

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: P598614

Luminaire Tested: **IFLD-L-SA8C-722-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: P598614
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 05/03/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: IFLD-L-SA8C-722-U-SLR
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLR distribution lens
 Light Source: (128) 2200K CCT, 70 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER

Summary

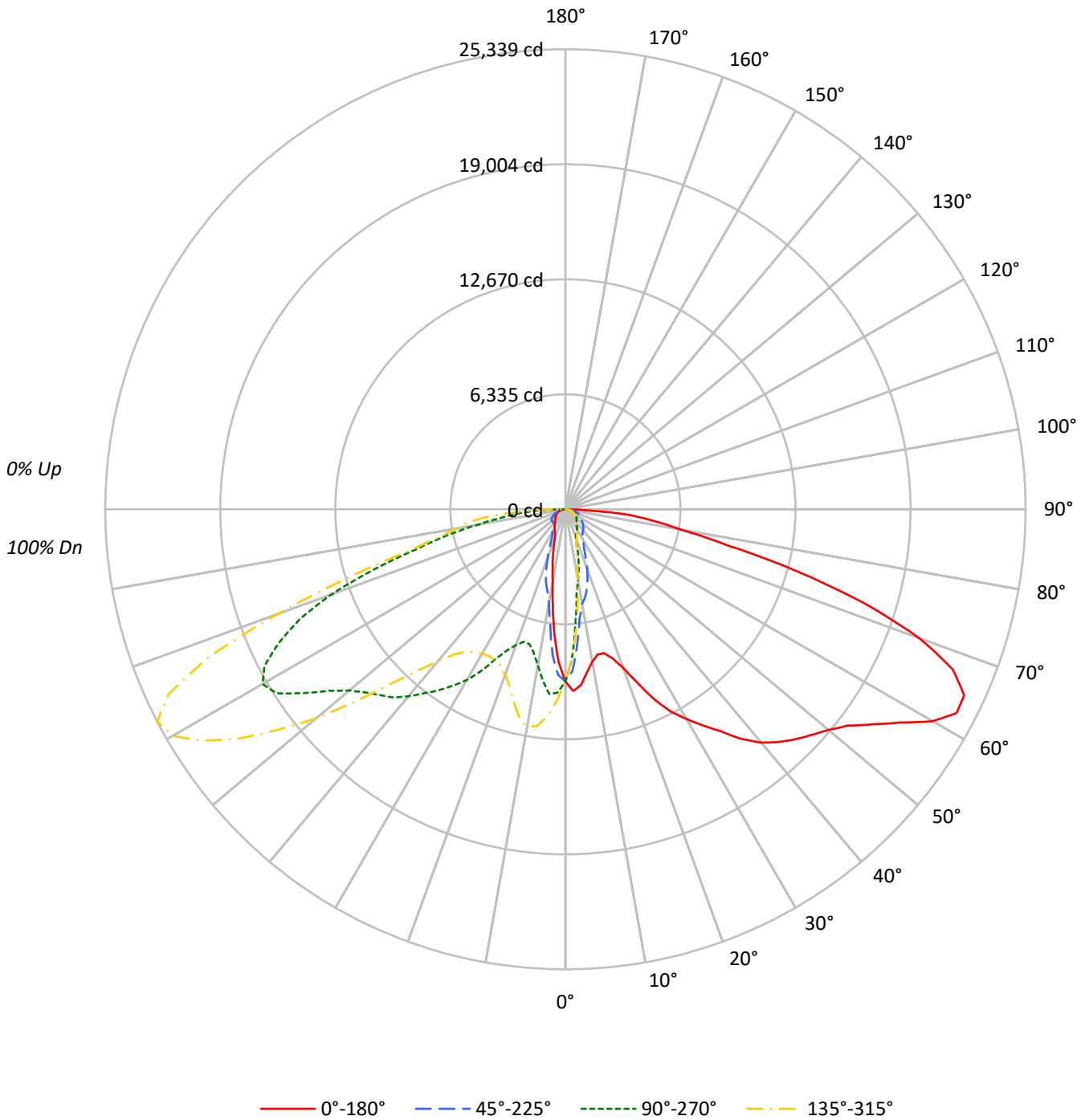
Lumens per Lamp: N/A
 Luminaire Lumens: 31742.8 lumens
 Efficiency: N/A
 Efficacy: 75.5 lumens/watt
 Spacing Criteria (0/90/45): 1.13 / 0.53 / 0.8
 Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
 CIE Type: Direct

