

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: P628270

Luminaire Tested: **IFLD-S-SA2E-740-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628270
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-740-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

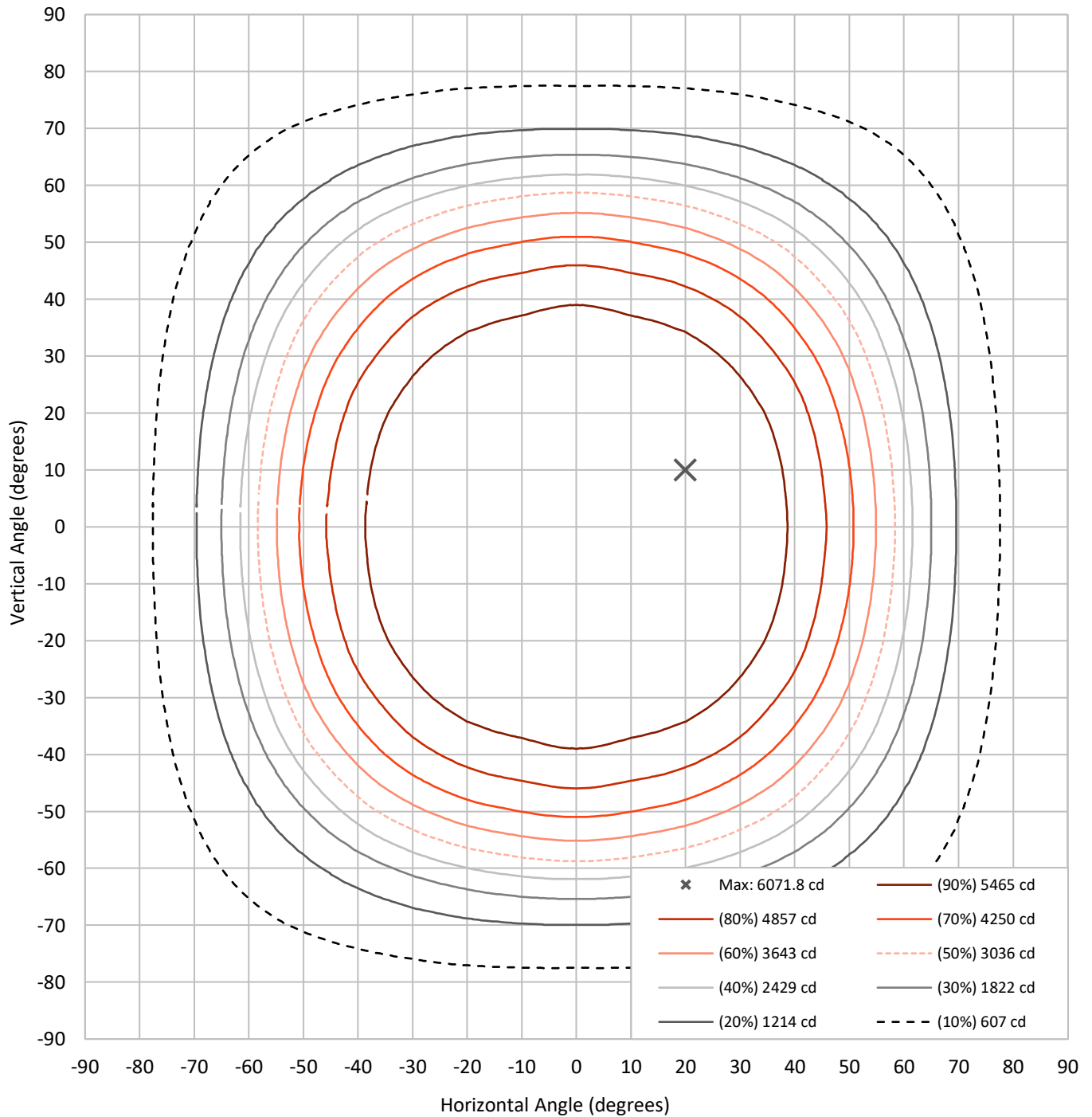
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18627.4 lumens	Max Intensity:	6071.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	119.3 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	11430.1 lumens	Field Lumens:	13702.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 156.2
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: P628270
CATALOG NUMBER: IFLD-S-SA2E-740-U-LAM

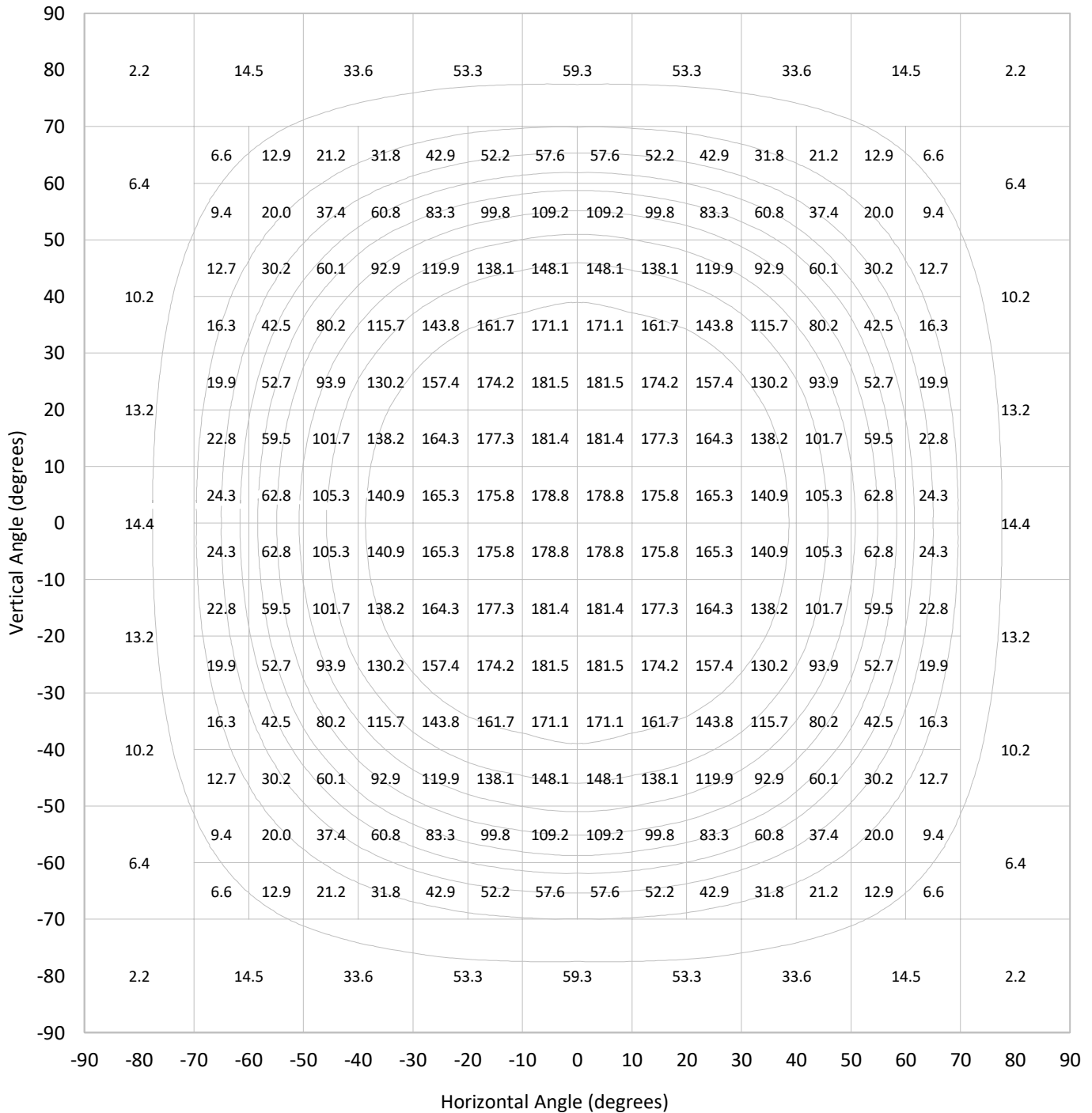
Iso-Candela Plot





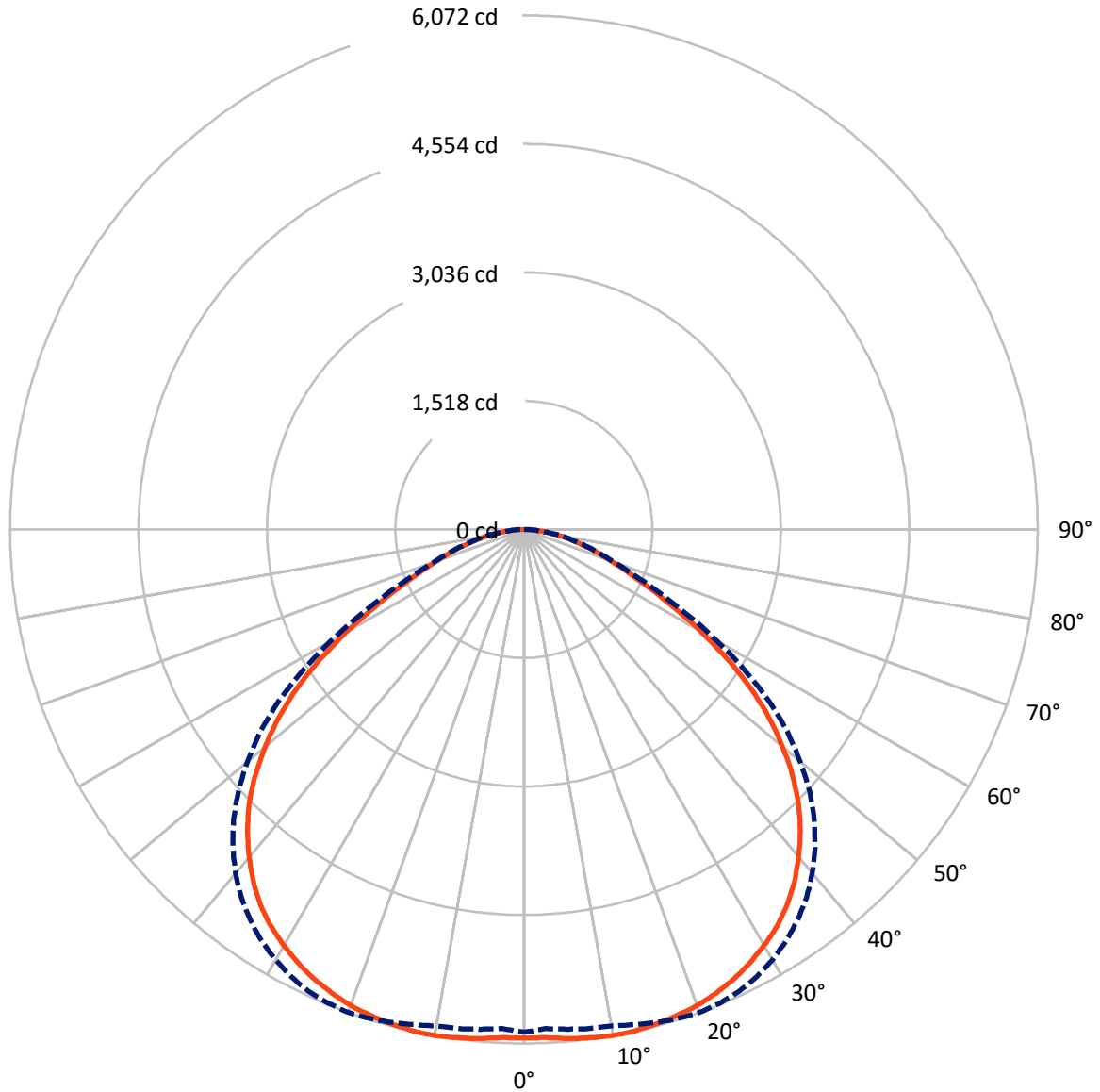
REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-U-LAM

Lumen Table



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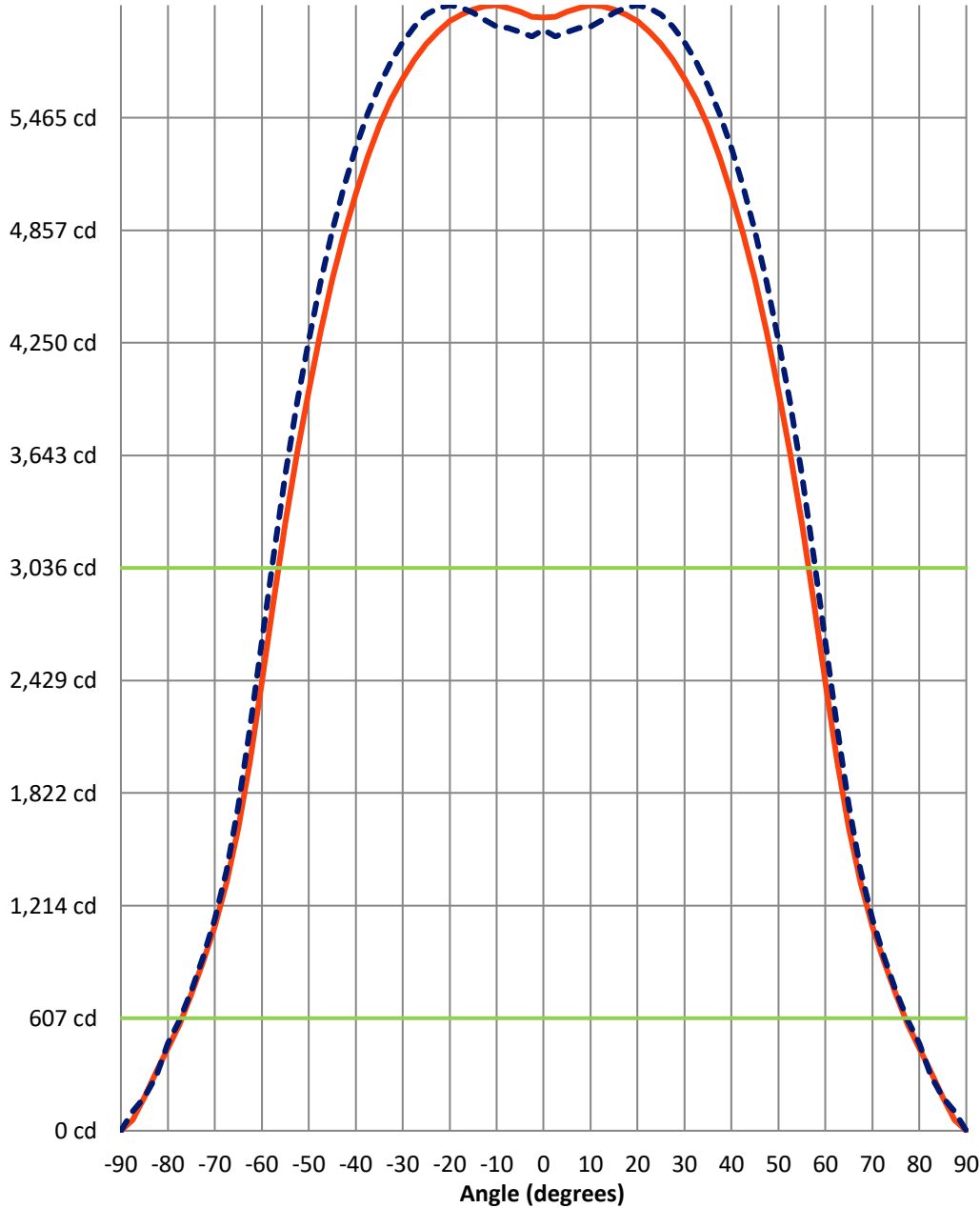
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 11430.1
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 13702.8
 Efficiency: 73.6%

Spill:
 Lumens: 4924.6
 Efficiency: 26.4%

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



REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-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°	49.0	52.9	54.9	56.8	58.8	60.8	62.7	60.8	58.8	58.8	56.8
