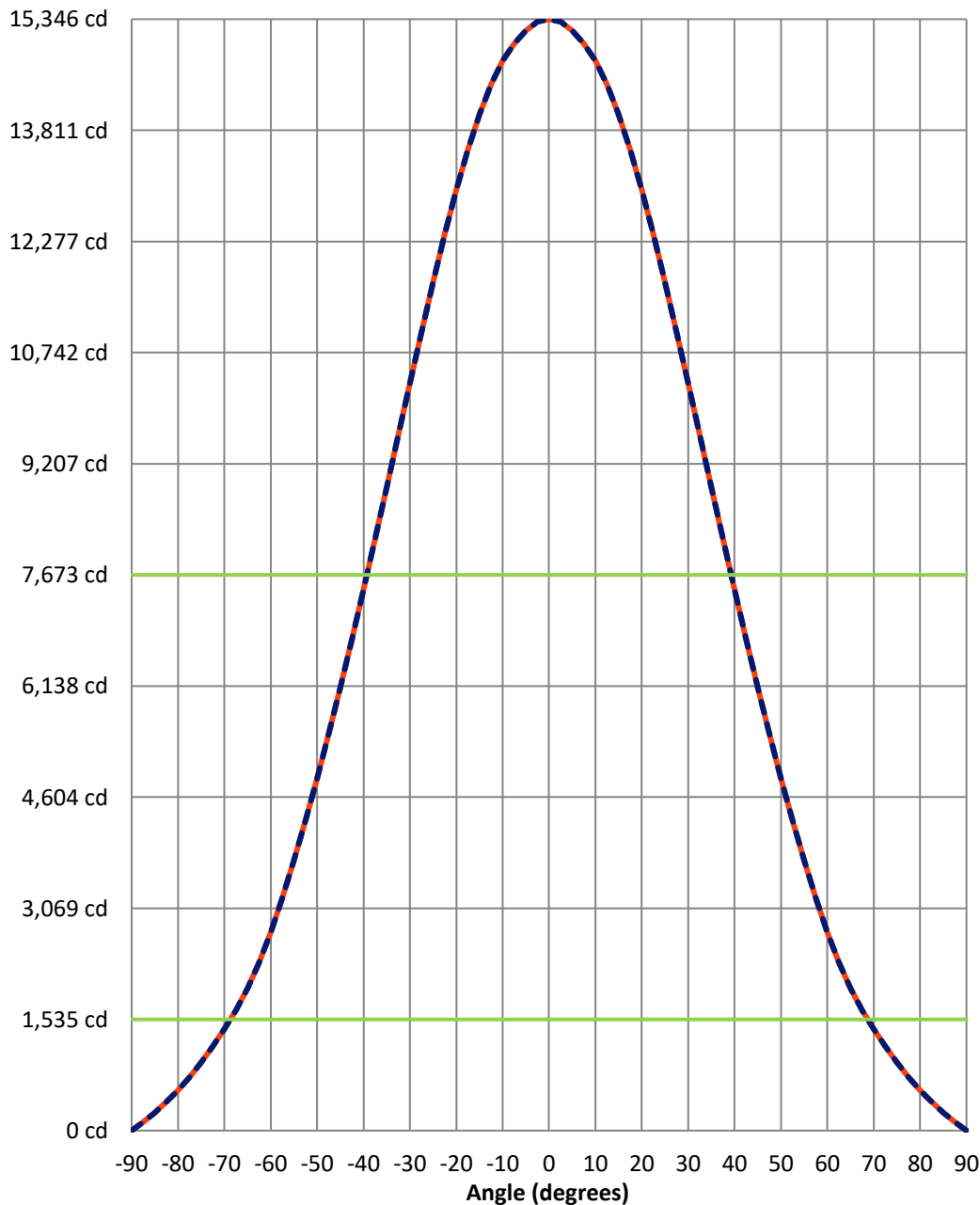


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624033

CATALOG NUMBER: IFLD-M-SA4E-827-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 11955.4
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 19576.6
Efficiency: 70.9%

Spill:

