

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: P623950

Luminaire Tested: **IFLD-L-SA7D-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623950
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-740-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	50642 lumens	Max Intensity:	28126.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	119.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	21912.3 lumens	Field Lumens:	35880.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

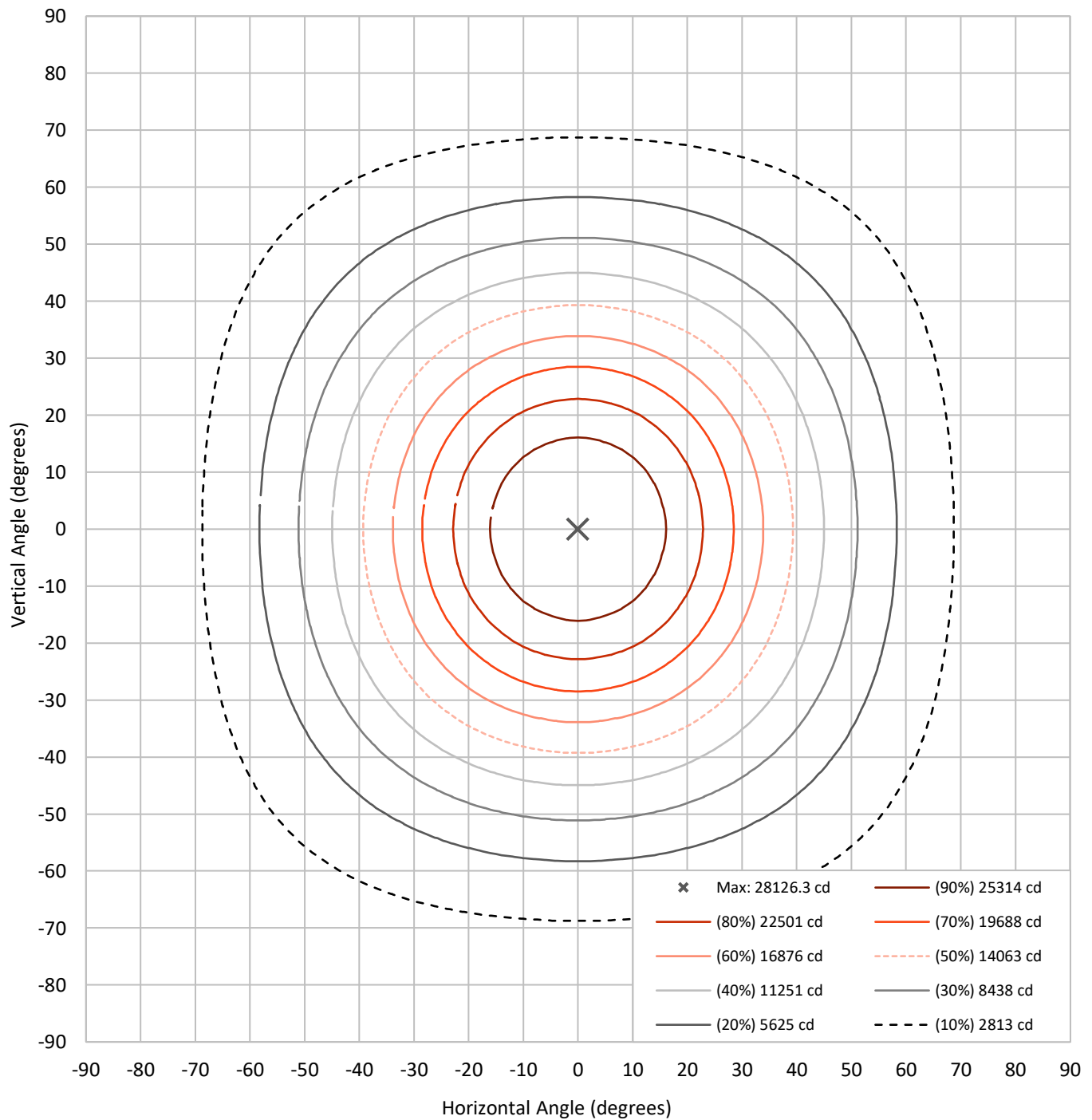
Input Watts (W): 422.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P623950

