

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: P628459

Luminaire Tested: **IFLD-M-SA4E-930-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628459
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-930-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

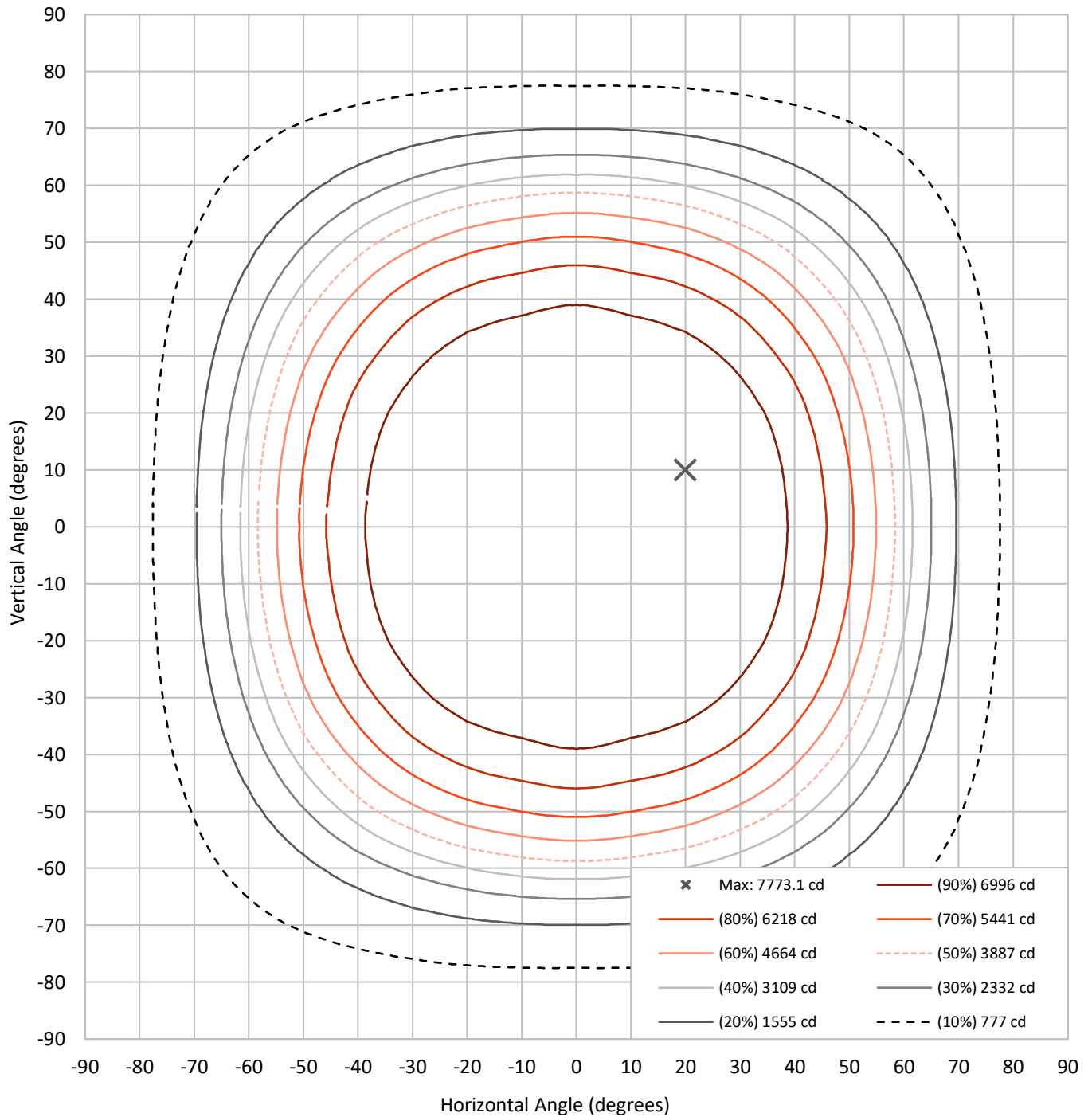
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23846.9 lumens	Max Intensity:	7773.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	75.8 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:	14632.9 lumens	Field Lumens:	17542.4 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		