85°	131.3	135.2	137.2	150.9	164.6	172.5	182.3	180.3	180.3	178.4	176.4
82.5°	262.6	274.4	284.2	297.9	305.7	317.5	325.3	319.5	315.5	307.7	301.8
80°	466.5	470.4	472.3	474.3	464.5	462.5	458.6	452.7	444.9	435.1	425.3
77.5°	593.8	597.8	601.7	597.8	595.8	593.8	588.0	582.1	574.3	566.4	554.7
75°	785.9	785.9	785.9	780.0	776.1	770.2	760.4	750.6	736.9	721.2	703.6
72.5°	989.7	987.8	985.8	974.1	964.3	952.5	938.8	927.0	911.4	893.7	870.2
70°	1203.4	1207.3	1209.3	1193.6	1181.8	1166.1	1148.5	1126.9	1103.4	1077.9	1044.6
67.5°	1497.4	1493.4	1489.5	1468.0	1452.3	1430.7	1405.2	1373.9	1338.6	1299.4	1252.4
65°	1861.9	1867.8	1856.0	1834.5	1805.1	1769.8	1730.6	1685.5	1632.6	1573.8	1507.2
62.5°	2302.9	2312.7	2299.0	2271.5	2234.3	2187.2	2132.4	2067.7	1995.2	1912.9	1830.5
60°	2804.6	2802.7	2777.2	2739.9	2690.9	2632.1	2571.4	2500.8	2418.5	2322.5	2222.5
57.5°	3265.2	3261.3	3229.9	3192.7	3143.7	3081.0	3016.3	2941.8	2855.6	2753.7	2638.0
55°	3678.7	3674.8	3643.5	3604.3	3553.3	3490.6	3431.8	3361.2	3276.9	3169.2	3045.7
52.5°	4045.2	4047.2	4019.8	3976.6	3921.8	3861.0	3804.2	3733.6	3653.2	3545.5	3425.9
50°	4382.3	4380.4	4351.0	4311.8	4260.8	4202.0	4145.2	4074.6	3990.4	3886.5	3770.8
47.5°	4695.9	4692.0	4658.7	4615.6	4562.6	4511.7	4458.8	4396.1	4307.9	4204.0	4088.3
45°	4958.5	4950.7	4917.4	4876.2	4825.3	4780.2	4733.2	4686.1	4592.0	4496.0	4386.3
