

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: P628314

Luminaire Tested: **IFLD-M-SA4E-750-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628314
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-750-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38114 lumens	Max Intensity:	12423.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	121.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

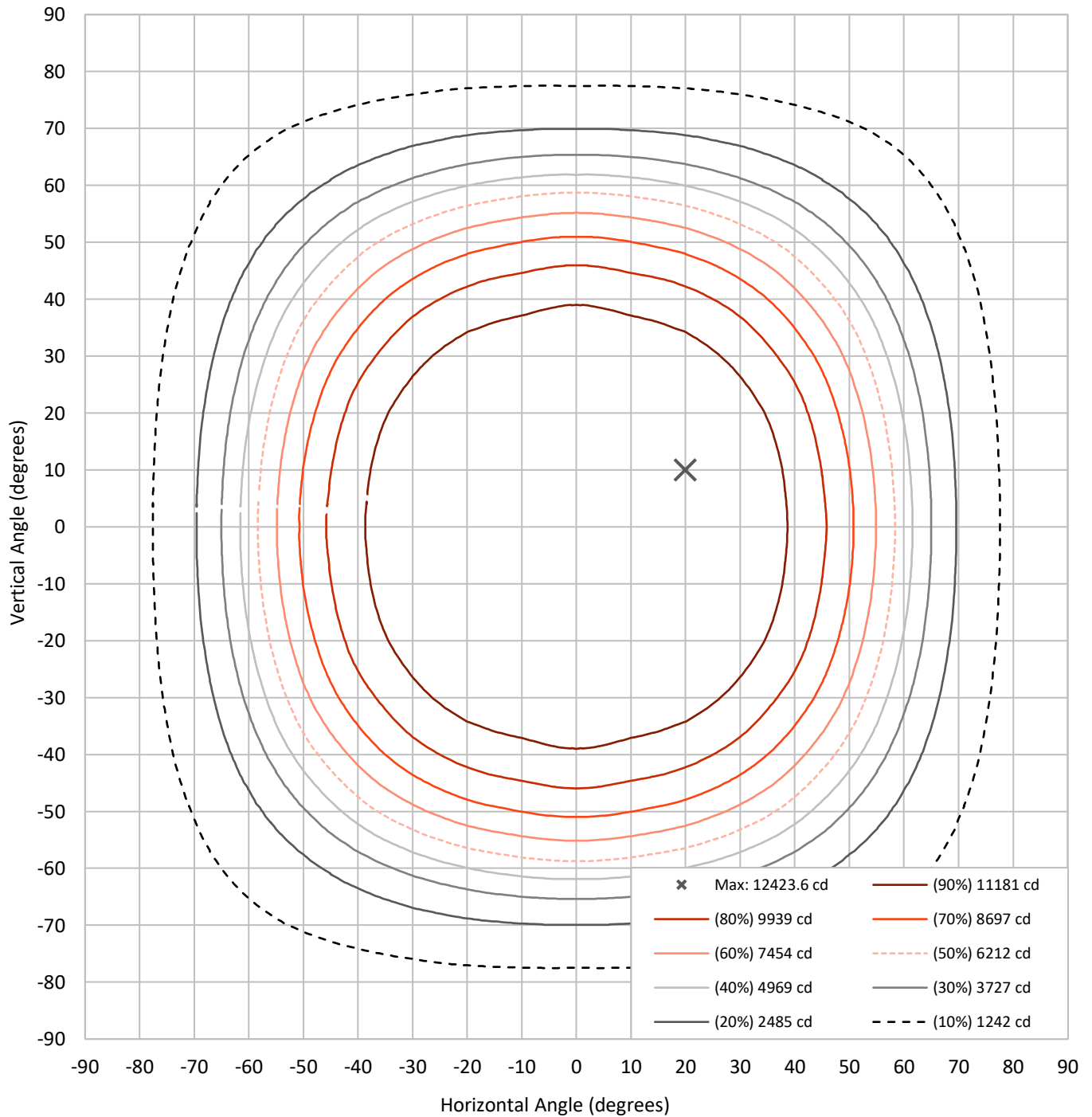
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	23387.5 lumens	Field Lumens:	28037.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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: P628314
CATALOG NUMBER: IFLD-M-SA4E-750-U-LAM

