

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: P598915

Luminaire Tested: **IFLD-S-SA3E-730-U-SLL**

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: P598915
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 05/03/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: IFLD-S-SA3E-730-U-SLL
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLL distribution lens
 Light Source: (48) 3000K CCT, 70 CRI LEDs
 Ballast/Driver: ELECTRONIC DRIVER

Summary

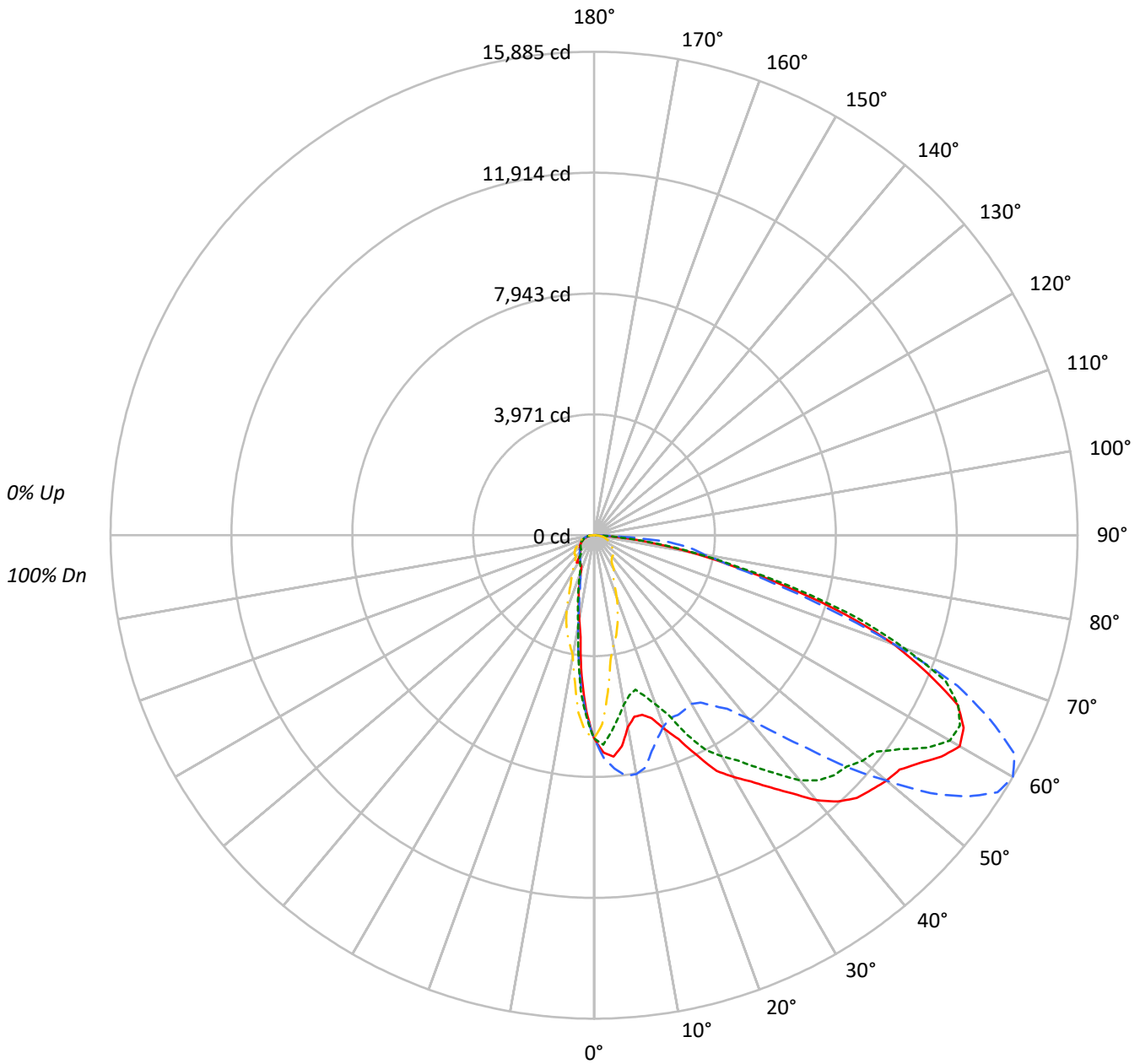
Lumens per Lamp: N/A
 Luminaire Lumens: 20892.5 lumens
 Efficiency: N/A
 Efficacy: 90.0 lumens/watt
 Spacing Criteria (0/90/45): 1.12 / 0.52 / 0.8
 Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
 CIE Type: Direct

