

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: P598783

Luminaire Tested: **IFLD-L-SA7C-760-U-SLR**

Issue Date: 05/03/2022

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-08
 Report Number: P598783
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 05/03/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: IFLD-L-SA7C-760-U-SLR
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLR distribution lens
 Light Source: (112) 5700K CCT, 70 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER

Summary

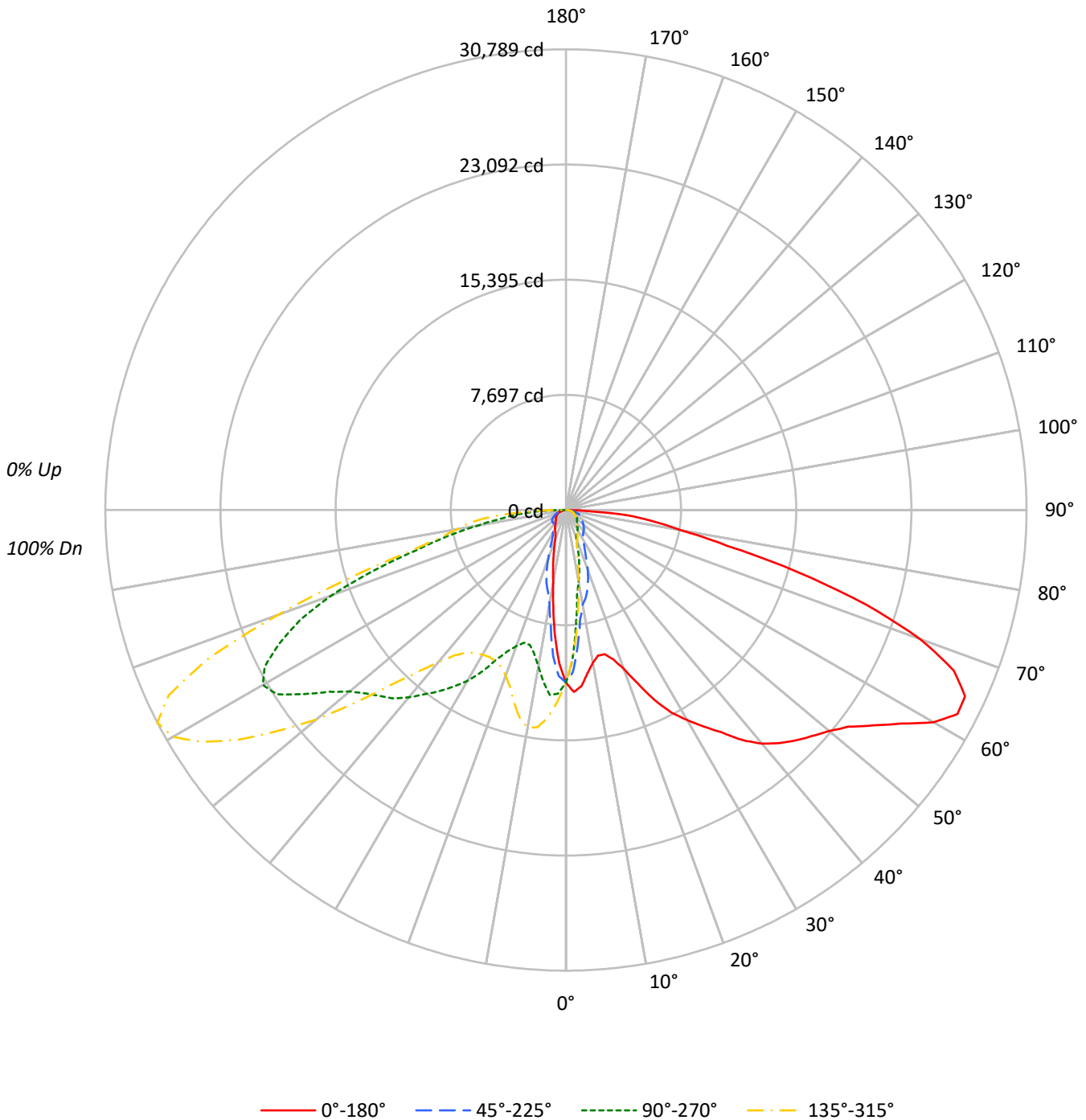
Lumens per Lamp: N/A
 Luminaire Lumens: 38570.4 lumens
 Efficiency: N/A
 Efficacy: 104.5 lumens/watt
 Spacing Criteria (0/90/45): 1.13 / 0.53 / 0.8
 Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
 CIE Type: Direct

