

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: P624019

Luminaire Tested: **IFLD-S-SA3A-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624019
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3A-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

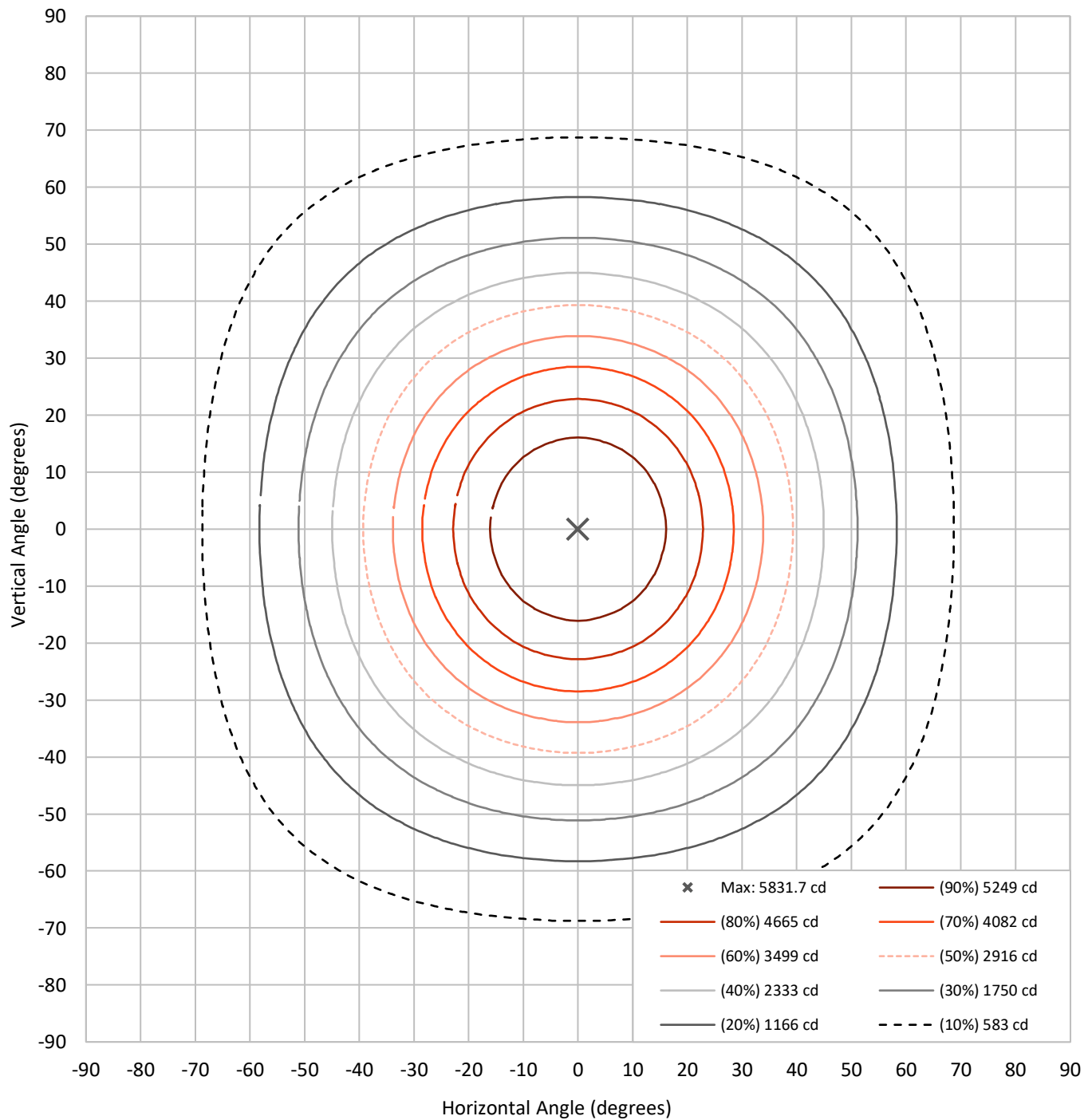
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	10500.2 lumens	Max Intensity:	5831.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	110.8 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' 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:	4543.3 lumens	Field Lumens:	7439.5 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	94.8		
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		



