

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: P628227

Luminaire Tested: **IFLD-M-SA4E-730-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628227
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-730-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	33929.6 lumens	Max Intensity:	11059.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	107.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

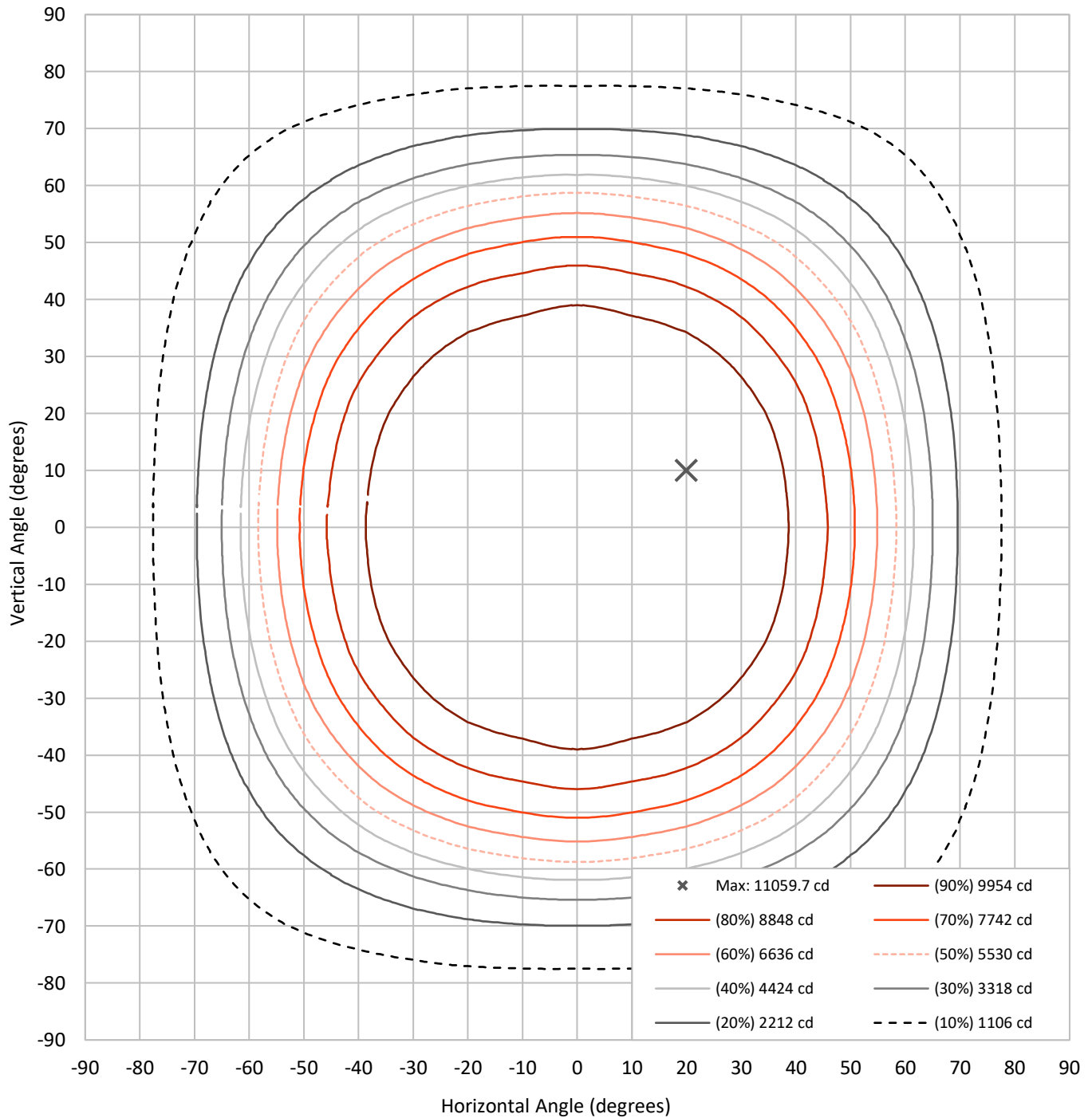
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	20819.9 lumens	Field Lumens:	24959.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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: P628227
CATALOG NUMBER: IFLD-M-SA4E-730-U-LAM

