

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: P624038

Luminaire Tested: **IFLD-L-SA7E-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624038
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7E-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

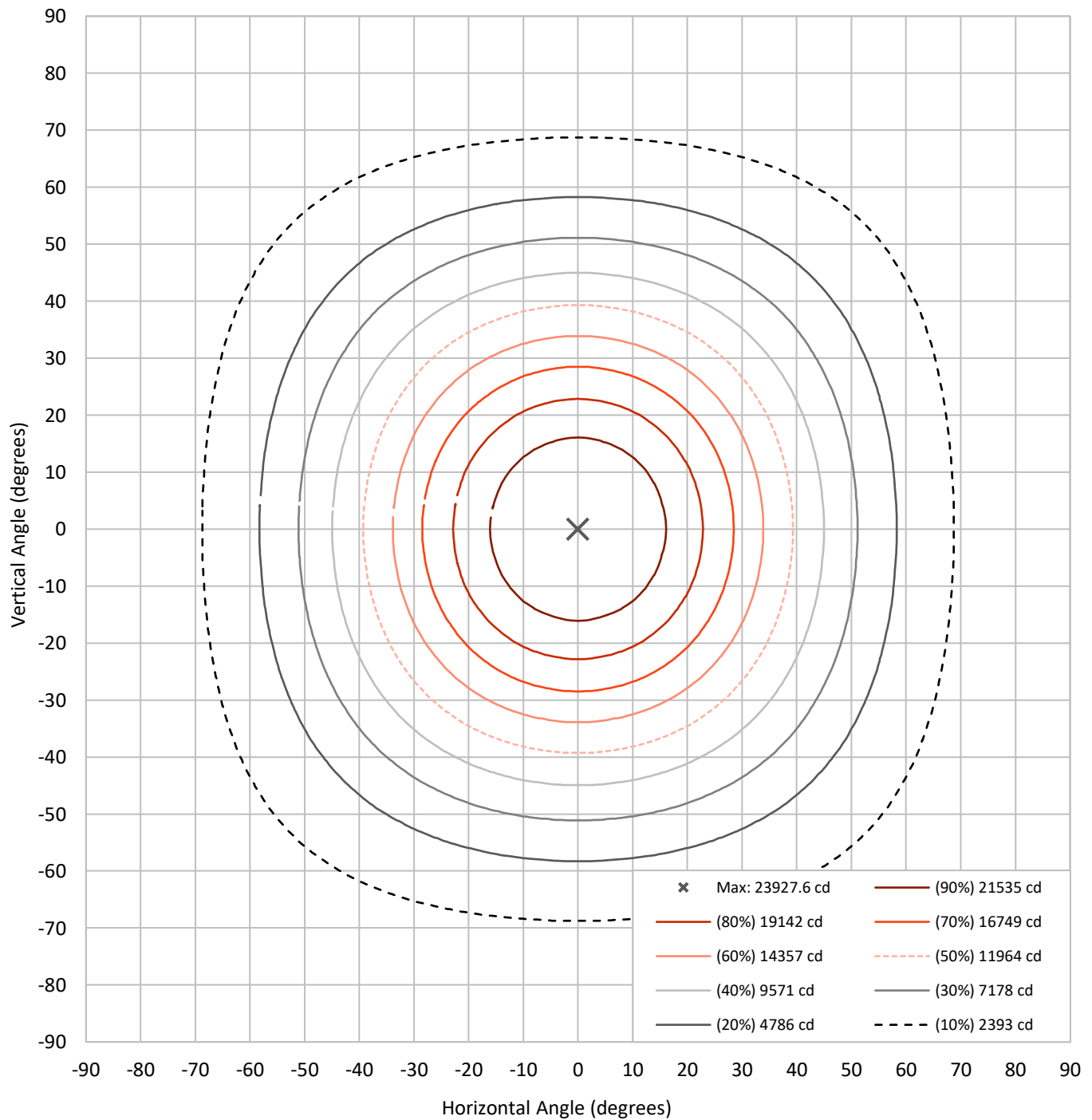
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	43082.2 lumens	Max Intensity:	23927.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	80.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	18641.3 lumens	Field Lumens:	30524.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	532.7		
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: P624038