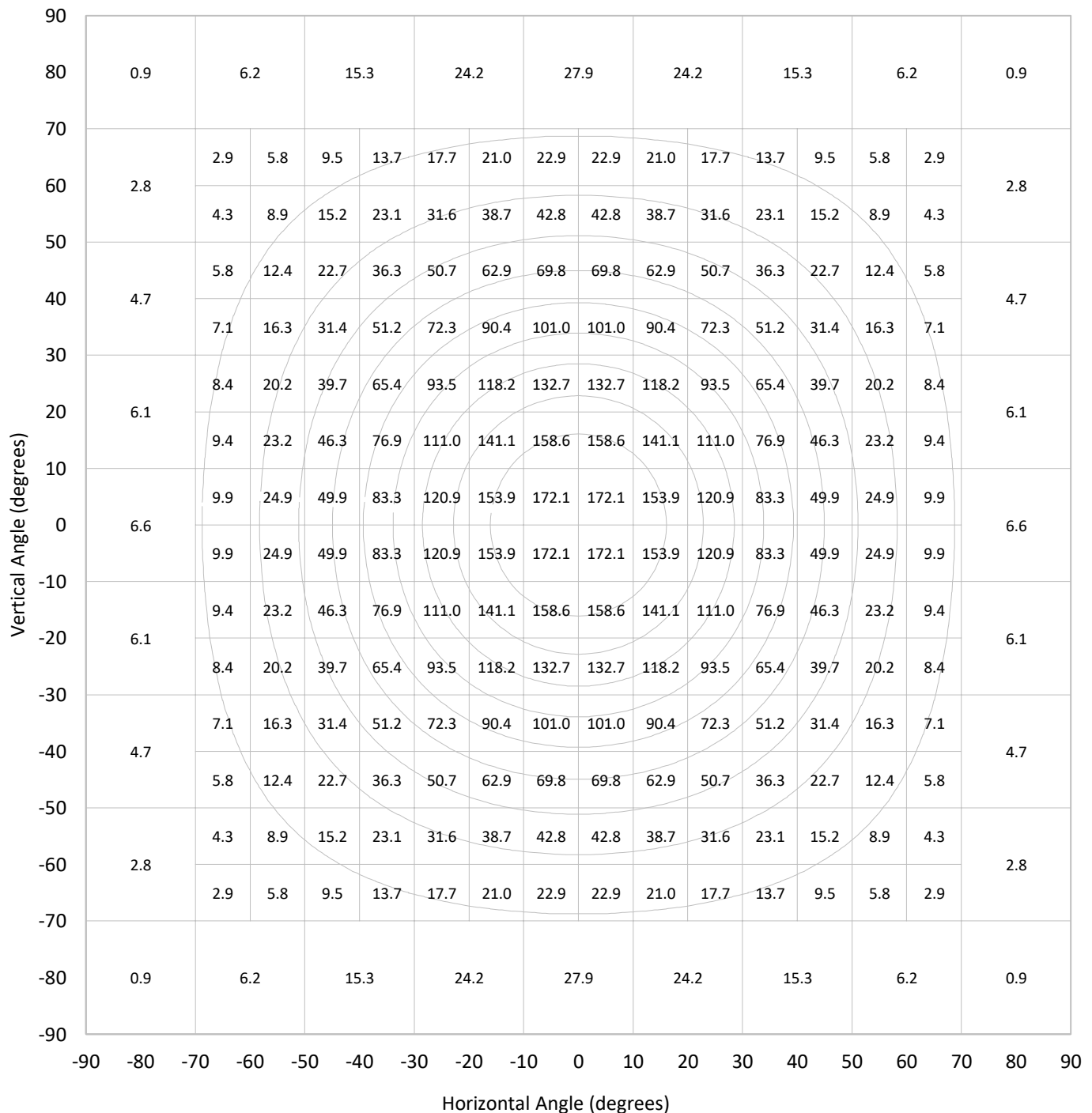
REPORT NUMBER: P624019
CATALOG NUMBER: IFLD-S-SA3A-827-U-77