Input Watts (W): 420.3
 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: P598614
CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

Luminous Intensity Polar Plot



TEST NUMBER: P598614

CATALOG NUMBER: IFLD-L-SA8C-722-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	100				
1	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79	77				
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	65	61	59				
3	83	70	60	52	80	68	59	51	65	57	50	62	55	49	59	53	48	46				
4	74	60	49	41	72	59	49	41	56	47	40	53	46	40	51	44	39	36				
5	68	52	42	34	65	51	41	34	49	40	33	47	39	33	45	38	32	30				
6	62	46	36	28	60	45	35	28	43	34	28	41	34	28	40	33	27	25				
7	57	41	31	24	55	40	31	24	39	30	24	37	29	24	36	29	23	21				
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	18				
9	49	34	25	19	47	33	24	18	32	24	18	31	23	18	30	23	18	16				
10	46	31	22	17	44	31	22	17	29	22	16	28	21	16	28	21	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	51033	51033	51033	51033
5°	52519	34151	37309	55174
10°	46594	21700	21918	47683
15°	45729	15391	14577	42769
20°	53167	9736	9812	45561
25°	68374	8359	8123	53864
30°	82862	7923	7428	67428
35°	98073	6980	6719	79925
40°	117842	6624	6158	94423
45°	136357	6570	5963	110076
50°	158340	6671	6004	129986
55°	193771	6853	6106	165609
60°	251303	6862	6433	207132
65°	308479	6934	6595	221719
70°	326422	7314	6897	215873
75°	274774	7731	6904	176188
80°	199629	9056	6998	152293
85°	211578	13122	5743	158274

TEST NUMBER: P598614
 CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	733.8	2.3
10°-20°	1535.8	4.8
20°-30°	2213.3	7.0
30°-40°	3186.2	10.0
40°-50°	4525.8	14.3
50°-60°	6506.9	20.5
60°-70°	7517.6	23.7
70°-80°	4256.6	13.4
80°-90°	1266.8	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°	4482.9	14.1
0°-40°	7669.2	24.2
0°-60°	18701.9	58.9
0°-90°	31742.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	31742.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	9482	9482	9482	9482	9482	
5°	9721	6321	6906	10213	9721	882
15°	8207	2762	2616	7676	8207	2413
25°	11514	1408	1368	9070	11514	5344
35°	14927	1062	1023	12165	14927	9474
45°	17915	863	784	14462	17915	13872
55°	20651	730	651	17650	20651	18703
65°	24223	544	518	17410	24223	23228
75°	13214	372	332	8473	13214	14021
85°	3426	212	93	2563	3426	3412
90°	0	0	0	0	0	

