

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: P628400

Luminaire Tested: **IFLD-M-SA4D-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628400
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

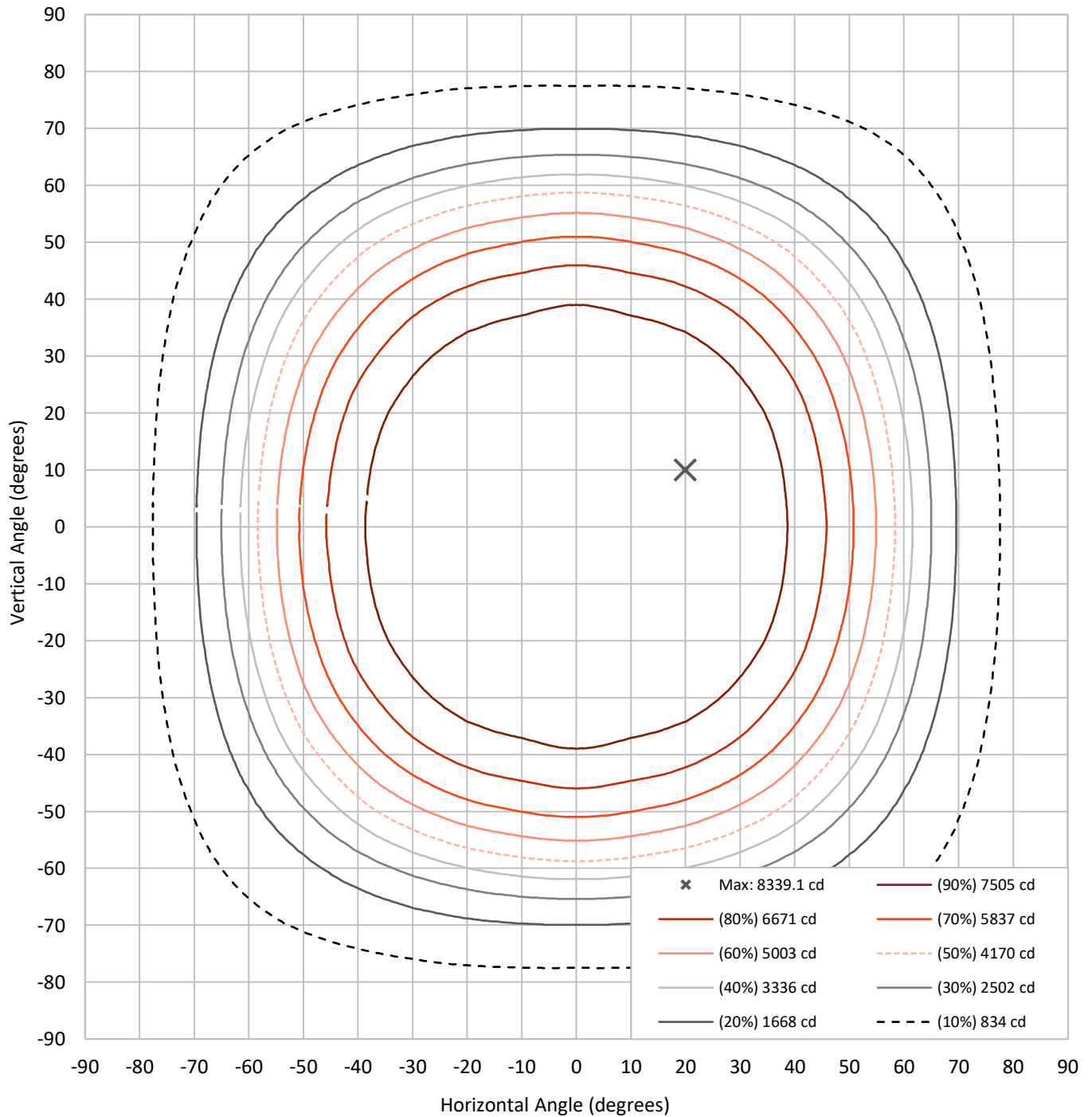
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	25583.4 lumens	Max Intensity:	8339.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	102.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	15698.5 lumens	Field Lumens:	18819.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
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: P628400
CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