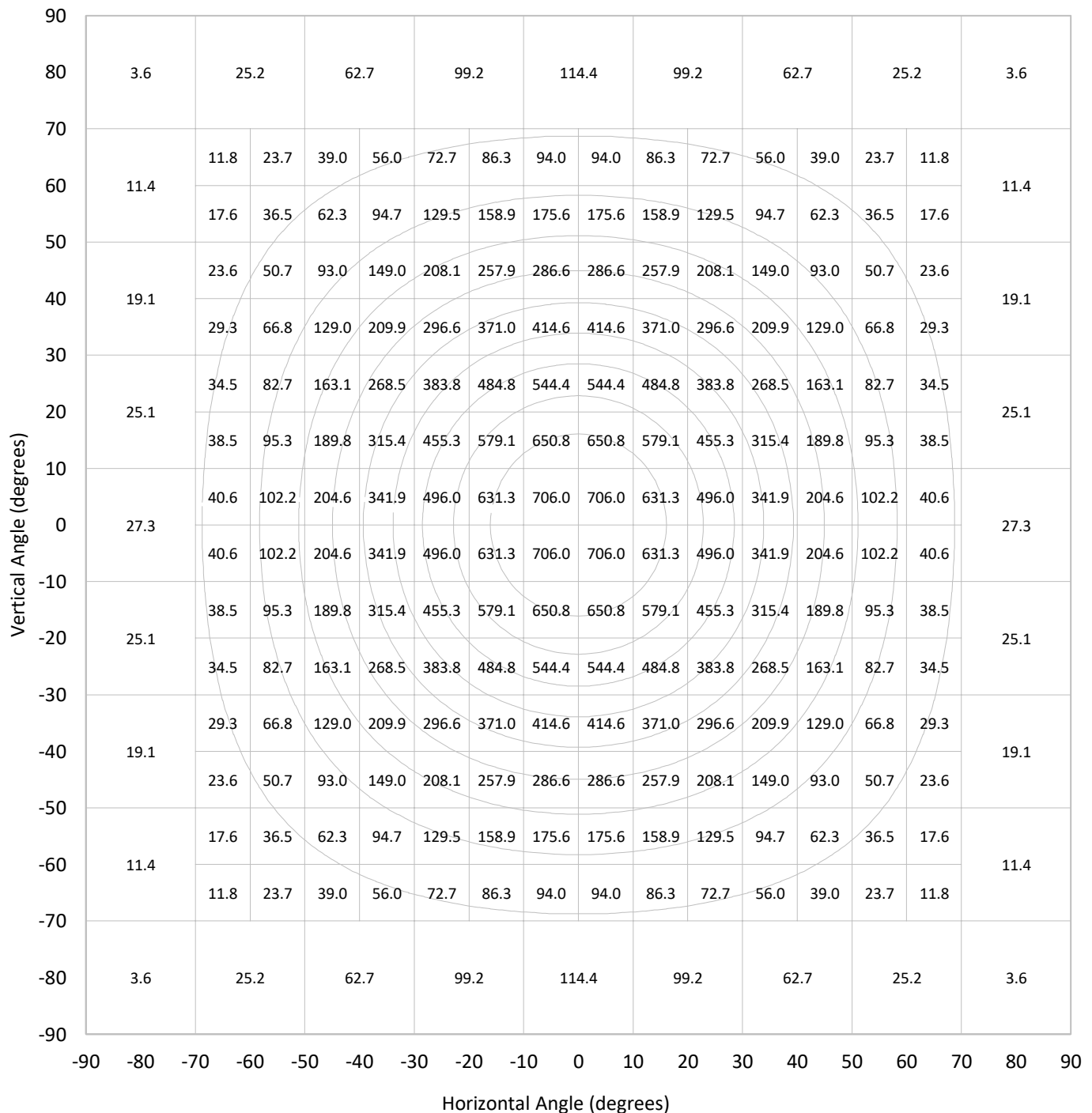
CATALOG NUMBER: IFLD-L-SA7E-827-U-77

Iso-Candela Plot