TEST NUMBER: P598614
 CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2
2.5°	10013.4	10000.1	9920.4	9668.1	9402.5	9150.2	8911.1	8658.8	8526.0	8366.6	8300.2
5°	9721.2	9694.6	9468.9	8911.1	8419.7	7888.5	7437.0	7078.4	6786.3	6494.1	6387.8
7.5°	9057.2	9017.3	8751.7	7981.5	7264.3	6573.8	6029.3	5564.5	5179.3	5006.7	4807.5
10°	8526.0	8459.6	8114.3	7264.3	6334.7	5644.1	5285.6	4966.8	4634.8	4355.9	4063.8
12.5°	8194.0	8114.3	7755.7	6759.7	5856.6	5338.7	4966.8	4608.3	4196.6	3851.3	3532.6
15°	8207.2	8114.3	7676.0	6626.9	5737.1	5073.1	4555.2	4063.8	3585.7	3200.6	2842.0
17.5°	8592.4	8472.9	8008.0	6812.8	5644.1	4727.8	4037.2	3399.8	2855.3	2443.6	2151.4
20°	9283.0	9203.3	8672.1	7091.7	5551.2	4355.9	3506.0	2735.7	2164.7	1846.0	1726.4
22.5°	10318.8	10225.9	9654.8	7516.7	5524.6	4023.9	2935.0	2151.4	1739.7	1606.9	1540.5
25°	11514.0	11341.4	10810.2	8233.8	5577.7	3718.5	2470.1	1779.6	1553.8	1460.8	1421.0
27.5°	12549.9	12443.7	11846.1	8911.1	5604.3	3479.4	2151.4	1620.2	1447.6	1367.9	1341.3
30°	13333.5	13293.6	12709.3	9654.8	5537.9	3187.3	1952.2	1553.8	1447.6	1367.9	1288.2
32.5°	14117.0	14130.3	13506.1	10225.9	5444.9	2935.0	1766.3	1381.2	1274.9	1221.8	1235.1
35°	14927.1	14993.5	14462.3	10783.6	5245.7	2842.0	1633.5	1288.2	1195.2	1115.5	1075.7
37.5°	15949.7	16122.3	15604.4	11407.8	5046.5	2762.3	1567.1	1221.8	1128.8	1062.4	1009.3
40°	16773.1	17091.8	16786.3	11992.1	4913.7	2669.3	1514.0	1155.4	1089.0	1009.3	969.5
42.5°	17384.0	17755.8	17649.6	12443.7	4913.7	2576.4	1460.8	1115.5	1062.4	969.5	916.3
45°	17915.2	18300.3	18287.0	12908.5	5020.0	2523.3	1394.4	1115.5	1035.9	942.9	889.8
47.5°	18393.3	18778.4	18911.2	13492.8	5192.6	2496.7	1314.8	1089.0	1035.9	929.6	849.9
50°	18911.2	19336.2	19734.6	14422.4	5405.1	2430.3	1261.6	1049.1	1049.1	916.3	823.4
52.5°	19575.2	20053.3	20783.7	15577.8	5617.6	2310.8	1181.9	1022.6	1049.1	903.1	796.8
55°	20650.9	21049.3	22005.5	16959.0	5883.2	2164.7	1115.5	956.2	996.0	863.2	757.0
57.5°	21859.4	22204.7	23001.5	18021.4	5962.9	1978.8	1022.6	889.8	956.2	823.4	703.9
60°	23346.8	23519.5	23519.5	18326.9	5697.3	1806.1	956.2	836.7	863.2	783.5	664.0
62.5°	24289.7	24289.7	23519.5	17769.1	5192.6	1660.0	903.1	783.5	757.0	730.4	624.2
65°	24223.3	24117.1	22975.0	16148.9	4608.3	1567.1	849.9	717.1	677.3	664.0	584.3
67.5°	23107.8	22921.9	21368.1	13864.7	3997.4	1527.2	796.8	650.7	624.2	597.6	531.2
70°	20743.9	20265.8	18353.4	11155.5	3399.8	1500.7	783.5	597.6	571.1	544.5	491.4
72.5°	17317.6	16706.7	14329.5	8579.1	2855.3	1407.7	743.7	531.2	517.9	491.4	438.3
75°	13213.9	12085.1	10000.1	6560.5	2217.8	1221.8	637.5	464.8	464.8	451.5	398.4
77.5°	9110.3	8526.0	6972.2	4847.3	1620.2	942.9	517.9	411.7	411.7	425.0	371.8
80°	6441.0	5896.5	4966.8	3479.4	1022.6	637.5	398.4	345.3	385.1	411.7	345.3
82.5°	4927.0	4528.6	3691.9	2536.5	597.6	438.3	305.4	278.9	332.0	358.6	292.2
85°	3426.3	2948.2	1872.5	1699.9	345.3	265.6	225.8	225.8	292.2	358.6	265.6