Lumens: 8053.8
Efficiency: 29.1%

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



REPORT NUMBER: P624033

CATALOG NUMBER: IFLD-M-SA4E-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°	118.1	118.1	118.1	118.1	118.1	118.1	118.1	112.3	112.3	109.5	106.6
85°	247.7	247.7	247.7	247.7	247.7	242.0	239.1	236.2	233.3	227.6	224.7
82.5°	397.5	397.5	397.5	397.5	391.8	386.0	383.1	377.4	371.6	363.0	354.3
80°	556.0	556.0	556.0	556.0	547.3	541.6	532.9	527.2	518.5	507.0	495.5
77.5°	737.5	737.5	737.5	728.8	723.1	714.4	705.8	694.3	682.7	668.3	651.0
75°	942.0	942.0	942.0	930.5	921.8	913.2	898.8	884.4	867.1	846.9	823.9
72.5°	1163.8	1163.8	1163.8	1149.4	1140.8	1126.4	1109.1	1088.9	1068.8	1042.8	1014.0
70°	1402.9	1402.9	1402.9	1385.6	1371.2	1356.8	1333.8	1310.7	1281.9	1253.1	1218.6
67.5°	1662.2	1662.2	1662.2	1642.0	1624.7	1604.6	1578.7	1549.8	1515.3	1474.9	1434.6
65°	1964.7	1964.7	1953.1	1935.9	1915.7	1886.9	1855.2	1814.9	1771.7	1719.8	1665.1
62.5°	2321.9	2321.9	2304.6	2284.4	2258.5	2221.1	2177.8	2126.0	2065.5	1999.2	1933.0
60°	2736.7	2736.7	2716.5	2690.6	2653.2	2607.1	2549.5	2483.2	2408.3	2324.8	2244.1
57.5°	3214.9	3214.9	3189.0	3154.4	3108.3	3050.7	2978.7	2895.2	2800.1	2696.4	2595.6
55°	3733.5	3733.5	3701.8	3661.4	3606.7	3537.6	3451.1	3353.2	3238.0	3119.9	2990.2
52.5°	4283.7	4283.7	4246.2	4200.1	4136.8	4056.1	3958.2	3842.9	3710.4	3572.1	3419.5
50°	4862.7	4862.7	4819.5	4767.6	4695.6	4600.6	4488.2	4355.7	4208.8	4047.5	3871.7
47.5°	5482.1	5482.1	5433.1	5372.6	5286.2	5176.7	5044.2	4891.5	4724.4	4542.9	4344.2
45°	6118.7	6118.7	6064.0	5994.8	5899.8	5775.9	5629.0	5482.1	5268.9	5058.6	4828.1
42.5°	6781.3	6781.3	6717.9	6640.1	6530.7	6395.3	6228.2	6038.1	5827.8	5591.5	5340.9
40°	7469.8	7469.8	7397.8	7308.5	7187.5	7031.9	6844.7	6631.5	6395.3	6133.1	5856.6
37.5°	8172.7	8172.7	8092.0	7994.1	7858.7	7685.8	7475.5	7239.3	6974.3	6683.3	6378.0
35°	8881.4	8881.4	8792.1	8685.5	8535.7	8345.5	8118.0	7855.8	7562.0	7245.1	6902.3
32.5°	9604.4	9604.4	9506.5	9385.5	9215.5	9005.2	8754.6	8469.4	8172.7	7804.0	7429.5
30°	10318.8	10318.8	10212.3	10079.7	9898.3	9667.8	9394.1	9080.1	8731.6	8354.2	7950.9
27.5°	11021.8	10992.9	10903.6	10762.5	10563.7	10318.8	10022.1	9682.2	9304.8	8890.0	8457.9
25°	11713.1	11681.4	11583.5	11427.9	11214.8	10946.9	10627.1	10264.1	9857.9	9420.1	8947.6
22.5°	12375.7	12341.1	12237.4	12070.3	11842.8	11551.8	11209.0	10820.1	10388.0	9918.4	9420.1
20°	12989.3	12951.9	12845.3	12669.5	12433.3	12125.1	11762.1	11344.4	10883.5	10388.0	9857.9
17.5°	13542.4	13505.0	13392.6	13211.1	12989.3	12646.5	12272.0	11831.2	11344.4	10820.1	10264.1
15°	14029.3	13988.9	13873.7	13692.2	13438.7	13116.1	12721.4	12272.0	11762.1	11209.0	10627.1
12.5°	14444.1	14403.8	14285.6	14104.2	13842.0	13519.4	13116.1	12646.5	12125.1	11551.8	10946.9
10°	14772.5	14732.2	14619.8	14447.0	14176.2	13842.0	13438.7	12989.3	12433.3	11842.8	11214.8
7.5°	15008.7	14971.3	14867.6	14694.7	14447.0	14104.2	13692.2	13211.1	12669.5	12070.3	11427.9
5°	15187.3	15144.1	15040.4	14867.6	14619.8	14285.6	13873.7	13392.6	12845.3	12237.4	11583.5
2.5°	15311.2	15259.3	15144.1	14971.3	14732.2	14403.8	13988.9	13505.0	12951.9	12341.1	11681.4
0°	15345.8	15311.2	15187.3	15008.7	14772.5	14444.1	14029.3	13542.4	12989.3	12375.7	11713.1