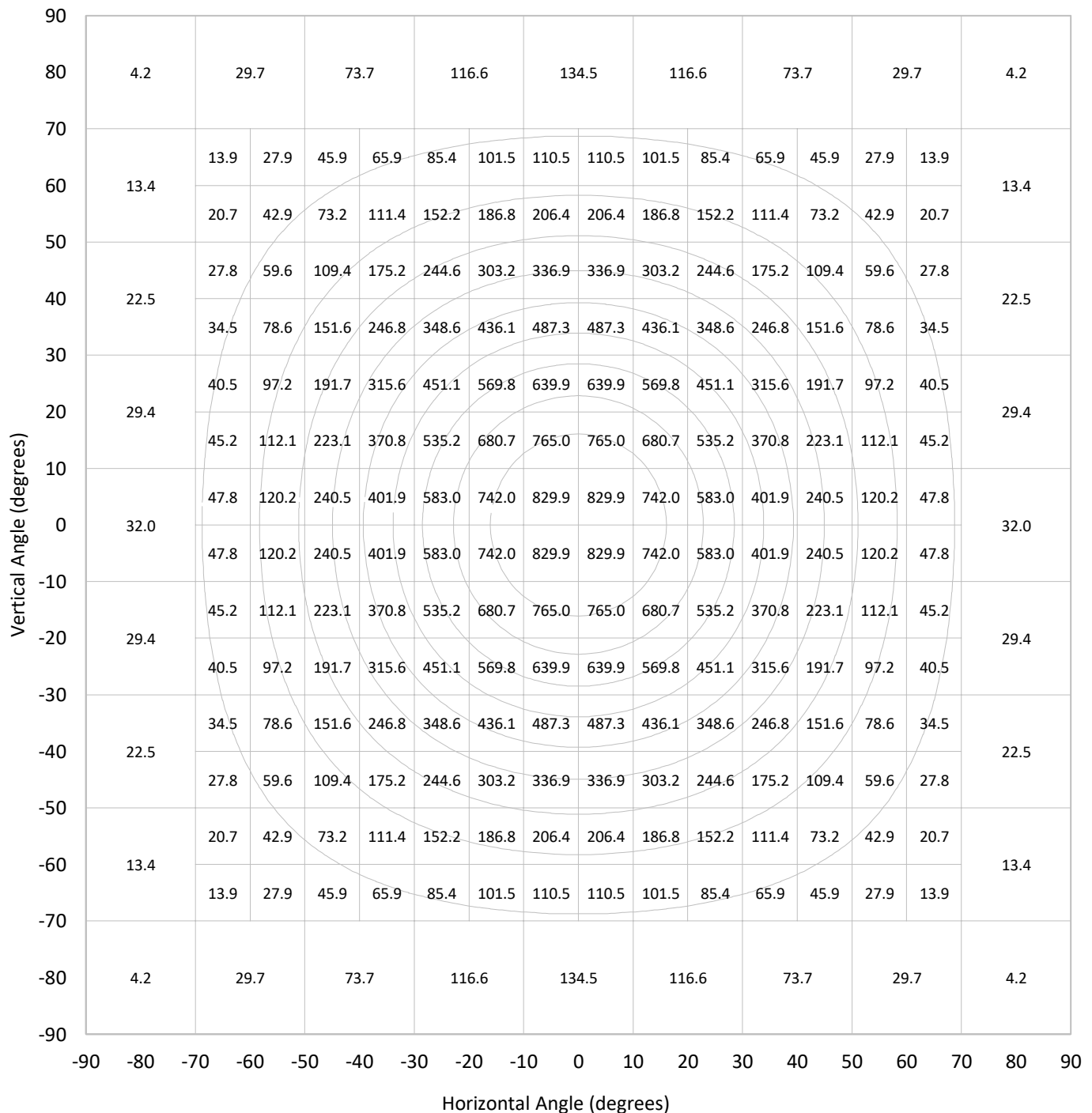
CATALOG NUMBER: IFLD-L-SA7D-740-U-77

Iso-Candela Plot