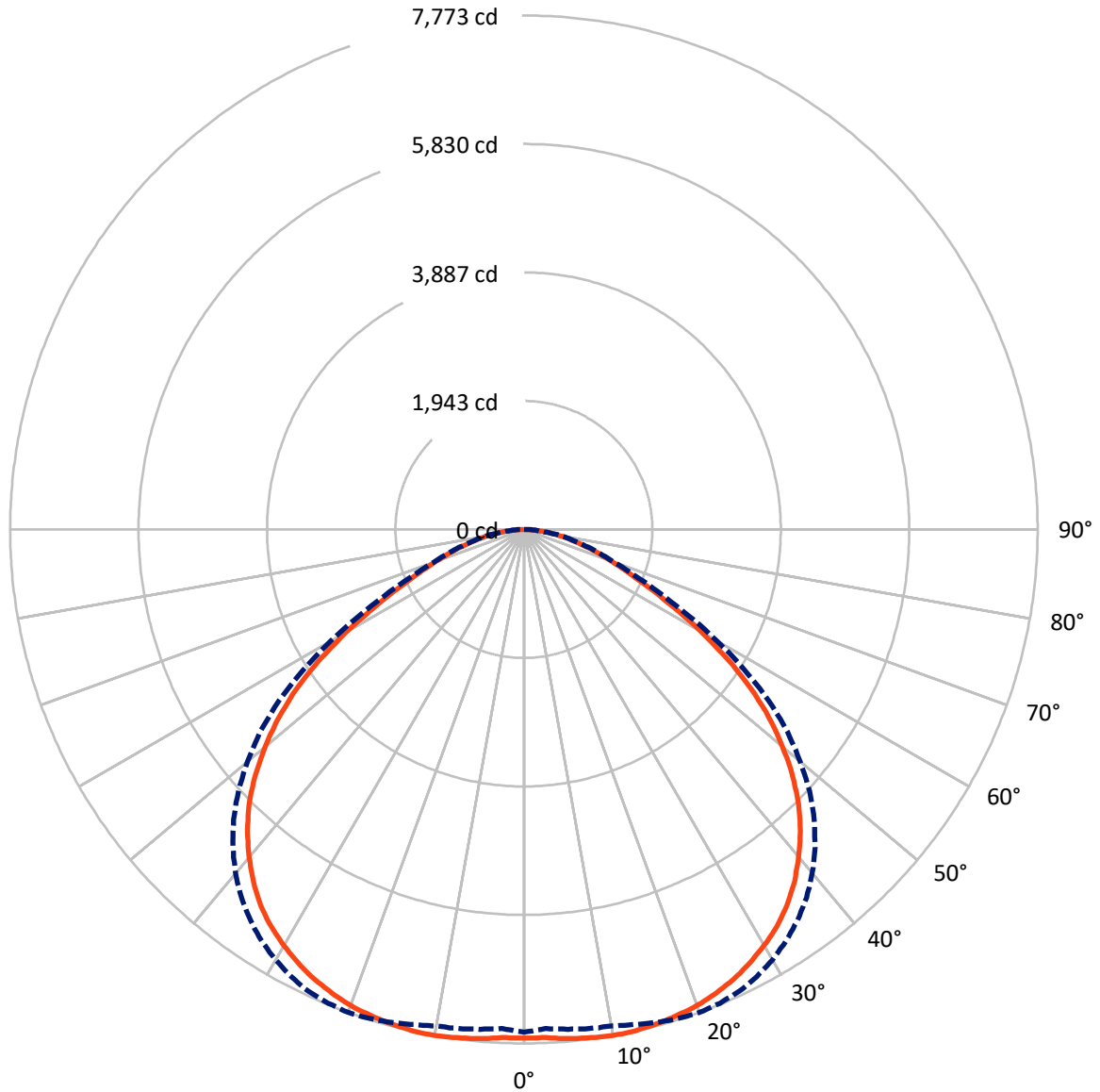
REPORT NUMBER: P628459
CATALOG NUMBER: IFLD-M-SA4E-930-U-LAM

