

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P598988

Luminaire Tested: **IFLD-L-SA7E-740-U-SLL**

Issue Date: 05/03/2022

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P598988  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 05/03/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: IFLD-L-SA7E-740-U-SLL  
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLL distribution lens  
 Light Source: (112) 4000K CCT, 70 CRI LEDS  
 Ballast/Driver: ELECTRONIC DRIVER

**Summary**

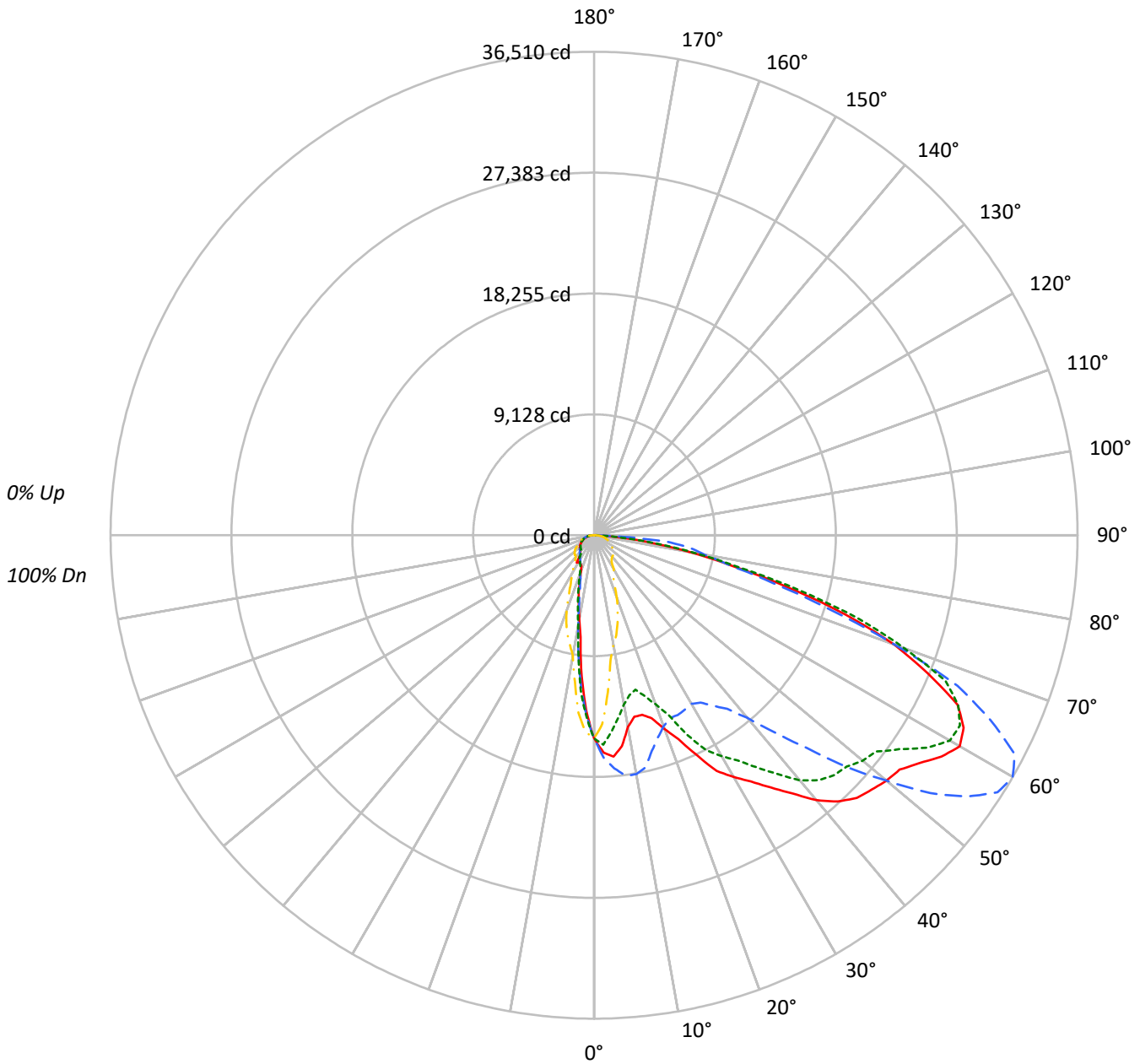
Lumens per Lamp: N/A  
 Luminaire Lumens: 48017.8 lumens  
 Efficiency: N/A  
 Efficacy: 90.1 lumens/watt  
 Spacing Criteria (0/90/45): 1.12 / 0.52 / 0.8  
 Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
 CIE Type: Direct

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

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    ··· 90°-270°    - · 135°-315°

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	106	100	94	89	103	97	92	88	93	89	85	89	85	82	85	82	80	77	77	77	77
2	94	83	75	68	91	81	74	67	78	71	65	74	69	64	71	66	62	60	60	60	60
3	84	71	61	53	81	69	60	53	66	58	52	63	56	51	60	55	50	47	47	47	47
4	75	61	51	43	73	60	50	42	57	48	42	54	47	41	52	46	40	38	38	38	38
5	68	53	43	35	66	52	42	35	50	41	34	48	40	34	46	39	34	31	31	31	31
6	63	47	37	30	60	46	37	29	44	36	29	42	35	29	41	34	29	26	26	26	26
7	58	42	32	25	56	41	32	25	40	31	25	38	31	25	37	30	25	22	22	22	22
8	53	38	29	22	52	37	28	22	36	28	22	35	27	22	33	27	22	19	19	19	19
9	50	35	26	20	48	34	26	20	33	25	19	32	25	19	31	24	19	17	17	17	17
10	46	32	23	18	45	31	23	18	30	23	17	29	22	17	28	22	17	15	15	15	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	82541	82541	82541	82541
5°	90682	80555	57769	63063
10°	80322	70893	35039	37600
15°	78213	67294	24805	25755
20°	89180	77834	16226	17934
25°	108656	98664	14167	14673
30°	130919	119667	14694	13635
35°	152685	140510	12176	11476
40°	183473	169706	11374	10775
45°	213520	195037	11511	10701
50°	241306	221688	11771	11058
55°	281416	264227	12192	11592
60°	343233	333832	12151	12151
65°	385734	386277	12478	13020
70°	379096	392503	13072	13407
75°	312713	333530	13730	14616