Input Watts (W): 369
 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

TEST NUMBER: P598783
CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

Luminous Intensity Polar Plot



TEST NUMBER: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

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	102	102	102	100
1	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79	85	82	79	77
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	65	61	70	65	61	59
3	83	70	60	52	80	68	59	51	65	57	50	62	55	49	59	53	48	59	53	48	46
4	74	60	49	41	72	59	49	41	56	47	40	53	46	40	51	44	39	51	44	39	36
5	68	52	42	34	65	51	41	34	49	40	33	47	39	33	45	38	32	45	38	32	30
6	62	46	36	28	60	45	35	28	43	34	28	41	34	28	40	33	27	40	33	27	25
7	57	41	31	24	55	40	31	24	39	30	24	37	29	24	36	29	23	36	29	23	21
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	32	26	20	18
9	49	34	25	19	47	33	24	18	32	24	18	31	23	18	30	23	18	30	23	18	16
10	46	31	22	17	44	31	22	17	29	22	16	28	21	16	28	21	16	28	21	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	62009	62009	62009	62009
5°	63815	41497	45333	67041
10°	56616	26368	26633	57939
15°	55565	18702	17712	51969
20°	64602	11830	11922	55360
25°	83081	10158	9870	65449
30°	100684	9627	9025	81931
35°	119168	8481	8163	97115
40°	143188	8049	7482	114732
45°	165685	7983	7247	133752
50°	192398	8107	7296	157944
55°	235449	8328	7419	201229
60°	305356	8338	7817	251684
65°	374830	8425	8014	269408
70°	396632	8888	8379	262305
75°	333875	9395	8388	214083
80°	242564	11003	8502	185050
85°	257088	15944	6978	192317

TEST NUMBER: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	891.7	2.3
10°-20°	1866.2	4.8
20°-30°	2689.3	7.0
30°-40°	3871.6	10.0
40°-50°	5499.3	14.3
50°-60°	7906.4	20.5
60°-70°	9134.5	23.7
70°-80°	5172.1	13.4
80°-90°	1539.3	4.0
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°	5447.2	14.1
0°-40°	9318.7	24.2
0°-60°	22724.5	58.9
0°-90°	38570.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	38570.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	11522	11522	11522	11522	11522	
5°	11812	7681	8391	12409	11812	1072
15°	9972	3356	3179	9327	9972	2932
25°	13991	1710	1662	11021	13991	6494
35°	18138	1291	1242	14781	18138	11511
45°	21768	1049	952	17573	21768	16856
55°	25093	888	791	21446	25093	22725
65°	29434	662	629	21155	29434	28225
75°	16056	452	403	10295	16056	17036
85°	4163	258	113	3114	4163	4146
90°	0	0	0	0	0	