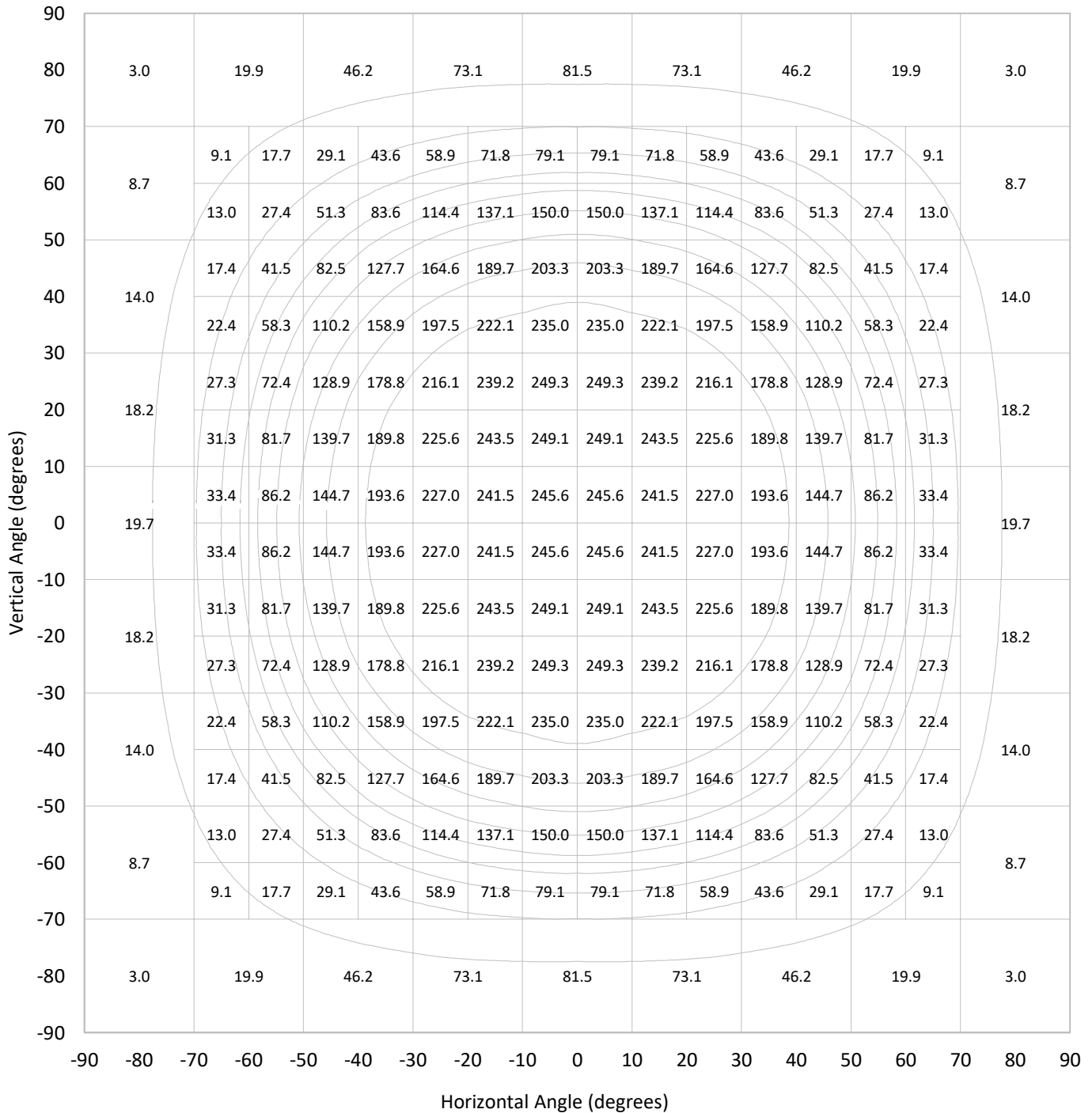
Iso-Candela Plot