80°	225784	237007	15184	15844
85°	124959	134166	17099	21045

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1191.5	2.5
10°-20°	2515.5	5.2
20°-30°	3680.5	7.7
30°-40°	5185.7	10.8
40°-50°	7126.6	14.8
50°-60°	9712.8	20.2
60°-70°	10630.2	22.1
70°-80°	6137.2	12.8
80°-90°	1837.8	3.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	7387.5	15.4
0°-40°	12573.2	26.2
0°-60°	29412.6	61.3
0°-90°	48017.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	48017.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	15337	15337	15337	15337	15337	
5°	16785	14911	10693	11673	16785	1524
15°	14037	12078	4452	4622	14037	4101
25°	18297	16615	2386	2471	18297	8568
35°	23239	21386	1853	1747	23239	14736
45°	28053	25625	1512	1406	28053	21561
55°	29992	28160	1299	1235	29992	27061
65°	30290	30332	980	1022	30290	28991
75°	15038	16040	660	703	15038	16154
85°	2024	2173	277	341	2024	2808
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6
2.5°	16423.0	16359.1	16423.0	16657.3	16721.2	16827.7	16827.7	16678.6	16401.7	16273.9	16060.8
5°	16785.1	16678.6	17211.1	17701.0	18084.4	18041.8	17679.7	17381.5	16827.7	15996.9	15208.8
7.5°	16060.8	16167.3	16550.8	17828.8	18723.5	18893.9	18318.7	17722.3	16529.5	15379.2	14314.2
10°	14697.6	14846.7	15677.4	16998.1	18403.9	18680.8	18318.7	17594.5	16167.3	14740.2	13504.7
12.5°	14037.3	14378.1	14868.0	16465.6	17466.7	18127.0	17956.6	17488.0	15890.4	14207.7	13014.8
15°	14037.3	14122.5	14846.7	16188.6	16763.8	16785.1	16849.0	16934.2	15975.6	14442.0	12844.4
17.5°	14484.6	14718.9	15336.6	16167.3	16273.9	16018.2	16018.2	16380.4	16146.0	15102.3	13462.1
20°	15570.9	15485.7	16295.2	16636.0	16060.8	15421.8	15357.9	15975.6	16337.8	15805.2	14591.1
22.5°	16657.3	17040.7	17701.0	16934.2	15869.1	15017.1	14931.9	15698.7	16912.9	17019.4	15890.4
25°	18297.4	18680.8	19021.7	18084.4	15847.8	14910.6	14974.5	15570.9	17615.8	18744.8	18063.1
27.5°	20065.4	20299.7	20789.6	19341.2	16359.1	14782.8	14846.7	15741.3	18276.1	19873.7	19767.2
30°	21066.5	21322.2	21215.7	19575.5	16699.9	14868.0	14697.6	15975.6	17914.0	19873.7	20874.8
32.5°	22046.4	21897.3	21833.4	19958.9	17125.9	15400.5	14974.5	16465.6	18127.0	20193.2	22302.0