TEST NUMBER: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7
2.5°	12167.1	12151.0	12054.2	11747.6	11424.9	11118.3	10827.8	10521.2	10359.8	10166.2	10085.5
5°	11812.1	11779.9	11505.5	10827.8	10230.7	9585.3	9036.6	8600.9	8245.9	7890.9	7761.8
7.5°	11005.3	10956.9	10634.1	9698.2	8826.8	7987.7	7326.1	6761.3	6293.4	6083.6	5841.5
10°	10359.8	10279.1	9859.6	8826.8	7697.3	6858.1	6422.4	6035.2	5631.7	5292.9	4937.9
12.5°	9956.4	9859.6	9423.9	8213.6	7116.3	6487.0	6035.2	5599.5	5099.2	4679.7	4292.4
15°	9972.5	9859.6	9327.1	8052.3	6971.1	6164.3	5534.9	4937.9	4356.9	3889.0	3453.3
17.5°	10440.5	10295.3	9730.5	8278.2	6858.1	5744.7	4905.6	4131.0	3469.4	2969.2	2614.2
20°	11279.6	11182.8	10537.3	8617.0	6745.2	5292.9	4260.1	3324.2	2630.3	2243.0	2097.8
22.5°	12538.3	12425.3	11731.5	9133.4	6712.9	4889.4	3566.2	2614.2	2113.9	1952.6	1871.9
25°	13990.6	13780.8	13135.4	10004.8	6777.5	4518.3	3001.4	2162.3	1888.0	1775.0	1726.6
27.5°	15249.3	15120.2	14394.0	10827.8	6809.7	4227.8	2614.2	1968.7	1758.9	1662.1	1629.8
30°	16201.3	16152.9	15442.9	11731.5	6729.0	3872.8	2372.1	1888.0	1758.9	1662.1	1565.3
32.5°	17153.4	17169.6	16411.1	12425.3	6616.1	3566.2	2146.2	1678.2	1549.1	1484.6	1500.7
35°	18137.8	18218.4	17573.0	13103.1	6374.0	3453.3	1984.8	1565.3	1452.3	1355.5	1307.1
37.5°	19380.3	19590.1	18960.7	13861.5	6132.0	3356.5	1904.1	1484.6	1371.6	1290.9	1226.4
40°	20380.8	20768.1	20396.9	14571.5	5970.6	3243.5	1839.6	1403.9	1323.2	1226.4	1178.0
42.5°	21123.1	21574.9	21445.8	15120.2	5970.6	3130.5	1775.0	1355.5	1290.9	1178.0	1113.4
45°	21768.5	22236.5	22220.4	15685.0	6099.7	3066.0	1694.4	1355.5	1258.7	1145.7	1081.2
47.5°	22349.5	22817.4	22978.8	16395.0	6309.5	3033.7	1597.5	1323.2	1258.7	1129.6	1032.8
50°	22978.8	23495.2	23979.3	17524.6	6567.7	2953.0	1533.0	1274.8	1274.8	1113.4	1000.5
52.5°	23785.6	24366.6	25254.1	18928.5	6825.9	2807.8	1436.2	1242.5	1274.8	1097.3	968.2
55°	25092.7	25576.8	26738.7	20606.7	7148.6	2630.3	1355.5	1161.8	1210.3	1048.9	919.8
57.5°	26561.2	26980.7	27948.9	21897.6	7245.4	2404.4	1242.5	1081.2	1161.8	1000.5	855.3
60°	28368.5	28578.3	28578.3	22268.8	6922.7	2194.6	1161.8	1016.6	1048.9	952.1	806.8
62.5°	29514.2	29514.2	28578.3	21591.0	6309.5	2017.1	1097.3	952.1	919.8	887.5	758.4
65°	29433.5	29304.4	27916.7	19622.3	5599.5	1904.1	1032.8	871.4	823.0	806.8	710.0
67.5°	28078.0	27852.1	25964.1	16846.8	4857.2	1855.7	968.2	790.7	758.4	726.2	645.5
70°	25205.7	24624.8	22301.1	13554.9	4131.0	1823.5	952.1	726.2	693.9	661.6	597.1
72.5°	21042.4	20300.1	17411.6	10424.4	3469.4	1710.5	903.7	645.5	629.3	597.1	532.5
75°	16056.1	14684.5	12151.0	7971.6	2694.8	1484.6	774.6	564.8	564.8	548.7	484.1
77.5°	11069.8	10359.8	8471.8	5889.9	1968.7	1145.7	629.3	500.2	500.2	516.4	451.8
80°	7826.3	7164.7	6035.2	4227.8	1242.5	774.6	484.1	419.6	468.0	500.2	419.6
82.5°	5986.8	5502.6	4486.0	3082.1	726.2	532.5	371.1	338.9	403.4	435.7	355.0
85°	4163.3	3582.4	2275.3	2065.5	419.6	322.7	274.3	274.3	355.0	435.7	322.7
87.5°	1178.0	500.2	145.2	613.2	177.5	129.1	96.8	64.5	96.8	96.8	64.5