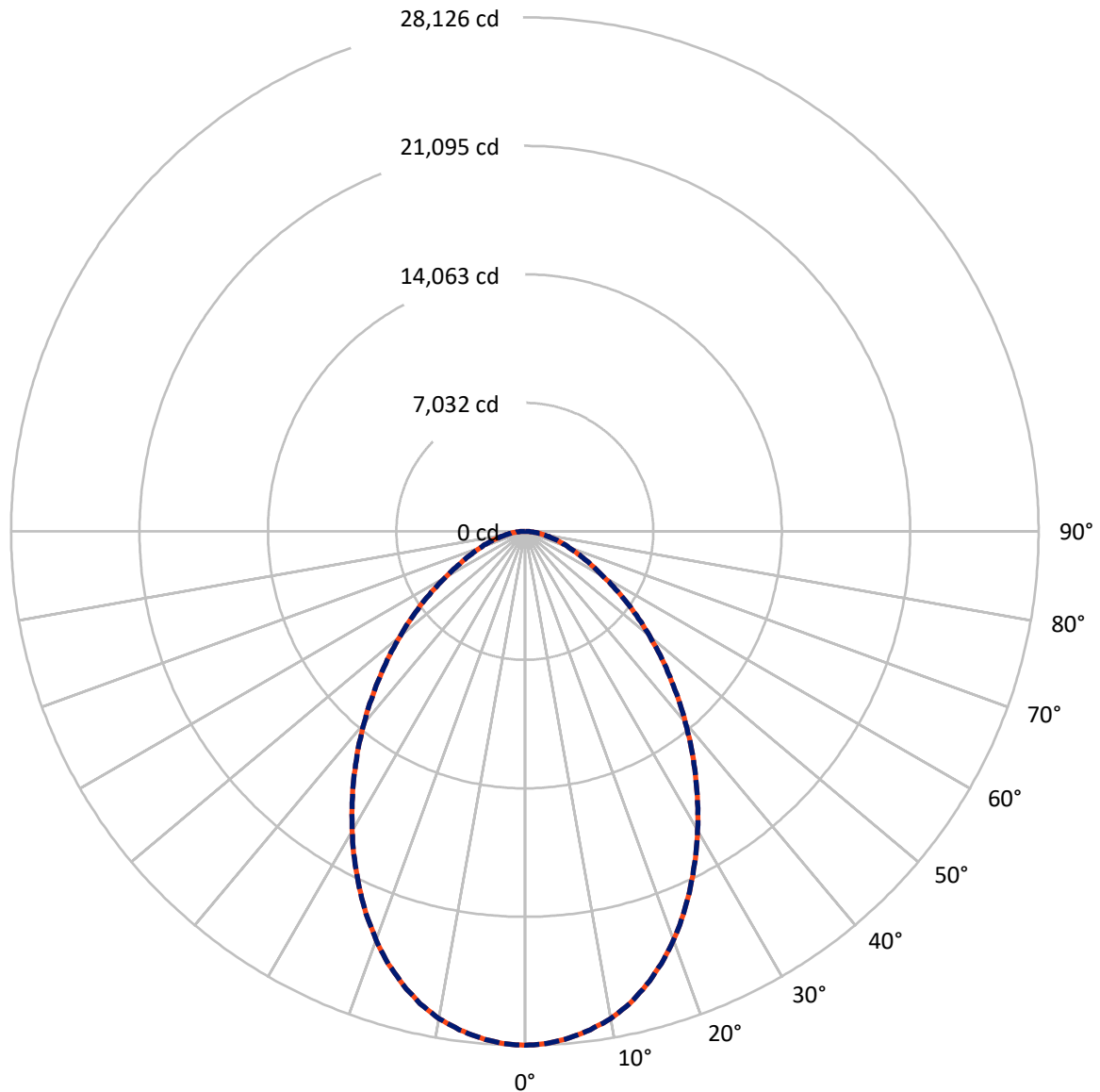
REPORT NUMBER: P623950
CATALOG NUMBER: IFLD-L-SA7D-740-U-77