35°	23239.2	23026.2	22855.8	20704.4	17828.8	15911.7	15720.0	17104.6	18595.6	20853.5	23452.2
37.5°	24559.9	24559.9	23729.2	21258.3	18659.5	16742.5	16529.5	18020.5	19341.2	21258.3	25028.5
40°	26114.8	26178.8	24709.0	22003.8	19596.8	18063.1	17999.2	19213.4	20065.4	21854.7	26540.9
42.5°	27265.1	27307.7	25561.0	22280.7	20683.1	19895.0	20171.9	21130.4	20896.1	22387.2	26647.4
45°	28053.2	27840.2	26157.4	23068.8	21876.0	22642.8	22728.0	23004.9	21982.5	22706.7	27073.4
47.5°	28436.6	28394.0	26413.1	23984.8	24389.5	25433.2	25923.1	25539.7	22983.6	22365.9	27073.4
50°	28820.1	28457.9	26647.4	25241.5	26839.1	28947.9	28841.4	28138.4	24368.2	22791.9	26668.7
52.5°	29075.7	28756.2	27116.0	26370.5	29182.2	31567.9	31993.9	30694.5	25987.0	23580.0	26860.4
55°	29991.6	29736.0	28521.8	27904.1	31887.4	34337.0	34400.9	32590.3	27691.1	24879.4	28117.1
57.5°	31099.2	31248.4	30460.2	30076.8	33953.6	36360.6	36126.2	33996.2	29139.6	26455.7	29565.6
60°	31887.4	32121.7	31930.0	31972.6	34976.0	37042.2	36509.7	34869.5	30204.6	27648.5	31333.6
62.5°	31461.4	31930.0	32718.1	32547.7	35018.6	36552.3	35806.7	33719.3	30332.4	29203.5	32675.5
65°	30289.8	30332.4	31866.1	32803.3	33101.5	34017.5	33037.6	31312.3	29011.8	30162.0	32483.8
67.5°	27286.4	27627.2	29011.8	30843.6	29586.9	29799.9	29714.7	27222.5	27009.5	29501.7	31014.0
70°	24091.3	24325.6	25837.9	27989.3	24985.9	23984.8	24176.5	22323.3	23196.6	27456.8	28053.2
72.5°	19916.3	20065.4	21790.8	23686.6	20044.1	18254.8	18702.2	17189.8	18425.2	24027.4	23665.2
75°	15038.4	15315.3	16657.3	18893.9	14761.5	13611.2	14058.6	13440.8	14591.1	19788.5	18361.3
77.5°	10693.0	10480.0	12141.5	14782.8	11097.7	10416.1	10458.7	10565.2	11800.7	16678.6	13185.2
80°	7284.9	7348.8	8839.9	10842.1	8712.0	8605.5	8499.0	9351.1	9904.9	13206.5	9585.4
82.5°	4324.1	4324.1	5964.2	7710.9	6880.2	7753.5	7263.6	8030.4	7753.5	9713.2	6283.8
85°	2023.6	2023.6	3067.3	5559.5	5325.2	6390.3	5431.7	6070.7	5729.9	6773.7	2833.0
87.5°	340.8	298.2	617.7	2726.5	2194.0	2492.2	979.8	3237.7	3599.8	4728.8	702.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6
2.5°	15826.5	15677.4	15379.2	14995.8	14676.3	14271.6	14143.8	13866.9	13483.4	13440.8	13270.4