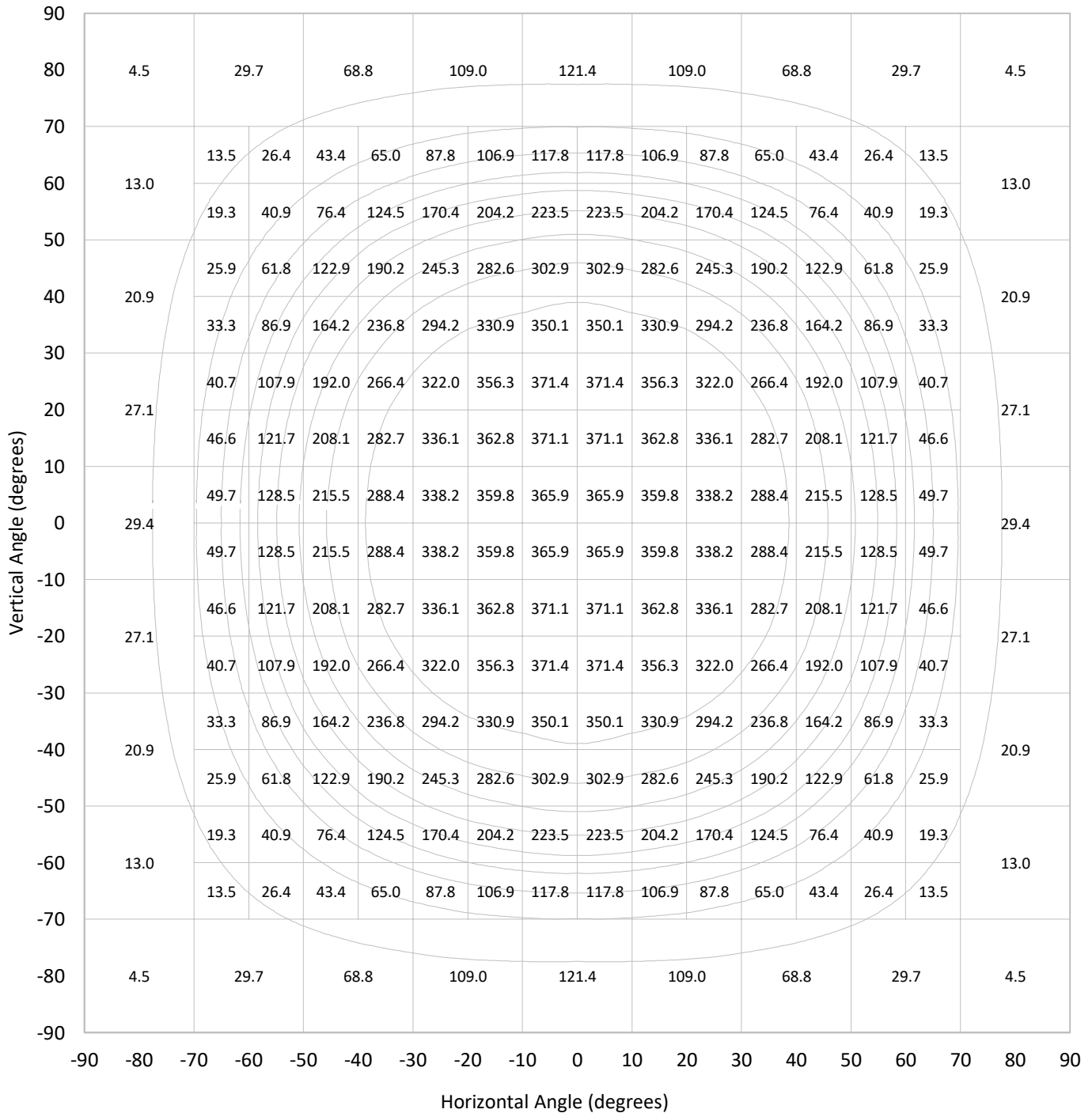
Iso-Candela Plot





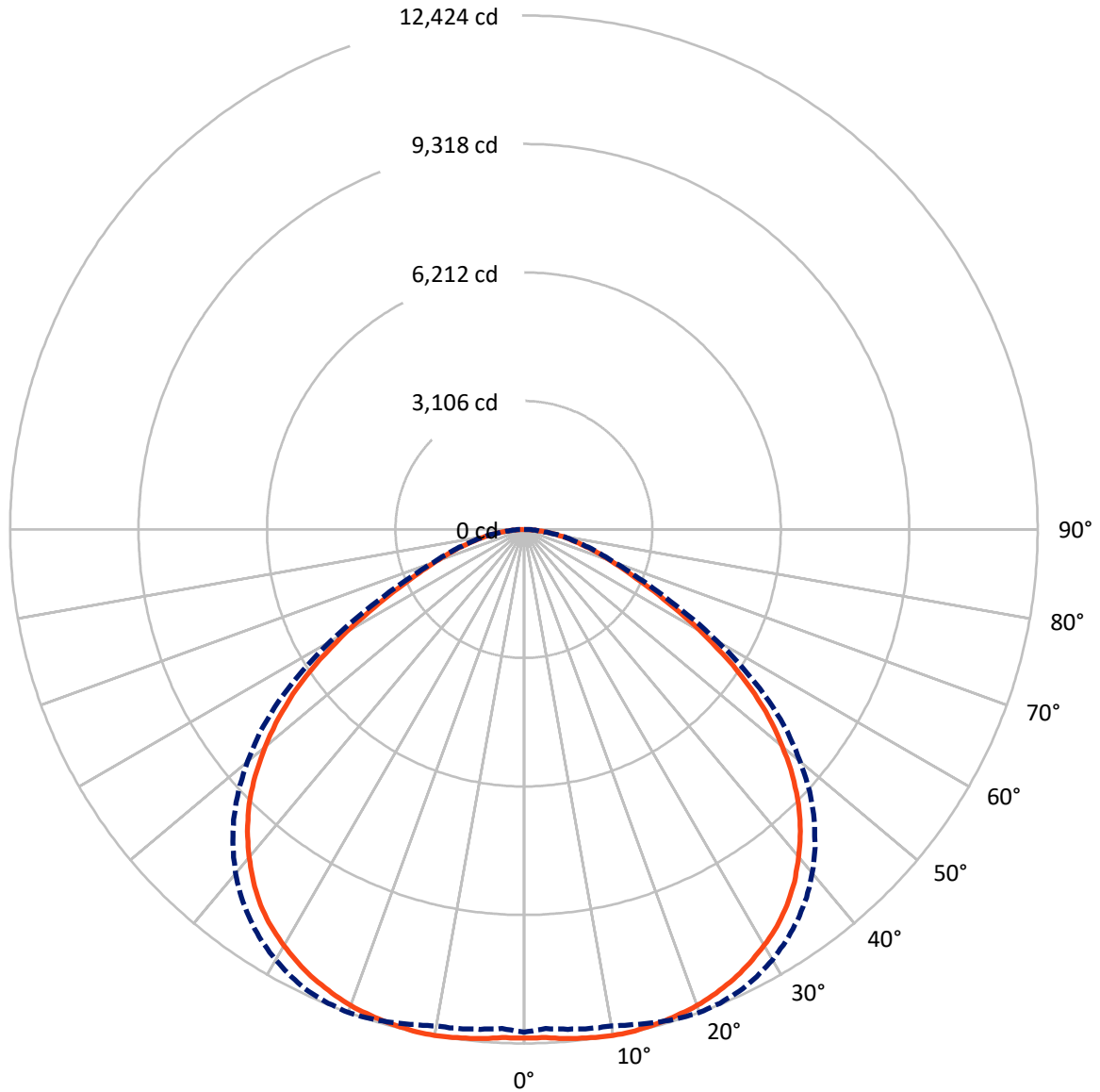
REPORT NUMBER: P628314
 CATALOG NUMBER: IFLD-M-SA4E-750-U-LAM