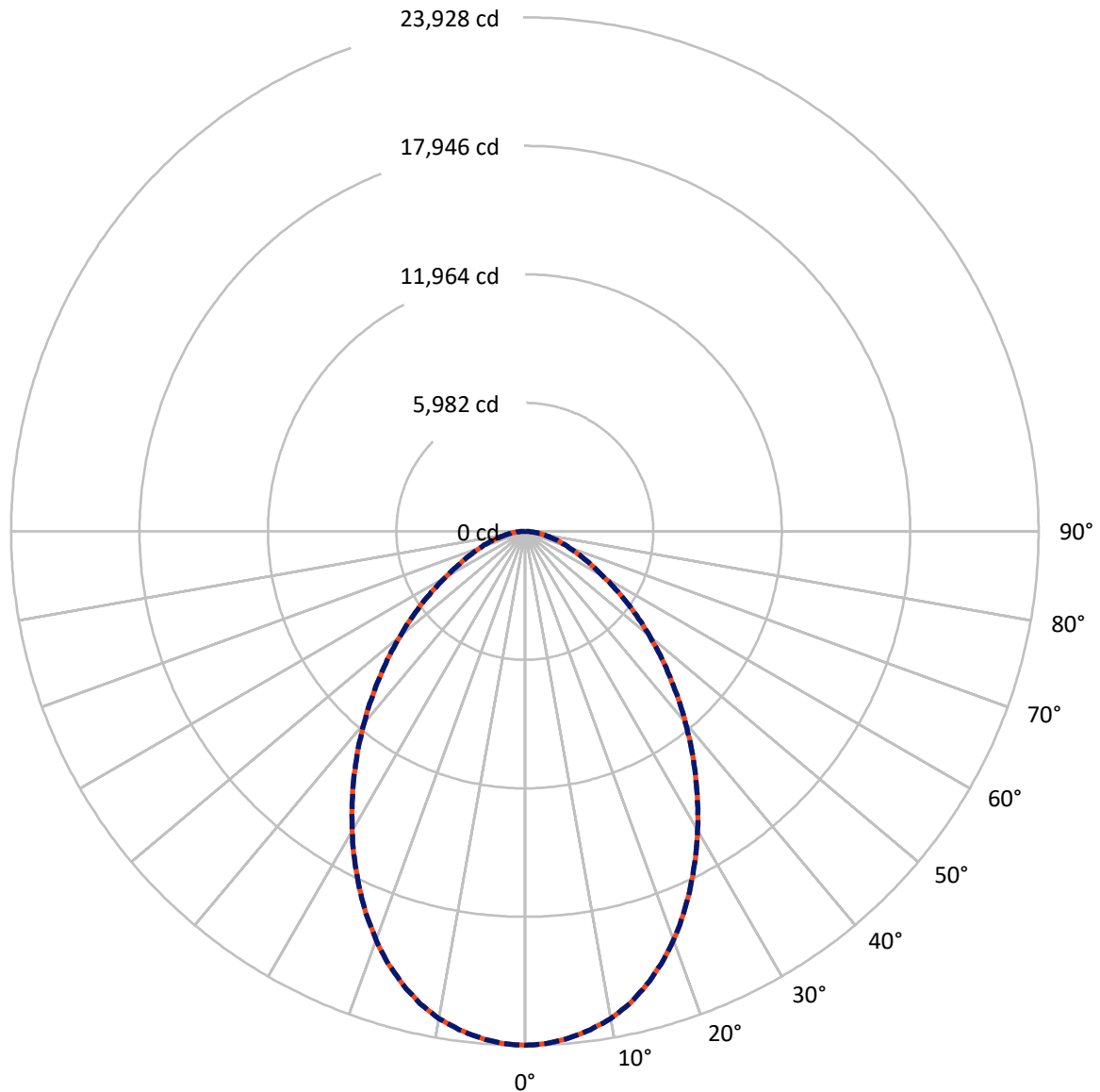
REPORT NUMBER: P624038
CATALOG NUMBER: IFLD-L-SA7E-827-U-77