REPORT NUMBER: P624033

CATALOG NUMBER: IFLD-M-SA4E-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°	103.7	103.7	100.8	97.9	95.1	89.3	86.4	83.5	80.7	74.9	72.0
85°	218.9	213.2	207.4	201.7	193.0	187.2	178.6	172.8	164.2	155.6	146.9
82.5°	345.7	337.0	325.5	316.9	305.4	291.0	279.4	265.0	250.6	239.1	224.7
80°	484.0	469.6	455.2	440.8	423.5	406.2	388.9	371.6	351.5	331.3	311.1
77.5°	633.8	613.6	593.4	570.4	550.2	527.2	504.1	481.1	455.2	429.2	403.3
75°	800.8	774.9	746.1	717.3	691.4	659.7	628.0	596.3	561.7	530.1	495.5
72.5°	982.3	950.6	916.1	881.5	844.1	803.7	763.4	720.2	679.9	639.5	596.3
70°	1178.2	1140.8	1097.6	1054.4	1008.3	959.3	910.3	858.5	806.6	754.8	702.9
67.5°	1388.5	1342.4	1290.6	1238.7	1181.1	1123.5	1065.9	1005.4	942.0	878.6	818.1
65°	1613.2	1555.6	1495.1	1428.9	1362.6	1296.3	1227.2	1155.2	1083.2	1008.3	942.0
62.5°	1863.8	1791.8	1714.0	1633.4	1558.5	1477.8	1402.9	1313.6	1227.2	1143.7	1060.1
60°	2154.8	2059.7	1964.7	1863.8	1768.8	1665.1	1572.9	1474.9	1377.0	1281.9	1184.0
57.5°	2480.3	2359.3	2244.1	2123.1	1996.4	1881.1	1763.0	1644.9	1535.4	1423.1	1316.5
55°	2849.1	2702.1	2558.1	2408.3	2261.4	2117.4	1967.6	1835.0	1699.6	1572.9	1449.0
52.5°	3252.4	3085.3	2906.7	2736.7	2549.5	2370.9	2203.8	2036.7	1878.2	1725.6	1584.4
50°	3684.5	3488.6	3284.1	3076.6	2863.5	2653.2	2451.5	2255.6	2071.3	1892.7	1725.6
47.5°	4133.9	3912.1	3678.7	3442.5	3214.9	2958.5	2716.5	2494.7	2272.9	2071.3	1878.2
45°	4594.8	4344.2	4087.8	3819.9	3552.0	3275.4	3007.5	2736.7	2494.7	2255.6	2036.7
42.5°	5070.1	4787.8	4502.6	4205.9	3909.2	3606.7	3304.2	3007.5	2716.5	2451.5	2203.8
40°	5559.8	5248.7	4923.2	4600.6	4283.7	3938.0	3606.7	3275.4	2958.5	2653.2	2370.9
37.5°	6049.6	5709.6	5358.2	4995.2	4632.2	4283.7	3909.2	3552.0	3214.9	2863.5	2549.5
35°	6542.2	6167.7	5787.4	5392.8	4995.2	4600.6	4205.9	3819.9	3442.5	3076.6	2736.7
32.5°	7037.7	6628.6	6208.0	5787.4	5358.2	4923.2	4502.6	4087.8	3678.7	3284.1	2906.7
30°	7524.5	7080.9	6628.6	6167.7	5709.6	5248.7	4787.8	4344.2	3912.1	3488.6	3085.3
27.5°	7999.8	7524.5	7037.7	6542.2	6049.6	5559.8	5070.1	4594.8	4133.9	3684.5	3252.4
25°	8457.9	7950.9	7429.5	6902.3	6378.0	5856.6	5340.9	4828.1	4344.2	3871.7	3419.5
22.5°	8890.0	8354.2	7804.0	7245.1	6683.3	6133.1	5591.5	5058.6	4542.9	4047.5	3572.1
20°	9304.8	8731.6	8172.7	7562.0	6974.3	6395.3	5827.8	5268.9	4724.4	4208.8	3710.4
17.5°	9682.2	9080.1	8469.4	7855.8	7239.3	6631.5	6038.1	5482.1	4891.5	4355.7	3842.9
15°	10022.1	9394.1	8754.6	8118.0	7475.5	6844.7	6228.2	5629.0	5044.2	4488.2	3958.2
12.5°	10318.8	9667.8	9005.2	8345.5	7685.8	7031.9	6395.3	5775.9	5176.7	4600.6	4056.1
10°	10563.7	9898.3	9215.5	8535.7	7858.7	7187.5	6530.7	5899.8	5286.2	4695.6	4136.8
7.5°	10762.5	10079.7	9385.5	8685.5	7994.1	7308.5	6640.1	5994.8	5372.6	4767.6	4200.1
5°	10903.6	10212.3	9506.5	8792.1	8092.0	7397.8	6717.9	6064.0	5433.1	4819.5	4246.2
2.5°	10992.9	10318.8	9604.4	8881.4	8172.7	7469.8	6781.3	6118.7	5482.1	4862.7	4283.7
0°	11021.8	10318.8	9604.4	8881.4	8172.7	7469.8	6781.3	6118.7	5482.1	4862.7	4283.7