87.5°	969.5	411.7	119.5	504.7	146.1	106.2	79.7	53.1	79.7	79.7	53.1
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: P598614
 CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2
2.5°	8233.8	8154.1	8154.1	8127.6	8140.8	8154.1	8140.8	8233.8	8273.6	8326.8	8433.0
5°	6321.4	6427.7	6348.0	6427.7	6533.9	6693.3	6733.1	6852.7	6865.9	6958.9	6905.8
7.5°	4688.0	4674.7	4608.3	4701.2	4993.4	5219.2	5325.4	5391.8	5405.1	5405.1	5338.7
10°	3970.8	3851.3	3731.8	3665.4	3691.9	3931.0	4010.7	4050.5	4023.9	4063.8	4010.7
12.5°	3399.8	3293.5	3120.9	3001.4	2921.7	2988.1	3067.8	3107.6	3134.2	3200.6	3253.7
15°	2762.3	2656.1	2549.8	2483.4	2417.0	2363.9	2430.3	2470.1	2536.5	2589.7	2616.2
17.5°	2098.3	2045.2	1992.1	2031.9	2031.9	2005.3	2031.9	2045.2	2071.7	2111.6	2098.3
20°	1699.9	1686.6	1673.3	1739.7	1792.8	1792.8	1819.4	1779.6	1766.3	1726.4	1713.2
22.5°	1514.0	1514.0	1527.2	1580.4	1633.5	1660.0	1660.0	1593.6	1527.2	1500.7	1514.0
25°	1407.7	1407.7	1447.6	1460.8	1487.4	1487.4	1500.7	1434.3	1394.4	1354.6	1367.9
27.5°	1328.0	1328.0	1341.3	1341.3	1354.6	1354.6	1367.9	1341.3	1288.2	1274.9	1274.9
30°	1274.9	1274.9	1261.6	1261.6	1261.6	1261.6	1274.9	1235.1	1208.5	1195.2	1195.2
32.5°	1221.8	1208.5	1195.2	1195.2	1181.9	1181.9	1195.2	1155.4	1142.1	1142.1	1142.1
35°	1062.4	1049.1	1062.4	1089.0	1089.0	1102.3	1102.3	1089.0	1062.4	1035.9	1022.6
37.5°	996.0	982.7	982.7	982.7	1009.3	1022.6	1035.9	1009.3	969.5	929.6	929.6
40°	942.9	942.9	929.6	929.6	929.6	956.2	982.7	942.9	889.8	876.5	876.5
42.5°	903.1	889.8	876.5	863.2	849.9	889.8	916.3	863.2	836.7	836.7	836.7
45°	863.2	849.9	836.7	823.4	810.1	823.4	849.9	796.8	783.5	783.5	783.5
47.5°	823.4	810.1	783.5	770.3	757.0	757.0	783.5	743.7	730.4	743.7	743.7
50°	796.8	770.3	743.7	730.4	717.1	717.1	717.1	703.9	703.9	703.9	717.1
52.5°	770.3	743.7	703.9	690.6	677.3	677.3	677.3	677.3	664.0	677.3	690.6
55°	730.4	703.9	677.3	664.0	650.7	637.5	650.7	637.5	637.5	650.7	650.7
57.5°	677.3	650.7	624.2	624.2	610.9	610.9	624.2	610.9	610.9	624.2	624.2
60°	637.5	610.9	584.3	584.3	571.1	584.3	597.6	584.3	584.3	584.3	597.6
62.5°	584.3	571.1	544.5	544.5	544.5	544.5	557.8	544.5	557.8	557.8	557.8
65°	544.5	517.9	504.7	504.7	504.7	504.7	531.2	504.7	517.9	517.9	517.9
67.5°	504.7	478.1	464.8	464.8	464.8	464.8	491.4	464.8	478.1	491.4	478.1
70°	464.8	438.3	425.0	425.0	425.0	425.0	438.3	425.0	425.0	438.3	438.3
72.5°	411.7	398.4	385.1	385.1	371.8	385.1	398.4	385.1	385.1	385.1	385.1
75°	371.8	358.6	358.6	345.3	345.3	345.3	358.6	332.0	332.0	332.0	332.0
77.5°	345.3	318.7	318.7	318.7	305.4	318.7	305.4	278.9	278.9	278.9	278.9
80°	292.2	265.6	278.9	278.9	265.6	265.6	252.3	225.8	225.8	225.8	225.8
82.5°	239.0	212.5	225.8	225.8	225.8	225.8	199.2	185.9	172.6	159.4	159.4
85°	212.5	172.6	199.2	199.2	185.9	185.9	132.8	132.8	106.2	106.2	93.0
87.5°	39.8	26.6	53.1	66.4	66.4	79.7	53.1	66.4	39.8	26.6	26.6
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: P598614
 CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2
