

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: P628203

Luminaire Tested: **IFLD-L-SA7E-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628203
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7E-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	48587.5 lumens	Max Intensity:	15837.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	91.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

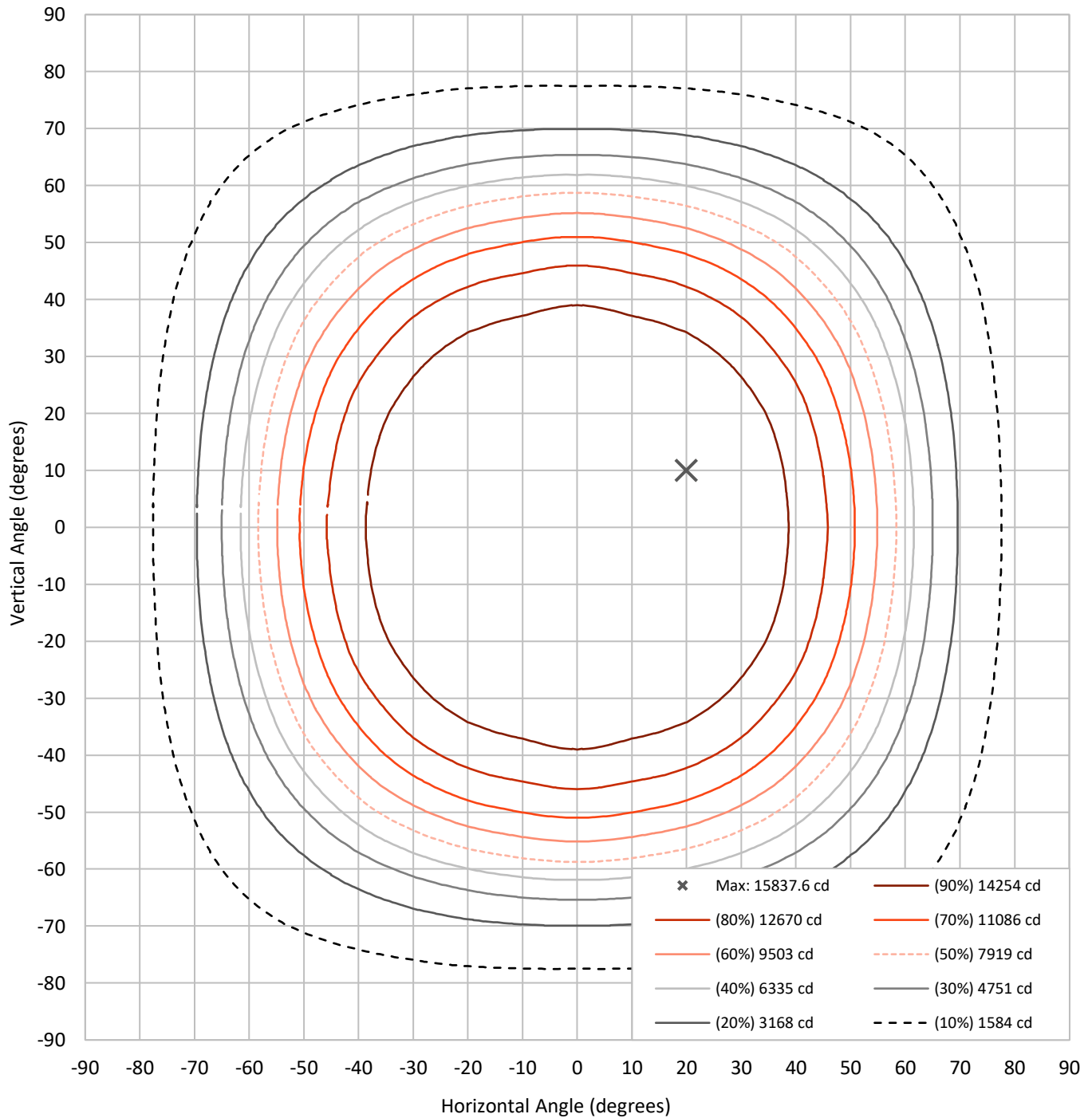
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	29814.3 lumens	Field Lumens:	35742.3 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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: P628203
CATALOG NUMBER: IFLD-L-SA7E-727-U-LAM