Lumen Table



REPORT NUMBER: P628314
CATALOG NUMBER: IFLD-M-SA4E-750-U-LAM

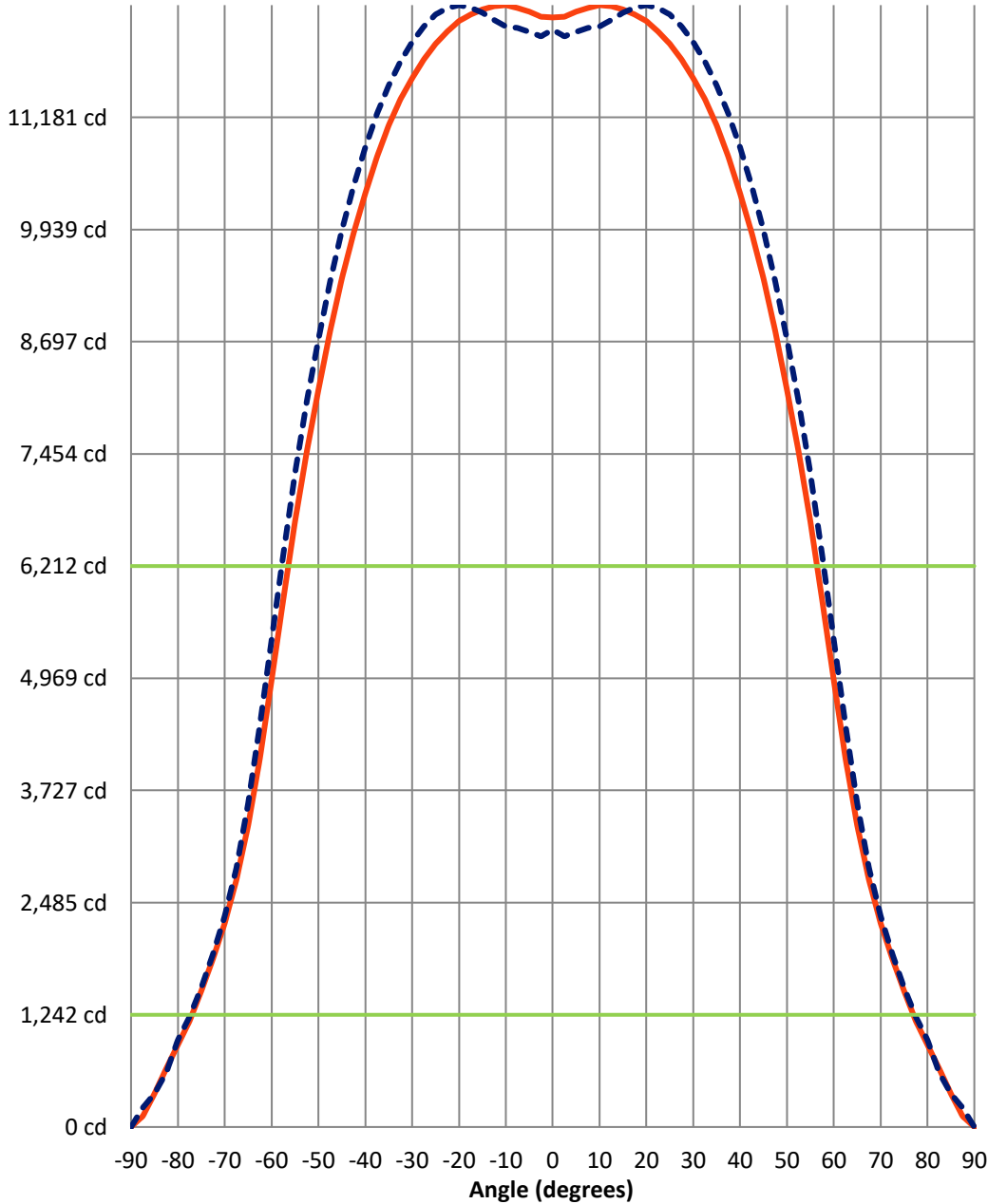
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628314
CATALOG NUMBER: IFLD-M-SA4E-750-U-LAM

Luminous Intensity Plot



Beam:
H Angle: 115.7°
V Angle: 112.9°
Lumens: 23387.5
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 28037.7
Efficiency: 73.6%