Input Watts (W): 232.1
 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: P598915
CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

Luminous Intensity Polar Plot



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

TEST NUMBER: P598915

CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	95769	95769	95769	95769
5°	105215	93465	67027	73169
10°	93195	82255	40655	43627
15°	90748	78078	28780	29881
20°	103473	90309	18825	20808
25°	126070	114475	16437	17025
30°	151900	138845	17048	15820
35°	177156	163027	14127	13316
40°	212877	196904	13197	12502
45°	247739	226295	13355	12415
50°	279979	257216	13658	12829
55°	326516	306574	14145	13449
60°	398239	387334	14099	14099
65°	447552	448183	14477	15109
70°	439851	455406	15169	15555
75°	362830	386984	15931	16957
80°	261965	274990	17621	18381
85°	144991	155662	19843	24420

TEST NUMBER: P598915
 CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.4	2.5
10°-20°	1094.5	5.2
20°-30°	1601.4	7.7
30°-40°	2256.3	10.8
40°-50°	3100.8	14.8
50°-60°	4226.0	20.2
60°-70°	4625.2	22.1
70°-80°	2670.3	12.8
80°-90°	799.6	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°	3214.3	15.4
0°-40°	5470.6	26.2
0°-60°	12797.4	61.3
0°-90°	20892.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20892.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	6673	6673	6673	6673	6673	
5°	7303	6488	4652	5079	7303	663
15°	6108	5255	1937	2011	6108	1784
25°	7961	7229	1038	1075	7961	3728
35°	10111	9305	806	760	10111	6412
45°	12206	11149	658	612	12206	9381
55°	13049	12252	565	538	13049	11774
65°	13179	13198	426	445	13179	12614
75°	6543	6979	287	306	6543	7029
85°	880	945	120	148	880	1222
90°	0	0	0	0	0	