Lumen Table



REPORT NUMBER: P623950
CATALOG NUMBER: IFLD-L-SA7D-740-U-77

Luminous Intensity Polar Plot

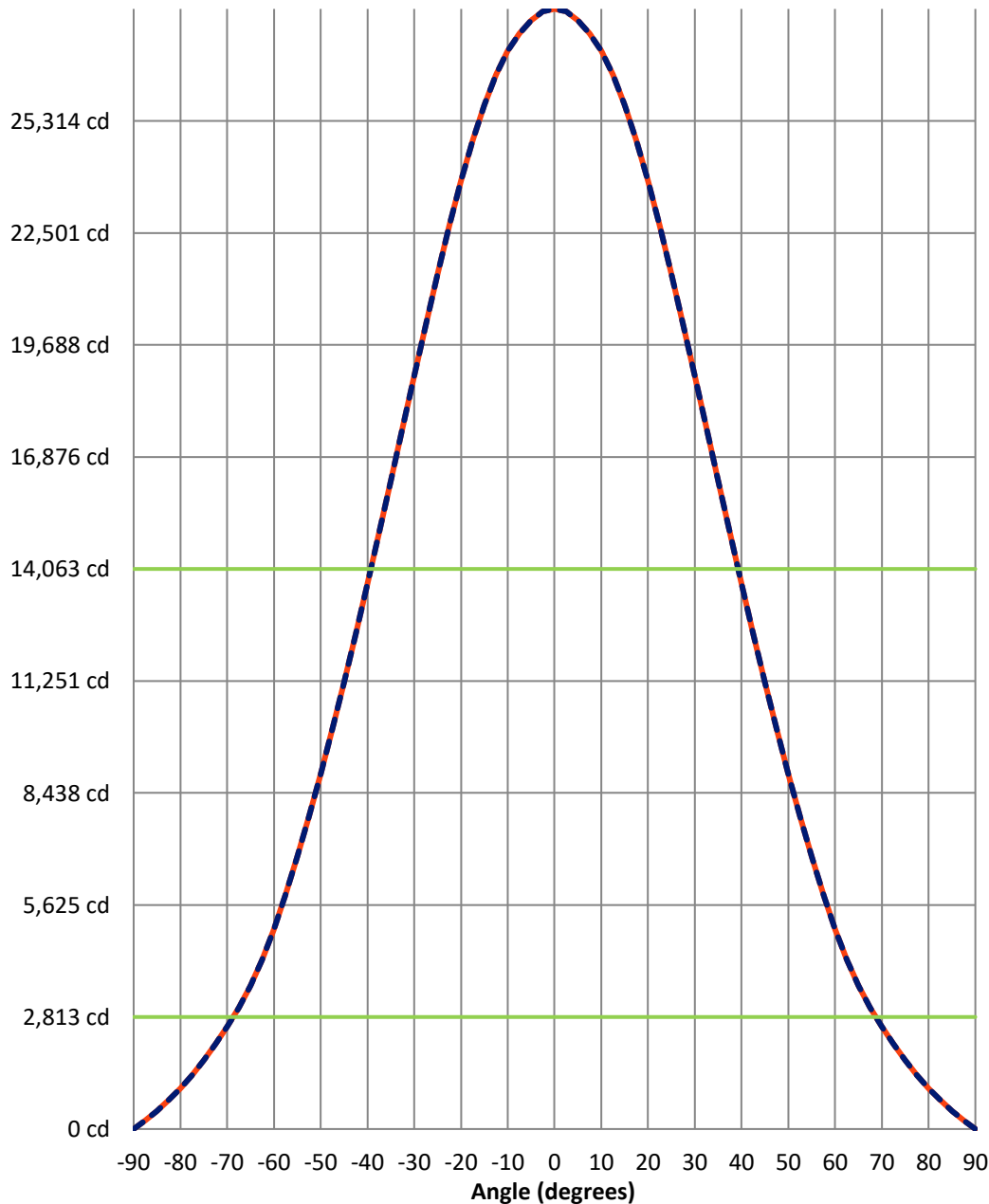


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P623950

CATALOG NUMBER: IFLD-L-SA7D-740-U-77

Luminous Intensity Plot



Beam:

H Angle: 78.6°

V Angle: 78.6°

Lumens: 21912.3

Efficiency: 43.3%

Field:

H Angle: 137.5°

V Angle: 137.5°

Lumens: 35880.6

Efficiency: 70.9%

Spill:

Lumens: 14761.4

Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg



REPORT NUMBER: P623950

CATALOG NUMBER: IFLD-L-SA7D-740-U-77

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°	216.5	216.5	216.5	216.5	216.5	216.5	216.5	205.9	205.9	200.6	195.4
85°	454.1	454.1	454.1	454.1	454.1	443.5	438.2	433.0	427.7	417.1	411.8
82.5°	728.6	728.6	728.6	728.6	718.1	707.5	702.2	691.7	681.1	665.3	649.4
80°	1019.0	1019.0	1019.0	1019.0	1003.2	992.6	976.8	966.2	950.4	929.3	908.2
77.5°	1351.7	1351.7	1351.7	1335.8	1325.3	1309.4	1293.6	1272.5	1251.3	1224.9	1193.3
75°	1726.5	1726.5	1726.5	1705.4	1689.6	1673.7	1647.3	1620.9	1589.3	1552.3	1510.1
72.5°	2133.1	2133.1	2133.1	2106.7	2090.9	2064.5	2032.8	1995.8	1958.9	1911.3	1858.5
70°	2571.3	2571.3	2571.3	2539.7	2513.3	2486.9	2444.6	2402.4	2349.6	2296.8	2233.4
67.5°	3046.5	3046.5	3046.5	3009.6	2977.9	2940.9	2893.4	2840.6	2777.2	2703.3	2629.4
65°	3600.9	3600.9	3579.8	3548.1	3511.2	3458.4	3400.3	3326.4	3247.2	3152.1	3051.8
62.5°	4255.6	4255.6	4224.0	4187.0	4139.5	4070.8	3991.6	3896.6	3785.7	3664.3	3542.8
60°	5015.9	5015.9	4979.0	4931.5	4862.8	4778.3	4672.7	4551.3	4414.0	4260.9	4113.1
57.5°	5892.4	5892.4	5844.9	5781.5	5697.1	5591.5	5459.5	5306.3	5132.1	4942.0	4757.2
55°	6842.8	6842.8	6784.7	6710.8	6610.5	6483.8	6325.4	6145.9	5934.7	5718.2	5480.6
52.5°	7851.3	7851.3	7782.6	7698.2	7582.0	7434.2	7254.6	7043.4	6800.6	6547.1	6267.3
50°	8912.5	8912.5	8833.3	8738.3	8606.3	8432.1	8226.2	7983.3	7714.0	7418.3	7096.2
47.5°	10047.7	10047.7	9958.0	9847.1	9688.7	9488.1	9245.2	8965.3	8659.1	8326.5	7962.2
45°	11214.6	11214.6	11114.3	10987.6	10813.3	10586.3	10317.0	10047.7	9657.0	9271.6	8849.2
42.5°	12429.0	12429.0	12312.8	12170.3	11969.6	11721.5	11415.2	11066.8	10681.3	10248.4	9789.0
40°	13690.9	13690.9	13558.9	13395.2	13173.5	12888.3	12545.1	12154.4	11721.5	11241.0	10734.1
37.5°	14979.2	14979.2	14831.4	14651.8	14403.7	14086.9	13701.5	13268.5	12782.7	12249.5	11689.8
35°	16278.1	16278.1	16114.4	15919.0	15644.5	15296.0	14878.9	14398.4	13859.8	13279.1	12650.7
32.5°	17603.3	17603.3	17423.8	17202.1	16890.5	16505.1	16045.7	15523.0	14979.2	14303.4	13617.0
30°	18912.8	18912.8	18717.4	18474.5	18141.9	17719.5	17217.9	16642.4	16003.5	15311.8	14572.6
27.5°	20201.1	20148.3	19984.6	19725.9	19361.5	18912.8	18368.9	17745.9	17054.2	16293.9	15501.9
25°	21468.2	21410.2	21230.6	20945.5	20554.8	20063.8	19477.7	18812.4	18068.0	17265.4	16399.5
22.5°	22682.6	22619.3	22429.2	22123.0	21705.8	21172.6	20544.3	19831.5	19039.5	18178.8	17265.4
20°	23807.3	23738.6	23543.3	23221.2	22788.2	22223.3	21558.0	20792.4	19947.6	19039.5	18068.0
17.5°	24821.0	24752.4	24546.5	24213.8	23807.3	23178.9	22492.6	21684.7	20792.4	19831.5	18812.4
15°	25713.3	25639.4	25428.2	25095.6	24630.9	24039.6	23316.2	22492.6	21558.0	20544.3	19477.7
12.5°	26473.6	26399.7	26183.2	25850.6	25370.1	24778.8	24039.6	23178.9	22223.3	21172.6	20063.8
10°	27075.5	27001.6	26795.7	26478.9	25982.6	25370.1	24630.9	23807.3	22788.2	21705.8	20554.8
7.5°	27508.5	27439.9	27249.8	26933.0	26478.9	25850.6	25095.6	24213.8	23221.2	22123.0	20945.5
5°	27835.9	27756.7	27566.6	27249.8	26795.7	26183.2	25428.2	24546.5	23543.3	22429.2	21230.6
2.5°	28062.9	27967.9	27756.7	27439.9	27001.6	26399.7	25639.4	24752.4	23738.6	22619.3	21410.2
0°	28126.3	28062.9	27835.9	27508.5	27075.5	26473.6	25713.3	24821.0	23807.3	22682.6	21468.2