Iso-Candela Plot



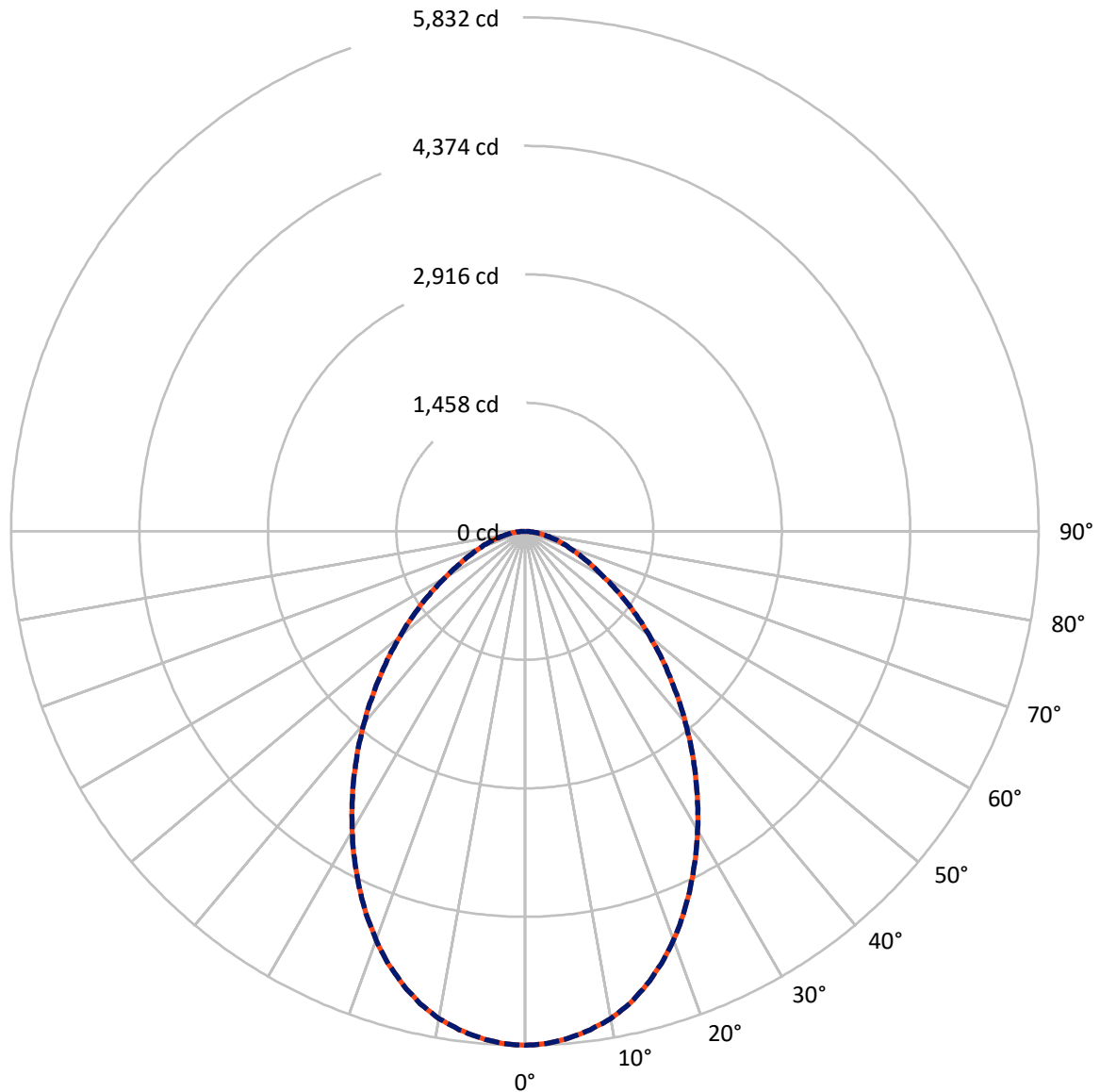
REPORT NUMBER: P624019
CATALOG NUMBER: IFLD-S-SA3A-827-U-77