5°	14910.6	14399.4	13760.4	12972.2	12439.7	11885.9	11417.3	11140.3	10820.8	10778.2	10693.0
7.5°	13909.5	13270.4	12205.4	11268.2	10352.2	9478.9	9052.9	8520.3	8158.2	7881.3	7753.5
10°	12972.2	12375.8	11055.1	9777.1	8967.7	8392.5	7881.3	7327.5	6880.2	6539.4	6411.6
12.5°	12354.5	11651.6	10224.4	9010.3	8413.8	7753.5	7178.4	6582.0	6006.8	5559.5	5325.2
15°	12077.6	11417.3	9968.8	8626.8	7753.5	6837.6	6177.2	5580.8	4877.9	4558.4	4451.9
17.5°	12737.9	11758.1	9883.6	8179.5	6944.1	5900.3	5090.9	4451.9	3940.7	3621.1	3493.3
20°	13589.9	12375.8	10032.7	7647.0	6177.2	5005.7	4111.1	3429.4	3088.6	2854.3	2833.0
22.5°	14676.3	13291.7	10267.0	7263.6	5325.2	4025.9	3216.4	2811.7	2577.4	2556.1	2513.5
25°	16614.7	14953.2	10650.4	6752.4	4643.6	3322.9	2747.8	2513.5	2407.0	2343.1	2385.7
27.5°	18276.1	16039.5	10927.3	6432.9	4366.7	3131.2	2662.6	2407.0	2300.5	2279.2	2300.5
30°	19256.0	17040.7	10842.1	5836.4	3812.9	2982.1	2833.0	2747.8	2534.8	2364.4	2364.4
32.5°	20150.6	17679.7	10820.8	5303.9	3259.0	2492.2	2364.4	2300.5	2428.3	2513.5	2449.6
35°	21386.1	18680.8	10756.9	5005.7	3024.7	2300.5	2087.5	1917.1	1831.9	1789.3	1853.2
37.5°	22706.7	19362.5	10586.5	4963.1	2896.9	2194.0	2023.6	1853.2	1768.0	1725.4	1704.1
40°	24155.2	20086.7	10394.8	4750.1	2833.0	2130.1	1959.7	1810.6	1704.1	1640.2	1618.9
42.5°	25092.4	20661.8	10203.1	4643.6	2705.2	2087.5	1895.8	1768.0	1661.5	1576.3	1576.3
45°	25624.9	21343.5	10011.4	4537.1	2556.1	2108.8	1895.8	1725.4	1597.6	1555.0	1512.4
47.5°	25859.2	21854.7	9947.5	4366.7	2428.3	2023.6	1853.2	1682.8	1555.0	1469.8	1448.5
50°	26477.0	22941.0	10181.8	4238.9	2279.2	1938.4	1959.7	1661.5	1533.7	1427.2	1405.9
52.5°	26839.1	23814.4	10693.0	4047.2	2172.7	1831.9	1917.1	1618.9	1469.8	1363.3	1363.3
55°	28159.7	25262.8	11246.9	3898.1	2044.9	1682.8	1768.0	1533.7	1363.3	1299.4	1299.4
57.5°	29842.5	26796.5	11715.5	3834.2	1959.7	1576.3	1576.3	1491.1	1299.4	1214.1	1192.8
60°	31014.0	28053.2	11992.4	3791.6	1874.5	1469.8	1405.9	1491.1	1235.4	1150.2	1128.9
62.5°	31141.8	27329.0	11715.5	3770.3	1853.2	1363.3	1278.1	1427.2	1171.5	1086.3	1043.7
65°	30332.4	25859.2	10948.6	3685.0	1831.9	1256.8	1192.8	1235.4	1086.3	1022.4	979.8