REPORT NUMBER: P623950

CATALOG NUMBER: IFLD-L-SA7D-740-U-77

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°	190.1	190.1	184.8	179.5	174.2	163.7	158.4	153.1	147.8	137.3	132.0
85°	401.3	390.7	380.2	369.6	353.8	343.2	327.4	316.8	301.0	285.1	269.3
82.5°	633.6	617.8	596.6	580.8	559.7	533.3	512.2	485.8	459.4	438.2	411.8
80°	887.0	860.6	834.2	807.8	776.2	744.5	712.8	681.1	644.2	607.2	570.2
77.5°	1161.6	1124.6	1087.7	1045.4	1008.5	966.2	924.0	881.8	834.2	786.7	739.2
75°	1467.8	1420.3	1367.5	1314.7	1267.2	1209.1	1151.0	1092.9	1029.6	971.5	908.2
72.5°	1800.5	1742.4	1679.0	1615.7	1547.0	1473.1	1399.2	1320.0	1246.1	1172.1	1092.9
70°	2159.5	2090.9	2011.7	1932.5	1848.0	1758.2	1668.5	1573.4	1478.4	1383.3	1288.3
67.5°	2544.9	2460.5	2365.4	2270.4	2164.8	2059.2	1953.6	1842.7	1726.5	1610.4	1499.5
65°	2956.8	2851.2	2740.3	2618.9	2497.4	2376.0	2249.3	2117.3	1985.3	1848.0	1726.5
62.5°	3416.1	3284.1	3141.6	2993.7	2856.4	2708.6	2571.3	2407.7	2249.3	2096.1	1943.0
60°	3949.4	3775.2	3600.9	3416.1	3241.9	3051.8	2882.8	2703.3	2523.8	2349.6	2170.1
57.5°	4546.0	4324.3	4113.1	3891.3	3659.0	3447.8	3231.3	3014.8	2814.2	2608.3	2412.9
55°	5221.9	4952.6	4688.6	4414.0	4144.8	3880.8	3606.2	3363.3	3115.2	2882.8	2655.8
52.5°	5961.1	5654.8	5327.5	5015.9	4672.7	4345.4	4039.2	3732.9	3442.5	3162.7	2904.0
50°	6753.0	6394.0	6019.1	5639.0	5248.3	4862.8	4493.2	4134.2	3796.3	3468.9	3162.7
47.5°	7576.7	7170.2	6742.5	6309.5	5892.4	5422.5	4979.0	4572.4	4165.9	3796.3	3442.5
45°	8421.5	7962.2	7492.2	7001.2	6510.2	6003.3	5512.3	5015.9	4572.4	4134.2	3732.9
42.5°	9292.7	8775.3	8252.6	7708.7	7164.9	6610.5	6056.1	5512.3	4979.0	4493.2	4039.2
40°	10190.3	9620.1	9023.4	8432.1	7851.3	7217.7	6610.5	6003.3	5422.5	4862.8	4345.4
37.5°	11087.9	10464.8	9820.7	9155.4	8490.1	7851.3	7164.9	6510.2	5892.4	5248.3	4672.7
35°	11990.7	11304.4	10607.4	9884.1	9155.4	8432.1	7708.7	7001.2	6309.5	5639.0	5015.9
32.5°	12898.9	12149.1	11378.3	10607.4	9820.7	9023.4	8252.6	7492.2	6742.5	6019.1	5327.5
30°	13791.2	12978.1	12149.1	11304.4	10464.8	9620.1	8775.3	7962.2	7170.2	6394.0	5654.8
27.5°	14662.4	13791.2	12898.9	11990.7	11087.9	10190.3	9292.7	8421.5	7576.7	6753.0	5961.1
25°	15501.9	14572.6	13617.0	12650.7	11689.8	10734.1	9789.0	8849.2	7962.2	7096.2	6267.3
22.5°	16293.9	15311.8	14303.4	13279.1	12249.5	11241.0	10248.4	9271.6	8326.5	7418.3	6547.1
20°	17054.2	16003.5	14979.2	13859.8	12782.7	11721.5	10681.3	9657.0	8659.1	7714.0	6800.6
17.5°	17745.9	16642.4	15523.0	14398.4	13268.5	12154.4	11066.8	10047.7	8965.3	7983.3	7043.4
15°	18368.9	17217.9	16045.7	14878.9	13701.5	12545.1	11415.2	10317.0	9245.2	8226.2	7254.6
12.5°	18912.8	17719.5	16505.1	15296.0	14086.9	12888.3	11721.5	10586.3	9488.1	8432.1	7434.2
10°	19361.5	18141.9	16890.5	15644.5	14403.7	13173.5	11969.6	10813.3	9688.7	8606.3	7582.0
7.5°	19725.9	18474.5	17202.1	15919.0	14651.8	13395.2	12170.3	10987.6	9847.1	8738.3	7698.2
5°	19984.6	18717.4	17423.8	16114.4	14831.4	13558.9	12312.8	11114.3	9958.0	8833.3	7782.6
2.5°	20148.3	18912.8	17603.3	16278.1	14979.2	13690.9	12429.0	11214.6	10047.7	8912.5	7851.3
0°	20201.1	18912.8	17603.3	16278.1	14979.2	13690.9	12429.0	11214.6	10047.7	8912.5	7851.3