Lumen Table



REPORT NUMBER: P624019
CATALOG NUMBER: IFLD-S-SA3A-827-U-77

Luminous Intensity Polar Plot

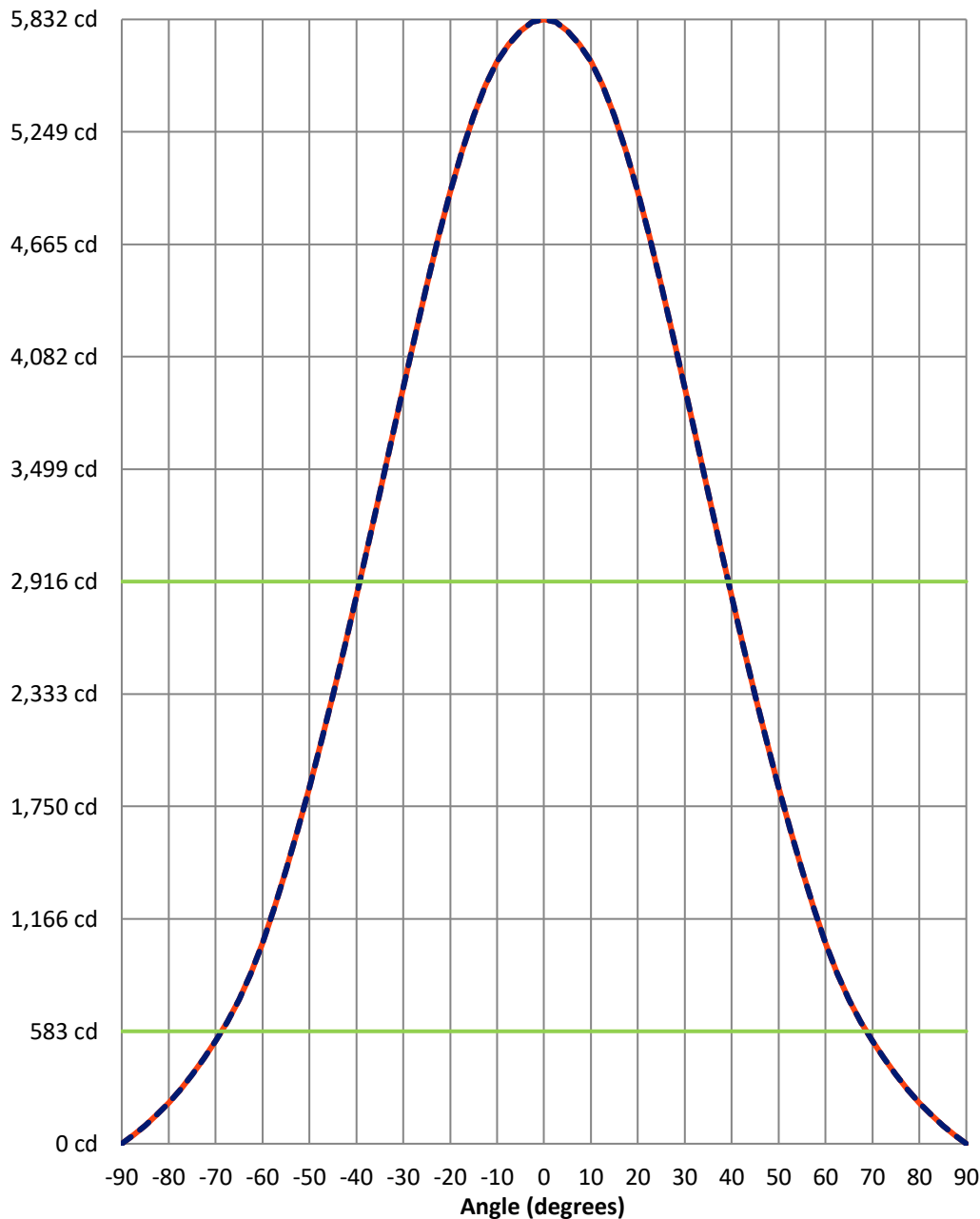


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624019

CATALOG NUMBER: IFLD-S-SA3A-827-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 4543.3
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 7439.5
Efficiency: 70.9%

Spill:

Lumens: 3060.6
Efficiency: 29.1%

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

REPORT NUMBER: P624019

CATALOG NUMBER: IFLD-S-SA3A-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°	44.9	44.9	44.9	44.9	44.9	44.9	44.9	42.7	42.7	41.6	40.5
85°	94.1	94.1	94.1	94.1	94.1	92.0	90.9	89.8	88.7	86.5	85.4
82.5°	151.1	151.1	151.1	151.1	148.9	146.7	145.6	143.4	141.2	137.9	134.7
80°	211.3	211.3	211.3	211.3	208.0	205.8	202.5	200.3	197.1	192.7	188.3
77.5°	280.3	280.3	280.3	277.0	274.8	271.5	268.2	263.8	259.5	254.0	247.4
75°	358.0	358.0	358.0	353.6	350.3	347.0	341.6	336.1	329.5	321.9	313.1
72.5°	442.3	442.3	442.3	436.8	433.5	428.0	421.5	413.8	406.2	396.3	385.4
70°	533.1	533.1	533.1	526.6	521.1	515.6	506.9	498.1	487.2	476.2	463.1
67.5°	631.7	631.7	631.7	624.0	617.4	609.8	599.9	589.0	575.8	560.5	545.2
65°	746.6	746.6	742.2	735.7	728.0	717.1	705.0	689.7	673.3	653.6	632.8
62.5°	882.4	882.4	875.8	868.1	858.3	844.1	827.6	807.9	784.9	759.8	734.6
60°	1040.0	1040.0	1032.3	1022.5	1008.3	990.7	968.9	943.7	915.2	883.5	852.8
57.5°	1221.7	1221.7	1211.9	1198.7	1181.2	1159.3	1132.0	1100.2	1064.1	1024.7	986.4
55°	1418.8	1418.8	1406.8	1391.4	1370.6	1344.3	1311.5	1274.3	1230.5	1185.6	1136.3
52.5°	1627.9	1627.9	1613.7	1596.1	1572.1	1541.4	1504.2	1460.4	1410.0	1357.5	1299.5
50°	1847.9	1847.9	1831.5	1811.8	1784.4	1748.3	1705.6	1655.3	1599.4	1538.1	1471.3
47.5°	2083.3	2083.3	2064.7	2041.7	2008.9	1967.3	1916.9	1858.9	1795.4	1726.4	1650.9
45°	2325.2	2325.2	2304.4	2278.2	2242.0	2195.0	2139.1	2083.3	2002.3	1922.4	1834.8
42.5°	2577.0	2577.0	2553.0	2523.4	2481.8	2430.3	2366.8	2294.6	2214.7	2124.9	2029.7
40°	2838.7	2838.7	2811.3	2777.4	2731.4	2672.3	2601.1	2520.1	2430.3	2330.7	2225.6
37.5°	3105.8	3105.8	3075.1	3037.9	2986.5	2920.8	2840.9	2751.1	2650.4	2539.8	2423.8
35°	3375.1	3375.1	3341.2	3300.7	3243.7	3171.5	3085.0	2985.4	2873.7	2753.3	2623.0
32.5°	3649.9	3649.9	3612.7	3566.7	3502.1	3422.2	3326.9	3218.6	3105.8	2965.7	2823.4
30°	3921.4	3921.4	3880.9	3830.5	3761.6	3674.0	3570.0	3450.6	3318.2	3174.8	3021.5
27.5°	4188.5	4177.6	4143.6	4090.0	4014.4	3921.4	3808.6	3679.4	3536.0	3378.4	3214.2
25°	4451.2	4439.2	4402.0	4342.9	4261.9	4160.0	4038.5	3900.6	3746.2	3579.8	3400.3
22.5°	4703.0	4689.9	4650.5	4587.0	4500.5	4389.9	4259.7	4111.9	3947.7	3769.2	3579.8
20°	4936.2	4922.0	4881.5	4814.7	4724.9	4607.8	4469.9	4311.1	4136.0	3947.7	3746.2
17.5°	5146.4	5132.2	5089.5	5020.5	4936.2	4805.9	4663.6	4496.1	4311.1	4111.9	3900.6
15°	5331.4	5316.1	5272.3	5203.3	5107.0	4984.4	4834.4	4663.6	4469.9	4259.7	4038.5
12.5°	5489.1	5473.7	5428.9	5359.9	5260.3	5137.7	4984.4	4805.9	4607.8	4389.9	4160.0
10°	5613.9	5598.5	5555.8	5490.2	5387.3	5260.3	5107.0	4936.2	4724.9	4500.5	4261.9
7.5°	5703.6	5689.4	5650.0	5584.3	5490.2	5359.9	5203.3	5020.5	4814.7	4587.0	4342.9
5°	5771.5	5755.1	5715.7	5650.0	5555.8	5428.9	5272.3	5089.5	4881.5	4650.5	4402.0
2.5°	5818.6	5798.9	5755.1	5689.4	5598.5	5473.7	5316.1	5132.2	4922.0	4689.9	4439.2
0°	5831.7	5818.6	5771.5	5703.6	5613.9	5489.1	5331.4	5146.4	4936.2	4703.0	4451.2