42.5°	5183.9	5182.0	5148.7	5107.5	5056.5	5017.3	4974.2	4915.4	4837.0	4748.8	4641.0
40°	5399.5	5383.8	5350.5	5311.3	5264.3	5231.0	5187.8	5129.1	5052.6	4966.4	4862.5
37.5°	5560.2	5562.2	5526.9	5483.8	5442.6	5411.3	5372.1	5317.2	5250.6	5166.3	5062.4
35°	5713.1	5703.3	5673.9	5636.7	5599.4	5564.2	5523.0	5476.0	5421.1	5342.7	5244.7
32.5°	5813.1	5826.8	5791.5	5752.3	5730.7	5703.3	5660.2	5611.2	5562.2	5483.8	5395.6
30°	5922.8	5911.1	5883.6	5850.3	5834.6	5817.0	5779.7	5732.7	5675.9	5605.3	5523.0
27.5°	5999.2	5993.4	5960.0	5928.7	5920.9	5905.2	5875.8	5834.6	5777.8	5709.2	5632.7
25°	6032.6	6036.5	6005.1	5987.5	5987.5	5977.7	5954.2	5918.9	5862.1	5799.3	5724.9
22.5°	6048.2	6044.3	6022.8	6018.8	6028.6	6020.8	6011.0	5979.6	5928.7	5877.7	5815.0
20°	6058.0	6030.6	6011.0	6026.7	6038.4	6036.5	6028.6	6009.0	5985.5	5942.4	5887.5
17.5°	6036.5	6018.8	5995.3	6018.8	6044.3	6046.3	6038.4	6026.7	6020.8	5993.4	5944.4
15°	5983.6	5969.8	5973.8	5997.3	6026.7	6036.5	6042.4	6056.1	6048.2	6026.7	5983.6
12.5°	5948.3	5930.7	5948.3	5971.8	5987.5	5993.4	6040.4	6065.9	6065.9	6046.3	6018.8
10°	5938.5	5903.2	5926.7	5948.3	5956.1	5991.4	6030.6	6058.0	6071.8	6056.1	6020.8
7.5°	5918.9	5895.4	5905.2	5915.0	5960.0	5985.5	6007.1	6036.5	6056.1	6054.1	6022.8
5°	5909.1	5879.7	5883.6	5924.8	5956.1	5973.8	5981.6	6007.1	6036.5	6042.4	6018.8
2.5°	5883.6	5869.9	5899.3	5903.2	5926.7	5940.5	5948.3	5971.8	6009.0	6022.8	6013.0