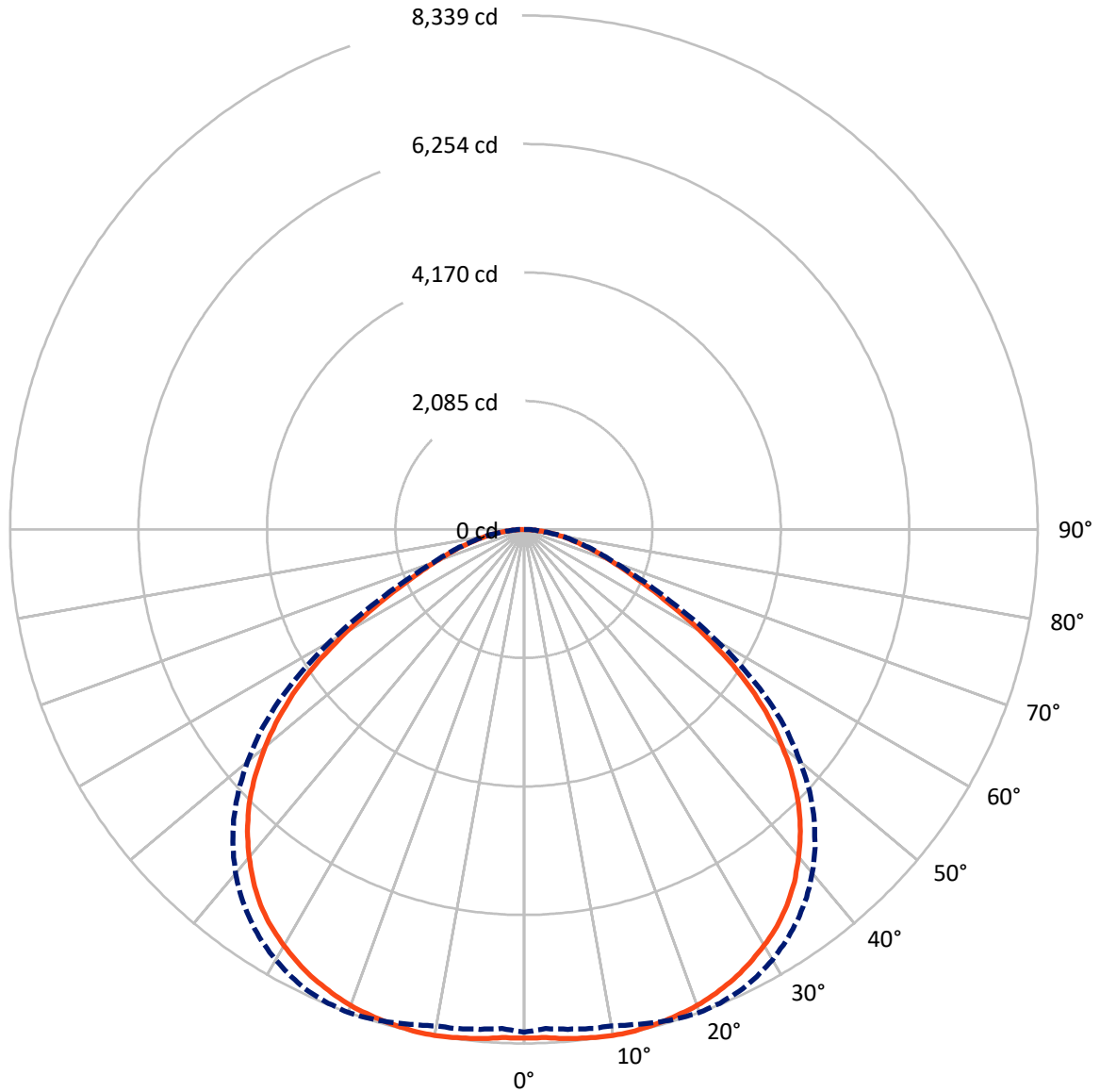
REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