REPORT NUMBER: P624019

CATALOG NUMBER: IFLD-S-SA3A-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°	39.4	39.4	38.3	37.2	36.1	33.9	32.8	31.7	30.7	28.5	27.4
85°	83.2	81.0	78.8	76.6	73.3	71.2	67.9	65.7	62.4	59.1	55.8
82.5°	131.4	128.1	123.7	120.4	116.0	110.6	106.2	100.7	95.2	90.9	85.4
80°	183.9	178.4	173.0	167.5	160.9	154.4	147.8	141.2	133.6	125.9	118.2
77.5°	240.8	233.2	225.5	216.8	209.1	200.3	191.6	182.8	173.0	163.1	153.3
75°	304.3	294.5	283.5	272.6	262.7	250.7	238.7	226.6	213.5	201.4	188.3
72.5°	373.3	361.3	348.1	335.0	320.8	305.4	290.1	273.7	258.4	243.0	226.6
70°	447.8	433.5	417.1	400.7	383.2	364.6	345.9	326.2	306.5	286.8	267.1
67.5°	527.7	510.2	490.4	470.7	448.8	427.0	405.1	382.1	358.0	333.9	310.9
65°	613.1	591.2	568.2	543.0	517.8	492.6	466.4	439.0	411.6	383.2	358.0
62.5°	708.3	680.9	651.4	620.7	592.3	561.6	533.1	499.2	466.4	434.6	402.9
60°	818.9	782.7	746.6	708.3	672.2	632.8	597.7	560.5	523.3	487.2	449.9
57.5°	942.6	896.6	852.8	806.8	758.7	714.9	670.0	625.1	583.5	540.8	500.3
55°	1082.7	1026.9	972.1	915.2	859.4	804.6	747.7	697.4	645.9	597.7	550.7
52.5°	1236.0	1172.5	1104.6	1040.0	968.9	901.0	837.5	774.0	713.8	655.8	602.1
50°	1400.2	1325.7	1248.0	1169.2	1088.2	1008.3	931.6	857.2	787.1	719.2	655.8
47.5°	1571.0	1486.7	1398.0	1308.2	1221.7	1124.3	1032.3	948.1	863.8	787.1	713.8
45°	1746.1	1650.9	1553.4	1451.6	1349.8	1244.7	1142.9	1040.0	948.1	857.2	774.0
42.5°	1926.8	1819.5	1711.1	1598.3	1485.6	1370.6	1255.7	1142.9	1032.3	931.6	837.5
40°	2112.9	1994.6	1870.9	1748.3	1627.9	1496.5	1370.6	1244.7	1124.3	1008.3	901.0
37.5°	2299.0	2169.8	2036.2	1898.3	1760.4	1627.9	1485.6	1349.8	1221.7	1088.2	968.9
35°	2486.2	2343.9	2199.3	2049.4	1898.3	1748.3	1598.3	1451.6	1308.2	1169.2	1040.0
32.5°	2674.5	2519.0	2359.2	2199.3	2036.2	1870.9	1711.1	1553.4	1398.0	1248.0	1104.6
30°	2859.5	2690.9	2519.0	2343.9	2169.8	1994.6	1819.5	1650.9	1486.7	1325.7	1172.5
27.5°	3040.1	2859.5	2674.5	2486.2	2299.0	2112.9	1926.8	1746.1	1571.0	1400.2	1236.0
25°	3214.2	3021.5	2823.4	2623.0	2423.8	2225.6	2029.7	1834.8	1650.9	1471.3	1299.5
22.5°	3378.4	3174.8	2965.7	2753.3	2539.8	2330.7	2124.9	1922.4	1726.4	1538.1	1357.5
20°	3536.0	3318.2	3105.8	2873.7	2650.4	2430.3	2214.7	2002.3	1795.4	1599.4	1410.0
17.5°	3679.4	3450.6	3218.6	2985.4	2751.1	2520.1	2294.6	2083.3	1858.9	1655.3	1460.4
15°	3808.6	3570.0	3326.9	3085.0	2840.9	2601.1	2366.8	2139.1	1916.9	1705.6	1504.2
12.5°	3921.4	3674.0	3422.2	3171.5	2920.8	2672.3	2430.3	2195.0	1967.3	1748.3	1541.4
10°	4014.4	3761.6	3502.1	3243.7	2986.5	2731.4	2481.8	2242.0	2008.9	1784.4	1572.1
7.5°	4090.0	3830.5	3566.7	3300.7	3037.9	2777.4	2523.4	2278.2	2041.7	1811.8	1596.1
5°	4143.6	3880.9	3612.7	3341.2	3075.1	2811.3	2553.0	2304.4	2064.7	1831.5	1613.7
2.5°	4177.6	3921.4	3649.9	3375.1	3105.8	2838.7	2577.0	2325.2	2083.3	1847.9	1627.9
0°	4188.5	3921.4	3649.9	3375.1	3105.8	2838.7	2577.0	2325.2	2083.3	1847.9	1627.9