Iso-Candela Plot



REPORT NUMBER: P628459
CATALOG NUMBER: IFLD-M-SA4E-930-U-LAM

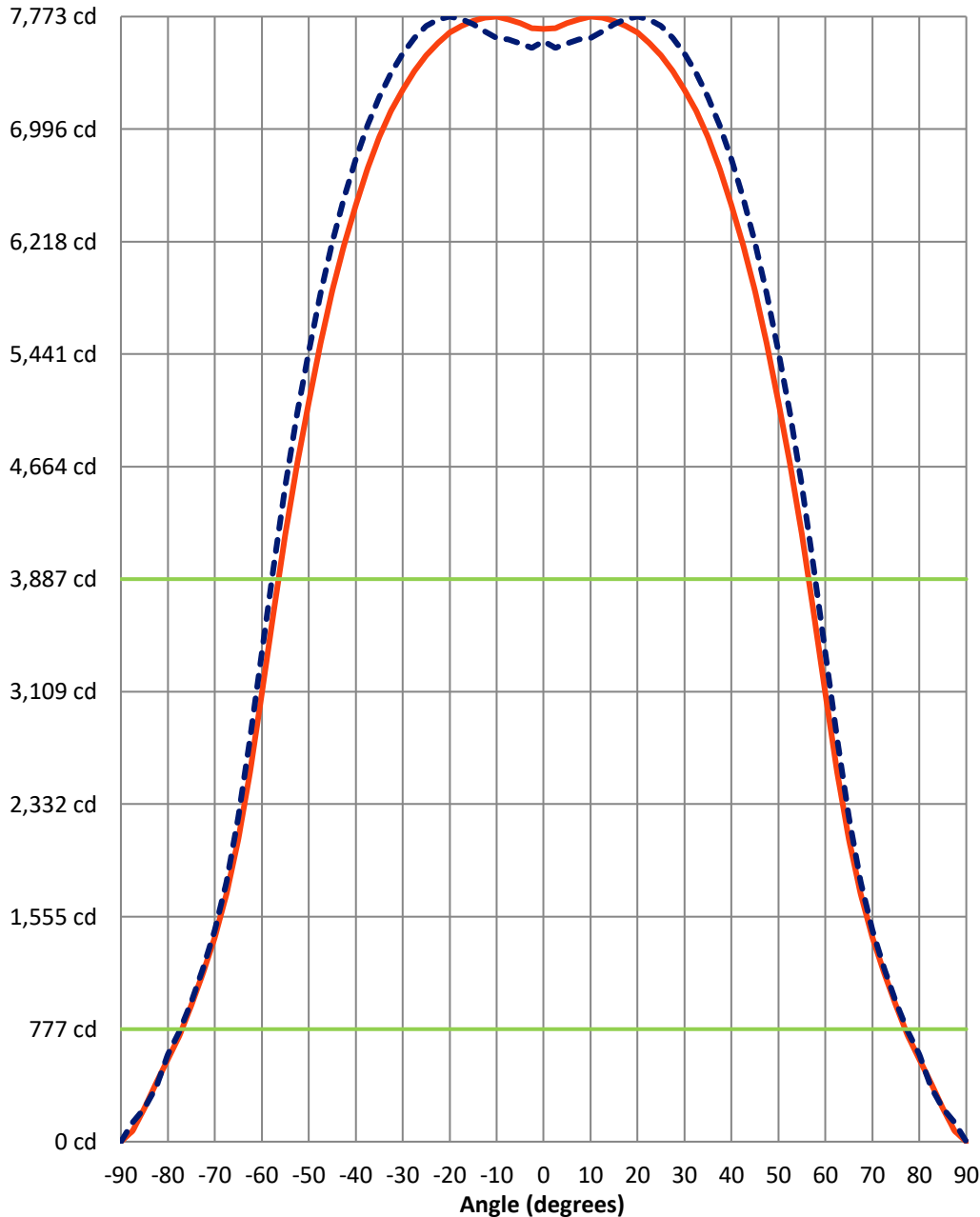
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628459
 CATALOG NUMBER: IFLD-M-SA4E-930-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 14632.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 17542.4
 Efficiency: 73.6%