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: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7
2.5°	10004.8	9908.0	9908.0	9875.7	9891.9	9908.0	9891.9	10004.8	10053.2	10117.8	10246.9
5°	7681.1	7810.2	7713.4	7810.2	7939.3	8132.9	8181.4	8326.6	8342.7	8455.7	8391.1
7.5°	5696.3	5680.2	5599.5	5712.4	6067.4	6341.8	6470.9	6551.5	6567.7	6567.7	6487.0
10°	4824.9	4679.7	4534.4	4453.8	4486.0	4776.5	4873.3	4921.7	4889.4	4937.9	4873.3
12.5°	4131.0	4001.9	3792.1	3646.9	3550.1	3630.8	3727.6	3776.0	3808.3	3889.0	3953.5
15°	3356.5	3227.4	3098.3	3017.6	2936.9	2872.3	2953.0	3001.4	3082.1	3146.7	3178.9
17.5°	2549.6	2485.1	2420.5	2468.9	2468.9	2436.7	2468.9	2485.1	2517.3	2565.8	2549.6
20°	2065.5	2049.4	2033.2	2113.9	2178.5	2178.5	2210.7	2162.3	2146.2	2097.8	2081.6
22.5°	1839.6	1839.6	1855.7	1920.3	1984.8	2017.1	2017.1	1936.4	1855.7	1823.5	1839.6
25°	1710.5	1710.5	1758.9	1775.0	1807.3	1807.3	1823.5	1742.8	1694.4	1646.0	1662.1
27.5°	1613.7	1613.7	1629.8	1629.8	1646.0	1646.0	1662.1	1629.8	1565.3	1549.1	1549.1
30°	1549.1	1549.1	1533.0	1533.0	1533.0	1533.0	1549.1	1500.7	1468.4	1452.3	1452.3
32.5°	1484.6	1468.4	1452.3	1452.3	1436.2	1436.2	1452.3	1403.9	1387.8	1387.8	1387.8
35°	1290.9	1274.8	1290.9	1323.2	1323.2	1339.4	1339.4	1323.2	1290.9	1258.7	1242.5
37.5°	1210.3	1194.1	1194.1	1194.1	1226.4	1242.5	1258.7	1226.4	1178.0	1129.6	1129.6
40°	1145.7	1145.7	1129.6	1129.6	1129.6	1161.8	1194.1	1145.7	1081.2	1065.0	1065.0
42.5°	1097.3	1081.2	1065.0	1048.9	1032.8	1081.2	1113.4	1048.9	1016.6	1016.6	1016.6
45°	1048.9	1032.8	1016.6	1000.5	984.3	1000.5	1032.8	968.2	952.1	952.1	952.1
47.5°	1000.5	984.3	952.1	935.9	919.8	919.8	952.1	903.7	887.5	903.7	903.7
50°	968.2	935.9	903.7	887.5	871.4	871.4	871.4	855.3	855.3	855.3	871.4
52.5°	935.9	903.7	855.3	839.1	823.0	823.0	823.0	823.0	806.8	823.0	839.1
55°	887.5	855.3	823.0	806.8	790.7	774.6	790.7	774.6	774.6	790.7	790.7
57.5°	823.0	790.7	758.4	758.4	742.3	742.3	758.4	742.3	742.3	758.4	758.4
60°	774.6	742.3	710.0	710.0	693.9	710.0	726.2	710.0	710.0	710.0	726.2
62.5°	710.0	693.9	661.6	661.6	661.6	661.6	677.7	661.6	677.7	677.7	677.7
65°	661.6	629.3	613.2	613.2	613.2	613.2	645.5	613.2	629.3	629.3	629.3
67.5°	613.2	580.9	564.8	564.8	564.8	564.8	597.1	564.8	580.9	597.1	580.9
70°	564.8	532.5	516.4	516.4	516.4	516.4	532.5	516.4	516.4	532.5	532.5
72.5°	500.2	484.1	468.0	468.0	451.8	468.0	484.1	468.0	468.0	468.0	468.0
75°	451.8	435.7	435.7	419.6	419.6	419.6	435.7	403.4	403.4	403.4	403.4
77.5°	419.6	387.3	387.3	387.3	371.1	387.3	371.1	338.9	338.9	338.9	338.9
80°	355.0	322.7	338.9	338.9	322.7	322.7	306.6	274.3	274.3	274.3	274.3
82.5°	290.5	258.2	274.3	274.3	274.3	274.3	242.1	225.9	209.8	193.6	193.6
85°	258.2	209.8	242.1	242.1	225.9	225.9	161.4	161.4	129.1	129.1	113.0
87.5°	48.4	32.3	64.5	80.7	80.7	96.8	64.5	80.7	48.4	32.3	32.3
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: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7
2.5°	10230.7	10408.2	10650.3	10827.8	11102.1	11311.9	11634.6	11909.0	12167.1	12280.1	12393.1