TEST NUMBER: P598915
 CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9
2.5°	7145.6	7117.8	7145.6	7247.6	7275.4	7321.7	7321.7	7256.8	7136.3	7080.7	6988.0
5°	7303.2	7256.8	7488.5	7701.7	7868.5	7850.0	7692.4	7562.7	7321.7	6960.2	6617.3
7.5°	6988.0	7034.4	7201.2	7757.3	8146.5	8220.7	7970.5	7710.9	7191.9	6691.5	6228.1
10°	6394.9	6459.8	6821.2	7395.8	8007.5	8128.0	7970.5	7655.3	7034.4	6413.4	5875.9
12.5°	6107.6	6255.9	6469.0	7164.1	7599.7	7887.0	7812.9	7609.0	6913.9	6181.7	5662.7
15°	6107.6	6144.7	6459.8	7043.7	7293.9	7303.2	7331.0	7368.0	6951.0	6283.7	5588.6
17.5°	6302.2	6404.2	6672.9	7034.4	7080.7	6969.5	6969.5	7127.1	7025.1	6571.0	5857.4
20°	6774.9	6737.8	7090.0	7238.3	6988.0	6710.0	6682.2	6951.0	7108.5	6876.8	6348.6
22.5°	7247.6	7414.4	7701.7	7368.0	6904.6	6533.9	6496.8	6830.5	7358.8	7405.1	6913.9
25°	7961.2	8128.0	8276.3	7868.5	6895.4	6487.6	6515.4	6774.9	7664.6	8155.8	7859.2
27.5°	8730.4	8832.4	9045.5	8415.3	7117.8	6432.0	6459.8	6849.0	7951.9	8647.0	8600.7
30°	9166.0	9277.2	9230.9	8517.3	7266.1	6469.0	6394.9	6951.0	7794.4	8647.0	9082.6
32.5°	9592.3	9527.5	9499.7	8684.1	7451.4	6700.7	6515.4	7164.1	7887.0	8786.0	9703.6
35°	10111.4	10018.7	9944.5	9008.5	7757.3	6923.2	6839.8	7442.2	8090.9	9073.3	10204.0
37.5°	10686.0	10686.0	10324.5	9249.4	8118.7	7284.6	7191.9	7840.7	8415.3	9249.4	10889.9
40°	11362.5	11390.3	10750.8	9573.8	8526.5	7859.2	7831.4	8359.7	8730.4	9508.9	11547.9
42.5°	11863.0	11881.5	11121.6	9694.3	8999.2	8656.3	8776.8	9193.8	9091.9	9740.6	11594.2
45°	12205.9	12113.2	11381.1	10037.2	9518.2	9851.8	9888.9	10009.4	9564.5	9879.7	11779.6
47.5°	12372.7	12354.2	11492.3	10435.7	10611.8	11066.0	11279.1	11112.3	10000.1	9731.4	11779.6
50°	12539.6	12382.0	11594.2	10982.5	11677.6	12595.2	12548.8	12243.0	10602.6	9916.7	11603.5
52.5°	12650.8	12511.8	11798.1	11473.7	12697.1	13735.1	13920.5	13355.1	11306.9	10259.6	11686.9
55°	13049.3	12938.1	12409.8	12141.0	13874.1	14940.0	14967.8	14180.0	12048.4	10825.0	12233.7
57.5°	13531.2	13596.1	13253.2	13086.4	14773.1	15820.4	15718.5	14791.7	12678.6	11510.8	12863.9
60°	13874.1	13976.1	13892.7	13911.2	15218.0	16117.0	15885.3	15171.7	13142.0	12029.8	13633.2
62.5°	13688.8	13892.7	14235.6	14161.5	15236.5	15903.8	15579.5	14671.2	13197.6	12706.4	14217.1
65°	13179.0	13197.6	13864.9	14272.7	14402.4	14800.9	14374.6	13623.9	12623.0	13123.4	14133.7
67.5°	11872.3	12020.6	12623.0	13420.0	12873.2	12965.9	12928.8	11844.5	11751.8	12836.1	13494.2
70°	10482.1	10584.0	11242.0	12178.1	10871.3	10435.7	10519.1	9712.8	10092.8	11946.4	12205.9
72.5°	8665.5	8730.4	9481.1	10306.0	8721.2	7942.6	8137.3	7479.2	8016.8	10454.3	10296.7
75°	6543.2	6663.7	7247.6	8220.7	6422.7	5922.2	6116.9	5848.1	6348.6	8609.9	7989.0
77.5°	4652.5	4559.8	5282.7	6432.0	4828.6	4532.0	4550.6	4596.9	5134.5	7256.8	5736.9
80°	3169.6	3197.4	3846.2	4717.4	3790.6	3744.3	3697.9	4068.6	4309.6	5746.1	4170.6