67.5°	28713.6	23473.5	9841.0	3642.4	1810.6	1171.5	1086.3	1065.0	1001.1	937.2	894.6
70°	24943.3	20363.6	8541.6	3450.7	1768.0	1107.6	979.8	958.5	894.6	852.0	830.7
72.5°	20938.7	16657.3	7050.6	3195.1	1682.8	1001.1	894.6	852.0	830.7	766.8	745.5
75°	16039.5	12823.1	5644.7	2833.0	1469.8	894.6	788.1	745.5	724.2	681.6	660.3
77.5°	11268.2	9542.8	4175.0	2300.5	1235.4	809.4	702.9	660.3	639.0	575.1	575.1
80°	7647.0	6688.5	2833.0	1597.6	958.5	660.3	617.7	575.1	532.5	489.9	489.9
82.5°	4750.1	4686.2	2044.9	1043.7	702.9	532.5	489.9	489.9	426.0	383.4	383.4
85°	2172.7	2875.6	1427.2	724.2	532.5	404.7	404.7	383.4	340.8	276.9	276.9
87.5°	681.6	958.5	745.5	319.5	298.2	234.3	234.3	213.0	213.0	170.4	170.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6
2.5°	13440.8	13419.5	13419.5	13334.3	13547.3	13547.3	13675.1	13568.6	13632.5	13653.8	13824.3
5°	10671.7	10842.1	10969.9	11225.6	11374.7	11438.6	11438.6	11609.0	11545.1	11672.9	11928.5
7.5°	7817.4	8030.4	8413.8	8733.4	8989.0	9074.2	9052.9	9095.5	9159.4	9010.3	9052.9
10°	6326.4	6177.2	6305.1	6603.3	6837.6	7114.5	6901.5	6880.2	6944.1	6880.2	7008.0
12.5°	5282.6	5112.2	5005.7	5005.7	5176.1	5303.9	5240.0	5346.5	5580.8	5644.7	5793.8
15°	4281.5	4132.4	4047.2	3940.7	4111.1	4153.7	4217.6	4366.7	4537.1	4622.3	4792.7
17.5°	3429.4	3429.4	3429.4	3344.2	3408.1	3472.0	3493.3	3685.0	3706.3	3791.6	3855.5
20°	2811.7	2875.6	2982.1	3024.7	3088.6	3088.6	3046.0	3152.5	3067.3	3131.2	3173.8
22.5°	2534.8	2620.0	2662.6	2683.9	2769.1	2790.4	2683.9	2705.2	2726.5	2662.6	2683.9
25°	2385.7	2428.3	2385.7	2407.0	2428.3	2385.7	2407.0	2449.6	2428.3	2470.9	2449.6
27.5°	2321.8	2279.2	2257.9	2236.6	2236.6	2194.0	2215.3	2215.3	2257.9	2279.2	2279.2
30°	2321.8	2257.9	2172.7	2108.8	2108.8	2044.9	2087.5	2130.1	2151.4	2194.0	2194.0
32.5°	2385.7	2257.9	2108.8	2044.9	1981.0	1938.4	1981.0	2044.9	2130.1	2151.4	2172.7
35°	1895.8	1959.7	1938.4	1853.2	1831.9	1831.9	1810.6	1810.6	1746.7	1746.7	1725.4
37.5°	1704.1	1682.8	1725.4	1746.7	1768.0	1704.1	1704.1	1618.9	1597.6	1618.9	1618.9
40°	1597.6	1597.6	1597.6	1661.5	1682.8	1640.2	1576.3	1533.7	1533.7	1533.7	1555.0
42.5°	1555.0	1512.4	1491.1	1533.7	1597.6	1555.0	1491.1	1469.8	1469.8	1491.1	1491.1