0°	5869.9	5850.3	5830.7	5846.4	5885.6	5915.0	5926.7	5962.0	6005.1	6018.8	5997.3



REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-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°	54.9	52.9	51.0	49.0	51.0	51.0	51.0	49.0	51.0	49.0	49.0
85°	170.5	162.7	156.8	149.0	141.1	135.2	127.4	119.6	117.6	115.6	111.7
82.5°	294.0	284.2	274.4	262.6	250.9	237.1	223.4	207.7	203.8	199.9	194.0
80°	413.5	399.8	386.1	372.4	360.6	346.9	331.2	313.6	301.8	292.0	280.3
77.5°	539.0	519.4	499.8	476.3	462.5	448.8	433.1	415.5	397.9	382.2	364.5
75°	682.0	660.5	640.9	617.4	591.9	566.4	540.9	517.4	491.9	468.4	444.9
72.5°	840.8	809.4	778.1	748.7	717.3	686.0	652.6	621.3	589.9	558.6	525.3
70°	1007.4	968.2	929.0	889.8	848.6	807.5	768.3	729.1	689.9	648.7	611.5
67.5°	1203.4	1158.3	1107.3	1052.5	991.7	938.8	887.8	840.8	793.8	746.7	699.7
65°	1448.4	1385.6	1317.1	1242.6	1172.0	1101.5	1027.0	956.4	901.6	846.7	793.8
62.5°	1750.2	1662.0	1566.0	1469.9	1383.7	1291.6	1205.3	1113.2	1027.0	948.6	883.9
60°	2110.8	1991.3	1873.7	1750.2	1630.6	1505.2	1395.4	1281.8	1174.0	1077.9	983.9
57.5°	2508.7	2369.5	2228.4	2077.5	1914.8	1767.8	1618.9	1469.9	1342.5	1215.1	1109.3
55°	2912.4	2765.4	2606.7	2436.2	2257.8	2069.7	1867.8	1701.2	1526.8	1377.8	1240.6
52.5°	3296.5	3143.7	2979.0	2822.3	2608.6	2393.0	2171.6	1952.1	1748.2	1558.1	1391.5
50°	3639.5	3490.6	3331.8	3149.6	2951.6	2722.3	2475.4	2228.4	1987.3	1763.9	1556.2