Lumen Table



REPORT NUMBER: P624038
CATALOG NUMBER: IFLD-L-SA7E-827-U-77

Luminous Intensity Polar Plot

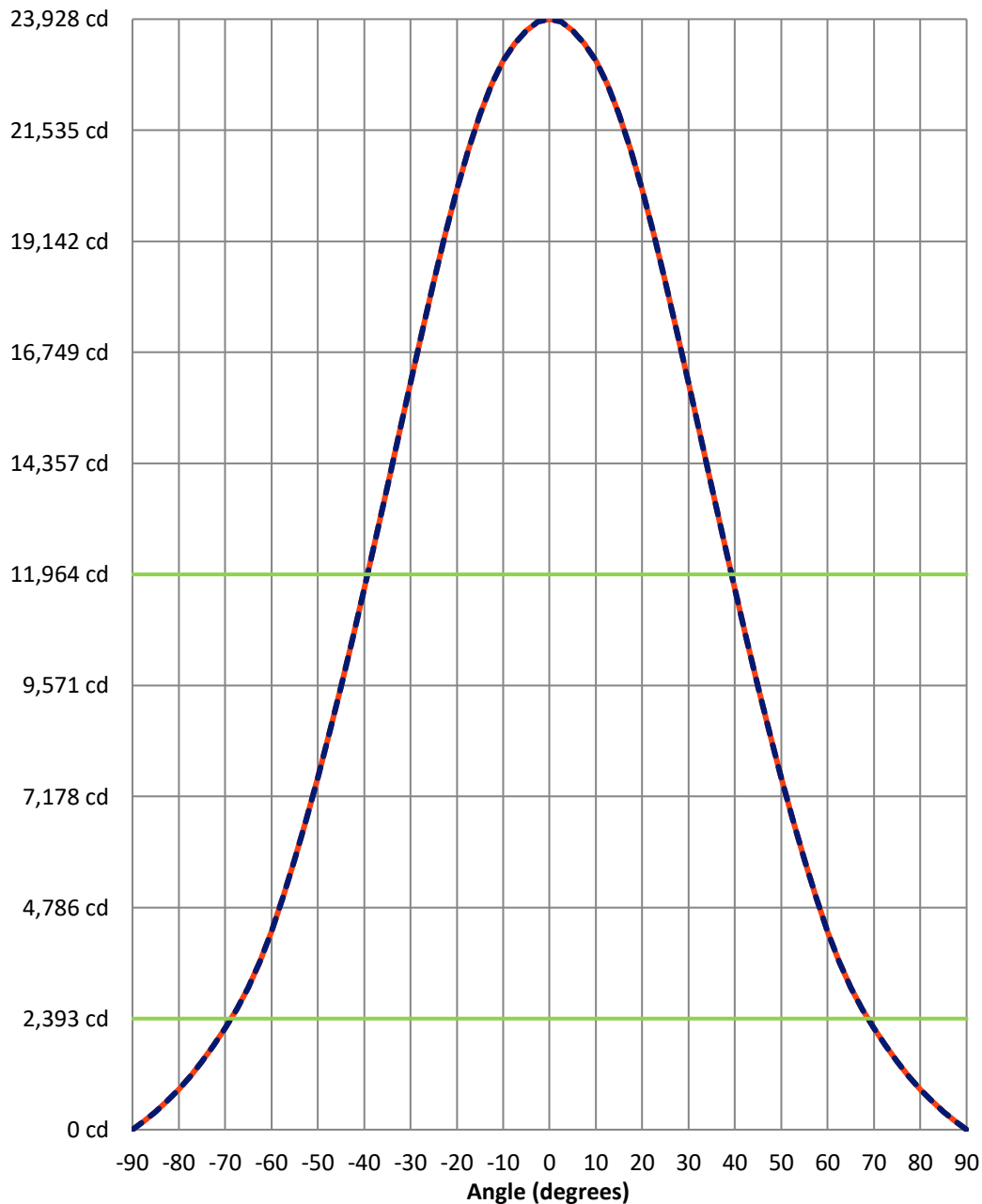


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624038

CATALOG NUMBER: IFLD-L-SA7E-827-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 18641.3
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 30524.4
Efficiency: 70.9%

Spill:

Lumens: 12557.8
Efficiency: 29.1%

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

REPORT NUMBER: P624038

CATALOG NUMBER: IFLD-L-SA7E-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°	184.2	184.2	184.2	184.2	184.2	184.2	184.2	175.2	175.2	170.7	166.2
85°	386.3	386.3	386.3	386.3	386.3	377.3	372.8	368.3	363.8	354.8	350.4
82.5°	619.9	619.9	619.9	619.9	610.9	601.9	597.4	588.4	579.4	566.0	552.5
80°	866.9	866.9	866.9	866.9	853.4	844.5	831.0	822.0	808.5	790.6	772.6
77.5°	1149.9	1149.9	1149.9	1136.4	1127.4	1114.0	1100.5	1082.5	1064.5	1042.1	1015.1
75°	1468.8	1468.8	1468.8	1450.8	1437.4	1423.9	1401.4	1379.0	1352.0	1320.6	1284.6
72.5°	1814.7	1814.7	1814.7	1792.2	1778.7	1756.3	1729.3	1697.9	1666.4	1626.0	1581.1
70°	2187.5	2187.5	2187.5	2160.5	2138.1	2115.6	2079.7	2043.8	1998.8	1953.9	1900.0
67.5°	2591.7	2591.7	2591.7	2560.3	2533.4	2501.9	2461.5	2416.6	2362.7	2299.8	2236.9
65°	3063.4	3063.4	3045.4	3018.5	2987.0	2942.1	2892.7	2829.8	2762.4	2681.6	2596.2
62.5°	3620.4	3620.4	3593.4	3562.0	3521.5	3463.2	3395.8	3314.9	3220.6	3117.3	3014.0
60°	4267.2	4267.2	4235.7	4195.3	4136.9	4065.0	3975.2	3871.9	3755.1	3624.9	3499.1
57.5°	5012.8	5012.8	4972.4	4918.5	4846.6	4756.8	4644.5	4514.2	4366.0	4204.3	4047.1
55°	5821.3	5821.3	5771.9	5709.0	5623.7	5515.9	5381.1	5228.4	5048.7	4864.6	4662.5
52.5°	6679.3	6679.3	6620.9	6549.0	6450.2	6324.4	6171.7	5992.0	5785.4	5569.8	5331.7
50°	7582.1	7582.1	7514.7	7433.9	7321.6	7173.3	6998.2	6791.5	6562.5	6310.9	6036.9
47.5°	8547.8	8547.8	8471.5	8377.1	8242.4	8071.7	7865.1	7627.0	7366.5	7083.5	6773.6
45°	9540.5	9540.5	9455.2	9347.4	9199.1	9006.0	8776.9	8547.8	8215.4	7887.5	7528.2
42.5°	10573.6	10573.6	10474.8	10353.5	10182.8	9971.7	9711.2	9414.7	9086.8	8718.5	8327.7
40°	11647.1	11647.1	11534.9	11395.6	11207.0	10964.4	10672.4	10340.0	9971.7	9563.0	9131.8
37.5°	12743.1	12743.1	12617.4	12464.6	12253.5	11984.0	11656.1	11287.8	10874.6	10420.9	9944.8
35°	13848.1	13848.1	13708.9	13542.7	13309.1	13012.6	12657.8	12249.0	11790.9	11296.8	10762.3
32.5°	14975.5	14975.5	14822.8	14634.2	14369.2	14041.3	13650.5	13205.8	12743.1	12168.2	11584.3
30°	16089.5	16089.5	15923.3	15716.7	15433.7	15074.4	14647.6	14158.0	13614.5	13026.1	12397.3
27.5°	17185.5	17140.6	17001.3	16781.2	16471.3	16089.5	15626.9	15096.8	14508.4	13861.6	13187.8
25°	18263.5	18214.1	18061.4	17818.8	17486.4	17068.7	16570.1	16004.2	15370.8	14688.1	13951.4
22.5°	19296.6	19242.7	19081.0	18820.5	18465.6	18012.0	17477.5	16871.1	16197.3	15465.1	14688.1
20°	20253.4	20195.0	20028.8	19754.8	19386.5	18905.8	18339.9	17688.6	16969.9	16197.3	15370.8
17.5°	21115.8	21057.4	20882.2	20599.2	20253.4	19718.9	19134.9	18447.7	17688.6	16871.1	16004.2
15°	21874.9	21812.0	21632.3	21349.4	20954.1	20451.0	19835.6	19134.9	18339.9	17477.5	16570.1
12.5°	22521.7	22458.8	22274.7	21991.7	21582.9	21079.9	20451.0	19718.9	18905.8	18012.0	17068.7
10°	23033.8	22970.9	22795.7	22526.2	22104.0	21582.9	20954.1	20253.4	19386.5	18465.6	17486.4
7.5°	23402.1	23343.7	23182.0	22912.5	22526.2	21991.7	21349.4	20599.2	19754.8	18820.5	17818.8
5°	23680.6	23613.2	23451.5	23182.0	22795.7	22274.7	21632.3	20882.2	20028.8	19081.0	18061.4
2.5°	23873.7	23792.9	23613.2	23343.7	22970.9	22458.8	21812.0	21057.4	20195.0	19242.7	18214.1
0°	23927.6	23873.7	23680.6	23402.1	23033.8	22521.7	21874.9	21115.8	20253.4	19296.6	18263.5