REPORT NUMBER: P624033

CATALOG NUMBER: IFLD-M-SA4E-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°	69.1	63.4	57.6	54.7	49.0	46.1	40.3	34.6	31.7	25.9	20.2
85°	138.3	126.8	118.1	109.5	100.8	89.3	80.7	72.0	60.5	51.9	40.3
82.5°	210.3	195.9	181.5	167.1	152.7	138.3	121.0	106.6	92.2	77.8	60.5
80°	291.0	267.9	247.7	227.6	207.4	187.2	164.2	144.0	121.0	100.8	80.7
77.5°	374.5	348.6	319.8	291.0	262.1	236.2	207.4	181.5	155.6	126.8	100.8
75°	463.8	429.2	397.5	360.1	325.5	288.1	253.5	218.9	187.2	155.6	121.0
72.5°	556.0	512.8	469.6	429.2	386.0	342.8	302.5	259.3	218.9	181.5	144.0
70°	651.0	599.2	547.3	498.4	449.4	397.5	351.5	302.5	253.5	207.4	164.2
67.5°	751.9	691.4	630.9	567.5	512.8	455.2	397.5	342.8	288.1	236.2	187.2
65°	861.3	789.3	714.4	648.2	576.2	512.8	449.4	386.0	325.5	262.1	207.4
62.5°	973.7	890.2	806.6	723.1	648.2	567.5	498.4	429.2	360.1	291.0	227.6
60°	1088.9	993.9	898.8	806.6	714.4	630.9	547.3	469.6	397.5	319.8	247.7
57.5°	1207.0	1100.4	993.9	890.2	789.3	691.4	599.2	512.8	429.2	348.6	267.9
55°	1328.0	1207.0	1088.9	973.7	861.3	751.9	651.0	556.0	463.8	374.5	291.0
52.5°	1449.0	1316.5	1184.0	1060.1	942.0	818.1	702.9	596.3	495.5	403.3	311.1
50°	1572.9	1423.1	1281.9	1143.7	1008.3	878.6	754.8	639.5	530.1	429.2	331.3
47.5°	1699.6	1535.4	1377.0	1227.2	1083.2	942.0	806.6	679.9	561.7	455.2	351.5
45°	1835.0	1644.9	1474.9	1313.6	1155.2	1005.4	858.5	720.2	596.3	481.1	371.6
42.5°	1967.6	1763.0	1572.9	1402.9	1227.2	1065.9	910.3	763.4	628.0	504.1	388.9
40°	2117.4	1881.1	1665.1	1477.8	1296.3	1123.5	959.3	803.7	659.7	527.2	406.2
37.5°	2261.4	1996.4	1768.8	1558.5	1362.6	1181.1	1008.3	844.1	691.4	550.2	423.5
35°	2408.3	2123.1	1863.8	1633.4	1428.9	1238.7	1054.4	881.5	717.3	570.4	440.8
32.5°	2558.1	2244.1	1964.7	1714.0	1495.1	1290.6	1097.6	916.1	746.1	593.4	455.2
30°	2702.1	2359.3	2059.7	1791.8	1555.6	1342.4	1140.8	950.6	774.9	613.6	469.6
27.5°	2849.1	2480.3	2154.8	1863.8	1613.2	1388.5	1178.2	982.3	800.8	633.8	484.0
25°	2990.2	2595.6	2244.1	1933.0	1665.1	1434.6	1218.6	1014.0	823.9	651.0	495.5
22.5°	3119.9	2696.4	2324.8	1999.2	1719.8	1474.9	1253.1	1042.8	846.9	668.3	507.0
20°	3238.0	2800.1	2408.3	2065.5	1771.7	1515.3	1281.9	1068.8	867.1	682.7	518.5
17.5°	3353.2	2895.2	2483.2	2126.0	1814.9	1549.8	1310.7	1088.9	884.4	694.3	527.2
15°	3451.1	2978.7	2549.5	2177.8	1855.2	1578.7	1333.8	1109.1	898.8	705.8	532.9
12.5°	3537.6	3050.7	2607.1	2221.1	1886.9	1604.6	1356.8	1126.4	913.2	714.4	541.6
10°	3606.7	3108.3	2653.2	2258.5	1915.7	1624.7	1371.2	1140.8	921.8	723.1	547.3
7.5°	3661.4	3154.4	2690.6	2284.4	1935.9	1642.0	1385.6	1149.4	930.5	728.8	556.0
5°	3701.8	3189.0	2716.5	2304.6	1953.1	1662.2	1402.9	1163.8	942.0	737.5	556.0
2.5°	3733.5	3214.9	2736.7	2321.9	1964.7	1662.2	1402.9	1163.8	942.0	737.5	556.0
0°	3733.5	3214.9	2736.7	2321.9	1964.7	1662.2	1402.9	1163.8	942.0	737.5	556.0