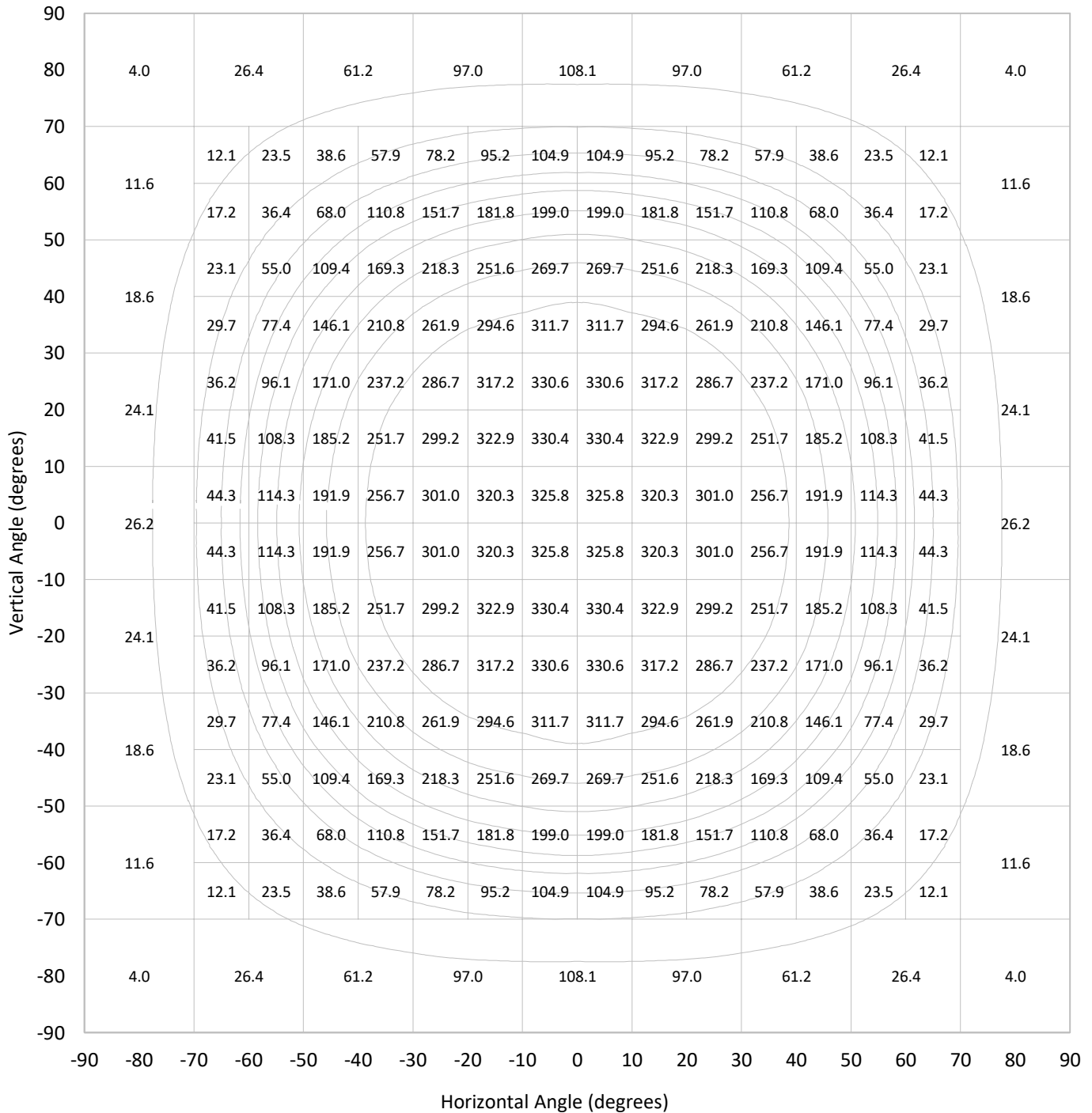
Iso-Candela Plot





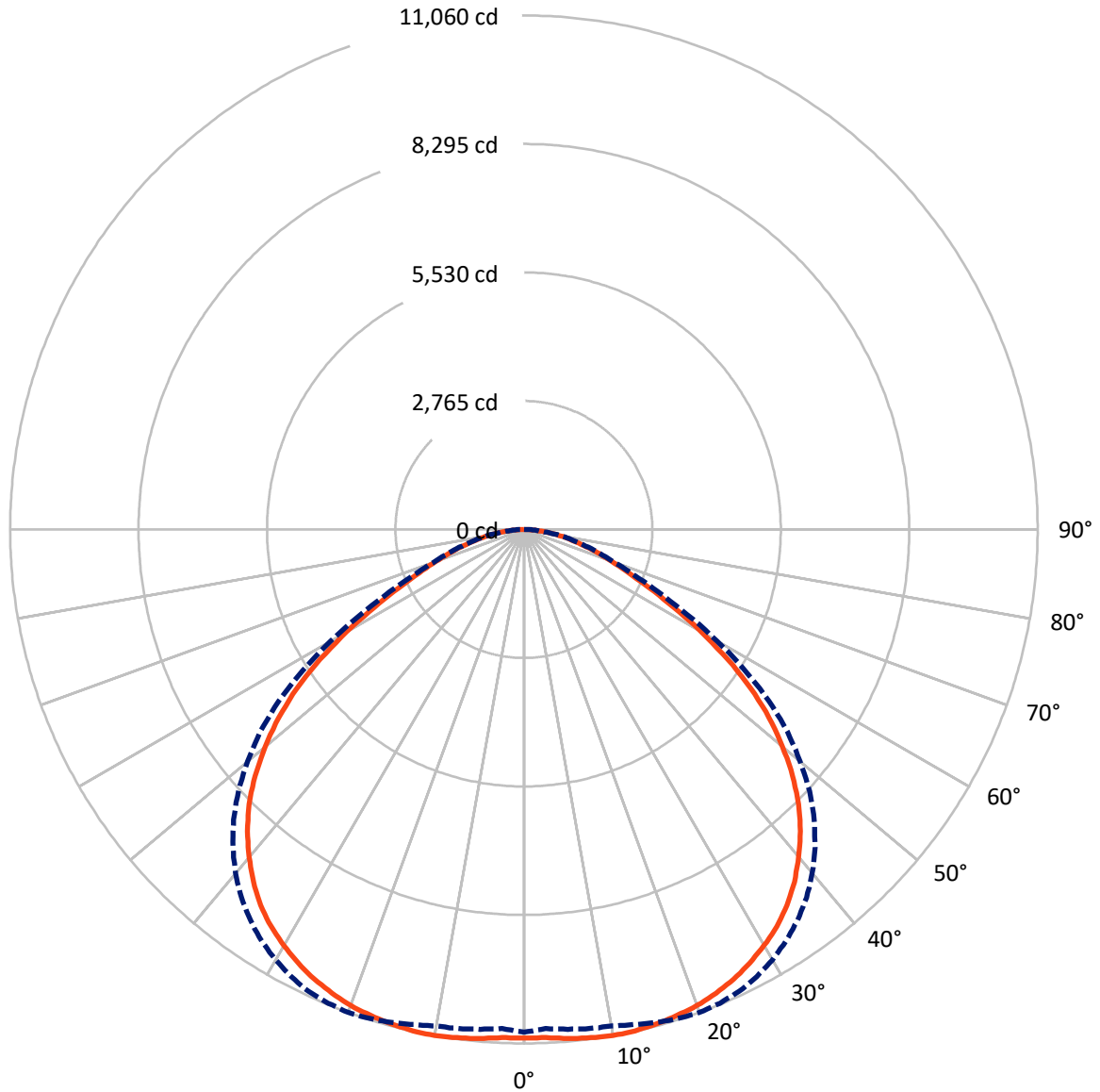
REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-U-LAM