47.5°	3953.1	3808.1	3649.3	3467.1	3286.7	3032.0	2783.1	2510.6	2242.1	1985.4	1742.3
45°	4247.1	4100.1	3935.5	3761.0	3553.3	3325.9	3069.2	2794.8	2506.7	2218.6	1938.3
42.5°	4513.6	4366.7	4200.1	4019.8	3814.0	3588.6	3339.7	3063.3	2773.3	2459.7	2152.0
40°	4746.9	4603.8	4443.1	4254.9	4062.9	3825.7	3580.7	3318.1	3018.2	2702.7	2363.6
37.5°	4950.7	4817.4	4658.7	4472.5	4268.7	4057.0	3804.2	3541.5	3271.1	2928.1	2581.2
35°	5131.0	5007.5	4844.9	4668.5	4468.6	4245.1	4008.0	3751.2	3459.2	3137.8	2800.7
32.5°	5287.8	5162.4	5013.4	4837.0	4643.0	4433.3	4190.3	3931.6	3655.2	3327.9	2961.4
30°	5421.1	5299.6	5158.5	4991.9	4805.7	4597.9	4360.8	4100.1	3817.9	3492.5	3130.0
27.5°	5536.7	5421.1	5283.9	5129.1	4950.7	4750.8	4511.7	4249.1	3961.0	3647.4	3284.8
25°	5636.7	5525.0	5397.6	5250.6	5074.2	4878.2	4652.8	4378.4	4090.3	3774.8	3416.1
22.5°	5726.8	5619.0	5491.6	5348.6	5187.8	4991.9	4764.5	4492.1	4200.1	3888.4	3535.7
20°	5807.2	5707.2	5581.8	5434.8	5274.1	5076.1	4850.7	4592.0	4298.1	3992.3	3643.5
17.5°	5871.9	5783.7	5658.2	5503.4	5342.7	5150.6	4931.1	4694.0	4382.3	4080.5	3733.6
15°	5916.9	5830.7	5717.0	5560.2	5403.4	5213.3	4993.8	4748.8	4458.8	4151.1	3808.1
12.5°	5948.3	5856.2	5750.3	5605.3	5448.5	5260.4	5046.7	4805.7	4523.4	4213.8	3872.8
10°	5956.1	5871.9	5766.0	5636.7	5483.8	5301.5	5091.8	4852.7	4576.4	4262.8	3925.7