REPORT NUMBER: P623950

CATALOG NUMBER: IFLD-L-SA7D-740-U-77

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°	126.7	116.2	105.6	100.3	89.8	84.5	73.9	63.4	58.1	47.5	37.0
85°	253.4	232.3	216.5	200.6	184.8	163.7	147.8	132.0	110.9	95.0	73.9
82.5°	385.4	359.0	332.6	306.2	279.8	253.4	221.8	195.4	169.0	142.6	110.9
80°	533.3	491.0	454.1	417.1	380.2	343.2	301.0	264.0	221.8	184.8	147.8
77.5°	686.4	638.9	586.1	533.3	480.5	433.0	380.2	332.6	285.1	232.3	184.8
75°	850.1	786.7	728.6	660.0	596.6	528.0	464.6	401.3	343.2	285.1	221.8
72.5°	1019.0	939.8	860.6	786.7	707.5	628.3	554.4	475.2	401.3	332.6	264.0
70°	1193.3	1098.2	1003.2	913.4	823.7	728.6	644.2	554.4	464.6	380.2	301.0
67.5°	1378.1	1267.2	1156.3	1040.1	939.8	834.2	728.6	628.3	528.0	433.0	343.2
65°	1578.7	1446.7	1309.4	1188.0	1056.0	939.8	823.7	707.5	596.6	480.5	380.2
62.5°	1784.6	1631.5	1478.4	1325.3	1188.0	1040.1	913.4	786.7	660.0	533.3	417.1
60°	1995.8	1821.6	1647.3	1478.4	1309.4	1156.3	1003.2	860.6	728.6	586.1	454.1
57.5°	2212.3	2016.9	1821.6	1631.5	1446.7	1267.2	1098.2	939.8	786.7	638.9	491.0
55°	2434.1	2212.3	1995.8	1784.6	1578.7	1378.1	1193.3	1019.0	850.1	686.4	533.3
52.5°	2655.8	2412.9	2170.1	1943.0	1726.5	1499.5	1288.3	1092.9	908.2	739.2	570.2
50°	2882.8	2608.3	2349.6	2096.1	1848.0	1610.4	1383.3	1172.1	971.5	786.7	607.2
47.5°	3115.2	2814.2	2523.8	2249.3	1985.3	1726.5	1478.4	1246.1	1029.6	834.2	644.2
45°	3363.3	3014.8	2703.3	2407.7	2117.3	1842.7	1573.4	1320.0	1092.9	881.8	681.1
42.5°	3606.2	3231.3	2882.8	2571.3	2249.3	1953.6	1668.5	1399.2	1151.0	924.0	712.8
40°	3880.8	3447.8	3051.8	2708.6	2376.0	2059.2	1758.2	1473.1	1209.1	966.2	744.5
37.5°	4144.8	3659.0	3241.9	2856.4	2497.4	2164.8	1848.0	1547.0	1267.2	1008.5	776.2
35°	4414.0	3891.3	3416.1	2993.7	2618.9	2270.4	1932.5	1615.7	1314.7	1045.4	807.8
32.5°	4688.6	4113.1	3600.9	3141.6	2740.3	2365.4	2011.7	1679.0	1367.5	1087.7	834.2
30°	4952.6	4324.3	3775.2	3284.1	2851.2	2460.5	2090.9	1742.4	1420.3	1124.6	860.6
27.5°	5221.9	4546.0	3949.4	3416.1	2956.8	2544.9	2159.5	1800.5	1467.8	1161.6	887.0
25°	5480.6	4757.2	4113.1	3542.8	3051.8	2629.4	2233.4	1858.5	1510.1	1193.3	908.2
22.5°	5718.2	4942.0	4260.9	3664.3	3152.1	2703.3	2296.8	1911.3	1552.3	1224.9	929.3
20°	5934.7	5132.1	4414.0	3785.7	3247.2	2777.2	2349.6	1958.9	1589.3	1251.3	950.4
17.5°	6145.9	5306.3	4551.3	3896.6	3326.4	2840.6	2402.4	1995.8	1620.9	1272.5	966.2
15°	6325.4	5459.5	4672.7	3991.6	3400.3	2893.4	2444.6	2032.8	1647.3	1293.6	976.8
12.5°	6483.8	5591.5	4778.3	4070.8	3458.4	2940.9	2486.9	2064.5	1673.7	1309.4	992.6
10°	6610.5	5697.1	4862.8	4139.5	3511.2	2977.9	2513.3	2090.9	1689.6	1325.3	1003.2
7.5°	6710.8	5781.5	4931.5	4187.0	3548.1	3009.6	2539.7	2106.7	1705.4	1335.8	1019.0
5°	6784.7	5844.9	4979.0	4224.0	3579.8	3046.5	2571.3	2133.1	1726.5	1351.7	1019.0
2.5°	6842.8	5892.4	5015.9	4255.6	3600.9	3046.5	2571.3	2133.1	1726.5	1351.7	1019.0
0°	6842.8	5892.4	5015.9	4255.6	3600.9	3046.5	2571.3	2133.1	1726.5	1351.7	1019.0