Lumen Table



REPORT NUMBER: P628400
CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

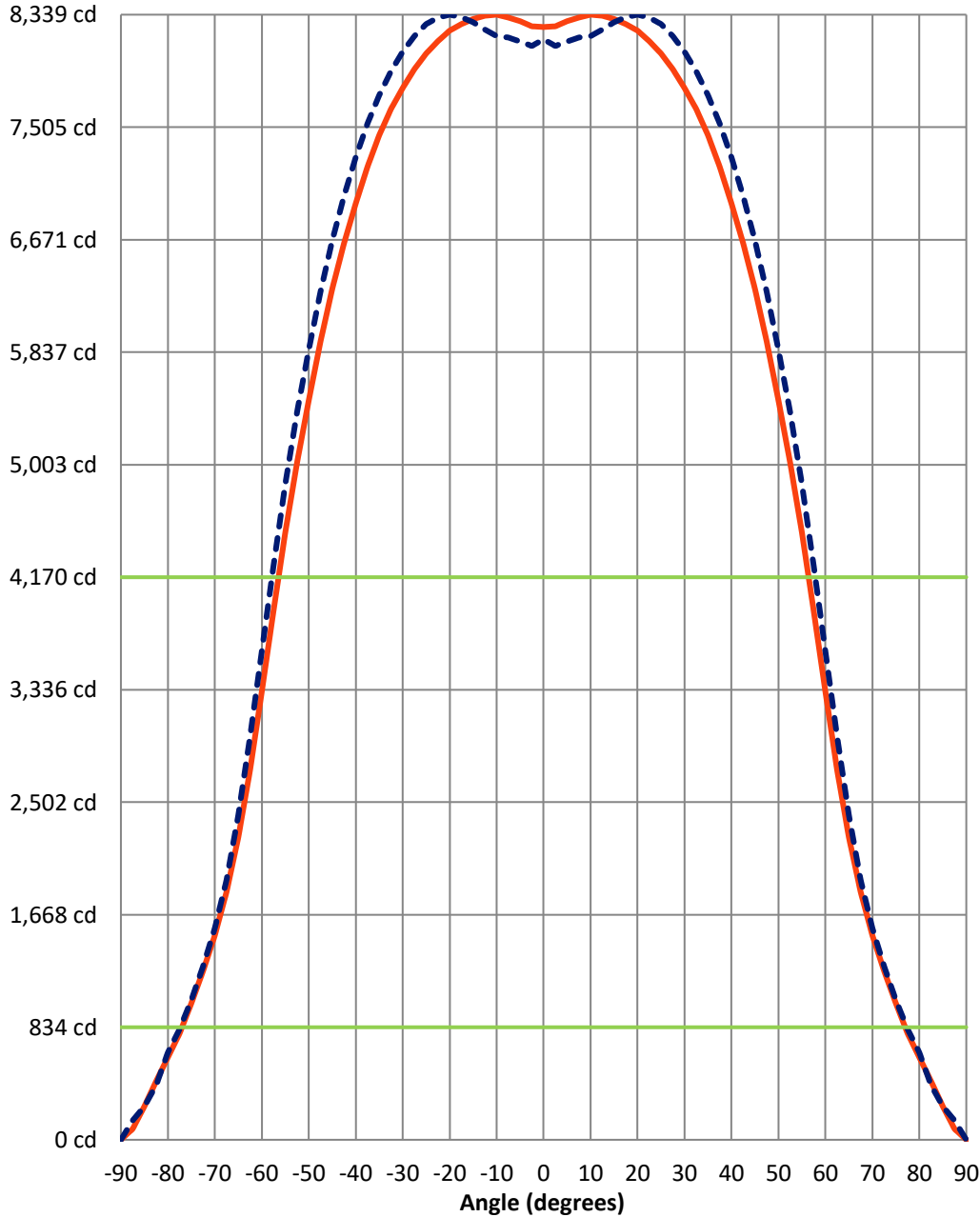
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 15698.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 18819.8
 Efficiency: 73.6%