Lumen Table



REPORT NUMBER: P628227
CATALOG NUMBER: IFLD-M-SA4E-730-U-LAM

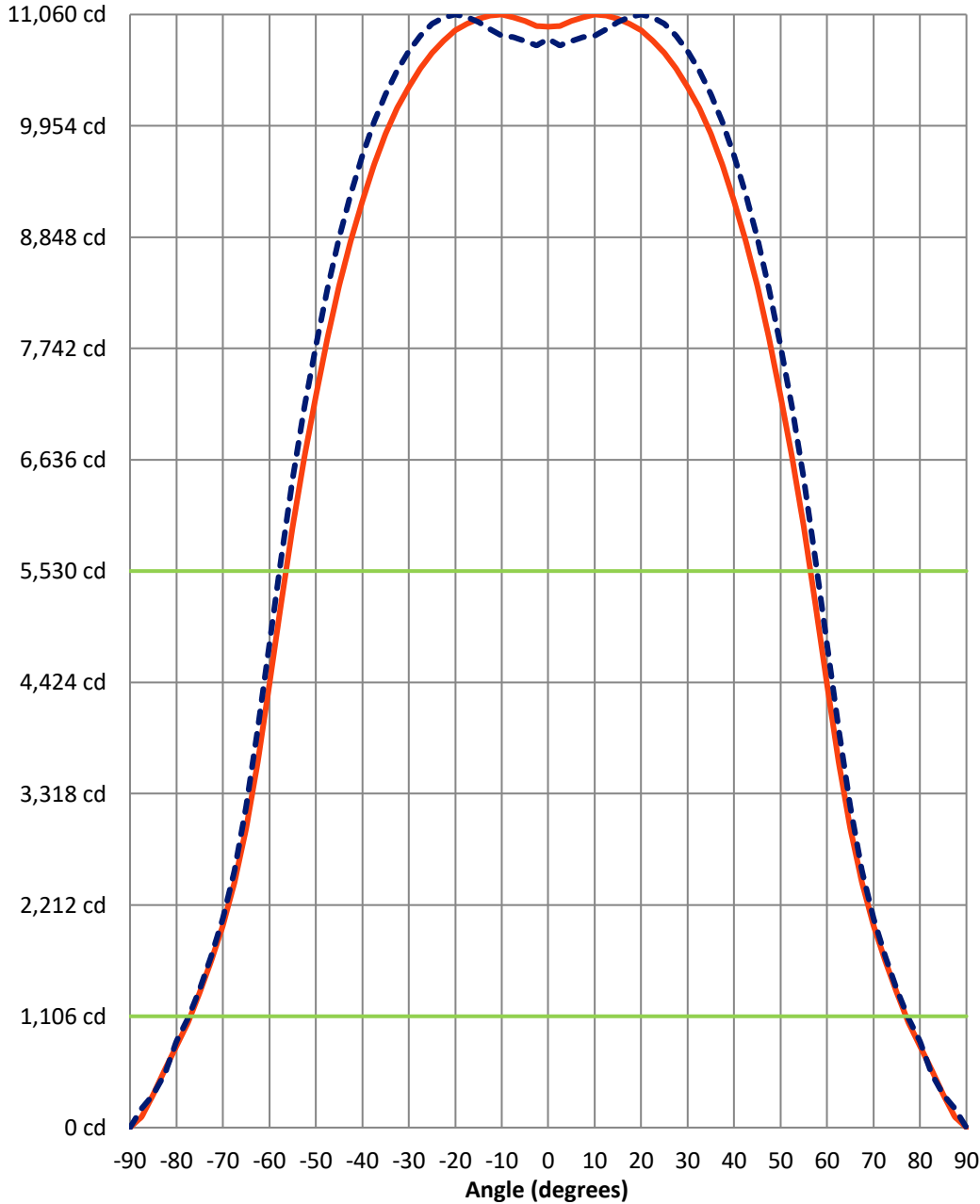
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 20819.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 24959.5
 Efficiency: 73.6%