82.5°	1881.4	1881.4	2595.0	3355.0	2993.6	3373.5	3160.4	3494.0	3373.5	4226.2	2734.1
85°	880.5	880.5	1334.6	2418.9	2317.0	2780.4	2363.3	2641.4	2493.1	2947.2	1232.6
87.5°	148.3	129.8	268.8	1186.3	954.6	1084.4	426.3	1408.7	1566.3	2057.5	305.8
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: P598915
 CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9
2.5°	6886.1	6821.2	6691.5	6524.6	6385.6	6209.5	6153.9	6033.4	5866.6	5848.1	5773.9
5°	6487.6	6265.1	5987.1	5644.2	5412.5	5171.5	4967.6	4847.1	4708.1	4689.6	4652.5
7.5°	6052.0	5773.9	5310.5	4902.8	4504.2	4124.2	3938.9	3707.2	3549.6	3429.1	3373.5
10°	5644.2	5384.7	4810.1	4254.0	3901.8	3651.6	3429.1	3188.2	2993.6	2845.3	2789.7
12.5°	5375.4	5069.6	4448.6	3920.4	3660.8	3373.5	3123.3	2863.8	2613.6	2418.9	2317.0
15°	5254.9	4967.6	4337.4	3753.5	3373.5	2975.0	2687.7	2428.2	2122.4	1983.3	1937.0
17.5°	5542.2	5115.9	4300.3	3558.9	3021.4	2567.2	2215.0	1937.0	1714.6	1575.6	1519.9
20°	5913.0	5384.7	4365.2	3327.2	2687.7	2178.0	1788.7	1492.1	1343.9	1241.9	1232.6
22.5°	6385.6	5783.2	4467.2	3160.4	2317.0	1751.6	1399.5	1223.4	1121.4	1112.2	1093.6
25°	7229.0	6506.1	4634.0	2937.9	2020.4	1445.8	1195.6	1093.6	1047.3	1019.5	1038.0
27.5°	7951.9	6978.8	4754.5	2798.9	1899.9	1362.4	1158.5	1047.3	1000.9	991.7	1000.9
30°	8378.2	7414.4	4717.4	2539.4	1659.0	1297.5	1232.6	1195.6	1102.9	1028.7	1028.7
32.5°	8767.5	7692.4	4708.1	2307.7	1418.0	1084.4	1028.7	1000.9	1056.5	1093.6	1065.8
35°	9305.0	8128.0	4680.3	2178.0	1316.1	1000.9	908.3	834.1	797.0	778.5	806.3
37.5°	9879.7	8424.6	4606.2	2159.4	1260.4	954.6	880.5	806.3	769.2	750.7	741.4
40°	10509.9	8739.7	4522.8	2066.8	1232.6	926.8	852.7	787.8	741.4	713.6	704.4
42.5°	10917.7	8989.9	4439.4	2020.4	1177.0	908.3	824.8	769.2	722.9	685.8	685.8
45°	11149.4	9286.5	4355.9	1974.1	1112.2	917.5	824.8	750.7	695.1	676.6	658.0
47.5°	11251.3	9508.9	4328.1	1899.9	1056.5	880.5	806.3	732.2	676.6	639.5	630.2
50°	11520.1	9981.6	4430.1	1844.3	991.7	843.4	852.7	722.9	667.3	621.0	611.7
52.5°	11677.6	10361.6	4652.5	1760.9	945.3	797.0	834.1	704.4	639.5	593.1	593.1
55°	12252.3	10991.8	4893.5	1696.0	889.7	732.2	769.2	667.3	593.1	565.3	565.3
57.5°	12984.4	11659.1	5097.4	1668.2	852.7	685.8	685.8	648.8	565.3	528.3	519.0
60°	13494.2	12205.9	5217.9	1649.7	815.6	639.5	611.7	648.8	537.5	500.5	491.2
62.5°	13549.8	11890.8	5097.4	1640.4	806.3	593.1	556.1	621.0	509.7	472.7	454.1
65°	13197.6	11251.3	4763.7	1603.4	797.0	546.8	519.0	537.5	472.7	444.9	426.3
67.5°	12493.2	10213.3	4281.8	1584.8	787.8	509.7	472.7	463.4	435.6	407.8	389.3
70°	10852.8	8860.2	3716.5	1501.4	769.2	481.9	426.3	417.1	389.3	370.7	361.5
72.5°	9110.4	7247.6	3067.7	1390.2	732.2	435.6	389.3	370.7	361.5	333.6	324.4
75°	6978.8	5579.3	2456.0	1232.6	639.5	389.3	342.9	324.4	315.1	296.6	287.3
77.5°	4902.8	4152.0	1816.5	1000.9	537.5	352.2	305.8	287.3	278.0	250.2	250.2
80°	3327.2	2910.1	1232.6	695.1	417.1	287.3	268.8	250.2	231.7	213.2	213.2