Spill:
 Lumens: 6763.6
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

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°	67.3	72.7	75.4	78.1	80.8	83.4	86.1	83.4	80.8	80.8	78.1
85°	180.3	185.7	188.4	207.3	226.1	236.9	250.3	247.6	247.6	245.0	242.3
82.5°	360.7	376.8	390.3	409.2	419.9	436.1	446.8	438.8	433.4	422.6	414.5
80°	640.6	646.0	648.7	651.4	638.0	635.3	629.9	621.8	611.0	597.6	584.1
77.5°	815.6	821.0	826.4	821.0	818.3	815.6	807.5	799.5	788.7	777.9	761.8
75°	1079.4	1079.4	1079.4	1071.3	1065.9	1057.9	1044.4	1031.0	1012.1	990.6	966.3
72.5°	1359.4	1356.7	1354.0	1337.8	1324.4	1308.2	1289.4	1273.2	1251.7	1227.5	1195.2
70°	1652.8	1658.1	1660.8	1639.3	1623.1	1601.6	1577.4	1547.8	1515.5	1480.5	1434.7
67.5°	2056.5	2051.1	2045.8	2016.1	1994.6	1965.0	1930.0	1886.9	1838.5	1784.7	1720.0
65°	2557.2	2565.3	2549.1	2519.5	2479.1	2430.7	2376.8	2314.9	2242.3	2161.5	2070.0
62.5°	3162.8	3176.3	3157.5	3119.8	3068.6	3004.0	2928.7	2839.8	2740.2	2627.2	2514.1
60°	3851.9	3849.2	3814.3	3763.1	3695.8	3615.1	3531.6	3434.7	3321.7	3189.8	3052.5
57.5°	4484.5	4479.1	4436.1	4384.9	4317.6	4231.5	4142.7	4040.4	3921.9	3782.0	3623.1
55°	5052.5	5047.1	5004.0	4950.2	4880.2	4794.1	4713.3	4616.4	4500.7	4352.6	4183.0
52.5°	5555.8	5558.5	5520.8	5461.6	5386.3	5302.8	5224.7	5127.8	5017.5	4869.4	4705.2
50°	6018.8	6016.1	5975.8	5921.9	5851.9	5771.2	5693.1	5596.2	5480.5	5337.8	5179.0
47.5°	6449.5	6444.1	6398.4	6339.1	6266.5	6196.5	6123.8	6037.7	5916.5	5773.9	5615.1
45°	6810.2	6799.4	6753.7	6697.2	6627.2	6565.3	6500.7	6436.1	6306.8	6174.9	6024.2
42.5°	7119.8	7117.1	7071.3	7014.8	6944.8	6891.0	6831.7	6751.0	6643.3	6522.2	6374.1
40°	7415.9	7394.3	7348.6	7294.7	7230.1	7184.4	7125.1	7044.4	6939.4	6821.0	6678.3
37.5°	7636.6	7639.3	7590.8	7531.6	7475.1	7432.0	7378.2	7302.8	7211.3	7095.5	6952.9
35°	7846.5	7833.1	7792.7	7741.6	7690.4	7642.0	7585.4	7520.8	7445.5	7337.8	7203.2
32.5°	7983.8	8002.7	7954.2	7900.4	7870.8	7833.1	7773.9	7706.6	7639.3	7531.6	7410.5
30°	8134.6	8118.4	8080.7	8035.0	8013.4	7989.2	7938.1	7873.5	7795.4	7698.5	7585.4
27.5°	8239.5	8231.5	8185.7	8142.6	8131.9	8110.3	8070.0	8013.4	7935.4	7841.2	7736.2
25°	8285.3	8290.7	8247.6	8223.4	8223.4	8209.9	8177.6	8129.2	8051.1	7965.0	7862.7
22.5°	8306.8	8301.5	8271.8	8266.5	8279.9	8269.2	8255.7	8212.6	8142.6	8072.7	7986.5
20°	8320.3	8282.6	8255.7	8277.2	8293.4	8290.7	8279.9	8253.0	8220.7	8161.5	8086.1
17.5°	8290.7	8266.5	8234.2	8266.5	8301.5	8304.1	8293.4	8277.2	8269.2	8231.5	8164.2
15°	8218.0	8199.2	8204.6	8236.9	8277.2	8290.7	8298.8	8317.6	8306.8	8277.2	8218.0
12.5°	8169.6	8145.3	8169.6	8201.9	8223.4	8231.5	8296.1	8331.1	8331.1	8304.1	8266.5
10°	8156.1	8107.6	8139.9	8169.6	8180.3	8228.8	8282.6	8320.3	8339.1	8317.6	8269.2
7.5°	8129.2	8096.9	8110.3	8123.8	8185.7	8220.7	8250.3	8290.7	8317.6	8314.9	8271.8
5°	8115.7	8075.3	8080.7	8137.3	8180.3	8204.6	8215.3	8250.3	8290.7	8298.8	8266.5
2.5°	8080.7	8061.9	8102.3	8107.6	8139.9	8158.8	8169.6	8201.9	8253.0	8271.8	8258.4
0°	8061.9	8035.0	8008.1	8029.6	8083.4	8123.8	8139.9	8188.4	8247.6	8266.5	8236.9



REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

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°	75.4	72.7	70.0	67.3	70.0	70.0	70.0	67.3	70.0	67.3	67.3
85°	234.2	223.4	215.3	204.6	193.8	185.7	175.0	164.2	161.5	158.8	153.4
82.5°	403.8	390.3	376.8	360.7	344.5	325.7	306.9	285.3	279.9	274.6	266.5
80°	568.0	549.1	530.3	511.4	495.3	476.4	454.9	430.7	414.5	401.1	384.9
77.5°	740.2	713.3	686.4	654.1	635.3	616.4	594.9	570.7	546.4	524.9	500.7
75°	936.7	907.1	880.2	847.9	812.9	777.9	742.9	710.6	675.6	643.3	611.0
72.5°	1154.8	1111.7	1068.6	1028.3	985.2	942.1	896.4	853.3	810.2	767.2	721.4
70°	1383.6	1329.7	1275.9	1222.1	1165.5	1109.0	1055.2	1001.3	947.5	891.0	839.8
67.5°	1652.8	1590.8	1520.9	1445.5	1362.0	1289.4	1219.4	1154.8	1090.2	1025.6	961.0
65°	1989.2	1903.1	1808.9	1706.6	1609.7	1512.8	1410.5	1313.6	1238.2	1162.8	1090.2
62.5°	2403.8	2282.6	2150.7	2018.8	1900.4	1773.9	1655.4	1528.9	1410.5	1302.8	1214.0
60°	2899.0	2734.9	2573.3	2403.8	2239.6	2067.3	1916.5	1760.4	1612.4	1480.5	1351.3
57.5°	3445.5	3254.4	3060.6	2853.3	2629.9	2428.0	2223.4	2018.8	1843.9	1668.9	1523.5
55°	4000.0	3798.1	3580.1	3345.9	3100.9	2842.5	2565.3	2336.5	2096.9	1892.3	1703.9
52.5°	4527.6	4317.6	4091.5	3876.2	3582.8	3286.7	2982.5	2681.0	2401.1	2140.0	1911.2
50°	4998.6	4794.1	4576.0	4325.7	4053.8	3738.9	3399.7	3060.6	2729.5	2422.6	2137.3
47.5°	5429.3	5230.1	5012.1	4761.8	4514.1	4164.2	3822.3	3448.2	3079.4	2726.8	2393.0
45°	5833.1	5631.2	5405.1	5165.5	4880.2	4568.0	4215.3	3838.5	3442.8	3047.1	2662.2
42.5°	6199.2	5997.3	5768.5	5520.8	5238.2	4928.7	4586.8	4207.3	3808.9	3378.2	2955.6
40°	6519.5	6323.0	6102.3	5843.9	5580.1	5254.4	4917.9	4557.2	4145.3	3712.0	3246.3
37.5°	6799.4	6616.4	6398.4	6142.6	5862.7	5572.0	5224.7	4864.1	4492.6	4021.5	3545.1
35°	7047.1	6877.5	6654.1	6411.8	6137.3	5830.4	5504.7	5152.1	4751.0	4309.5	3846.6
32.5°	7262.4	7090.2	6885.6	6643.3	6376.8	6088.8	5755.0	5399.7	5020.2	4570.6	4067.3
30°	7445.5	7278.6	7084.8	6856.0	6600.3	6314.9	5989.2	5631.2	5243.6	4796.8	4298.8
27.5°	7604.3	7445.5	7257.0	7044.4	6799.4	6524.9	6196.5	5835.8	5440.1	5009.4	4511.4
25°	7741.6	7588.1	7413.2	7211.3	6969.0	6699.8	6390.3	6013.4	5617.7	5184.4	4691.8
22.5°	7865.4	7717.3	7542.4	7345.9	7125.1	6856.0	6543.7	6169.6	5768.5	5340.5	4856.0
20°	7975.8	7838.5	7666.2	7464.3	7243.6	6971.7	6662.2	6306.8	5903.1	5483.2	5004.0
17.5°	8064.6	7943.4	7771.2	7558.5	7337.8	7074.0	6772.5	6446.8	6018.8	5604.3	5127.8
15°	8126.5	8008.1	7851.9	7636.6	7421.2	7160.1	6858.7	6522.2	6123.8	5701.2	5230.1
12.5°	8169.6	8043.0	7897.7	7698.5	7483.2	7224.7	6931.3	6600.3	6212.6	5787.3	5319.0
10°	8180.3	8064.6	7919.2	7741.6	7531.6	7281.3	6993.3	6664.9	6285.3	5854.6	5391.6
7.5°	8185.7	8075.3	7943.4	7773.9	7566.6	7324.3	7039.0	6716.0	6339.1	5911.2	5445.5
5°	8183.0	8078.0	7959.6	7795.4	7588.1	7348.6	7068.6	6751.0	6376.8	5948.8	5485.9
2.5°	8174.9	8080.7	7970.4	7811.6	7612.4	7375.5	7098.2	6791.4	6417.2	5981.1	5518.2
0°	8196.5	8115.7	7975.8	7806.2	7617.7	7375.5	7095.5	6796.8	6422.6	5978.4	5515.5



REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

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°	67.3	64.6	64.6	61.9	59.2	56.5	51.1	48.5	43.1	35.0	26.9
85°	145.4	137.3	129.2	123.8	118.4	113.1	105.0	96.9	86.1	70.0	53.8
82.5°	255.7	239.6	223.4	204.6	188.4	172.3	158.8	145.4	129.2	105.0	80.8
80°	366.1	341.9	317.6	290.7	266.5	239.6	215.3	193.8	172.3	140.0	107.7
77.5°	476.4	444.1	409.2	376.8	341.9	306.9	271.9	242.3	210.0	172.3	134.6
75°	578.7	541.0	508.7	463.0	419.9	374.2	328.4	288.0	247.6	201.9	161.5
72.5°	681.0	632.6	586.8	543.7	495.3	438.8	387.6	336.5	285.3	231.5	183.0
70°	783.3	724.1	667.6	616.4	562.6	506.1	444.1	384.9	323.0	258.4	201.9
67.5°	888.3	821.0	756.4	691.8	629.9	565.3	500.7	433.4	360.7	285.3	223.4
65°	1004.0	920.6	842.5	769.8	697.2	627.2	554.5	481.8	401.1	314.9	242.3
62.5°	1119.8	1028.3	936.7	845.2	764.5	686.4	608.3	527.6	438.8	347.2	261.1
60°	1243.6	1138.6	1033.6	931.4	831.8	745.6	659.5	573.3	479.1	376.8	279.9
57.5°	1380.9	1254.4	1135.9	1020.2	907.1	804.8	710.6	619.1	514.1	406.5	301.5
55°	1537.0	1380.9	1240.9	1111.7	987.9	864.1	761.8	667.6	554.5	436.1	325.7
52.5°	1701.2	1520.9	1351.3	1205.9	1074.0	934.0	810.2	705.2	594.9	465.7	347.2
50°	1892.3	1663.5	1475.1	1297.4	1149.4	1004.0	861.4	748.3	635.3	500.7	368.8
47.5°	2088.8	1835.8	1598.9	1405.1	1230.1	1071.3	920.6	786.0	672.9	533.0	390.3
45°	2317.6	2000.0	1738.9	1510.1	1308.2	1141.3	979.8	826.4	705.2	565.3	411.8
42.5°	2538.4	2193.8	1884.2	1625.8	1397.0	1208.6	1033.6	869.4	737.5	597.6	430.7
40°	2799.5	2387.6	2024.2	1736.2	1485.9	1273.2	1087.5	915.2	767.2	627.2	449.5
37.5°	3049.8	2584.1	2193.8	1857.3	1572.0	1337.8	1141.3	958.3	794.1	656.8	473.8
35°	3297.4	2802.1	2355.3	1970.4	1660.8	1410.5	1195.2	998.7	821.0	681.0	495.3
32.5°	3534.3	3006.7	2519.5	2096.9	1757.7	1477.8	1243.6	1036.3	847.9	702.6	516.8
30°	3755.0	3200.5	2681.0	2226.1	1846.6	1539.7	1289.4	1074.0	880.2	721.4	538.4
27.5°	3956.9	3389.0	2842.5	2347.2	1930.0	1596.2	1337.8	1109.0	907.1	740.2	557.2
25°	4140.0	3558.5	2990.6	2457.6	2005.4	1658.1	1383.6	1144.0	931.4	756.4	573.3
22.5°	4312.2	3714.7	3125.2	2568.0	2096.9	1720.0	1426.6	1176.3	955.6	772.5	589.5
20°	4463.0	3857.3	3254.4	2678.3	2177.7	1776.6	1464.3	1205.9	977.1	783.3	605.7
17.5°	4584.1	3983.8	3370.1	2775.2	2247.6	1825.0	1496.6	1232.8	996.0	796.8	616.4
15°	4691.8	4091.5	3467.0	2858.7	2309.5	1865.4	1526.2	1254.4	1012.1	804.8	629.9
12.5°	4783.3	4183.0	3550.5	2931.4	2363.4	1900.4	1550.5	1270.5	1025.6	812.9	638.0
10°	4858.7	4255.7	3620.4	2987.9	2406.5	1927.3	1569.3	1286.7	1036.3	821.0	646.0
7.5°	4915.2	4309.5	3671.6	3036.3	2441.4	1946.2	1585.5	1297.4	1047.1	826.4	659.5
5°	4958.3	4355.3	3712.0	3068.6	2468.4	1973.1	1604.3	1310.9	1057.9	831.8	659.5
2.5°	4990.6	4393.0	3744.3	3095.5	2489.9	1967.7	1604.3	1308.2	1057.9	831.8	656.8
0°	4985.2	4395.7	3741.6	3095.5	2489.9	1962.3	1604.3	1305.5	1057.9	831.8	656.8



