

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: P599050

Luminaire Tested: **IFLD-L-SA8D-760-U-SLL**

Issue Date: 05/03/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P599050
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 05/03/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: IFLD-L-SA8D-760-U-SLL
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLL distribution lens
 Light Source: (128) 5700K CCT, 70 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER

Summary

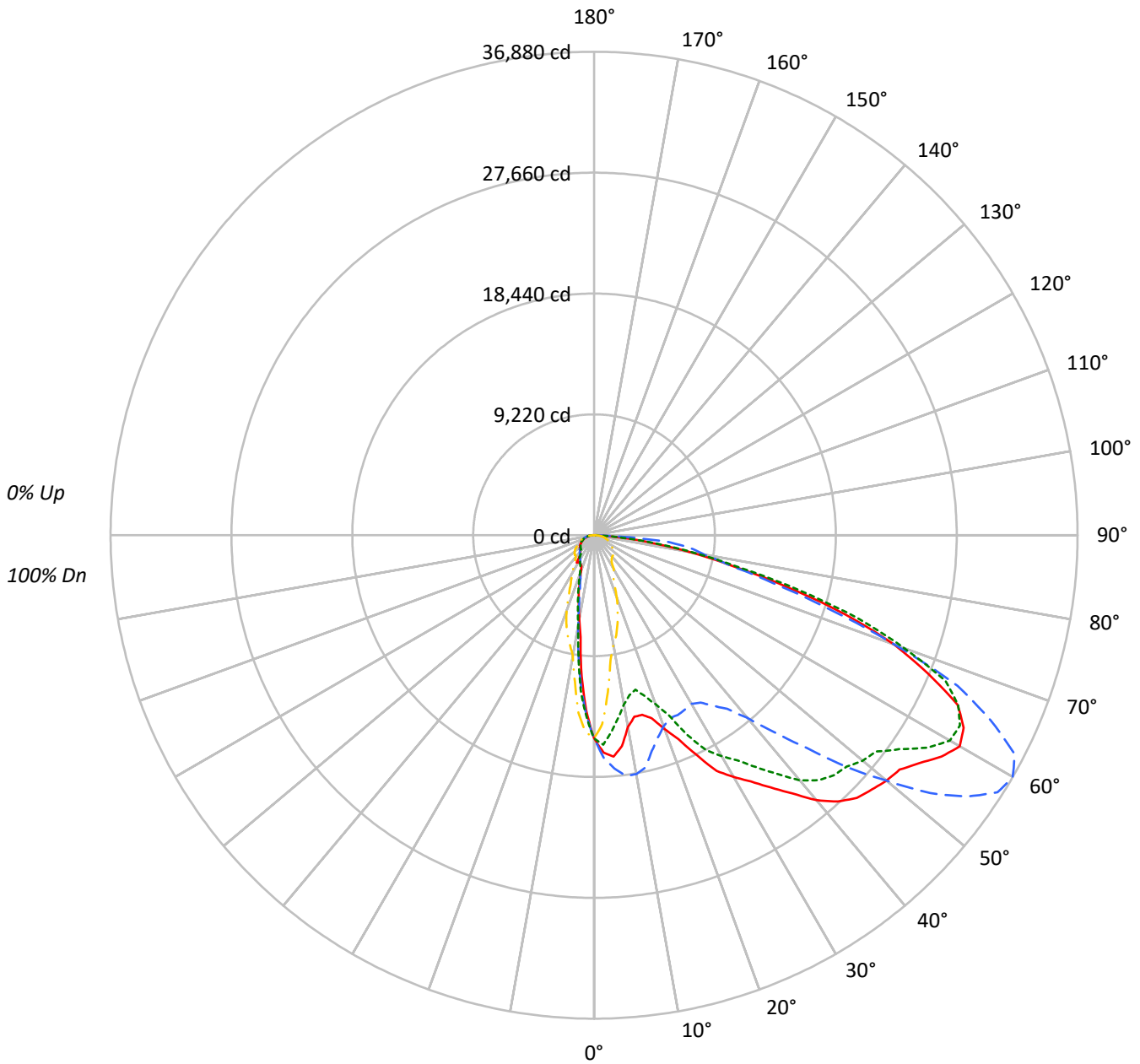
Lumens per Lamp: N/A
 Luminaire Lumens: 48505.1 lumens
 Efficiency: N/A
 Efficacy: 99.3 lumens/watt
 Spacing Criteria (0/90/45): 1.12 / 0.52 / 0.8
 Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
 CIE Type: Direct