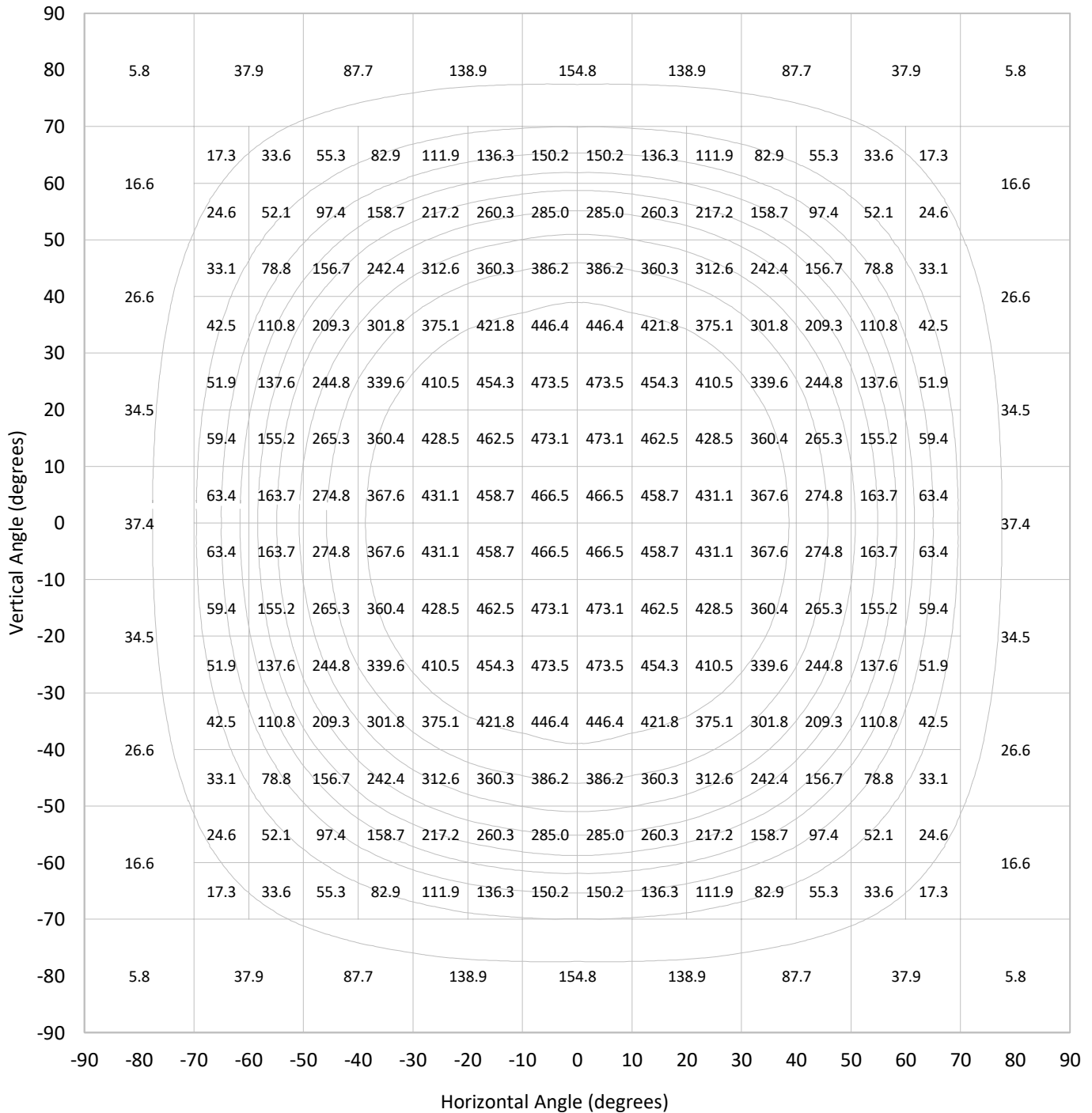
Iso-Candela Plot





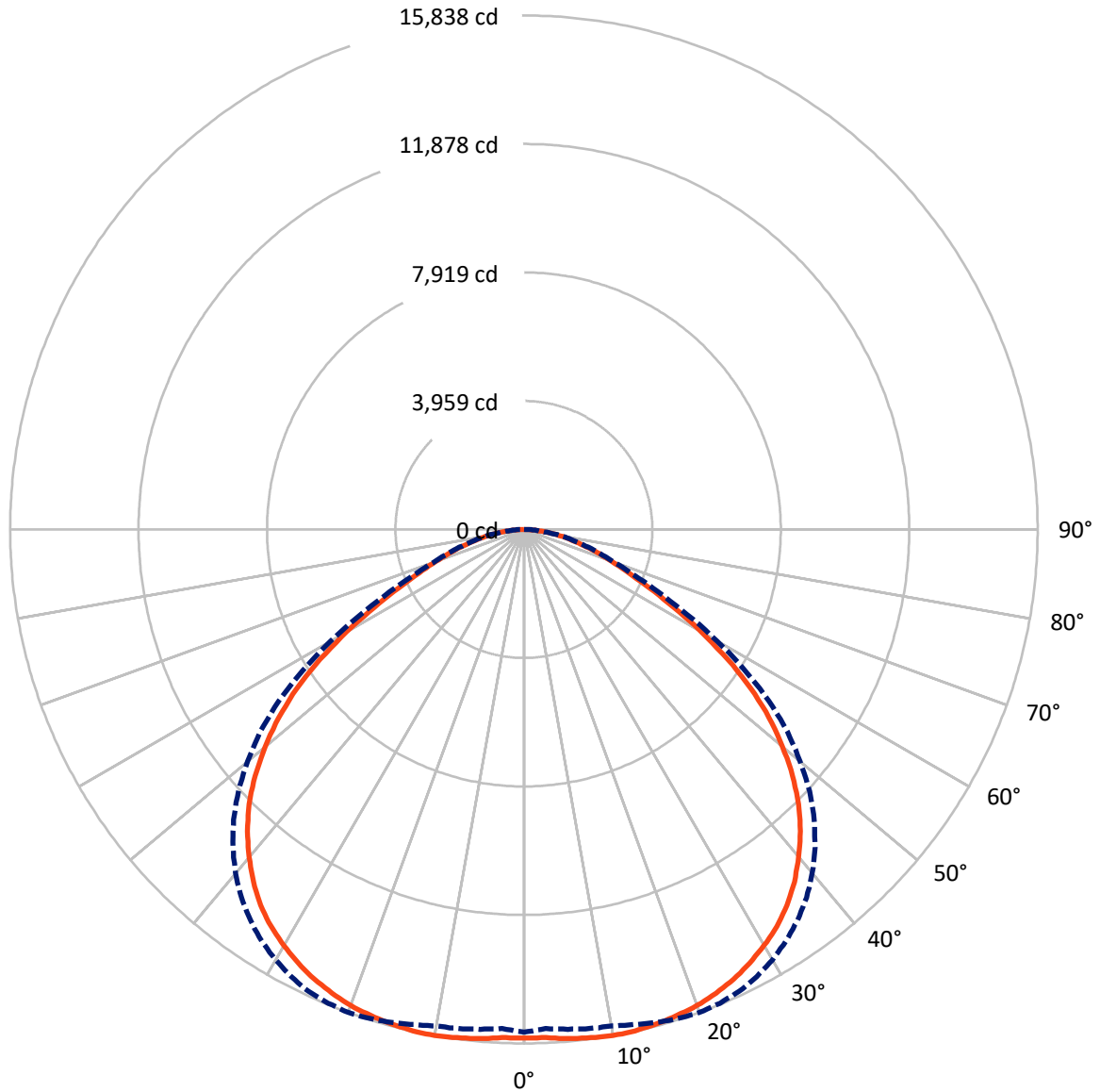
REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-U-LAM