2.5°	8419.7	8565.8	8765.0	8911.1	9136.9	9309.5	9575.1	9800.9	10013.4	10106.3	10199.3
5°	7065.1	7158.1	7463.5	7702.6	8061.2	8446.3	8924.4	9442.3	9973.5	10212.6	10491.5
7.5°	5285.6	5458.2	5630.9	5976.2	6414.4	7038.6	7649.5	8419.7	9163.4	9522.0	10000.1
10°	4103.6	4236.4	4435.6	4794.2	5205.9	5723.8	6454.2	7370.6	8260.4	8725.2	9216.6
12.5°	3293.5	3479.4	3745.1	4116.9	4595.0	5126.2	5657.4	6507.4	7543.2	8074.4	8632.2
15°	2669.3	2815.4	3107.6	3572.4	4130.2	4674.7	5232.5	5936.3	7065.1	7676.0	8340.0
17.5°	2124.9	2231.1	2496.7	2961.5	3519.3	4130.2	4767.6	5657.4	6905.8	7649.5	8433.0
20°	1726.4	1806.1	1978.8	2324.1	2855.3	3519.3	4316.1	5391.8	6998.7	7954.9	8911.1
22.5°	1514.0	1540.5	1620.2	1806.1	2244.4	2948.2	3904.4	5166.0	7171.4	8406.5	9694.6
25°	1367.9	1394.4	1421.0	1540.5	1792.8	2456.9	3545.8	5033.2	7543.2	9070.5	10597.7
27.5°	1274.9	1301.5	1314.8	1367.9	1540.5	2098.3	3240.4	4953.6	8047.9	10039.9	11713.3
30°	1195.2	1195.2	1235.1	1314.8	1434.3	1846.0	2974.8	4767.6	8579.1	10850.0	12589.8
32.5°	1128.8	1142.1	1195.2	1235.1	1314.8	1633.5	2709.2	4528.6	9057.2	11514.0	13453.0
35°	1009.3	1009.3	1022.6	1089.0	1195.2	1460.8	2470.1	4289.5	9322.8	12164.8	14223.2
37.5°	929.6	942.9	969.5	1022.6	1115.5	1341.3	2270.9	4023.9	9601.7	12775.7	15126.3
40°	876.5	889.8	916.3	969.5	1062.4	1235.1	2098.3	3811.5	9893.8	13439.7	16095.8
42.5°	836.7	849.9	876.5	929.6	1009.3	1208.5	1912.4	3638.8	10066.5	14050.6	17012.1
45°	796.8	810.1	849.9	903.1	969.5	1181.9	1806.1	3519.3	10132.9	14462.3	17742.5
47.5°	757.0	770.3	810.1	889.8	969.5	1142.1	1766.3	3452.9	10186.0	14927.1	18326.9
50°	717.1	743.7	796.8	876.5	982.7	1089.0	1739.7	3439.6	10491.5	15524.7	18884.6
52.5°	690.6	730.4	783.5	876.5	969.5	1009.3	1726.4	3479.4	11102.4	16414.5	19681.5
55°	664.0	703.9	757.0	876.5	929.6	942.9	1660.0	3545.8	12032.0	17649.6	20810.3
57.5°	637.5	664.0	730.4	849.9	876.5	889.8	1527.2	3638.8	12961.6	18858.1	21965.7
60°	597.6	624.2	690.6	849.9	796.8	836.7	1354.6	3665.4	13625.6	19243.2	22071.9
62.5°	557.8	584.3	650.7	876.5	730.4	783.5	1208.5	3572.4	13758.4	18685.4	21474.3
65°	517.9	544.5	597.6	730.4	677.3	730.4	1115.5	3320.1	13320.2	17410.5	20385.3
67.5°	478.1	504.7	544.5	597.6	610.9	664.0	1075.7	2921.7	12217.9	15830.2	18897.9
70°	425.0	451.5	491.4	531.2	544.5	624.2	1009.3	2536.5	10438.3	13718.6	17078.5
72.5°	385.1	398.4	438.3	464.8	491.4	571.1	969.5	2217.8	7981.5	11102.4	13931.1
75°	332.0	332.0	371.8	398.4	425.0	504.7	889.8	1846.0	5630.9	8472.9	10239.1
77.5°	278.9	278.9	305.4	332.0	358.6	438.3	757.0	1500.7	3904.4	6719.8	7423.7
80°	212.5	212.5	239.0	265.6	292.2	371.8	610.9	1102.3	2417.0	4913.7	5405.1
82.5°	146.1	146.1	185.9	199.2	212.5	292.2	464.8	757.0	1421.0	3545.8	3864.6
85°	79.7	79.7	106.2	119.5	146.1	212.5	345.3	531.2	849.9	2563.1	2576.4
87.5°	13.3	13.3	39.8	39.8	66.4	106.2	199.2	292.2	478.1	1421.0	903.1
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: P598614
 CATALOG NUMBER: IFLD-L-SA8C-722-U-SLR