REPORT NUMBER: P624038

CATALOG NUMBER: IFLD-L-SA7E-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°	161.7	161.7	157.2	152.7	148.2	139.2	134.8	130.3	125.8	116.8	112.3
85°	341.4	332.4	323.4	314.4	300.9	292.0	278.5	269.5	256.0	242.6	229.1
82.5°	539.0	525.5	507.6	494.1	476.1	453.7	435.7	413.2	390.8	372.8	350.4
80°	754.6	732.2	709.7	687.2	660.3	633.3	606.4	579.4	548.0	516.6	485.1
77.5°	988.2	956.7	925.3	889.4	857.9	822.0	786.1	750.1	709.7	669.3	628.8
75°	1248.7	1208.3	1163.4	1118.4	1078.0	1028.6	979.2	929.8	875.9	826.5	772.6
72.5°	1531.7	1482.3	1428.4	1374.5	1316.1	1253.2	1190.3	1122.9	1060.1	997.2	929.8
70°	1837.1	1778.7	1711.4	1644.0	1572.1	1495.8	1419.4	1338.5	1257.7	1176.8	1096.0
67.5°	2165.0	2093.2	2012.3	1931.5	1841.6	1751.8	1662.0	1567.6	1468.8	1370.0	1275.7
65°	2515.4	2425.6	2331.2	2227.9	2124.6	2021.3	1913.5	1801.2	1688.9	1572.1	1468.8
62.5°	2906.2	2793.9	2672.6	2546.8	2430.0	2304.3	2187.5	2048.2	1913.5	1783.2	1653.0
60°	3359.8	3211.6	3063.4	2906.2	2757.9	2596.2	2452.5	2299.8	2147.1	1998.8	1846.1
57.5°	3867.4	3678.8	3499.1	3310.4	3112.8	2933.1	2749.0	2564.8	2394.1	2218.9	2052.7
55°	4442.4	4213.3	3988.7	3755.1	3526.0	3301.4	3067.9	2861.3	2650.1	2452.5	2259.4
52.5°	5071.2	4810.7	4532.2	4267.2	3975.2	3696.7	3436.2	3175.7	2928.6	2690.6	2470.5
50°	5745.0	5439.5	5120.6	4797.2	4464.8	4136.9	3822.5	3517.1	3229.6	2951.1	2690.6
47.5°	6445.7	6099.8	5736.0	5367.7	5012.8	4613.0	4235.7	3889.9	3544.0	3229.6	2928.6
45°	7164.4	6773.6	6373.8	5956.1	5538.3	5107.1	4689.4	4267.2	3889.9	3517.1	3175.7
42.5°	7905.5	7465.3	7020.6	6558.0	6095.3	5623.7	5152.1	4689.4	4235.7	3822.5	3436.2
40°	8669.1	8184.0	7676.4	7173.3	6679.3	6140.2	5623.7	5107.1	4613.0	4136.9	3696.7
37.5°	9432.7	8902.7	8354.7	7788.7	7222.8	6679.3	6095.3	5538.3	5012.8	4464.8	3975.2
35°	10200.8	9616.9	9024.0	8408.6	7788.7	7173.3	6558.0	5956.1	5367.7	4797.2	4267.2
32.5°	10973.4	10335.6	9679.8	9024.0	8354.7	7676.4	7020.6	6373.8	5736.0	5120.6	4532.2
30°	11732.5	11040.8	10335.6	9616.9	8902.7	8184.0	7465.3	6773.6	6099.8	5439.5	4810.7
27.5°	12473.6	11732.5	10973.4	10200.8	9432.7	8669.1	7905.5	7164.4	6445.7	5745.0	5071.2
25°	13187.8	12397.3	11584.3	10762.3	9944.8	9131.8	8327.7	7528.2	6773.6	6036.9	5331.7
22.5°	13861.6	13026.1	12168.2	11296.8	10420.9	9563.0	8718.5	7887.5	7083.5	6310.9	5569.8
20°	14508.4	13614.5	12743.1	11790.9	10874.6	9971.7	9086.8	8215.4	7366.5	6562.5	5785.4
17.5°	15096.8	14158.0	13205.8	12249.0	11287.8	10340.0	9414.7	8547.8	7627.0	6791.5	5992.0
15°	15626.9	14647.6	13650.5	12657.8	11656.1	10672.4	9711.2	8776.9	7865.1	6998.2	6171.7
12.5°	16089.5	15074.4	14041.3	13012.6	11984.0	10964.4	9971.7	9006.0	8071.7	7173.3	6324.4
10°	16471.3	15433.7	14369.2	13309.1	12253.5	11207.0	10182.8	9199.1	8242.4	7321.6	6450.2
7.5°	16781.2	15716.7	14634.2	13542.7	12464.6	11395.6	10353.5	9347.4	8377.1	7433.9	6549.0
5°	17001.3	15923.3	14822.8	13708.9	12617.4	11534.9	10474.8	9455.2	8471.5	7514.7	6620.9
2.5°	17140.6	16089.5	14975.5	13848.1	12743.1	11647.1	10573.6	9540.5	8547.8	7582.1	6679.3
0°	17185.5	16089.5	14975.5	13848.1	12743.1	11647.1	10573.6	9540.5	8547.8	7582.1	6679.3