7.5°	5960.0	5879.7	5783.7	5660.2	5509.3	5332.9	5125.1	4889.9	4615.6	4303.9	3964.9
5°	5958.1	5881.7	5795.4	5675.9	5525.0	5350.5	5146.7	4915.4	4643.0	4331.4	3994.3
2.5°	5952.2	5883.6	5803.3	5687.6	5542.6	5370.1	5168.3	4944.8	4672.4	4354.9	4017.8
0°	5967.9	5909.1	5807.2	5683.7	5546.5	5370.1	5166.3	4948.7	4676.3	4352.9	4015.8



REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-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°	49.0	47.0	47.0	45.1	43.1	41.2	37.2	35.3	31.4	25.5	19.6
85°	105.8	100.0	94.1	90.2	86.2	82.3	76.4	70.6	62.7	51.0	39.2
82.5°	186.2	174.4	162.7	149.0	137.2	125.4	115.6	105.8	94.1	76.4	58.8
80°	266.5	248.9	231.3	211.7	194.0	174.4	156.8	141.1	125.4	101.9	78.4
77.5°	346.9	323.4	297.9	274.4	248.9	223.4	197.9	176.4	152.9	125.4	98.0
75°	421.4	393.9	370.4	337.1	305.7	272.4	239.1	209.7	180.3	147.0	117.6
72.5°	495.9	460.6	427.3	395.9	360.6	319.5	282.2	245.0	207.7	168.6	133.3
70°	570.3	527.2	486.1	448.8	409.6	368.5	323.4	280.3	235.2	188.2	147.0
67.5°	646.8	597.8	550.7	503.7	458.6	411.6	364.5	315.5	262.6	207.7	162.7
65°	731.0	670.3	613.4	560.5	507.6	456.7	403.7	350.8	292.0	229.3	176.4
62.5°	815.3	748.7	682.0	615.4	556.6	499.8	442.9	384.1	319.5	252.8	190.1
60°	905.5	829.0	752.6	678.1	605.6	542.9	480.2	417.5	348.9	274.4	203.8
57.5°	1005.4	913.3	827.1	742.8	660.5	586.0	517.4	450.8	374.3	295.9	219.5
55°	1119.1	1005.4	903.5	809.4	719.3	629.1	554.7	486.1	403.7	317.5	237.1