Spill:
 Lumens: 8970.1
 Efficiency: 26.4%

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



REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-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°	89.2	96.4	100.0	103.5	107.1	110.7	114.2	110.7	107.1	107.1	103.5
85°	239.2	246.3	249.9	274.9	299.9	314.2	332.0	328.4	328.4	324.9	321.3
82.5°	478.4	499.8	517.6	542.6	556.9	578.3	592.6	581.9	574.8	560.5	549.8
80°	849.6	856.8	860.4	863.9	846.1	842.5	835.4	824.7	810.4	792.5	774.7
77.5°	1081.7	1088.8	1096.0	1088.8	1085.3	1081.7	1071.0	1060.3	1046.0	1031.7	1010.3
75°	1431.5	1431.5	1431.5	1420.8	1413.7	1403.0	1385.1	1367.3	1342.3	1313.7	1281.6
72.5°	1802.8	1799.3	1795.7	1774.3	1756.4	1735.0	1710.0	1688.6	1660.0	1627.9	1585.1
70°	2191.9	2199.1	2202.7	2174.1	2152.7	2124.1	2092.0	2052.7	2009.9	1963.5	1902.8
67.5°	2727.4	2720.3	2713.2	2673.9	2645.3	2606.1	2559.6	2502.5	2438.3	2366.9	2281.2
65°	3391.4	3402.2	3380.7	3341.5	3287.9	3223.7	3152.3	3070.2	2973.8	2866.7	2745.3
62.5°	4194.7	4212.5	4187.5	4137.6	4069.7	3984.1	3884.1	3766.3	3634.2	3484.3	3334.3
60°	5108.6	5105.0	5058.6	4990.8	4901.5	4794.4	4683.8	4555.2	4405.3	4230.4	4048.3
57.5°	5947.5	5940.4	5883.3	5815.4	5726.2	5612.0	5494.1	5358.5	5201.4	5015.8	4805.1
55°	6700.8	6693.6	6636.5	6565.1	6472.3	6358.1	6251.0	6122.5	5968.9	5772.6	5547.7
52.5°	7368.4	7371.9	7322.0	7243.4	7143.5	7032.8	6929.3	6800.7	6654.4	6458.0	6240.3
50°	7982.4	7978.8	7925.3	7853.9	7761.1	7654.0	7550.4	7421.9	7268.4	7079.2	6868.6
47.5°	8553.6	8546.4	8485.8	8407.2	8310.8	8218.0	8121.6	8007.4	7846.7	7657.5	7446.9
45°	9032.0	9017.7	8957.0	8882.0	8789.2	8707.1	8621.4	8535.7	8364.4	8189.5	7989.5
42.5°	9442.5	9438.9	9378.2	9303.3	9210.5	9139.1	9060.5	8953.4	8810.6	8650.0	8453.6
40°	9835.2	9806.6	9745.9	9674.5	9588.9	9528.2	9449.6	9342.5	9203.3	9046.2	8857.0
37.5°	10127.9	10131.5	10067.2	9988.7	9913.7	9856.6	9785.2	9685.3	9563.9	9410.4	9221.2
35°	10406.4	10388.5	10335.0	10267.2	10199.3	10135.1	10060.1	9974.4	9874.5	9731.7	9553.2
32.5°	10588.5	10613.4	10549.2	10477.8	10438.5	10388.5	10310.0	10220.7	10131.5	9988.7	9828.1
30°	10788.4	10767.0	10717.0	10656.3	10627.7	10595.6	10527.8	10442.1	10338.6	10210.0	10060.1
27.5°	10927.6	10916.9	10856.2	10799.1	10784.8	10756.2	10702.7	10627.7	10524.2	10399.2	10260.0
25°	10988.3	10995.4	10938.3	10906.2	10906.2	10888.3	10845.5	10781.2	10677.7	10563.5	10427.8
22.5°	11016.8	11009.7	10970.4	10963.3	10981.1	10966.9	10949.0	10891.9	10799.1	10706.3	10592.0
20°	11034.7	10984.7	10949.0	10977.6	10999.0	10995.4	10981.1	10945.4	10902.6	10824.1	10724.1
17.5°	10995.4	10963.3	10920.5	10963.3	11009.7	11013.3	10999.0	10977.6	10966.9	10916.9	10827.6
15°	10899.0	10874.0	10881.2	10924.0	10977.6	10995.4	11006.1	11031.1	11016.8	10977.6	10899.0
12.5°	10834.8	10802.6	10834.8	10877.6	10906.2	10916.9	11002.6	11049.0	11049.0	11013.3	10963.3
10°	10816.9	10752.7	10795.5	10834.8	10849.1	10913.3	10984.7	11034.7	11059.7	11031.1	10966.9
7.5°	10781.2	10738.4	10756.2	10774.1	10856.2	10902.6	10941.9	10995.4	11031.1	11027.6	10970.4
5°	10763.4	10709.8	10717.0	10791.9	10849.1	10881.2	10895.5	10941.9	10995.4	11006.1	10963.3
2.5°	10717.0	10692.0	10745.5	10752.7	10795.5	10820.5	10834.8	10877.6	10945.4	10970.4	10952.6
0°	10692.0	10656.3	10620.6	10649.1	10720.5	10774.1	10795.5	10859.8	10938.3	10963.3	10924.0



REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-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°	100.0	96.4	92.8	89.2	92.8	92.8	92.8	89.2	92.8	89.2	89.2
85°	310.6	296.3	285.6	271.3	257.0	246.3	232.0	217.8	214.2	210.6	203.5
82.5°	535.5	517.6	499.8	478.4	457.0	432.0	407.0	378.4	371.3	364.1	353.4
80°	753.3	728.3	703.3	678.3	656.9	631.9	603.3	571.2	549.8	531.9	510.5
77.5°	981.7	946.0	910.3	867.5	842.5	817.5	789.0	756.8	724.7	696.1	664.0
75°	1242.3	1203.1	1167.4	1124.5	1078.1	1031.7	985.3	942.5	896.1	853.2	810.4
72.5°	1531.5	1474.4	1417.3	1363.7	1306.6	1249.5	1188.8	1131.7	1074.6	1017.4	956.7
70°	1835.0	1763.6	1692.2	1620.8	1545.8	1470.8	1399.4	1328.0	1256.6	1181.7	1113.8
67.5°	2191.9	2109.8	2017.0	1917.1	1806.4	1710.0	1617.2	1531.5	1445.8	1360.1	1274.5
65°	2638.2	2524.0	2399.0	2263.3	2134.8	2006.3	1870.7	1742.1	1642.2	1542.2	1445.8
62.5°	3188.0	3027.3	2852.4	2677.5	2520.4	2352.6	2195.5	2027.7	1870.7	1727.9	1610.0
60°	3844.8	3627.1	3412.9	3188.0	2970.2	2741.7	2541.8	2334.7	2138.4	1963.5	1792.1
57.5°	4569.5	4316.1	4059.0	3784.1	3487.8	3220.1	2948.8	2677.5	2445.4	2213.4	2020.6
55°	5304.9	5037.2	4748.0	4437.4	4112.6	3769.9	3402.2	3098.7	2781.0	2509.7	2259.8
52.5°	6004.6	5726.2	5426.3	5140.7	4751.6	4358.9	3955.5	3555.7	3184.4	2838.1	2534.7
50°	6629.4	6358.1	6068.9	5736.9	5376.3	4958.7	4508.8	4059.0	3619.9	3212.9	2834.5
47.5°	7200.6	6936.4	6647.2	6315.2	5986.8	5522.7	5069.3	4573.1	4084.0	3616.4	3173.7
45°	7736.1	7468.3	7168.4	6850.7	6472.3	6058.2	5590.5	5090.7	4566.0	4041.2	3530.7
42.5°	8221.6	7953.8	7650.4	7322.0	6947.1	6536.6	6083.2	5579.8	5051.5	4480.3	3919.8
40°	8646.4	8385.8	8093.1	7750.3	7400.5	6968.5	6522.3	6043.9	5497.7	4923.0	4305.4
37.5°	9017.7	8774.9	8485.8	8146.6	7775.3	7389.8	6929.3	6450.9	5958.2	5333.5	4701.6
35°	9346.1	9121.2	8824.9	8503.6	8139.5	7732.5	7300.5	6832.9	6301.0	5715.5	5101.4
32.5°	9631.7	9403.2	9131.9	8810.6	8457.2	8075.2	7632.5	7161.3	6657.9	6061.8	5394.2
30°	9874.5	9653.1	9396.1	9092.6	8753.5	8375.1	7943.1	7468.3	6954.3	6361.6	5701.2
27.5°	10085.1	9874.5	9624.6	9342.5	9017.7	8653.5	8218.0	7739.6	7214.9	6643.7	5983.2
25°	10267.2	10063.7	9831.6	9563.9	9242.6	8885.6	8475.0	7975.3	7450.5	6875.7	6222.4
22.5°	10431.4	10235.0	10003.0	9742.4	9449.6	9092.6	8678.5	8182.3	7650.4	7082.8	6440.2
20°	10577.7	10395.7	10167.2	9899.5	9606.7	9246.2	8835.6	8364.4	7828.9	7272.0	6636.5
17.5°	10695.6	10534.9	10306.4	10024.4	9731.7	9381.8	8982.0	8550.0	7982.4	7432.6	6800.7
15°	10777.7	10620.6	10413.5	10127.9	9842.3	9496.1	9096.2	8650.0	8121.6	7561.1	6936.4
12.5°	10834.8	10667.0	10474.2	10210.0	9924.4	9581.7	9192.6	8753.5	8239.4	7675.4	7054.2
10°	10849.1	10695.6	10502.8	10267.2	9988.7	9656.7	9274.7	8839.2	8335.8	7764.6	7150.6
7.5°	10856.2	10709.8	10534.9	10310.0	10035.1	9713.8	9335.4	8907.0	8407.2	7839.6	7222.0
5°	10852.6	10713.4	10556.3	10338.6	10063.7	9745.9	9374.7	8953.4	8457.2	7889.6	7275.5
2.5°	10841.9	10717.0	10570.6	10360.0	10095.8	9781.6	9413.9	9007.0	8510.7	7932.4	7318.4
0°	10870.5	10763.4	10577.7	10352.8	10102.9	9781.6	9410.4	9014.1	8517.9	7928.8	7314.8



REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-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°	89.2	85.7	85.7	82.1	78.5	75.0	67.8	64.3	57.1	46.4	35.7
85°	192.8	182.1	171.4	164.2	157.1	149.9	139.2	128.5	114.2	92.8	71.4
82.5°	339.1	317.7	296.3	271.3	249.9	228.5	210.6	192.8	171.4	139.2	107.1
80°	485.5	453.4	421.3	385.6	353.4	317.7	285.6	257.0	228.5	185.6	142.8
77.5°	631.9	589.0	542.6	499.8	453.4	407.0	360.6	321.3	278.5	228.5	178.5
75°	767.5	717.6	674.7	614.0	556.9	496.2	435.5	382.0	328.4	267.7	214.2
72.5°	903.2	838.9	778.2	721.1	656.9	581.9	514.1	446.2	378.4	307.0	242.8
70°	1038.9	960.3	885.3	817.5	746.1	671.1	589.0	510.5	428.4	342.7	267.7
67.5°	1178.1	1088.8	1003.2	917.5	835.4	749.7	664.0	574.8	478.4	378.4	296.3
65°	1331.6	1220.9	1117.4	1021.0	924.6	831.8	735.4	639.0	531.9	417.7	321.3
62.5°	1485.1	1363.7	1242.3	1121.0	1013.9	910.3	806.8	699.7	581.9	460.5	346.3
60°	1649.3	1510.1	1370.9	1235.2	1103.1	988.9	874.6	760.4	635.4	499.8	371.3
57.5°	1831.4	1663.6	1506.5	1353.0	1203.1	1067.4	942.5	821.1	681.9	539.1	399.8
55°	2038.4	1831.4	1645.7	1474.4	1310.2	1146.0	1010.3	885.3	735.4	578.3	432.0
52.5°	2256.2	2017.0	1792.1	1599.3	1424.4	1238.8	1074.6	935.3	789.0	617.6	460.5
50°	2509.7	2206.2	1956.3	1720.7	1524.4	1331.6	1142.4	992.4	842.5	664.0	489.1
47.5°	2770.3	2434.7	2120.5	1863.5	1631.5	1420.8	1220.9	1042.4	892.5	706.8	517.6
45°	3073.7	2652.5	2306.2	2002.7	1735.0	1513.7	1299.5	1096.0	935.3	749.7	546.2
42.5°	3366.5	2909.5	2499.0	2156.2	1852.8	1602.9	1370.9	1153.1	978.2	792.5	571.2
40°	3712.7	3166.5	2684.6	2302.6	1970.6	1688.6	1442.3	1213.8	1017.4	831.8	596.2
37.5°	4044.7	3427.1	2909.5	2463.3	2084.8	1774.3	1513.7	1270.9	1053.1	871.1	628.3
35°	4373.2	3716.3	3123.7	2613.2	2202.7	1870.7	1585.1	1324.4	1088.8	903.2	656.9
32.5°	4687.3	3987.6	3341.5	2781.0	2331.2	1959.9	1649.3	1374.4	1124.5	931.8	685.4
30°	4980.1	4244.7	3555.7	2952.3	2449.0	2042.0	1710.0	1424.4	1167.4	956.7	714.0
27.5°	5247.8	4494.6	3769.9	3113.0	2559.6	2117.0	1774.3	1470.8	1203.1	981.7	739.0
25°	5490.6	4719.5	3966.2	3259.4	2659.6	2199.1	1835.0	1517.2	1235.2	1003.2	760.4
22.5°	5719.0	4926.5	4144.7	3405.7	2781.0	2281.2	1892.1	1560.1	1267.3	1024.6	781.8
20°	5919.0	5115.7	4316.1	3552.1	2888.1	2356.2	1942.0	1599.3	1295.9	1038.9	803.2
17.5°	6079.6	5283.5	4469.6	3680.6	2980.9	2420.4	1984.9	1635.0	1320.9	1056.7	817.5
15°	6222.4	5426.3	4598.1	3791.3	3063.0	2474.0	2024.2	1663.6	1342.3	1067.4	835.4
12.5°	6343.8	5547.7	4708.8	3887.7	3134.4	2520.4	2056.3	1685.0	1360.1	1078.1	846.1
10°	6443.7	5644.1	4801.6	3962.6	3191.5	2556.1	2081.3	1706.4	1374.4	1088.8	856.8
7.5°	6518.7	5715.5	4869.4	4026.9	3237.9	2581.1	2102.7	1720.7	1388.7	1096.0	874.6
5°	6575.8	5776.2	4923.0	4069.7	3273.6	2616.8	2127.7	1738.6	1403.0	1103.1	874.6
2.5°	6618.7	5826.1	4965.8	4105.4	3302.2	2609.6	2127.7	1735.0	1403.0	1103.1	871.1
0°	6611.5	5829.7	4962.2	4105.4	3302.2	2602.5	2127.7	1731.4	1403.0	1103.1	871.1