Lumen Table



REPORT NUMBER: P628203
CATALOG NUMBER: IFLD-L-SA7E-727-U-LAM

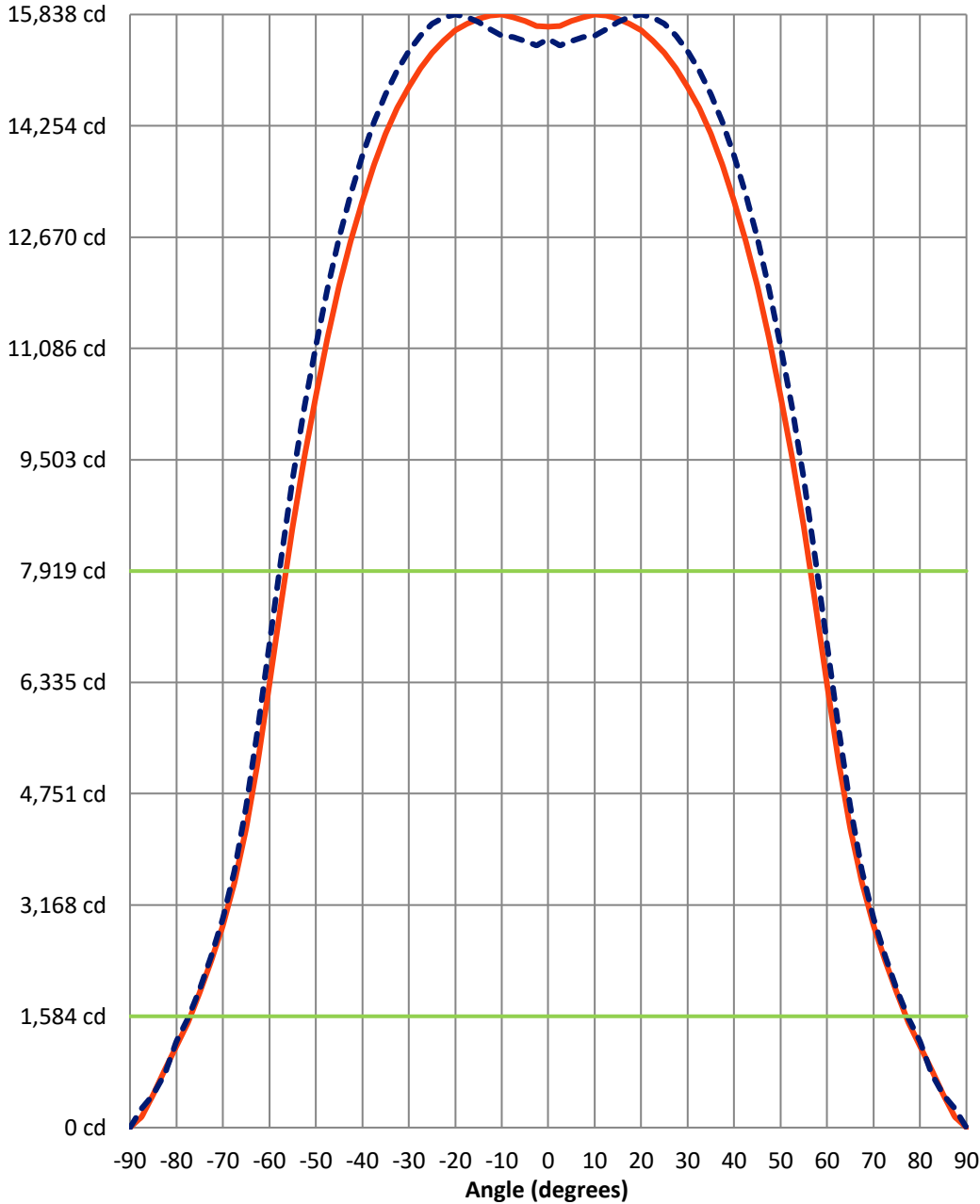
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 29814.3
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 35742.3
 Efficiency: 73.6%