52.5°	1238.7	1107.3	983.9	878.0	782.0	680.1	589.9	513.5	433.1	339.1	252.8
50°	1377.8	1211.2	1074.0	944.7	836.9	731.0	627.2	544.9	462.5	364.5	268.5
47.5°	1520.9	1336.7	1164.2	1023.1	895.7	780.0	670.3	572.3	490.0	388.1	284.2
45°	1687.5	1456.2	1266.1	1099.5	952.5	831.0	713.4	601.7	513.5	411.6	299.9
42.5°	1848.2	1597.3	1371.9	1183.8	1017.2	880.0	752.6	633.0	537.0	435.1	313.6
40°	2038.3	1738.4	1473.8	1264.1	1081.9	927.0	791.8	666.4	558.6	456.7	327.3
37.5°	2220.6	1881.5	1597.3	1352.3	1144.6	974.1	831.0	697.7	578.2	478.2	344.9
35°	2400.9	2040.3	1714.9	1434.6	1209.3	1027.0	870.2	727.1	597.8	495.9	360.6
32.5°	2573.3	2189.2	1834.5	1526.8	1279.8	1076.0	905.5	754.6	617.4	511.5	376.3
30°	2734.1	2330.3	1952.1	1620.8	1344.5	1121.1	938.8	782.0	640.9	525.3	392.0
27.5°	2881.1	2467.5	2069.7	1709.0	1405.2	1162.2	974.1	807.5	660.5	539.0	405.7
25°	3014.3	2591.0	2177.4	1789.4	1460.1	1207.3	1007.4	833.0	678.1	550.7	417.5
22.5°	3139.8	2704.7	2275.4	1869.7	1526.8	1252.4	1038.7	856.5	695.8	562.5	429.2
20°	3249.5	2808.5	2369.5	1950.1	1585.6	1293.5	1066.2	878.0	711.4	570.3	441.0
17.5°	3337.7	2900.6	2453.8	2020.7	1636.5	1328.8	1089.7	897.6	725.2	580.1	448.8
15°	3416.1	2979.0	2524.3	2081.4	1681.6	1358.2	1111.3	913.3	736.9	586.0	458.6
12.5°	3482.7	3045.7	2585.1	2134.3	1720.8	1383.7	1128.9	925.1	746.7	591.9	464.5
10°	3537.6	3098.6	2636.1	2175.5	1752.1	1403.3	1142.6	936.8	754.6	597.8	470.4