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2	9482.2
2.5°	10371.9	10518.0	10531.3	10531.3	10464.9	10478.2	10292.3	10093.1	10026.7	10013.4
5°	10916.4	11301.6	11407.8	11460.9	11288.3	11022.7	10544.6	10026.7	9761.0	9721.2
7.5°	10810.2	11580.5	11992.1	12045.3	11700.0	11075.8	10239.1	9442.3	9136.9	9057.2
10°	10186.0	11221.9	11965.6	12151.5	11779.7	10982.8	9893.8	8964.2	8592.4	8526.0
12.5°	9747.8	10743.8	11474.2	11726.5	11553.9	10863.3	9721.2	8658.8	8286.9	8194.0
15°	9508.7	10425.1	10903.2	10982.8	10969.6	10677.4	9721.2	8725.2	8313.5	8207.2
17.5°	9707.9	10332.1	10398.5	10212.6	10318.8	10464.9	9933.7	9083.7	8685.3	8592.4
20°	10106.3	10292.3	9973.5	9694.6	9747.8	10212.6	10265.7	9761.0	9442.3	9283.0
22.5°	10943.0	10438.3	9707.9	9322.8	9362.6	10013.4	10703.9	10677.4	10398.5	10318.8
25°	11792.9	10850.0	9628.2	9176.7	9229.8	9973.5	11221.9	11700.0	11553.9	11514.0
27.5°	12735.8	11540.6	9681.4	9110.3	9176.7	10026.7	11580.5	12563.2	12589.8	12549.9
30°	13373.3	11872.6	9840.7	9190.0	9283.0	10159.5	11660.1	13081.1	13320.2	13333.5
32.5°	13904.5	12204.6	10172.7	9322.8	9482.2	10398.5	11872.6	13572.5	14103.7	14117.0
35°	14329.5	12576.5	10584.4	9561.8	9800.9	10796.9	12151.5	14037.3	14834.1	14927.1
37.5°	14874.0	12988.2	11062.5	10079.8	10345.4	11368.0	12642.9	14581.8	15697.4	15949.7
40°	15458.3	13399.9	11753.1	10916.4	11301.6	12217.9	13200.7	15192.7	16427.8	16773.1
42.5°	16109.0	13838.1	12536.6	12045.3	12629.6	13293.6	13838.1	15750.5	16985.5	17384.0
45°	16746.5	14369.3	13678.7	13585.8	14236.5	14568.5	14462.3	16148.9	17516.8	17915.2
47.5°	17198.0	15139.6	15059.9	15617.7	16228.6	16055.9	15192.7	16441.1	17955.0	18393.3
50°	17609.7	16095.8	16799.6	17888.6	18260.5	17676.1	15976.2	16839.5	18419.8	18911.2
52.5°	18220.6	17118.4	18592.5	19947.1	20305.6	19376.0	16826.2	17490.2	19137.0	19575.2
55°	19469.0	18273.7	20465.0	22018.8	22085.2	20929.8	17968.3	18592.5	20146.3	20650.9
57.5°	20863.4	19694.7	21952.4	23732.0	23705.4	22483.6	19256.5	20079.9	21514.1	21859.4
60°	22125.0	21129.0	23572.6	24953.7	24887.3	23612.4	20757.2	21766.5	23081.2	23346.8
62.5°	22868.7	22430.5	24289.7	25338.9	25086.6	23984.3	22032.1	23267.1	24196.8	24289.7
65°	22749.2	23174.2	23453.1	24103.8	23745.2	22948.4	22656.3	24223.3	24316.3	24223.3
67.5°	21846.1	22749.2	21155.6	21222.0	21036.0	20358.8	21686.8	23971.0	23333.5	23107.8
70°	20478.3	20544.7	17689.4	16852.7	17144.9	16215.3	18605.7	22005.5	21022.8	20743.9
72.5°	18207.3	17384.0	13373.3	12523.4	12961.6	12297.6	14927.1	19176.8	18220.6	17317.6
75°	15272.4	13771.7	10186.0	8977.5	9203.3	9176.7	11567.2	15843.4	14117.0	13213.9
77.5°	11832.8	10730.5	7516.7	7051.9	6812.8	6865.9	8074.4	11779.7	10239.1	9110.3
80°	8645.5	7503.4	5816.8	6082.4	5949.6	5630.9	5657.4	7888.5	7118.3	6441.0
82.5°	5976.2	5338.7	4714.5	5325.4	5006.7	4515.3	4409.1	5684.0	5338.7	4927.0
85°	4010.7	4395.8	3745.1	4077.1	3532.6	3253.7	4143.5	4754.4	3838.0	3426.3
87.5°	2616.2	4023.9	2695.9	2045.2	1168.7	1567.1	2536.5	3120.9	1792.8	969.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)