REPORT NUMBER: P623950

CATALOG NUMBER: IFLD-L-SA7D-740-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	26.4	21.1	10.6	0.0
85°	58.1	37.0	21.1	0.0
82.5°	84.5	58.1	26.4	0.0
80°	110.9	73.9	37.0	0.0
77.5°	142.6	95.0	47.5	0.0
75°	169.0	110.9	58.1	0.0
72.5°	195.4	132.0	63.4	0.0
70°	221.8	147.8	73.9	0.0
67.5°	253.4	163.7	84.5	0.0
65°	279.8	184.8	89.8	0.0
62.5°	306.2	200.6	100.3	0.0
60°	332.6	216.5	105.6	0.0
57.5°	359.0	232.3	116.2	0.0
55°	385.4	253.4	126.7	0.0
52.5°	411.8	269.3	132.0	0.0
50°	438.2	285.1	137.3	0.0
47.5°	459.4	301.0	147.8	0.0
45°	485.8	316.8	153.1	0.0
42.5°	512.2	327.4	158.4	0.0
40°	533.3	343.2	163.7	0.0
37.5°	559.7	353.8	174.2	0.0
35°	580.8	369.6	179.5	0.0
32.5°	596.6	380.2	184.8	0.0
30°	617.8	390.7	190.1	0.0
27.5°	633.6	401.3	190.1	0.0
25°	649.4	411.8	195.4	0.0
22.5°	665.3	417.1	200.6	0.0
20°	681.1	427.7	205.9	0.0
17.5°	691.7	433.0	205.9	0.0
15°	702.2	438.2	216.5	0.0
12.5°	707.5	443.5	216.5	0.0
10°	718.1	454.1	216.5	0.0
7.5°	728.6	454.1	216.5	0.0
5°	728.6	454.1	216.5	0.0
2.5°	728.6	454.1	216.5	0.0
0°	728.6	454.1	216.5	0.0

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