Spill:
Lumens: 10076.3
Efficiency: 26.4%

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



REPORT NUMBER: P628314
 CATALOG NUMBER: IFLD-M-SA4E-750-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°	100.3	108.3	112.3	116.3	120.3	124.3	128.3	124.3	120.3	120.3	116.3
85°	268.7	276.7	280.7	308.8	336.9	352.9	372.9	368.9	368.9	364.9	360.9
82.5°	537.4	561.4	581.5	609.6	625.6	649.7	665.7	653.7	645.6	629.6	617.6
80°	954.4	962.4	966.5	970.5	950.4	946.4	938.4	926.4	910.3	890.3	870.2
77.5°	1215.1	1223.1	1231.1	1223.1	1219.1	1215.1	1203.1	1191.0	1175.0	1159.0	1134.9
75°	1608.1	1608.1	1608.1	1596.1	1588.0	1576.0	1556.0	1535.9	1507.8	1475.8	1439.7
72.5°	2025.2	2021.1	2017.1	1993.1	1973.0	1949.0	1920.9	1896.8	1864.7	1828.7	1780.5
70°	2462.3	2470.3	2474.3	2442.2	2418.2	2386.1	2350.0	2305.9	2257.7	2205.6	2137.4
67.5°	3063.8	3055.8	3047.8	3003.6	2971.6	2927.5	2875.3	2811.2	2739.0	2658.8	2562.5
65°	3809.7	3821.7	3797.7	3753.6	3693.4	3621.2	3541.0	3448.8	3340.5	3220.2	3083.8
62.5°	4712.0	4732.0	4704.0	4647.8	4571.6	4475.4	4363.1	4230.8	4082.4	3914.0	3745.5
60°	5738.6	5734.6	5682.5	5606.3	5506.0	5385.7	5261.4	5117.0	4948.6	4752.1	4547.6
57.5°	6681.0	6673.0	6608.8	6532.6	6432.4	6304.0	6171.7	6019.3	5842.9	5634.3	5397.7
55°	7527.2	7519.1	7455.0	7374.8	7270.5	7142.2	7021.9	6877.5	6705.1	6484.5	6231.9
52.5°	8277.1	8281.1	8224.9	8136.7	8024.4	7900.1	7783.8	7639.4	7475.0	7254.5	7009.8
50°	8966.8	8962.8	8902.7	8822.5	8718.2	8597.9	8481.6	8337.2	8164.8	7952.2	7715.6
47.5°	9608.5	9600.4	9532.3	9444.0	9335.8	9231.5	9123.2	8994.9	8814.4	8601.9	8365.3
45°	10145.8	10129.8	10061.6	9977.4	9873.1	9780.9	9684.7	9588.4	9395.9	9199.4	8974.8
42.5°	10607.0	10603.0	10534.8	10450.6	10346.3	10266.1	10177.9	10057.6	9897.2	9716.7	9496.2
40°	11048.1	11016.0	10947.9	10867.7	10771.4	10703.2	10615.0	10494.7	10338.3	10161.9	9949.3
37.5°	11377.0	11381.0	11308.8	11220.6	11136.3	11072.2	10992.0	10879.7	10743.3	10570.9	10358.4
35°	11689.8	11669.7	11609.6	11533.4	11457.2	11385.0	11300.8	11204.5	11092.2	10931.8	10731.3
32.5°	11894.3	11922.3	11850.2	11770.0	11725.8	11669.7	11581.5	11481.2	11381.0	11220.6	11040.1
30°	12118.8	12094.8	12038.6	11970.5	11938.4	11902.3	11826.1	11729.9	11613.6	11469.2	11300.8
27.5°	12275.2	12263.2	12195.0	12130.9	12114.8	12082.8	12022.6	11938.4	11822.1	11681.7	11525.3
25°	12343.4	12351.4	12287.3	12251.2	12251.2	12231.1	12183.0	12110.8	11994.5	11866.2	11713.8
22.5°	12375.5	12367.5	12323.4	12315.3	12335.4	12319.4	12299.3	12235.1	12130.9	12026.6	11898.3
20°	12395.6	12339.4	12299.3	12331.4	12355.5	12351.4	12335.4	12295.3	12247.2	12159.0	12046.7
17.5°	12351.4	12315.3	12267.2	12315.3	12367.5	12371.5	12355.5	12331.4	12319.4	12263.2	12163.0
15°	12243.2	12215.1	12223.1	12271.2	12331.4	12351.4	12363.5	12391.5	12375.5	12331.4	12243.2
12.5°	12171.0	12134.9	12171.0	12219.1	12251.2	12263.2	12359.5	12411.6	12411.6	12371.5	12315.3
10°	12150.9	12078.7	12126.9	12171.0	12187.0	12259.2	12339.4	12395.6	12423.6	12391.5	12319.4
7.5°	12110.8	12062.7	12082.8	12102.8	12195.0	12247.2	12291.3	12351.4	12391.5	12387.5	12323.4
5°	12090.8	12030.6	12038.6	12122.9	12187.0	12223.1	12239.2	12291.3	12351.4	12363.5	12315.3
2.5°	12038.6	12010.6	12070.7	12078.7	12126.9	12154.9	12171.0	12219.1	12295.3	12323.4	12303.3
0°	12010.6	11970.5	11930.4	11962.5	12042.7	12102.8	12126.9	12199.1	12287.3	12315.3	12271.2