Spill:
 Lumens: 6304.5
 Efficiency: 26.4%

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



REPORT NUMBER: P628459
 CATALOG NUMBER: IFLD-M-SA4E-930-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°	62.7	67.7	70.3	72.8	75.3	77.8	80.3	77.8	75.3	75.3	72.8
85°	168.1	173.1	175.6	193.2	210.8	220.8	233.3	230.8	230.8	228.3	225.8
82.5°	336.2	351.3	363.8	381.4	391.4	406.5	416.5	409.0	404.0	393.9	386.4
80°	597.2	602.2	604.7	607.2	594.7	592.1	587.1	579.6	569.6	557.0	544.5
77.5°	760.2	765.3	770.3	765.3	762.8	760.2	752.7	745.2	735.2	725.1	710.1
75°	1006.1	1006.1	1006.1	998.6	993.6	986.1	973.5	961.0	943.4	923.3	900.8
72.5°	1267.1	1264.6	1262.1	1247.0	1234.5	1219.4	1201.8	1186.8	1166.7	1144.1	1114.0
70°	1540.6	1545.6	1548.1	1528.0	1513.0	1492.9	1470.3	1442.7	1412.6	1380.0	1337.3
67.5°	1916.9	1911.9	1906.9	1879.3	1859.2	1831.6	1799.0	1758.9	1713.7	1663.5	1603.3
65°	2383.6	2391.1	2376.1	2348.5	2310.9	2265.7	2215.5	2157.8	2090.1	2014.8	1929.5
62.5°	2948.2	2960.7	2943.1	2908.0	2860.3	2800.1	2729.9	2647.1	2554.2	2448.9	2343.5
60°	3590.5	3588.0	3555.4	3507.7	3445.0	3369.7	3291.9	3201.6	3096.2	2973.3	2845.3
57.5°	4180.1	4175.1	4135.0	4087.3	4024.6	3944.3	3861.5	3766.1	3655.7	3525.3	3377.2
55°	4709.5	4704.5	4664.4	4614.2	4549.0	4468.7	4393.4	4303.1	4195.2	4057.2	3899.1
52.5°	5178.7	5181.2	5146.1	5090.9	5020.7	4942.9	4870.1	4779.8	4676.9	4538.9	4385.9
50°	5610.3	5607.8	5570.1	5520.0	5454.7	5379.5	5306.7	5216.4	5108.5	4975.5	4827.5
47.5°	6011.7	6006.7	5964.1	5908.9	5841.1	5775.9	5708.1	5627.9	5514.9	5382.0	5233.9
45°	6348.0	6337.9	6295.3	6242.6	6177.3	6119.6	6059.4	5999.2	5878.8	5755.8	5615.3
42.5°	6636.5	6634.0	6591.3	6538.7	6473.4	6423.2	6368.0	6292.8	6192.4	6079.5	5941.5
40°	6912.5	6892.4	6849.8	6799.6	6739.4	6696.7	6641.5	6566.3	6468.4	6358.0	6225.0
37.5°	7118.2	7120.8	7075.6	7020.4	6967.7	6927.6	6877.4	6807.1	6721.8	6613.9	6480.9
35°	7314.0	7301.4	7263.8	7216.1	7168.4	7123.3	7070.6	7010.4	6940.1	6839.7	6714.3
32.5°	7441.9	7459.5	7414.3	7364.1	7336.5	7301.4	7246.2	7183.5	7120.8	7020.4	6907.5
30°	7582.4	7567.4	7532.2	7489.6	7469.5	7446.9	7399.3	7339.0	7266.3	7176.0	7070.6
27.5°	7680.3	7672.8	7630.1	7590.0	7579.9	7559.8	7522.2	7469.5	7396.8	7308.9	7211.1
25°	7722.9	7728.0	7687.8	7665.2	7665.2	7652.7	7622.6	7577.4	7504.6	7424.4	7329.0
22.5°	7743.0	7738.0	7710.4	7705.4	7717.9	7707.9	7695.3	7655.2	7590.0	7524.7	7444.4
20°	7755.6	7720.4	7695.3	7715.4	7730.5	7728.0	7717.9	7692.8	7662.7	7607.5	7537.3
17.5°	7728.0	7705.4	7675.3	7705.4	7738.0	7740.5	7730.5	7715.4	7707.9	7672.8	7610.0
15°	7660.2	7642.6	7647.7	7677.8	7715.4	7728.0	7735.5	7753.0	7743.0	7715.4	7660.2
12.5°	7615.0	7592.5	7615.0	7645.2	7665.2	7672.8	7733.0	7765.6	7765.6	7740.5	7705.4
10°	7602.5	7557.3	7587.4	7615.0	7625.1	7670.2	7720.4	7755.6	7773.1	7753.0	7707.9
7.5°	7577.4	7547.3	7559.8	7572.4	7630.1	7662.7	7690.3	7728.0	7753.0	7750.5	7710.4
5°	7564.9	7527.2	7532.2	7584.9	7625.1	7647.7	7657.7	7690.3	7728.0	7735.5	7705.4
2.5°	7532.2	7514.7	7552.3	7557.3	7587.4	7605.0	7615.0	7645.2	7692.8	7710.4	7697.8
0°	7514.7	7489.6	7464.5	7484.6	7534.8	7572.4	7587.4	7632.6	7687.8	7705.4	7677.8