45°	1491.1	1469.8	1448.5	1427.2	1512.4	1448.5	1427.2	1405.9	1405.9	1405.9	1427.2
47.5°	1427.2	1405.9	1363.3	1363.3	1384.6	1363.3	1342.0	1342.0	1342.0	1384.6	1384.6
50°	1384.6	1363.3	1320.7	1320.7	1320.7	1320.7	1299.4	1299.4	1299.4	1320.7	1342.0
52.5°	1320.7	1299.4	1278.1	1256.8	1256.8	1256.8	1256.8	1256.8	1256.8	1278.1	1299.4
55°	1256.8	1235.4	1214.1	1214.1	1235.4	1235.4	1214.1	1235.4	1214.1	1235.4	1256.8
57.5°	1192.8	1171.5	1150.2	1171.5	1192.8	1171.5	1171.5	1171.5	1171.5	1171.5	1192.8
60°	1107.6	1107.6	1107.6	1107.6	1150.2	1150.2	1150.2	1150.2	1107.6	1128.9	1150.2
62.5°	1065.0	1043.7	1043.7	1065.0	1086.3	1086.3	1107.6	1086.3	1065.0	1086.3	1086.3
65°	979.8	979.8	979.8	1001.1	1001.1	1022.4	1022.4	1022.4	1001.1	1022.4	1022.4
67.5°	915.9	915.9	915.9	915.9	958.5	958.5	958.5	958.5	937.2	937.2	958.5
70°	809.4	830.7	809.4	852.0	894.6	873.3	894.6	894.6	873.3	852.0	894.6
72.5°	745.5	745.5	745.5	745.5	809.4	809.4	809.4	830.7	809.4	788.1	809.4
75°	660.3	660.3	660.3	681.6	724.2	724.2	724.2	724.2	724.2	702.9	702.9
77.5°	575.1	596.4	575.1	596.4	639.0	617.7	639.0	660.3	639.0	617.7	617.7
80°	489.9	489.9	489.9	511.2	532.5	532.5	532.5	553.8	532.5	511.2	511.2
82.5°	383.4	383.4	404.7	404.7	426.0	426.0	426.0	447.3	426.0	404.7	404.7
85°	298.2	298.2	298.2	319.5	319.5	340.8	340.8	362.1	362.1	340.8	340.8
87.5°	191.7	170.4	191.7	191.7	213.0	213.0	191.7	170.4	191.7	170.4	149.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P598988  
 CATALOG NUMBER: IFLD-L-SA7E-740-U-SLL

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6	15336.6
2.5°	13994.7	14378.1	14655.0	14846.7	15123.6	15656.1	15869.1	16252.6	16359.1	16423.0
5°	12035.0	12439.7	13036.1	13462.1	13952.1	14953.2	15720.0	16295.2	16550.8	16785.1
7.5°	9436.3	9968.8	10586.5	11140.3	11949.8	13185.2	14186.4	15379.2	15826.5	16060.8
10°	7370.1	7860.0	8541.6	9223.3	10352.2	11396.0	12823.1	13909.5	14527.2	14697.6
12.5°	6219.8	6795.0	7604.4	8435.1	9138.1	10330.9	11779.4	13355.6	13930.8	14037.3
15°	5282.6	6070.7	6901.5	7753.5	8562.9	9606.7	11161.6	13078.7	13930.8	14037.3
17.5°	4366.7	5069.6	6049.4	6965.4	7902.6	9329.8	11268.2	13313.0	14165.1	14484.6
20°	3472.0	4153.7	4920.5	6070.7	7348.8	8861.2	11502.5	14101.2	15230.1	15570.9