REPORT NUMBER: P628314
 CATALOG NUMBER: IFLD-M-SA4E-750-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°	112.3	108.3	104.3	100.3	104.3	104.3	104.3	100.3	104.3	100.3	100.3
85°	348.9	332.8	320.8	304.8	288.7	276.7	260.7	244.6	240.6	236.6	228.6
82.5°	601.5	581.5	561.4	537.4	513.3	485.2	457.2	425.1	417.1	409.0	397.0
80°	846.2	818.1	790.0	761.9	737.9	709.8	677.7	641.6	617.6	597.5	573.5
77.5°	1102.8	1062.7	1022.6	974.5	946.4	918.3	886.3	850.2	814.1	782.0	745.9
75°	1395.6	1351.4	1311.3	1263.2	1211.1	1159.0	1106.8	1058.7	1006.6	958.4	910.3
72.5°	1720.4	1656.2	1592.1	1531.9	1467.7	1403.6	1335.4	1271.2	1207.1	1142.9	1074.7
70°	2061.2	1981.0	1900.8	1820.6	1736.4	1652.2	1572.0	1491.8	1411.6	1327.4	1251.2
67.5°	2462.3	2370.0	2265.8	2153.5	2029.2	1920.9	1816.6	1720.4	1624.1	1527.9	1431.6
65°	2963.5	2835.2	2694.9	2542.5	2398.1	2253.7	2101.3	1957.0	1844.7	1732.4	1624.1
62.5°	3581.1	3400.7	3204.2	3007.7	2831.2	2642.7	2466.3	2277.8	2101.3	1940.9	1808.6
60°	4319.0	4074.4	3833.8	3581.1	3336.5	3079.8	2855.3	2622.7	2402.1	2205.6	2013.1
57.5°	5133.1	4848.3	4559.6	4250.8	3918.0	3617.2	3312.4	3007.7	2747.0	2486.3	2269.8
55°	5959.2	5658.4	5333.6	4984.7	4619.8	4234.8	3821.7	3480.9	3124.0	2819.2	2538.5
52.5°	6745.2	6432.4	6095.5	5774.7	5337.6	4896.5	4443.3	3994.2	3577.1	3188.1	2847.2
50°	7447.0	7142.2	6817.4	6444.4	6039.4	5570.2	5064.9	4559.6	4066.4	3609.2	3184.1
47.5°	8088.6	7791.8	7467.0	7094.1	6725.1	6203.8	5694.5	5137.1	4587.7	4062.3	3565.1
45°	8690.1	8389.4	8052.5	7695.6	7270.5	6805.3	6280.0	5718.6	5129.1	4539.6	3966.1
42.5°	9235.5	8934.7	8593.9	8224.9	7803.9	7342.7	6833.4	6268.0	5674.4	5032.8	4403.2
40°	9712.7	9420.0	9091.1	8706.2	8313.2	7827.9	7326.7	6789.3	6175.7	5530.1	4836.3
37.5°	10129.8	9857.1	9532.3	9151.3	8734.2	8301.1	7783.8	7246.4	6693.0	5991.3	5281.4
35°	10498.7	10246.1	9913.2	9552.3	9143.3	8686.1	8200.9	7675.5	7078.0	6420.3	5730.6
32.5°	10819.5	10562.9	10258.1	9897.2	9500.2	9071.1	8573.8	8044.5	7479.0	6809.3	6059.4
30°	11092.2	10843.6	10554.9	10214.0	9833.0	9407.9	8922.7	8389.4	7811.9	7146.2	6404.3
27.5°	11328.8	11092.2	10811.5	10494.7	10129.8	9720.7	9231.5	8694.1	8104.6	7463.0	6721.1
25°	11533.4	11304.8	11044.1	10743.3	10382.4	9981.4	9520.2	8958.8	8369.3	7723.7	6989.8
22.5°	11717.8	11497.3	11236.6	10943.9	10615.0	10214.0	9748.8	9191.4	8593.9	7956.3	7234.4
20°	11882.2	11677.7	11421.1	11120.3	10791.5	10386.4	9925.3	9395.9	8794.4	8168.8	7455.0
17.5°	12014.6	11834.1	11577.5	11260.7	10931.8	10538.8	10089.7	9604.4	8966.8	8349.3	7639.4
15°	12106.8	11930.4	11697.8	11377.0	11056.1	10667.2	10218.0	9716.7	9123.2	8493.6	7791.8
12.5°	12171.0	11982.5	11766.0	11469.2	11148.4	10763.4	10326.3	9833.0	9255.6	8621.9	7924.2
10°	12187.0	12014.6	11798.0	11533.4	11220.6	10847.6	10418.5	9929.3	9363.8	8722.2	8032.4
7.5°	12195.0	12030.6	11834.1	11581.5	11272.7	10911.8	10486.7	10005.5	9444.0	8806.4	8112.7
5°	12191.0	12034.6	11858.2	11613.6	11304.8	10947.9	10530.8	10057.6	9500.2	8862.6	8172.8
2.5°	12179.0	12038.6	11874.2	11637.6	11340.9	10988.0	10574.9	10117.8	9560.3	8910.7	8220.9
0°	12211.1	12090.8	11882.2	11629.6	11348.9	10988.0	10570.9	10125.8	9568.4	8906.7	8216.9