REPORT NUMBER: P628227
 CATALOG NUMBER: IFLD-M-SA4E-730-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	25.0	17.8	7.1	0.0
85°	53.5	35.7	17.8	0.0
82.5°	78.5	50.0	25.0	0.0
80°	103.5	67.8	32.1	0.0
77.5°	132.1	85.7	42.8	0.0
75°	157.1	100.0	50.0	0.0
72.5°	182.1	117.8	57.1	0.0
70°	203.5	132.1	64.3	0.0
67.5°	224.9	149.9	75.0	0.0
65°	242.8	164.2	82.1	0.0
62.5°	257.0	182.1	89.2	0.0
60°	274.9	196.3	96.4	0.0
57.5°	289.2	207.1	103.5	0.0
55°	303.4	214.2	110.7	0.0
52.5°	317.7	224.9	117.8	0.0
50°	332.0	235.6	124.9	0.0
47.5°	346.3	242.8	128.5	0.0
45°	367.7	253.5	135.7	0.0
42.5°	385.6	260.6	142.8	0.0
40°	403.4	267.7	146.4	0.0
37.5°	421.3	274.9	153.5	0.0
35°	439.1	282.0	157.1	0.0
32.5°	453.4	289.2	160.6	0.0
30°	467.7	296.3	164.2	0.0
27.5°	481.9	299.9	167.8	0.0
25°	492.7	307.0	171.4	0.0
22.5°	503.4	310.6	174.9	0.0
20°	510.5	314.2	178.5	0.0
17.5°	521.2	317.7	182.1	0.0
15°	524.8	321.3	189.2	0.0
12.5°	531.9	324.9	189.2	0.0
10°	535.5	328.4	189.2	0.0
7.5°	542.6	328.4	189.2	0.0
5°	539.1	328.4	189.2	0.0
2.5°	539.1	328.4	189.2	0.0
0°	535.5	328.4	189.2	0.0

(END OF REPORT)