REPORT NUMBER: P624019

CATALOG NUMBER: IFLD-S-SA3A-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°	26.3	24.1	21.9	20.8	18.6	17.5	15.3	13.1	12.0	9.9	7.7
85°	52.5	48.2	44.9	41.6	38.3	33.9	30.7	27.4	23.0	19.7	15.3
82.5°	79.9	74.4	69.0	63.5	58.0	52.5	46.0	40.5	35.0	29.6	23.0
80°	110.6	101.8	94.1	86.5	78.8	71.2	62.4	54.7	46.0	38.3	30.7
77.5°	142.3	132.5	121.5	110.6	99.6	89.8	78.8	69.0	59.1	48.2	38.3
75°	176.3	163.1	151.1	136.8	123.7	109.5	96.3	83.2	71.2	59.1	46.0
72.5°	211.3	194.9	178.4	163.1	146.7	130.3	114.9	98.5	83.2	69.0	54.7
70°	247.4	227.7	208.0	189.4	170.8	151.1	133.6	114.9	96.3	78.8	62.4
67.5°	285.7	262.7	239.7	215.7	194.9	173.0	151.1	130.3	109.5	89.8	71.2
65°	327.3	300.0	271.5	246.3	218.9	194.9	170.8	146.7	123.7	99.6	78.8
62.5°	370.0	338.3	306.5	274.8	246.3	215.7	189.4	163.1	136.8	110.6	86.5
60°	413.8	377.7	341.6	306.5	271.5	239.7	208.0	178.4	151.1	121.5	94.1
57.5°	458.7	418.2	377.7	338.3	300.0	262.7	227.7	194.9	163.1	132.5	101.8
55°	504.7	458.7	413.8	370.0	327.3	285.7	247.4	211.3	176.3	142.3	110.6
52.5°	550.7	500.3	449.9	402.9	358.0	310.9	267.1	226.6	188.3	153.3	118.2
50°	597.7	540.8	487.2	434.6	383.2	333.9	286.8	243.0	201.4	163.1	125.9
47.5°	645.9	583.5	523.3	466.4	411.6	358.0	306.5	258.4	213.5	173.0	133.6
45°	697.4	625.1	560.5	499.2	439.0	382.1	326.2	273.7	226.6	182.8	141.2
42.5°	747.7	670.0	597.7	533.1	466.4	405.1	345.9	290.1	238.7	191.6	147.8
40°	804.6	714.9	632.8	561.6	492.6	427.0	364.6	305.4	250.7	200.3	154.4
37.5°	859.4	758.7	672.2	592.3	517.8	448.8	383.2	320.8	262.7	209.1	160.9
35°	915.2	806.8	708.3	620.7	543.0	470.7	400.7	335.0	272.6	216.8	167.5
32.5°	972.1	852.8	746.6	651.4	568.2	490.4	417.1	348.1	283.5	225.5	173.0
30°	1026.9	896.6	782.7	680.9	591.2	510.2	433.5	361.3	294.5	233.2	178.4
27.5°	1082.7	942.6	818.9	708.3	613.1	527.7	447.8	373.3	304.3	240.8	183.9
25°	1136.3	986.4	852.8	734.6	632.8	545.2	463.1	385.4	313.1	247.4	188.3
22.5°	1185.6	1024.7	883.5	759.8	653.6	560.5	476.2	396.3	321.9	254.0	192.7
20°	1230.5	1064.1	915.2	784.9	673.3	575.8	487.2	406.2	329.5	259.5	197.1
17.5°	1274.3	1100.2	943.7	807.9	689.7	589.0	498.1	413.8	336.1	263.8	200.3
15°	1311.5	1132.0	968.9	827.6	705.0	599.9	506.9	421.5	341.6	268.2	202.5
12.5°	1344.3	1159.3	990.7	844.1	717.1	609.8	515.6	428.0	347.0	271.5	205.8
10°	1370.6	1181.2	1008.3	858.3	728.0	617.4	521.1	433.5	350.3	274.8	208.0
7.5°	1391.4	1198.7	1022.5	868.1	735.7	624.0	526.6	436.8	353.6	277.0	211.3
5°	1406.8	1211.9	1032.3	875.8	742.2	631.7	533.1	442.3	358.0	280.3	211.3
2.5°	1418.8	1221.7	1040.0	882.4	746.6	631.7	533.1	442.3	358.0	280.3	211.3
0°	1418.8	1221.7	1040.0	882.4	746.6	631.7	533.1	442.3	358.0	280.3	211.3