REPORT NUMBER: P628314
 CATALOG NUMBER: IFLD-M-SA4E-750-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°	100.3	96.2	96.2	92.2	88.2	84.2	76.2	72.2	64.2	52.1	40.1
85°	216.6	204.5	192.5	184.5	176.4	168.4	156.4	144.4	128.3	104.3	80.2
82.5°	381.0	356.9	332.8	304.8	280.7	256.7	236.6	216.6	192.5	156.4	120.3
80°	545.4	509.3	473.2	433.1	397.0	356.9	320.8	288.7	256.7	208.5	160.4
77.5°	709.8	661.7	609.6	561.4	509.3	457.2	405.0	360.9	312.8	256.7	200.5
75°	862.2	806.1	757.9	689.8	625.6	557.4	489.2	429.1	368.9	300.8	240.6
72.5°	1014.6	942.4	874.2	810.1	737.9	653.7	577.5	501.3	425.1	344.9	272.7
70°	1167.0	1078.7	994.5	918.3	838.1	753.9	661.7	573.5	481.2	385.0	300.8
67.5°	1323.4	1223.1	1126.9	1030.6	938.4	842.1	745.9	645.6	537.4	425.1	332.8
65°	1495.8	1371.5	1255.2	1146.9	1038.6	934.4	826.1	717.8	597.5	469.2	360.9
62.5°	1668.2	1531.9	1395.6	1259.2	1138.9	1022.6	906.3	786.0	653.7	517.3	389.0
60°	1852.7	1696.3	1539.9	1387.5	1239.2	1110.8	982.5	854.2	713.8	561.4	417.1
57.5°	2057.2	1868.8	1692.3	1519.9	1351.4	1199.1	1058.7	922.3	765.9	605.5	449.1
55°	2289.8	2057.2	1848.7	1656.2	1471.7	1287.3	1134.9	994.5	826.1	649.7	485.2
52.5°	2534.5	2265.8	2013.1	1796.6	1600.1	1391.5	1207.1	1050.7	886.3	693.8	517.3
50°	2819.2	2478.3	2197.6	1932.9	1712.4	1495.8	1283.3	1114.8	946.4	745.9	549.4
47.5°	3111.9	2735.0	2382.1	2093.3	1832.7	1596.1	1371.5	1171.0	1002.6	794.0	581.5
45°	3452.8	2979.6	2590.6	2249.7	1949.0	1700.3	1459.7	1231.1	1050.7	842.1	613.6
42.5°	3781.6	3268.3	2807.1	2422.2	2081.3	1800.6	1539.9	1295.3	1098.8	890.3	641.6
40°	4170.6	3557.1	3015.7	2586.6	2213.6	1896.8	1620.1	1363.5	1142.9	934.4	669.7
37.5°	4543.6	3849.8	3268.3	2767.0	2342.0	1993.1	1700.3	1427.6	1183.0	978.5	705.8
35°	4912.5	4174.6	3508.9	2935.5	2474.3	2101.3	1780.5	1487.8	1223.1	1014.6	737.9
32.5°	5265.4	4479.4	3753.6	3124.0	2618.7	2201.6	1852.7	1543.9	1263.2	1046.7	770.0
30°	5594.2	4768.1	3994.2	3316.4	2751.0	2293.8	1920.9	1600.1	1311.3	1074.7	802.0
27.5°	5895.0	5048.9	4234.8	3496.9	2875.3	2378.1	1993.1	1652.2	1351.4	1102.8	830.1
25°	6167.7	5301.5	4455.3	3661.3	2987.6	2470.3	2061.2	1704.3	1387.5	1126.9	854.2
22.5°	6424.4	5534.1	4655.9	3825.7	3124.0	2562.5	2125.4	1752.5	1423.6	1150.9	878.2
20°	6648.9	5746.6	4848.3	3990.2	3244.3	2646.7	2181.6	1796.6	1455.7	1167.0	902.3
17.5°	6829.4	5935.1	5020.8	4134.5	3348.5	2718.9	2229.7	1836.7	1483.8	1187.0	918.3
15°	6989.8	6095.5	5165.1	4258.8	3440.8	2779.1	2273.8	1868.8	1507.8	1199.1	938.4
12.5°	7126.1	6231.9	5289.5	4367.1	3521.0	2831.2	2309.9	1892.8	1527.9	1211.1	950.4
10°	7238.4	6340.1	5393.7	4451.3	3585.1	2871.3	2338.0	1916.9	1543.9	1223.1	962.4
7.5°	7322.6	6420.3	5469.9	4523.5	3637.3	2899.4	2362.0	1932.9	1560.0	1231.1	982.5
5°	7386.8	6488.5	5530.1	4571.6	3677.4	2939.5	2390.1	1953.0	1576.0	1239.2	982.5
2.5°	7434.9	6544.7	5578.2	4611.7	3709.4	2931.5	2390.1	1949.0	1576.0	1239.2	978.5
0°	7426.9	6548.7	5574.2	4611.7	3709.4	2923.4	2390.1	1945.0	1576.0	1239.2	978.5