Input Watts (W): 488.3
 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

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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°	83378	83378	83378	83378
5°	91602	81372	58355	63703
10°	81137	71613	35395	37982
15°	79007	67977	25057	26016
20°	90085	78624	16391	18116
25°	109759	99665	14311	14822
30°	132247	120882	14843	13773
35°	154234	141936	12299	11592
40°	185335	171428	11489	10884
45°	215686	197017	11628	10809
50°	243754	223937	11890	11170
55°	284271	266909	12315	11710
60°	346716	337221	12275	12275
65°	389649	390197	12605	13152
70°	382941	396485	13205	13544
75°	315886	336915	13870	14766
80°	228075	239412	15339	16005
85°	126225	135525	17272	21261

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1203.6	2.5
10°-20°	2541.1	5.2
20°-30°	3717.9	7.7
30°-40°	5238.3	10.8
40°-50°	7198.9	14.8
50°-60°	9811.3	20.2
60°-70°	10738.1	22.1
70°-80°	6199.5	12.8
80°-90°	1856.5	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°	7462.5	15.4
0°-40°	12700.8	26.2
0°-60°	29711.0	61.3
0°-90°	48505.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	48505.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	15492	15492	15492	15492	15492	
5°	16955	15062	10802	11791	16955	1540
15°	14180	12200	4497	4669	14180	4143
25°	18483	16783	2410	2496	18483	8655
35°	23475	21603	1872	1764	23475	14885
45°	28338	25885	1528	1420	28338	21780
55°	30296	28446	1312	1248	30296	27336
65°	30597	30640	990	1033	30597	29285
75°	15191	16202	667	710	15191	16318
85°	2044	2195	280	344	2044	2836
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°	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2
2.5°	16589.6	16525.1	16589.6	16826.3	16890.8	16998.4	16998.4	16847.8	16568.1	16439.0	16223.8
5°	16955.4	16847.8	17385.7	17880.6	18267.9	18224.9	17859.1	17557.9	16998.4	16159.3	15363.1
7.5°	16223.8	16331.4	16718.7	18009.7	18913.4	19085.6	18504.6	17902.1	16697.2	15535.3	14459.4
10°	14846.7	14997.4	15836.5	17170.6	18590.7	18870.4	18504.6	17773.0	16331.4	14889.8	13641.8
12.5°	14179.7	14524.0	15018.9	16632.6	17643.9	18311.0	18138.8	17665.5	16051.7	14351.8	13146.9
15°	14179.7	14265.8	14997.4	16352.9	16933.9	16955.4	17019.9	17106.0	16137.8	14588.5	12974.8
17.5°	14631.6	14868.2	15492.2	16331.4	16439.0	16180.8	16180.8	16546.6	16309.9	15255.6	13598.7
20°	15728.9	15642.9	16460.5	16804.8	16223.8	15578.3	15513.8	16137.8	16503.5	15965.6	14739.1
22.5°	16826.3	17213.6	17880.6	17106.0	16030.2	15169.5	15083.4	15858.0	17084.5	17192.1	16051.7
25°	18483.1	18870.4	19214.7	18267.9	16008.6	15061.9	15126.5	15728.9	17794.6	18935.0	18246.4
27.5°	20269.0	20505.7	21000.6	19537.4	16525.1	14932.8	14997.4	15901.1	18461.6	20075.4	19967.8
30°	21280.3	21538.5	21430.9	19774.1	16869.3	15018.9	14846.7	16137.8	18095.8	20075.4	21086.7
32.5°	22270.1	22119.5	22054.9	20161.4	17299.7	15556.8	15126.5	16632.6	18311.0	20398.1	22528.3
35°	23475.0	23259.9	23087.7	20914.5	18009.7	16073.2	15879.5	17278.2	18784.3	21065.1	23690.2
37.5°	24809.1	24809.1	23969.9	21474.0	18848.9	16912.4	16697.2	18203.4	19537.4	21474.0	25282.5