REPORT NUMBER: P624019

CATALOG NUMBER: IFLD-S-SA3A-827-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.5	4.4	2.2	0.0
85°	12.0	7.7	4.4	0.0
82.5°	17.5	12.0	5.5	0.0
80°	23.0	15.3	7.7	0.0
77.5°	29.6	19.7	9.9	0.0
75°	35.0	23.0	12.0	0.0
72.5°	40.5	27.4	13.1	0.0
70°	46.0	30.7	15.3	0.0
67.5°	52.5	33.9	17.5	0.0
65°	58.0	38.3	18.6	0.0
62.5°	63.5	41.6	20.8	0.0
60°	69.0	44.9	21.9	0.0
57.5°	74.4	48.2	24.1	0.0
55°	79.9	52.5	26.3	0.0
52.5°	85.4	55.8	27.4	0.0
50°	90.9	59.1	28.5	0.0
47.5°	95.2	62.4	30.7	0.0
45°	100.7	65.7	31.7	0.0
42.5°	106.2	67.9	32.8	0.0
40°	110.6	71.2	33.9	0.0
37.5°	116.0	73.3	36.1	0.0
35°	120.4	76.6	37.2	0.0
32.5°	123.7	78.8	38.3	0.0
30°	128.1	81.0	39.4	0.0
27.5°	131.4	83.2	39.4	0.0
25°	134.7	85.4	40.5	0.0
22.5°	137.9	86.5	41.6	0.0
20°	141.2	88.7	42.7	0.0
17.5°	143.4	89.8	42.7	0.0
15°	145.6	90.9	44.9	0.0
12.5°	146.7	92.0	44.9	0.0
10°	148.9	94.1	44.9	0.0
7.5°	151.1	94.1	44.9	0.0
5°	151.1	94.1	44.9	0.0
2.5°	151.1	94.1	44.9	0.0
0°	151.1	94.1	44.9	0.0

(END OF REPORT)