REPORT NUMBER: P628400
 CATALOG NUMBER: IFLD-M-SA4D-830-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	18.8	13.5	5.4	0.0
85°	40.4	26.9	13.5	0.0
82.5°	59.2	37.7	18.8	0.0
80°	78.1	51.1	24.2	0.0
77.5°	99.6	64.6	32.3	0.0
75°	118.4	75.4	37.7	0.0
72.5°	137.3	88.8	43.1	0.0
70°	153.4	99.6	48.5	0.0
67.5°	169.6	113.1	56.5	0.0
65°	183.0	123.8	61.9	0.0
62.5°	193.8	137.3	67.3	0.0
60°	207.3	148.0	72.7	0.0
57.5°	218.0	156.1	78.1	0.0
55°	228.8	161.5	83.4	0.0
52.5°	239.6	169.6	88.8	0.0
50°	250.3	177.7	94.2	0.0
47.5°	261.1	183.0	96.9	0.0
45°	277.3	191.1	102.3	0.0
42.5°	290.7	196.5	107.7	0.0
40°	304.2	201.9	110.4	0.0
37.5°	317.6	207.3	115.7	0.0
35°	331.1	212.7	118.4	0.0
32.5°	341.9	218.0	121.1	0.0
30°	352.6	223.4	123.8	0.0
27.5°	363.4	226.1	126.5	0.0
25°	371.5	231.5	129.2	0.0
22.5°	379.5	234.2	131.9	0.0
20°	384.9	236.9	134.6	0.0
17.5°	393.0	239.6	137.3	0.0
15°	395.7	242.3	142.7	0.0
12.5°	401.1	245.0	142.7	0.0
10°	403.8	247.6	142.7	0.0
7.5°	409.2	247.6	142.7	0.0
5°	406.5	247.6	142.7	0.0
2.5°	406.5	247.6	142.7	0.0
0°	403.8	247.6	142.7	0.0

(END OF REPORT)