REPORT NUMBER: P624033

CATALOG NUMBER: IFLD-M-SA4E-827-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.4	11.5	5.8	0.0
85°	31.7	20.2	11.5	0.0
82.5°	46.1	31.7	14.4	0.0
80°	60.5	40.3	20.2	0.0
77.5°	77.8	51.9	25.9	0.0
75°	92.2	60.5	31.7	0.0
72.5°	106.6	72.0	34.6	0.0
70°	121.0	80.7	40.3	0.0
67.5°	138.3	89.3	46.1	0.0
65°	152.7	100.8	49.0	0.0
62.5°	167.1	109.5	54.7	0.0
60°	181.5	118.1	57.6	0.0
57.5°	195.9	126.8	63.4	0.0
55°	210.3	138.3	69.1	0.0
52.5°	224.7	146.9	72.0	0.0
50°	239.1	155.6	74.9	0.0
47.5°	250.6	164.2	80.7	0.0
45°	265.0	172.8	83.5	0.0
42.5°	279.4	178.6	86.4	0.0
40°	291.0	187.2	89.3	0.0
37.5°	305.4	193.0	95.1	0.0
35°	316.9	201.7	97.9	0.0
32.5°	325.5	207.4	100.8	0.0
30°	337.0	213.2	103.7	0.0
27.5°	345.7	218.9	103.7	0.0
25°	354.3	224.7	106.6	0.0
22.5°	363.0	227.6	109.5	0.0
20°	371.6	233.3	112.3	0.0
17.5°	377.4	236.2	112.3	0.0
15°	383.1	239.1	118.1	0.0
12.5°	386.0	242.0	118.1	0.0
10°	391.8	247.7	118.1	0.0
7.5°	397.5	247.7	118.1	0.0
5°	397.5	247.7	118.1	0.0
2.5°	397.5	247.7	118.1	0.0
0°	397.5	247.7	118.1	0.0

(END OF REPORT)