REPORT NUMBER: P628459
 CATALOG NUMBER: IFLD-M-SA4E-930-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°	70.3	67.7	65.2	62.7	65.2	65.2	65.2	62.7	65.2	62.7	62.7
85°	218.3	208.3	200.7	190.7	180.7	173.1	163.1	153.1	150.5	148.0	143.0
82.5°	376.4	363.8	351.3	336.2	321.2	303.6	286.0	266.0	260.9	255.9	248.4
80°	529.4	511.9	494.3	476.7	461.7	444.1	424.0	401.5	386.4	373.9	358.8
77.5°	690.0	664.9	639.8	609.7	592.1	574.6	554.5	531.9	509.3	489.3	466.7
75°	873.2	845.6	820.5	790.4	757.7	725.1	692.5	662.4	629.8	599.7	569.6
72.5°	1076.4	1036.2	996.1	958.5	918.3	878.2	835.5	795.4	755.2	715.1	672.4
70°	1289.7	1239.5	1189.3	1139.1	1086.4	1033.7	983.6	933.4	883.2	830.5	782.8
67.5°	1540.6	1482.9	1417.6	1347.4	1269.6	1201.8	1136.6	1076.4	1016.2	956.0	895.7
65°	1854.2	1773.9	1686.1	1590.8	1500.4	1410.1	1314.8	1224.4	1154.2	1083.9	1016.2
62.5°	2240.6	2127.7	2004.8	1881.8	1771.4	1653.5	1543.1	1425.2	1314.8	1214.4	1131.6
60°	2702.3	2549.2	2398.7	2240.6	2087.6	1927.0	1786.5	1640.9	1502.9	1380.0	1259.6
57.5°	3211.6	3033.5	2852.8	2659.6	2451.4	2263.2	2072.5	1881.8	1718.7	1555.6	1420.1
55°	3728.5	3540.3	3337.1	3118.8	2890.5	2649.6	2391.1	2177.9	1954.6	1763.9	1588.2
52.5°	4220.3	4024.6	3813.8	3613.1	3339.6	3063.6	2780.1	2499.0	2238.1	1994.7	1781.4
50°	4659.4	4468.7	4265.4	4032.1	3778.7	3485.1	3169.0	2852.8	2544.2	2258.2	1992.2
47.5°	5060.8	4875.1	4671.9	4438.6	4207.7	3881.5	3562.9	3214.1	2870.4	2541.7	2230.6
45°	5437.2	5249.0	5038.2	4814.9	4549.0	4257.9	3929.2	3577.9	3209.1	2840.3	2481.5
42.5°	5778.4	5590.2	5376.9	5146.1	4882.7	4594.1	4275.5	3921.7	3550.3	3148.9	2755.0
40°	6077.0	5893.8	5688.1	5447.2	5201.3	4897.7	4584.1	4247.9	3864.0	3460.0	3025.9
37.5°	6337.9	6167.3	5964.1	5725.7	5464.8	5193.8	4870.1	4533.9	4187.6	3748.6	3304.5
35°	6568.8	6410.7	6202.4	5976.6	5720.7	5434.7	5131.1	4802.4	4428.5	4017.0	3585.5
32.5°	6769.5	6608.9	6418.2	6192.4	5944.0	5675.5	5364.4	5033.2	4679.4	4260.4	3791.2
30°	6940.1	6784.5	6603.9	6390.6	6152.3	5886.3	5582.7	5249.0	4887.7	4471.2	4007.0
27.5°	7088.1	6940.1	6764.5	6566.3	6337.9	6082.0	5775.9	5439.7	5070.8	4669.4	4205.2
25°	7216.1	7073.1	6910.0	6721.8	6496.0	6245.1	5956.5	5605.3	5236.4	4832.5	4373.3
22.5°	7331.5	7193.5	7030.4	6847.3	6641.5	6390.6	6099.6	5750.8	5376.9	4978.0	4526.4
20°	7434.4	7306.4	7145.8	6957.7	6751.9	6498.5	6210.0	5878.8	5502.4	5111.0	4664.4
17.5°	7517.2	7404.3	7243.7	7045.5	6839.7	6593.8	6312.8	6009.2	5610.3	5223.9	4779.8
15°	7574.9	7464.5	7319.0	7118.2	6917.5	6674.1	6393.1	6079.5	5708.1	5314.2	4875.1
12.5°	7615.0	7497.1	7361.6	7176.0	6975.2	6734.4	6460.9	6152.3	5790.9	5394.5	4957.9
10°	7625.1	7517.2	7381.7	7216.1	7020.4	6787.0	6518.6	6212.5	5858.7	5457.2	5025.7
7.5°	7630.1	7527.2	7404.3	7246.2	7053.0	6827.2	6561.2	6260.1	5908.9	5509.9	5075.9
5°	7627.6	7529.7	7419.3	7266.3	7073.1	6849.8	6588.8	6292.8	5944.0	5545.1	5113.5
2.5°	7620.1	7532.2	7429.4	7281.3	7095.7	6874.9	6616.4	6330.4	5981.6	5575.2	5143.6
0°	7640.1	7564.9	7434.4	7276.3	7100.7	6874.9	6613.9	6335.4	5986.7	5572.7	5141.1