Spill:
 Lumens: 12845.2
 Efficiency: 26.4%

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



REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-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°	127.8	138.0	143.1	148.3	153.4	158.5	163.6	158.5	153.4	148.3	143.1
85°	342.5	352.7	357.9	393.6	429.4	449.9	475.4	470.3	465.2	460.1	455.0
82.5°	685.0	715.7	741.3	777.1	797.5	828.2	848.6	833.3	823.1	802.6	787.3
80°	1216.7	1226.9	1232.0	1237.2	1211.6	1206.5	1196.3	1180.9	1160.5	1134.9	1109.3
77.5°	1549.0	1559.2	1569.4	1559.2	1554.1	1549.0	1533.7	1518.3	1497.9	1477.4	1446.8
75°	2050.0	2050.0	2050.0	2034.7	2024.4	2009.1	1983.5	1958.0	1922.2	1881.3	1835.3
72.5°	2581.7	2576.5	2571.4	2540.8	2515.2	2484.5	2448.7	2418.1	2377.2	2331.2	2269.8
70°	3138.9	3149.1	3154.2	3113.3	3082.7	3041.8	2995.7	2939.5	2878.2	2811.7	2724.8
67.5°	3905.7	3895.5	3885.3	3829.0	3788.1	3731.9	3665.4	3583.6	3491.6	3389.4	3266.7
65°	4856.6	4871.9	4841.2	4785.0	4708.3	4616.3	4514.1	4396.5	4258.5	4105.1	3931.3
62.5°	6006.8	6032.4	5996.6	5925.0	5827.9	5705.2	5562.1	5393.4	5204.2	4989.5	4774.8
60°	7315.5	7310.4	7244.0	7146.8	7019.0	6865.7	6707.2	6523.2	6308.4	6057.9	5797.2
57.5°	8516.9	8506.7	8424.9	8327.8	8200.0	8036.4	7867.7	7673.4	7448.5	7182.6	6881.0
55°	9595.6	9585.4	9503.6	9401.3	9268.4	9104.8	8951.4	8767.4	8547.6	8266.4	7944.3
52.5°	10551.6	10556.7	10485.1	10372.6	10229.5	10071.0	9922.8	9738.7	9529.1	9248.0	8936.1
50°	11430.9	11425.8	11349.1	11246.8	11113.9	10960.5	10812.3	10628.2	10408.4	10137.5	9835.9
47.5°	12248.8	12238.6	12151.7	12039.2	11901.2	11768.3	11630.2	11466.6	11236.6	10965.7	10664.0
45°	12933.8	12913.4	12826.5	12719.1	12586.2	12468.6	12345.9	12223.3	11977.9	11727.4	11441.1
42.5°	13521.7	13516.6	13429.7	13322.4	13189.5	13087.2	12974.7	12821.4	12616.9	12386.8	12105.7
40°	14084.1	14043.2	13956.3	13854.0	13731.3	13644.4	13532.0	13378.6	13179.2	12954.3	12683.3
37.5°	14503.3	14508.4	14416.4	14303.9	14196.6	14114.8	14012.5	13869.4	13695.6	13475.7	13204.8
35°	14902.0	14876.5	14799.8	14702.7	14605.5	14513.5	14406.2	14283.5	14140.3	13935.8	13680.2
32.5°	15162.8	15198.5	15106.5	15004.3	14948.1	14876.5	14764.0	14636.2	14508.4	14303.9	14073.9
30°	15449.0	15418.4	15346.8	15259.9	15219.0	15173.0	15075.9	14953.2	14804.9	14620.9	14406.2
27.5°	15648.4	15633.1	15546.2	15464.4	15443.9	15403.0	15326.4	15219.0	15070.7	14891.8	14692.4
25°	15735.3	15745.6	15663.8	15617.7	15617.7	15592.2	15530.8	15438.8	15290.6	15127.0	14932.7
22.5°	15776.2	15766.0	15709.8	15699.5	15725.1	15704.7	15679.1	15597.3	15464.4	15331.5	15167.9
20°	15801.8	15730.2	15679.1	15720.0	15750.7	15745.6	15725.1	15674.0	15612.6	15500.2	15357.0
17.5°	15745.6	15699.5	15638.2	15699.5	15766.0	15771.1	15750.7	15720.0	15704.7	15633.1	15505.3
15°	15607.5	15571.7	15582.0	15643.3	15720.0	15745.6	15760.9	15796.7	15776.2	15720.0	15607.5
12.5°	15515.5	15469.5	15515.5	15576.9	15617.7	15633.1	15755.8	15822.2	15822.2	15771.1	15699.5
10°	15489.9	15397.9	15459.3	15515.5	15536.0	15628.0	15730.2	15801.8	15837.6	15796.7	15704.7
7.5°	15438.8	15377.5	15403.0	15428.6	15546.2	15612.6	15668.9	15745.6	15796.7	15791.6	15709.8
5°	15413.3	15336.6	15346.8	15454.2	15536.0	15582.0	15602.4	15668.9	15745.6	15760.9	15699.5
2.5°	15346.8	15311.0	15387.7	15397.9	15459.3	15495.1	15515.5	15576.9	15674.0	15709.8	15684.2
0°	15311.0	15259.9	15208.8	15249.7	15351.9	15428.6	15459.3	15551.3	15663.8	15699.5	15643.3



REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-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°	143.1	138.0	132.9	127.8	132.9	132.9	132.9	127.8	132.9	127.8	127.8
85°	444.8	424.3	409.0	388.5	368.1	352.7	332.3	311.8	306.7	301.6	291.4
82.5°	766.8	741.3	715.7	685.0	654.4	618.6	582.8	541.9	531.7	521.4	506.1
80°	1078.7	1042.9	1007.1	971.3	940.6	904.9	864.0	818.0	787.3	761.7	731.0
77.5°	1405.9	1354.7	1303.6	1242.3	1206.5	1170.7	1129.8	1083.8	1037.8	996.9	950.9
75°	1779.0	1722.8	1671.7	1610.3	1543.9	1477.4	1411.0	1349.6	1283.2	1221.8	1160.5
72.5°	2193.1	2111.3	2029.5	1952.9	1871.1	1789.3	1702.4	1620.6	1538.8	1457.0	1370.1
70°	2627.7	2525.4	2423.2	2320.9	2213.6	2106.2	2004.0	1901.7	1799.5	1692.1	1595.0
67.5°	3138.9	3021.3	2888.4	2745.2	2586.8	2448.7	2315.8	2193.1	2070.4	1947.7	1825.1
65°	3777.9	3614.3	3435.4	3241.1	3057.1	2873.1	2678.8	2494.7	2351.6	2208.5	2070.4
62.5°	4565.2	4335.1	4084.6	3834.1	3609.2	3368.9	3144.0	2903.7	2678.8	2474.3	2305.6
60°	5505.8	5194.0	4887.3	4565.2	4253.3	3926.2	3639.9	3343.4	3062.2	2811.7	2566.3
57.5°	6543.6	6180.6	5812.6	5418.9	4994.6	4611.2	4222.7	3834.1	3501.9	3169.6	2893.5
55°	7596.7	7213.3	6799.2	6354.5	5889.2	5398.5	4871.9	4437.4	3982.4	3593.9	3236.0
52.5°	8598.7	8200.0	7770.5	7361.6	6804.3	6242.0	5664.3	5091.7	4560.1	4064.2	3629.7
50°	9493.3	9104.8	8690.7	8215.3	7699.0	7100.8	6456.7	5812.6	5183.8	4601.0	4059.1
47.5°	10311.3	9933.0	9518.9	9043.5	8573.1	7908.6	7259.3	6548.7	5848.3	5178.7	4544.7
45°	11078.1	10694.7	10265.3	9810.3	9268.4	8675.4	8005.7	7290.0	6538.5	5787.0	5056.0
42.5°	11773.4	11390.0	10955.4	10485.1	9948.3	9360.4	8711.2	7990.4	7233.8	6415.8	5613.2
40°	12381.7	12008.5	11589.3	11098.6	10597.6	9979.0	9340.0	8654.9	7872.8	7049.7	6165.3
37.5°	12913.4	12565.8	12151.7	11666.0	11134.4	10582.2	9922.8	9237.7	8532.2	7637.6	6732.8
35°	13383.7	13061.7	12637.3	12177.2	11655.8	11073.0	10454.4	9784.7	9023.0	8184.6	7305.3
32.5°	13792.7	13465.5	13077.0	12616.9	12110.8	11563.8	10929.9	10255.1	9534.2	8680.5	7724.5
30°	14140.3	13823.4	13455.3	13020.8	12535.1	11993.2	11374.6	10694.7	9958.6	9109.9	8164.2
27.5°	14441.9	14140.3	13782.5	13378.6	12913.4	12392.0	11768.3	11083.2	10331.7	9513.8	8568.0
25°	14702.7	14411.3	14079.0	13695.6	13235.5	12724.2	12136.3	11420.6	10669.1	9846.1	8910.6
22.5°	14937.8	14656.7	14324.4	13951.2	13532.0	13020.8	12427.7	11717.1	10955.4	10142.6	9222.4
20°	15147.4	14886.7	14559.5	14176.1	13756.9	13240.6	12652.7	11977.9	11211.0	10413.5	9503.6
17.5°	15316.1	15086.1	14758.9	14355.0	13935.8	13434.8	12862.3	12243.7	11430.9	10643.6	9738.7
15°	15433.7	15208.8	14912.3	14503.3	14094.3	13598.4	13025.9	12386.8	11630.2	10827.6	9933.0
12.5°	15515.5	15275.2	14999.2	14620.9	14211.9	13721.1	13163.9	12535.1	11798.9	10991.2	10101.7
10°	15536.0	15316.1	15040.1	14702.7	14303.9	13828.5	13281.5	12657.8	11937.0	11119.0	10239.7
7.5°	15546.2	15336.6	15086.1	14764.0	14370.4	13910.3	13368.4	12754.9	12039.2	11226.4	10342.0
5°	15541.1	15341.7	15116.8	14804.9	14411.3	13956.3	13424.6	12821.4	12110.8	11297.9	10418.6
2.5°	15525.7	15346.8	15137.2	14835.6	14457.3	14007.4	13480.9	12898.1	12187.5	11359.3	10480.0
0°	15566.6	15413.3	15147.4	14825.4	14467.5	14007.4	13475.7	12908.3	12197.7	11354.2	10474.9



REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-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°	127.8	122.7	122.7	117.6	112.5	107.4	97.1	92.0	81.8	66.5	51.1
85°	276.1	260.7	245.4	235.2	224.9	214.7	199.4	184.0	163.6	132.9	102.2
82.5°	485.7	455.0	424.3	388.5	357.9	327.2	301.6	276.1	245.4	199.4	153.4
80°	695.3	649.2	603.2	552.1	506.1	455.0	409.0	368.1	327.2	265.8	204.5
77.5°	904.9	843.5	777.1	715.7	649.2	582.8	516.3	460.1	398.8	327.2	255.6
75°	1099.1	1027.6	966.2	879.3	797.5	710.6	623.7	547.0	470.3	383.4	306.7
72.5°	1293.4	1201.4	1114.5	1032.7	940.6	833.3	736.2	639.0	541.9	439.6	347.6
70°	1487.6	1375.2	1267.8	1170.7	1068.4	961.1	843.5	731.0	613.5	490.8	383.4
67.5°	1687.0	1559.2	1436.5	1313.8	1196.3	1073.6	950.9	823.1	685.0	541.9	424.3
65°	1906.8	1748.4	1600.1	1462.1	1324.1	1191.1	1053.1	915.1	761.7	598.1	460.1
62.5°	2126.7	1952.9	1779.0	1605.2	1451.9	1303.6	1155.4	1002.0	833.3	659.5	495.9
60°	2361.8	2162.5	1963.1	1768.8	1579.7	1416.1	1252.5	1088.9	910.0	715.7	531.7
57.5°	2622.6	2382.3	2157.3	1937.5	1722.8	1528.5	1349.6	1175.8	976.4	771.9	572.6
55°	2919.1	2622.6	2356.7	2111.3	1876.2	1641.0	1446.8	1267.8	1053.1	828.2	618.6
52.5°	3230.9	2888.4	2566.3	2290.3	2039.8	1773.9	1538.8	1339.4	1129.8	884.4	659.5
50°	3593.9	3159.3	2801.5	2464.1	2182.9	1906.8	1635.9	1421.2	1206.5	950.9	700.4
47.5°	3967.1	3486.5	3036.6	2668.6	2336.3	2034.7	1748.4	1492.8	1278.0	1012.2	741.3
45°	4401.6	3798.4	3302.5	2867.9	2484.5	2167.6	1860.8	1569.4	1339.4	1073.6	782.2
42.5°	4820.8	4166.4	3578.5	3087.8	2653.2	2295.4	1963.1	1651.2	1400.7	1134.9	818.0
40°	5316.7	4534.5	3844.4	3297.4	2821.9	2418.1	2065.3	1738.1	1457.0	1191.1	853.7
37.5°	5792.1	4907.7	4166.4	3527.4	2985.5	2540.8	2167.6	1819.9	1508.1	1247.4	899.7
35°	6262.4	5321.8	4473.2	3742.1	3154.2	2678.8	2269.8	1896.6	1559.2	1293.4	940.6
32.5°	6712.3	5710.3	4785.0	3982.4	3338.3	2806.6	2361.8	1968.2	1610.3	1334.3	981.5
30°	7131.5	6078.4	5091.7	4227.8	3507.0	2924.2	2448.7	2039.8	1671.7	1370.1	1022.4
27.5°	7514.9	6436.3	5398.5	4457.8	3665.4	3031.5	2540.8	2106.2	1722.8	1405.9	1058.2
25°	7862.6	6758.3	5679.6	4667.4	3808.6	3149.1	2627.7	2172.7	1768.8	1436.5	1088.9
22.5°	8189.7	7054.8	5935.3	4877.0	3982.4	3266.7	2709.5	2234.0	1814.8	1467.2	1119.6
20°	8476.0	7325.8	6180.6	5086.6	4135.8	3374.0	2781.0	2290.3	1855.7	1487.6	1150.2
17.5°	8706.1	7566.0	6400.5	5270.7	4268.7	3466.1	2842.4	2341.4	1891.5	1513.2	1170.7
15°	8910.6	7770.5	6584.5	5429.1	4386.3	3542.7	2898.6	2382.3	1922.2	1528.5	1196.3
12.5°	9084.4	7944.3	6743.0	5567.2	4488.5	3609.2	2944.6	2413.0	1947.7	1543.9	1211.6
10°	9227.5	8082.4	6875.9	5674.5	4570.3	3660.3	2980.4	2443.6	1968.2	1559.2	1226.9
7.5°	9334.9	8184.6	6973.0	5766.6	4636.8	3696.1	3011.1	2464.1	1988.6	1569.4	1252.5
5°	9416.7	8271.5	7049.7	5827.9	4687.9	3747.2	3046.9	2489.6	2009.1	1579.7	1252.5
2.5°	9478.0	8343.1	7111.1	5879.0	4728.8	3737.0	3046.9	2484.5	2009.1	1579.7	1247.4
0°	9467.8	8348.2	7105.9	5879.0	4728.8	3726.8	3046.9	2479.4	2009.1	1579.7	1247.4