REPORT NUMBER: P624038

CATALOG NUMBER: IFLD-L-SA7E-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°	107.8	98.8	89.8	85.3	76.4	71.9	62.9	53.9	49.4	40.4	31.4
85°	215.6	197.6	184.2	170.7	157.2	139.2	125.8	112.3	94.3	80.9	62.9
82.5°	327.9	305.4	283.0	260.5	238.1	215.6	188.7	166.2	143.7	121.3	94.3
80°	453.7	417.7	386.3	354.8	323.4	292.0	256.0	224.6	188.7	157.2	125.8
77.5°	583.9	543.5	498.6	453.7	408.8	368.3	323.4	283.0	242.6	197.6	157.2
75°	723.2	669.3	619.9	561.5	507.6	449.2	395.3	341.4	292.0	242.6	188.7
72.5°	866.9	799.5	732.2	669.3	601.9	534.5	471.6	404.3	341.4	283.0	224.6
70°	1015.1	934.3	853.4	777.1	700.7	619.9	548.0	471.6	395.3	323.4	256.0
67.5°	1172.4	1078.0	983.7	884.9	799.5	709.7	619.9	534.5	449.2	368.3	292.0
65°	1343.0	1230.7	1114.0	1010.6	898.4	799.5	700.7	601.9	507.6	408.8	323.4
62.5°	1518.2	1388.0	1257.7	1127.4	1010.6	884.9	777.1	669.3	561.5	453.7	354.8
60°	1697.9	1549.7	1401.4	1257.7	1114.0	983.7	853.4	732.2	619.9	498.6	386.3
57.5°	1882.0	1715.9	1549.7	1388.0	1230.7	1078.0	934.3	799.5	669.3	543.5	417.7
55°	2070.7	1882.0	1697.9	1518.2	1343.0	1172.4	1015.1	866.9	723.2	583.9	453.7
52.5°	2259.4	2052.7	1846.1	1653.0	1468.8	1275.7	1096.0	929.8	772.6	628.8	485.1
50°	2452.5	2218.9	1998.8	1783.2	1572.1	1370.0	1176.8	997.2	826.5	669.3	516.6
47.5°	2650.1	2394.1	2147.1	1913.5	1688.9	1468.8	1257.7	1060.1	875.9	709.7	548.0
45°	2861.3	2564.8	2299.8	2048.2	1801.2	1567.6	1338.5	1122.9	929.8	750.1	579.4
42.5°	3067.9	2749.0	2452.5	2187.5	1913.5	1662.0	1419.4	1190.3	979.2	786.1	606.4
40°	3301.4	2933.1	2596.2	2304.3	2021.3	1751.8	1495.8	1253.2	1028.6	822.0	633.3
37.5°	3526.0	3112.8	2757.9	2430.0	2124.6	1841.6	1572.1	1316.1	1078.0	857.9	660.3
35°	3755.1	3310.4	2906.2	2546.8	2227.9	1931.5	1644.0	1374.5	1118.4	889.4	687.2
32.5°	3988.7	3499.1	3063.4	2672.6	2331.2	2012.3	1711.4	1428.4	1163.4	925.3	709.7
30°	4213.3	3678.8	3211.6	2793.9	2425.6	2093.2	1778.7	1482.3	1208.3	956.7	732.2
27.5°	4442.4	3867.4	3359.8	2906.2	2515.4	2165.0	1837.1	1531.7	1248.7	988.2	754.6
25°	4662.5	4047.1	3499.1	3014.0	2596.2	2236.9	1900.0	1581.1	1284.6	1015.1	772.6
22.5°	4864.6	4204.3	3624.9	3117.3	2681.6	2299.8	1953.9	1626.0	1320.6	1042.1	790.6
20°	5048.7	4366.0	3755.1	3220.6	2762.4	2362.7	1998.8	1666.4	1352.0	1064.5	808.5
17.5°	5228.4	4514.2	3871.9	3314.9	2829.8	2416.6	2043.8	1697.9	1379.0	1082.5	822.0
15°	5381.1	4644.5	3975.2	3395.8	2892.7	2461.5	2079.7	1729.3	1401.4	1100.5	831.0
12.5°	5515.9	4756.8	4065.0	3463.2	2942.1	2501.9	2115.6	1756.3	1423.9	1114.0	844.5
10°	5623.7	4846.6	4136.9	3521.5	2987.0	2533.4	2138.1	1778.7	1437.4	1127.4	853.4
7.5°	5709.0	4918.5	4195.3	3562.0	3018.5	2560.3	2160.5	1792.2	1450.8	1136.4	866.9
5°	5771.9	4972.4	4235.7	3593.4	3045.4	2591.7	2187.5	1814.7	1468.8	1149.9	866.9
2.5°	5821.3	5012.8	4267.2	3620.4	3063.4	2591.7	2187.5	1814.7	1468.8	1149.9	866.9
0°	5821.3	5012.8	4267.2	3620.4	3063.4	2591.7	2187.5	1814.7	1468.8	1149.9	866.9