5°	8584.8	8697.7	9068.9	9359.3	9795.0	10263.0	10843.9	11473.3	12118.7	12409.2	12748.1
7.5°	6422.4	6632.2	6842.0	7261.6	7794.1	8552.5	9294.8	10230.7	11134.4	11570.1	12151.0
10°	4986.3	5147.6	5389.7	5825.4	6325.6	6955.0	7842.5	8955.9	10037.1	10601.9	11198.9
12.5°	4001.9	4227.8	4550.6	5002.4	5583.3	6228.8	6874.3	7907.0	9165.7	9811.2	10488.9
15°	3243.5	3421.0	3776.0	4340.8	5018.5	5680.2	6357.9	7213.1	8584.8	9327.1	10133.9
17.5°	2581.9	2711.0	3033.7	3598.5	4276.3	5018.5	5793.1	6874.3	8391.1	9294.8	10246.9
20°	2097.8	2194.6	2404.4	2823.9	3469.4	4276.3	5244.5	6551.5	8504.1	9665.9	10827.8
22.5°	1839.6	1871.9	1968.7	2194.6	2727.1	3582.4	4744.2	6277.2	8713.9	10214.6	11779.9
25°	1662.1	1694.4	1726.6	1871.9	2178.5	2985.3	4308.5	6115.8	9165.7	11021.4	12877.2
27.5°	1549.1	1581.4	1597.5	1662.1	1871.9	2549.6	3937.4	6019.0	9778.9	12199.4	14232.7
30°	1452.3	1452.3	1500.7	1597.5	1742.8	2243.0	3614.6	5793.1	10424.4	13183.8	15297.7
32.5°	1371.6	1387.8	1452.3	1500.7	1597.5	1984.8	3291.9	5502.6	11005.3	13990.6	16346.6
35°	1226.4	1226.4	1242.5	1323.2	1452.3	1775.0	3001.4	5212.2	11328.0	14781.3	17282.5
37.5°	1129.6	1145.7	1178.0	1242.5	1355.5	1629.8	2759.4	4889.4	11666.9	15523.6	18379.8
40°	1065.0	1081.2	1113.4	1178.0	1290.9	1500.7	2549.6	4631.3	12021.9	16330.4	19557.8
42.5°	1016.6	1032.8	1065.0	1129.6	1226.4	1468.4	2323.7	4421.5	12231.7	17072.7	20671.2
45°	968.2	984.3	1032.8	1097.3	1178.0	1436.2	2194.6	4276.3	12312.4	17573.0	21558.8
47.5°	919.8	935.9	984.3	1081.2	1178.0	1387.8	2146.2	4195.6	12376.9	18137.8	22268.8
50°	871.4	903.7	968.2	1065.0	1194.1	1323.2	2113.9	4179.4	12748.1	18863.9	22946.5
52.5°	839.1	887.5	952.1	1065.0	1178.0	1226.4	2097.8	4227.8	13490.4	19945.1	23914.7
55°	806.8	855.3	919.8	1065.0	1129.6	1145.7	2017.1	4308.5	14619.9	21445.8	25286.4
57.5°	774.6	806.8	887.5	1032.8	1065.0	1081.2	1855.7	4421.5	15749.5	22914.3	26690.3
60°	726.2	758.4	839.1	1032.8	968.2	1016.6	1646.0	4453.8	16556.4	23382.2	26819.4
62.5°	677.7	710.0	790.7	1065.0	887.5	952.1	1468.4	4340.8	16717.7	22704.5	26093.2
65°	629.3	661.6	726.2	887.5	823.0	887.5	1355.5	4034.2	16185.2	21155.3	24770.0
67.5°	580.9	613.2	661.6	726.2	742.3	806.8	1307.1	3550.1	14845.9	19235.1	22962.7
70°	516.4	548.7	597.1	645.5	661.6	758.4	1226.4	3082.1	12683.5	16669.3	20751.9
72.5°	468.0	484.1	532.5	564.8	597.1	693.9	1178.0	2694.8	9698.2	13490.4	16927.5
75°	403.4	403.4	451.8	484.1	516.4	613.2	1081.2	2243.0	6842.0	10295.3	12441.5
77.5°	338.9	338.9	371.1	403.4	435.7	532.5	919.8	1823.5	4744.2	8165.2	9020.5
80°	258.2	258.2	290.5	322.7	355.0	451.8	742.3	1339.4	2936.9	5970.6	6567.7
82.5°	177.5	177.5	225.9	242.1	258.2	355.0	564.8	919.8	1726.6	4308.5	4695.8
85°	96.8	96.8	129.1	145.2	177.5	258.2	419.6	645.5	1032.8	3114.4	3130.5
87.5°	16.1	16.1	48.4	48.4	80.7	129.1	242.1	355.0	580.9	1726.6	1097.3
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: P598783
 CATALOG NUMBER: IFLD-L-SA7C-760-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7	11521.7