REPORT NUMBER: P628203
 CATALOG NUMBER: IFLD-L-SA7E-727-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	35.8	25.6	10.2	0.0
85°	76.7	51.1	25.6	0.0
82.5°	112.5	71.6	35.8	0.0
80°	148.3	97.1	46.0	0.0
77.5°	189.2	122.7	61.3	0.0
75°	224.9	143.1	71.6	0.0
72.5°	260.7	168.7	81.8	0.0
70°	291.4	189.2	92.0	0.0
67.5°	322.1	214.7	107.4	0.0
65°	347.6	235.2	117.6	0.0
62.5°	368.1	260.7	127.8	0.0
60°	393.6	281.2	138.0	0.0
57.5°	414.1	296.5	148.3	0.0
55°	434.5	306.7	158.5	0.0
52.5°	455.0	322.1	168.7	0.0
50°	475.4	337.4	178.9	0.0
47.5°	495.9	347.6	184.0	0.0
45°	526.6	363.0	194.3	0.0
42.5°	552.1	373.2	204.5	0.0
40°	577.7	383.4	209.6	0.0
37.5°	603.2	393.6	219.8	0.0
35°	628.8	403.9	224.9	0.0
32.5°	649.2	414.1	230.0	0.0
30°	669.7	424.3	235.2	0.0
27.5°	690.1	429.4	240.3	0.0
25°	705.5	439.6	245.4	0.0
22.5°	720.8	444.8	250.5	0.0
20°	731.0	449.9	255.6	0.0
17.5°	746.4	455.0	260.7	0.0
15°	751.5	460.1	270.9	0.0
12.5°	761.7	465.2	270.9	0.0
10°	766.8	470.3	270.9	0.0
7.5°	777.1	470.3	270.9	0.0
5°	771.9	470.3	270.9	0.0
2.5°	771.9	470.3	270.9	0.0
0°	766.8	470.3	270.9	0.0

(END OF REPORT)