82.5°	2066.8	2039.0	889.7	454.1	305.8	231.7	213.2	213.2	185.4	166.8	166.8
85°	945.3	1251.2	621.0	315.1	231.7	176.1	176.1	166.8	148.3	120.5	120.5
87.5°	296.6	417.1	324.4	139.0	129.8	101.9	101.9	92.7	92.7	74.1	74.1
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: P598915
 CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9
2.5°	5848.1	5838.8	5838.8	5801.7	5894.4	5894.4	5950.0	5903.7	5931.5	5940.8	6014.9
5°	4643.3	4717.4	4773.0	4884.2	4949.1	4976.9	4976.9	5051.0	5023.2	5078.8	5190.1
7.5°	3401.3	3494.0	3660.8	3799.9	3911.1	3948.2	3938.9	3957.4	3985.2	3920.4	3938.9
10°	2752.6	2687.7	2743.3	2873.1	2975.0	3095.5	3002.8	2993.6	3021.4	2993.6	3049.2
12.5°	2298.5	2224.3	2178.0	2178.0	2252.1	2307.7	2279.9	2326.3	2428.2	2456.0	2520.9
15°	1862.9	1798.0	1760.9	1714.6	1788.7	1807.3	1835.1	1899.9	1974.1	2011.1	2085.3
17.5°	1492.1	1492.1	1492.1	1455.1	1482.9	1510.7	1519.9	1603.4	1612.6	1649.7	1677.5
20°	1223.4	1251.2	1297.5	1316.1	1343.9	1343.9	1325.3	1371.7	1334.6	1362.4	1380.9
22.5°	1102.9	1140.0	1158.5	1167.8	1204.8	1214.1	1167.8	1177.0	1186.3	1158.5	1167.8
25°	1038.0	1056.5	1038.0	1047.3	1056.5	1038.0	1047.3	1065.8	1056.5	1075.1	1065.8
27.5°	1010.2	991.7	982.4	973.1	973.1	954.6	963.9	963.9	982.4	991.7	991.7
30°	1010.2	982.4	945.3	917.5	917.5	889.7	908.3	926.8	936.1	954.6	954.6
32.5°	1038.0	982.4	917.5	889.7	861.9	843.4	861.9	889.7	926.8	936.1	945.3
35°	824.8	852.7	843.4	806.3	797.0	797.0	787.8	787.8	760.0	760.0	750.7
37.5°	741.4	732.2	750.7	760.0	769.2	741.4	741.4	704.4	695.1	704.4	704.4
40°	695.1	695.1	695.1	722.9	732.2	713.6	685.8	667.3	667.3	667.3	676.6
42.5°	676.6	658.0	648.8	667.3	695.1	676.6	648.8	639.5	639.5	648.8	648.8
45°	648.8	639.5	630.2	621.0	658.0	630.2	621.0	611.7	611.7	611.7	621.0
47.5°	621.0	611.7	593.1	593.1	602.4	593.1	583.9	583.9	583.9	602.4	602.4
50°	602.4	593.1	574.6	574.6	574.6	574.6	565.3	565.3	565.3	574.6	583.9
52.5°	574.6	565.3	556.1	546.8	546.8	546.8	546.8	546.8	546.8	556.1	565.3
55°	546.8	537.5	528.3	528.3	537.5	537.5	528.3	537.5	528.3	537.5	546.8
57.5°	519.0	509.7	500.5	509.7	519.0	509.7	509.7	509.7	509.7	509.7	519.0
60°	481.9	481.9	481.9	481.9	500.5	500.5	500.5	500.5	481.9	491.2	500.5
62.5°	463.4	454.1	454.1	463.4	472.7	472.7	481.9	472.7	463.4	472.7	472.7
65°	426.3	426.3	426.3	435.6	435.6	444.9	444.9	444.9	435.6	444.9	444.9
67.5°	398.5	398.5	398.5	398.5	417.1	417.1	417.1	417.1	407.8	407.8	417.1
70°	352.2	361.5	352.2	370.7	389.3	380.0	389.3	389.3	380.0	370.7	389.3
72.5°	324.4	324.4	324.4	324.4	352.2	352.2	352.2	361.5	352.2	342.9	352.2
75°	287.3	287.3	287.3	296.6	315.1	315.1	315.1	315.1	315.1	305.8	305.8
77.5°	250.2	259.5	250.2	259.5	278.0	268.8	278.0	287.3	278.0	268.8	268.8
80°	213.2	213.2	213.2	222.4	231.7	231.7	231.7	241.0	231.7	222.4	222.4
82.5°	166.8	166.8	176.1	176.1	185.4	185.4	185.4	194.6	185.4	176.1	176.1
85°	129.8	129.8	129.8	139.0	139.0	148.3	148.3	157.6	157.6	148.3	148.3