2.5°	12602.8	12780.3	12796.5	12796.5	12715.8	12731.9	12506.0	12264.0	12183.3	12167.1
5°	13264.4	13732.4	13861.5	13926.1	13716.3	13393.5	12812.6	12183.3	11860.5	11812.1
7.5°	13135.4	14071.3	14571.5	14636.1	14216.5	13458.1	12441.5	11473.3	11102.1	11005.3
10°	12376.9	13635.6	14539.3	14765.2	14313.3	13345.1	12021.9	10892.3	10440.5	10359.8
12.5°	11844.4	13054.7	13942.2	14248.8	14039.0	13199.9	11812.1	10521.2	10069.4	9956.4
15°	11553.9	12667.4	13248.3	13345.1	13329.0	12974.0	11812.1	10601.9	10101.6	9972.5
17.5°	11796.0	12554.4	12635.1	12409.2	12538.3	12715.8	12070.3	11037.6	10553.5	10440.5
20°	12280.1	12506.0	12118.7	11779.9	11844.4	12409.2	12473.7	11860.5	11473.3	11279.6
22.5°	13296.7	12683.5	11796.0	11328.0	11376.4	12167.1	13006.3	12974.0	12635.1	12538.3
25°	14329.5	13183.8	11699.2	11150.5	11215.1	12118.7	13635.6	14216.5	14039.0	13990.6
27.5°	15475.2	14022.9	11763.7	11069.8	11150.5	12183.3	14071.3	15265.4	15297.7	15249.3
30°	16249.8	14426.3	11957.4	11166.7	11279.6	12344.6	14168.1	15894.7	16185.2	16201.3
32.5°	16895.2	14829.7	12360.8	11328.0	11521.7	12635.1	14426.3	16491.8	17137.3	17153.4
35°	17411.6	15281.5	12861.0	11618.5	11909.0	13119.2	14765.2	17056.6	18024.8	18137.8
37.5°	18073.2	15781.8	13442.0	12247.8	12570.6	13813.1	15362.2	17718.2	19073.7	19380.3
40°	18783.2	16282.0	14281.1	13264.4	13732.4	14845.9	16040.0	18460.5	19961.2	20380.8
42.5°	19573.9	16814.5	15233.1	14636.1	15346.1	16152.9	16814.5	19138.2	20639.0	21123.1
45°	20348.5	17460.0	16620.9	16507.9	17298.6	17702.1	17573.0	19622.3	21284.4	21768.5
47.5°	20897.2	18395.9	18299.1	18976.9	19719.2	19509.4	18460.5	19977.4	21816.9	22349.5
50°	21397.4	19557.8	20413.0	21736.3	22188.1	21478.1	19412.6	20461.5	22381.7	22978.8
52.5°	22139.7	20800.3	22591.5	24237.5	24673.2	23543.6	20445.3	21252.2	23253.1	23785.6
55°	23656.5	22204.2	24866.8	26754.8	26835.5	25431.6	21833.1	22591.5	24479.5	25092.7
57.5°	25350.9	23930.9	26674.1	28836.5	28804.2	27319.6	23398.4	24398.8	26141.6	26561.2
60°	26883.9	25673.6	28642.8	30321.0	30240.4	28691.2	25221.8	26448.2	28045.8	28368.5
62.5°	27787.6	27255.0	29514.2	30789.0	30482.4	29143.1	26770.9	28271.7	29401.2	29514.2
65°	27642.3	28158.7	28497.6	29288.3	28852.6	27884.4	27529.4	29433.5	29546.5	29433.5
67.5°	26545.0	27642.3	25705.9	25786.6	25560.7	24737.7	26351.4	29126.9	28352.4	28078.0
70°	24882.9	24963.6	21494.2	20477.6	20832.6	19703.0	22607.7	26738.7	25544.5	25205.7
72.5°	22123.5	21123.1	16249.8	15217.0	15749.5	14942.7	18137.8	23301.5	22139.7	21042.4
75°	18557.3	16733.9	12376.9	10908.5	11182.8	11150.5	14055.1	19251.2	17153.4	16056.1
77.5°	14377.9	13038.5	9133.4	8568.6	8278.2	8342.7	9811.2	14313.3	12441.5	11069.8
80°	10505.1	9117.3	7067.9	7390.7	7229.3	6842.0	6874.3	9585.3	8649.3	7826.3
82.5°	7261.6	6487.0	5728.6	6470.9	6083.6	5486.5	5357.4	6906.5	6487.0	5986.8
85°	4873.3	5341.3	4550.6	4954.0	4292.4	3953.5	5034.7	5777.0	4663.5	4163.3
87.5°	3178.9	4889.4	3275.8	2485.1	1420.0	1904.1	3082.1	3792.1	2178.5	1178.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)