40°	26379.8	26444.4	24959.7	22227.1	19795.6	18246.4	18181.9	19408.3	20269.0	22076.4	26810.2
42.5°	27541.8	27584.8	25820.4	22506.8	20893.0	20096.9	20376.6	21344.9	21108.2	22614.4	26917.8
45°	28337.9	28122.7	26422.9	23302.9	22098.0	22872.6	22958.6	23238.4	22205.5	22937.1	27348.1
47.5°	28725.2	28682.2	26681.1	24228.1	24637.0	25691.3	26186.2	25798.9	23216.8	22592.9	27348.1
50°	29112.5	28746.7	26917.8	25497.6	27111.4	29241.6	29134.0	28424.0	24615.5	23023.2	26939.3
52.5°	29370.7	29048.0	27391.1	26638.0	29478.3	31888.2	32318.5	31006.0	26250.7	23819.3	27132.9
55°	30295.9	30037.7	28811.3	28187.3	32211.0	34685.4	34750.0	32921.0	27972.1	25131.9	28402.4
57.5°	31414.8	31565.4	30769.3	30382.0	34298.1	36729.5	36492.8	34341.1	29435.3	26724.1	29865.6
60°	32211.0	32447.6	32254.0	32297.0	35330.9	37418.1	36880.1	35223.3	30511.1	27929.1	31651.5
62.5°	31780.6	32254.0	33050.1	32878.0	35374.0	36923.2	36170.1	34061.4	30640.2	29499.8	33007.1
65°	30597.2	30640.2	32189.4	33136.2	33437.4	34362.7	33372.9	31630.0	29306.2	30468.1	32813.4
67.5°	27563.3	27907.6	29306.2	31156.6	29887.1	30102.3	30016.2	27498.7	27283.6	29801.0	31328.8
70°	24335.7	24572.4	26100.1	28273.3	25239.4	24228.1	24421.8	22549.8	23432.0	27735.4	28337.9
72.5°	20118.4	20269.0	22011.9	23926.9	20247.5	18440.1	18891.9	17364.2	18612.2	24271.2	23905.4
75°	15191.0	15470.7	16826.3	19085.6	14911.3	13749.4	14201.2	13577.2	14739.1	19989.3	18547.7
77.5°	10801.5	10586.4	12264.7	14932.8	11210.4	10521.8	10564.8	10672.4	11920.4	16847.8	13319.0
80°	7358.8	7423.4	8929.6	10952.2	8800.5	8692.9	8585.3	9446.0	10005.4	13340.5	9682.7
82.5°	4368.0	4368.0	6024.8	7789.2	6950.0	7832.2	7337.3	8111.9	7832.2	9811.8	6347.5
85°	2044.1	2044.1	3098.4	5615.9	5379.3	6455.1	5486.8	6132.3	5788.1	6842.4	2861.8
87.5°	344.3	301.2	624.0	2754.2	2216.3	2517.5	989.8	3270.6	3636.4	4776.8	710.1
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°	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2
2.5°	15987.1	15836.5	15535.3	15148.0	14825.2	14416.4	14287.3	14007.6	13620.3	13577.2	13405.1
5°	15061.9	14545.5	13900.0	13103.9	12565.9	12006.5	11533.1	11253.4	10930.6	10887.6	10801.5
7.5°	14050.6	13405.1	12329.2	11382.5	10457.3	9575.1	9144.7	8606.8	8241.0	7961.3	7832.2
10°	13103.9	12501.4	11167.3	9876.3	9058.7	8477.7	7961.3	7401.8	6950.0	6605.7	6476.6
12.5°	12479.9	11769.8	10328.2	9101.7	8499.2	7832.2	7251.2	6648.8	6067.8	5615.9	5379.3
15°	12200.1	11533.1	10070.0	8714.4	7832.2	6907.0	6239.9	5637.5	4927.4	4604.6	4497.1
17.5°	12867.2	11877.4	9983.9	8262.5	7014.5	5960.2	5142.6	4497.1	3980.6	3657.9	3528.8
20°	13727.8	12501.4	10134.5	7724.6	6239.9	5056.5	4152.8	3464.2	3120.0	2883.3	2861.8
22.5°	14825.2	13426.6	10371.2	7337.3	5379.3	4066.7	3249.1	2840.2	2603.6	2582.0	2539.0
25°	16783.3	15104.9	10758.5	6820.9	4690.7	3356.7	2775.7	2539.0	2431.4	2366.9	2409.9
27.5°	18461.6	16202.3	11038.2	6498.1	4411.0	3163.0	2689.6	2431.4	2323.8	2302.3	2323.8
30°	19451.4	17213.6	10952.2	5895.7	3851.5	3012.4	2861.8	2775.7	2560.5	2388.4	2388.4
32.5°	20355.1	17859.1	10930.6	5357.7	3292.1	2517.5	2388.4	2323.8	2452.9	2539.0	2474.5