87.5°	83.4	74.1	83.4	83.4	92.7	92.7	83.4	74.1	83.4	74.1	64.9
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: P598915
 CATALOG NUMBER: IFLD-S-SA3E-730-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9	6672.9
2.5°	6089.1	6255.9	6376.4	6459.8	6580.3	6812.0	6904.6	7071.5	7117.8	7145.6
5°	5236.4	5412.5	5672.0	5857.4	6070.5	6506.1	6839.8	7090.0	7201.2	7303.2
7.5°	4105.7	4337.4	4606.2	4847.1	5199.3	5736.9	6172.5	6691.5	6886.1	6988.0
10°	3206.7	3419.9	3716.5	4013.0	4504.2	4958.4	5579.3	6052.0	6320.8	6394.9
12.5°	2706.2	2956.5	3308.7	3670.1	3976.0	4495.0	5125.2	5811.0	6061.3	6107.6
15°	2298.5	2641.4	3002.8	3373.5	3725.7	4179.9	4856.4	5690.5	6061.3	6107.6
17.5°	1899.9	2205.8	2632.1	3030.6	3438.4	4059.4	4902.8	5792.5	6163.2	6302.2
20°	1510.7	1807.3	2140.9	2641.4	3197.4	3855.5	5004.7	6135.4	6626.6	6774.9
22.5°	1251.2	1380.9	1705.3	2187.2	2845.3	3716.5	5106.7	6672.9	7191.9	7247.6
25°	1093.6	1186.3	1390.2	1844.3	2567.2	3623.8	5347.6	7293.9	7961.2	7961.2
27.5°	1019.5	1056.5	1195.6	1603.4	2372.6	3540.4	5588.6	7979.7	8600.7	8730.4
30°	1000.9	1093.6	1167.8	1427.3	2159.4	3308.7	5811.0	8517.3	9156.8	9166.0
32.5°	982.4	963.9	1019.5	1241.9	1899.9	3067.7	5996.4	9064.1	9564.5	9592.3
35°	769.2	806.3	899.0	1093.6	1705.3	2891.6	6089.1	9360.6	10083.5	10111.4
37.5°	722.9	769.2	843.4	1010.2	1575.6	2743.3	6116.9	9935.3	10630.4	10686.0
40°	704.4	741.4	797.0	936.1	1473.6	2558.0	6172.5	10528.4	11436.7	11362.5
42.5°	667.3	713.6	769.2	899.0	1390.2	2418.9	6181.7	10852.8	11863.0	11863.0
45°	658.0	685.8	750.7	899.0	1297.5	2298.5	6033.4	11177.2	12354.2	12205.9
47.5°	621.0	676.6	732.2	871.2	1186.3	2178.0	5857.4	11344.0	12419.1	12372.7
50°	611.7	667.3	760.0	824.8	1121.4	2122.4	5820.3	11761.1	12548.8	12539.6
52.5°	593.1	648.8	787.8	787.8	1038.0	2048.2	5996.4	11946.4	12576.6	12650.8
55°	565.3	648.8	732.2	722.9	963.9	1955.5	6191.0	12428.3	13067.8	13049.3
57.5°	546.8	630.2	695.1	658.0	880.5	1890.7	6478.3	12891.7	13661.0	13531.2
60°	519.0	630.2	621.0	611.7	815.6	1835.1	6719.3	12984.4	13790.7	13874.1
62.5°	500.5	658.0	546.8	565.3	760.0	1807.3	6617.3	12289.3	13614.6	13688.8
65°	481.9	565.3	500.5	519.0	741.4	1751.6	6218.8	11455.2	12854.7	13179.0
67.5°	444.9	463.4	463.4	481.9	722.9	1621.9	5403.2	9953.8	11696.2	11872.3
70°	407.8	417.1	417.1	444.9	704.4	1473.6	4457.9	8609.9	10148.4	10482.1
72.5°	370.7	370.7	370.7	407.8	648.8	1353.1	3670.1	6617.3	8433.9	8665.5
75°	324.4	324.4	324.4	361.5	583.9	1232.6	2891.6	4921.3	6209.5	6543.2
77.5°	287.3	287.3	278.0	324.4	509.7	1000.9	2085.3	3475.5	4374.5	4652.5
80°	241.0	231.7	231.7	259.5	398.5	722.9	1343.9	2456.0	3049.2	3169.6
82.5°	194.6	185.4	176.1	194.6	287.3	454.1	834.1	1714.6	1955.5	1881.4
85°	185.4	194.6	157.6	148.3	203.9	296.6	528.3	1056.5	880.5	880.5
87.5°	74.1	64.9	64.9	55.6	101.9	111.2	231.7	194.6	148.3	148.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)