REPORT NUMBER: P624038

CATALOG NUMBER: IFLD-L-SA7E-827-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	22.5	18.0	9.0	0.0
85°	49.4	31.4	18.0	0.0
82.5°	71.9	49.4	22.5	0.0
80°	94.3	62.9	31.4	0.0
77.5°	121.3	80.9	40.4	0.0
75°	143.7	94.3	49.4	0.0
72.5°	166.2	112.3	53.9	0.0
70°	188.7	125.8	62.9	0.0
67.5°	215.6	139.2	71.9	0.0
65°	238.1	157.2	76.4	0.0
62.5°	260.5	170.7	85.3	0.0
60°	283.0	184.2	89.8	0.0
57.5°	305.4	197.6	98.8	0.0
55°	327.9	215.6	107.8	0.0
52.5°	350.4	229.1	112.3	0.0
50°	372.8	242.6	116.8	0.0
47.5°	390.8	256.0	125.8	0.0
45°	413.2	269.5	130.3	0.0
42.5°	435.7	278.5	134.8	0.0
40°	453.7	292.0	139.2	0.0
37.5°	476.1	300.9	148.2	0.0
35°	494.1	314.4	152.7	0.0
32.5°	507.6	323.4	157.2	0.0
30°	525.5	332.4	161.7	0.0
27.5°	539.0	341.4	161.7	0.0
25°	552.5	350.4	166.2	0.0
22.5°	566.0	354.8	170.7	0.0
20°	579.4	363.8	175.2	0.0
17.5°	588.4	368.3	175.2	0.0
15°	597.4	372.8	184.2	0.0
12.5°	601.9	377.3	184.2	0.0
10°	610.9	386.3	184.2	0.0
7.5°	619.9	386.3	184.2	0.0
5°	619.9	386.3	184.2	0.0
2.5°	619.9	386.3	184.2	0.0
0°	619.9	386.3	184.2	0.0

(END OF REPORT)