REPORT NUMBER: P628459
 CATALOG NUMBER: IFLD-M-SA4E-930-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°	62.7	60.2	60.2	57.7	55.2	52.7	47.7	45.2	40.1	32.6	25.1
85°	135.5	128.0	120.4	115.4	110.4	105.4	97.9	90.3	80.3	65.2	50.2
82.5°	238.4	223.3	208.3	190.7	175.6	160.6	148.0	135.5	120.4	97.9	75.3
80°	341.2	318.7	296.1	271.0	248.4	223.3	200.7	180.7	160.6	130.5	100.4
77.5°	444.1	414.0	381.4	351.3	318.7	286.0	253.4	225.8	195.7	160.6	125.5
75°	539.5	504.3	474.2	431.6	391.4	348.8	306.1	268.5	230.8	188.2	150.5
72.5°	634.8	589.6	547.0	506.8	461.7	409.0	361.3	313.6	266.0	215.8	170.6
70°	730.1	674.9	622.3	574.6	524.4	471.7	414.0	358.8	301.1	240.9	188.2
67.5°	828.0	765.3	705.1	644.8	587.1	526.9	466.7	404.0	336.2	266.0	208.3
65°	935.9	858.1	785.3	717.6	649.9	584.6	516.9	449.1	373.9	293.6	225.8
62.5°	1043.8	958.5	873.2	787.8	712.6	639.8	567.1	491.8	409.0	323.7	243.4
60°	1159.2	1061.3	963.5	868.1	775.3	695.0	614.7	534.4	446.6	351.3	260.9
57.5°	1287.2	1169.2	1058.8	950.9	845.6	750.2	662.4	577.1	479.2	378.9	281.0
55°	1432.7	1287.2	1156.7	1036.2	920.8	805.4	710.1	622.3	516.9	406.5	303.6
52.5°	1585.7	1417.6	1259.6	1124.1	1001.1	870.6	755.2	657.4	554.5	434.1	323.7
50°	1763.9	1550.6	1375.0	1209.4	1071.4	935.9	802.9	697.5	592.1	466.7	343.7
47.5°	1947.0	1711.2	1490.4	1309.7	1146.6	998.6	858.1	732.6	627.3	496.8	363.8
45°	2160.3	1864.2	1620.9	1407.6	1219.4	1063.8	913.3	770.3	657.4	526.9	383.9
42.5°	2366.1	2044.9	1756.4	1515.5	1302.2	1126.6	963.5	810.4	687.5	557.0	401.5
40°	2609.4	2225.5	1886.8	1618.4	1385.0	1186.8	1013.7	853.1	715.1	584.6	419.0
37.5°	2842.8	2408.7	2044.9	1731.3	1465.3	1247.0	1063.8	893.2	740.2	612.2	441.6
35°	3073.6	2611.9	2195.4	1836.6	1548.1	1314.8	1114.0	930.9	765.3	634.8	461.7
32.5°	3294.4	2802.6	2348.5	1954.6	1638.4	1377.5	1159.2	966.0	790.4	654.9	481.7
30°	3500.2	2983.3	2499.0	2075.0	1721.2	1435.2	1201.8	1001.1	820.5	672.4	501.8
27.5°	3688.3	3158.9	2649.6	2187.9	1799.0	1487.9	1247.0	1033.7	845.6	690.0	519.4
25°	3859.0	3317.0	2787.6	2290.8	1869.3	1545.6	1289.7	1066.4	868.1	705.1	534.4
22.5°	4019.5	3462.5	2913.0	2393.7	1954.6	1603.3	1329.8	1096.5	890.7	720.1	549.5
20°	4160.0	3595.5	3033.5	2496.5	2029.8	1656.0	1364.9	1124.1	910.8	730.1	564.5
17.5°	4273.0	3713.4	3141.4	2586.9	2095.1	1701.2	1395.0	1149.2	928.4	742.7	574.6
15°	4373.3	3813.8	3231.7	2664.6	2152.8	1738.8	1422.6	1169.2	943.4	750.2	587.1
12.5°	4458.6	3899.1	3309.5	2732.4	2203.0	1771.4	1445.2	1184.3	956.0	757.7	594.7
10°	4528.9	3966.8	3374.7	2785.1	2243.1	1796.5	1462.8	1199.3	966.0	765.3	602.2
7.5°	4581.6	4017.0	3422.4	2830.2	2275.7	1814.1	1477.8	1209.4	976.0	770.3	614.7
5°	4621.7	4059.7	3460.0	2860.3	2300.8	1839.2	1495.4	1221.9	986.1	775.3	614.7
2.5°	4651.8	4094.8	3490.1	2885.4	2320.9	1834.1	1495.4	1219.4	986.1	775.3	612.2
0°	4646.8	4097.3	3487.6	2885.4	2320.9	1829.1	1495.4	1216.9	986.1	775.3	612.2