22.5°	2875.6	3173.8	3919.4	5027.0	6539.4	8541.6	11736.8	15336.6	16529.5	16657.3
25°	2513.5	2726.5	3195.1	4238.9	5900.3	8328.6	12290.6	16763.8	18297.4	18297.4
27.5°	2343.1	2428.3	2747.8	3685.0	5453.0	8136.9	12844.4	18340.0	19767.2	20065.4
30°	2300.5	2513.5	2683.9	3280.3	4963.1	7604.4	13355.6	19575.5	21045.2	21066.5
32.5°	2257.9	2215.3	2343.1	2854.3	4366.7	7050.6	13781.7	20832.2	21982.5	22046.4
35°	1768.0	1853.2	2066.2	2513.5	3919.4	6645.9	13994.7	21513.9	23175.3	23239.2
37.5°	1661.5	1768.0	1938.4	2321.8	3621.1	6305.1	14058.6	22834.5	24432.1	24559.9
40°	1618.9	1704.1	1831.9	2151.4	3386.8	5879.0	14186.4	24197.8	26285.3	26114.8
42.5°	1533.7	1640.2	1768.0	2066.2	3195.1	5559.5	14207.7	24943.3	27265.1	27265.1
45°	1512.4	1576.3	1725.4	2066.2	2982.1	5282.6	13866.9	25688.8	28394.0	28053.2
47.5°	1427.2	1555.0	1682.8	2002.3	2726.5	5005.7	13462.1	26072.2	28543.1	28436.6
50°	1405.9	1533.7	1746.7	1895.8	2577.4	4877.9	13376.9	27030.8	28841.4	28820.1
52.5°	1363.3	1491.1	1810.6	1810.6	2385.7	4707.5	13781.7	27456.8	28905.3	29075.7
55°	1299.4	1491.1	1682.8	1661.5	2215.3	4494.5	14229.0	28564.4	30034.2	29991.6
57.5°	1256.8	1448.5	1597.6	1512.4	2023.6	4345.4	14889.3	29629.5	31397.5	31099.2
60°	1192.8	1448.5	1427.2	1405.9	1874.5	4217.6	15443.1	29842.5	31695.7	31887.4
62.5°	1150.2	1512.4	1256.8	1299.4	1746.7	4153.7	15208.8	28244.9	31291.0	31461.4
65°	1107.6	1299.4	1150.2	1192.8	1704.1	4025.9	14292.9	26327.9	29544.3	30289.8
67.5°	1022.4	1065.0	1065.0	1107.6	1661.5	3727.6	12418.4	22877.1	26881.7	27286.4
70°	937.2	958.5	958.5	1022.4	1618.9	3386.8	10245.7	19788.5	23324.4	24091.3
72.5°	852.0	852.0	852.0	937.2	1491.1	3109.9	8435.1	15208.8	19383.8	19916.3
75°	745.5	745.5	745.5	830.7	1342.0	2833.0	6645.9	11310.8	14271.6	15038.4
77.5°	660.3	660.3	639.0	745.5	1171.5	2300.5	4792.7	7987.8	10054.0	10693.0
80°	553.8	532.5	532.5	596.4	915.9	1661.5	3088.6	5644.7	7008.0	7284.9
82.5°	447.3	426.0	404.7	447.3	660.3	1043.7	1917.1	3940.7	4494.5	4324.1
85°	426.0	447.3	362.1	340.8	468.6	681.6	1214.1	2428.3	2023.6	2023.6
87.5°	170.4	149.1	149.1	127.8	234.3	255.6	532.5	447.3	340.8	340.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)