REPORT NUMBER: P628314
 CATALOG NUMBER: IFLD-M-SA4E-750-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	28.1	20.1	8.0	0.0
85°	60.2	40.1	20.1	0.0
82.5°	88.2	56.1	28.1	0.0
80°	116.3	76.2	36.1	0.0
77.5°	148.4	96.2	48.1	0.0
75°	176.4	112.3	56.1	0.0
72.5°	204.5	132.3	64.2	0.0
70°	228.6	148.4	72.2	0.0
67.5°	252.6	168.4	84.2	0.0
65°	272.7	184.5	92.2	0.0
62.5°	288.7	204.5	100.3	0.0
60°	308.8	220.6	108.3	0.0
57.5°	324.8	232.6	116.3	0.0
55°	340.9	240.6	124.3	0.0
52.5°	356.9	252.6	132.3	0.0
50°	372.9	264.7	140.4	0.0
47.5°	389.0	272.7	144.4	0.0
45°	413.1	284.7	152.4	0.0
42.5°	433.1	292.7	160.4	0.0
40°	453.2	300.8	164.4	0.0
37.5°	473.2	308.8	172.4	0.0
35°	493.3	316.8	176.4	0.0
32.5°	509.3	324.8	180.5	0.0
30°	525.3	332.8	184.5	0.0
27.5°	541.4	336.9	188.5	0.0
25°	553.4	344.9	192.5	0.0
22.5°	565.4	348.9	196.5	0.0
20°	573.5	352.9	200.5	0.0
17.5°	585.5	356.9	204.5	0.0
15°	589.5	360.9	212.5	0.0
12.5°	597.5	364.9	212.5	0.0
10°	601.5	368.9	212.5	0.0
7.5°	609.6	368.9	212.5	0.0
5°	605.5	368.9	212.5	0.0
2.5°	605.5	368.9	212.5	0.0
0°	601.5	368.9	212.5	0.0

(END OF REPORT)