REPORT NUMBER: P628459
 CATALOG NUMBER: IFLD-M-SA4E-930-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	17.6	12.5	5.0	0.0
85°	37.6	25.1	12.5	0.0
82.5°	55.2	35.1	17.6	0.0
80°	72.8	47.7	22.6	0.0
77.5°	92.8	60.2	30.1	0.0
75°	110.4	70.3	35.1	0.0
72.5°	128.0	82.8	40.1	0.0
70°	143.0	92.8	45.2	0.0
67.5°	158.1	105.4	52.7	0.0
65°	170.6	115.4	57.7	0.0
62.5°	180.7	128.0	62.7	0.0
60°	193.2	138.0	67.7	0.0
57.5°	203.2	145.5	72.8	0.0
55°	213.3	150.5	77.8	0.0
52.5°	223.3	158.1	82.8	0.0
50°	233.3	165.6	87.8	0.0
47.5°	243.4	170.6	90.3	0.0
45°	258.4	178.1	95.3	0.0
42.5°	271.0	183.2	100.4	0.0
40°	283.5	188.2	102.9	0.0
37.5°	296.1	193.2	107.9	0.0
35°	308.6	198.2	110.4	0.0
32.5°	318.7	203.2	112.9	0.0
30°	328.7	208.3	115.4	0.0
27.5°	338.7	210.8	117.9	0.0
25°	346.3	215.8	120.4	0.0
22.5°	353.8	218.3	122.9	0.0
20°	358.8	220.8	125.5	0.0
17.5°	366.3	223.3	128.0	0.0
15°	368.8	225.8	133.0	0.0
12.5°	373.9	228.3	133.0	0.0
10°	376.4	230.8	133.0	0.0
7.5°	381.4	230.8	133.0	0.0
5°	378.9	230.8	133.0	0.0
2.5°	378.9	230.8	133.0	0.0
0°	376.4	230.8	133.0	0.0

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