7.5°	3578.8	3137.8	2673.3	2210.8	1777.6	1417.0	1154.4	944.7	762.4	601.7	480.2
5°	3610.1	3171.1	2702.7	2234.3	1797.2	1436.6	1168.1	954.5	770.2	605.6	480.2
2.5°	3633.7	3198.6	2726.2	2253.9	1812.9	1432.7	1168.1	952.5	770.2	605.6	478.2
0°	3629.7	3200.5	2724.3	2253.9	1812.9	1428.8	1168.1	950.6	770.2	605.6	478.2



REPORT NUMBER: P628270
 CATALOG NUMBER: IFLD-S-SA2E-740-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.7	9.8	3.9	0.0
85°	29.4	19.6	9.8	0.0
82.5°	43.1	27.4	13.7	0.0
80°	56.8	37.2	17.6	0.0
77.5°	72.5	47.0	23.5	0.0
75°	86.2	54.9	27.4	0.0
72.5°	100.0	64.7	31.4	0.0
70°	111.7	72.5	35.3	0.0
67.5°	123.5	82.3	41.2	0.0
65°	133.3	90.2	45.1	0.0
62.5°	141.1	100.0	49.0	0.0
60°	150.9	107.8	52.9	0.0
57.5°	158.8	113.7	56.8	0.0
55°	166.6	117.6	60.8	0.0
52.5°	174.4	123.5	64.7	0.0
50°	182.3	129.4	68.6	0.0
47.5°	190.1	133.3	70.6	0.0
45°	201.9	139.2	74.5	0.0
42.5°	211.7	143.1	78.4	0.0
40°	221.5	147.0	80.4	0.0
37.5°	231.3	150.9	84.3	0.0
35°	241.1	154.8	86.2	0.0
32.5°	248.9	158.8	88.2	0.0
30°	256.7	162.7	90.2	0.0
27.5°	264.6	164.6	92.1	0.0
25°	270.5	168.6	94.1	0.0
22.5°	276.3	170.5	96.0	0.0
20°	280.3	172.5	98.0	0.0
17.5°	286.1	174.4	100.0	0.0
15°	288.1	176.4	103.9	0.0
12.5°	292.0	178.4	103.9	0.0
10°	294.0	180.3	103.9	0.0
7.5°	297.9	180.3	103.9	0.0
5°	295.9	180.3	103.9	0.0
2.5°	295.9	180.3	103.9	0.0
0°	294.0	180.3	103.9	0.0

(END OF REPORT)