35°	21603.1	18870.4	10866.1	5056.5	3055.4	2323.8	2108.7	1936.5	1850.5	1807.4	1872.0
37.5°	22937.1	19559.0	10694.0	5013.5	2926.3	2216.3	2044.1	1872.0	1785.9	1742.9	1721.4
40°	24400.3	20290.5	10500.3	4798.3	2861.8	2151.7	1979.6	1828.9	1721.4	1656.8	1635.3
42.5°	25347.0	20871.5	10306.6	4690.7	2732.7	2108.7	1915.0	1785.9	1678.3	1592.3	1592.3
45°	25885.0	21560.0	10113.0	4583.1	2582.0	2130.2	1915.0	1742.9	1613.8	1570.7	1527.7
47.5°	26121.6	22076.4	10048.4	4411.0	2452.9	2044.1	1872.0	1699.8	1570.7	1484.7	1463.2
50°	26745.6	23173.8	10285.1	4281.9	2302.3	1958.0	1979.6	1678.3	1549.2	1441.6	1420.1
52.5°	27111.4	24056.0	10801.5	4088.2	2194.7	1850.5	1936.5	1635.3	1484.7	1377.1	1377.1
55°	28445.5	25519.2	11361.0	3937.6	2065.6	1699.8	1785.9	1549.2	1377.1	1312.5	1312.5
57.5°	30145.3	27068.4	11834.4	3873.1	1979.6	1592.3	1592.3	1506.2	1312.5	1226.5	1205.0
60°	31328.8	28337.9	12114.1	3830.0	1893.5	1484.7	1420.1	1506.2	1248.0	1161.9	1140.4
62.5°	31457.9	27606.3	11834.4	3808.5	1872.0	1377.1	1291.0	1441.6	1183.4	1097.4	1054.3
65°	30640.2	26121.6	11059.7	3722.4	1850.5	1269.5	1205.0	1248.0	1097.4	1032.8	989.8
67.5°	29004.9	23711.7	9940.9	3679.4	1828.9	1183.4	1097.4	1075.9	1011.3	946.7	903.7
70°	25196.4	20570.3	8628.3	3485.8	1785.9	1118.9	989.8	968.3	903.7	860.7	839.2
72.5°	21151.2	16826.3	7122.1	3227.6	1699.8	1011.3	903.7	860.7	839.2	774.6	753.1
75°	16202.3	12953.2	5702.0	2861.8	1484.7	903.7	796.1	753.1	731.6	688.5	667.0
77.5°	11382.5	9639.6	4217.3	2323.8	1248.0	817.6	710.1	667.0	645.5	581.0	581.0
80°	7724.6	6756.3	2861.8	1613.8	968.3	667.0	624.0	581.0	537.9	494.9	494.9
82.5°	4798.3	4733.7	2065.6	1054.3	710.1	537.9	494.9	494.9	430.3	387.3	387.3
85°	2194.7	2904.8	1441.6	731.6	537.9	408.8	408.8	387.3	344.3	279.7	279.7
87.5°	688.5	968.3	753.1	322.8	301.2	236.7	236.7	215.2	215.2	172.1	172.1
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°	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2
2.5°	13577.2	13555.7	13555.7	13469.6	13684.8	13684.8	13813.9	13706.3	13770.9	13792.4	13964.5
5°	10780.0	10952.2	11081.3	11339.5	11490.1	11554.6	11554.6	11726.8	11662.2	11791.3	12049.5
7.5°	7896.7	8111.9	8499.2	8822.0	9080.2	9166.2	9144.7	9187.8	9252.3	9101.7	9144.7
10°	6390.5	6239.9	6369.0	6670.3	6907.0	7186.7	6971.5	6950.0	7014.5	6950.0	7079.1
12.5°	5336.2	5164.1	5056.5	5056.5	5228.6	5357.7	5293.2	5400.8	5637.5	5702.0	5852.6
15°	4324.9	4174.3	4088.2	3980.6	4152.8	4195.8	4260.4	4411.0	4583.1	4669.2	4841.3
17.5°	3464.2	3464.2	3464.2	3378.2	3442.7	3507.3	3528.8	3722.4	3744.0	3830.0	3894.6
20°	2840.2	2904.8	3012.4	3055.4	3120.0	3120.0	3076.9	3184.5	3098.4	3163.0	3206.0
22.5°	2560.5	2646.6	2689.6	2711.1	2797.2	2818.7	2711.1	2732.7	2754.2	2689.6	2711.1
25°	2409.9	2452.9	2409.9	2431.4	2452.9	2409.9	2431.4	2474.5	2452.9	2496.0	2474.5
27.5°	2345.4	2302.3	2280.8	2259.3	2259.3	2216.3	2237.8	2237.8	2280.8	2302.3	2302.3
30°	2345.4	2280.8	2194.7	2130.2	2130.2	2065.6	2108.7	2151.7	2173.2	2216.3	2216.3
32.5°	2409.9	2280.8	2130.2	2065.6	2001.1	1958.0	2001.1	2065.6	2151.7	2173.2	2194.7
35°	1915.0	1979.6	1958.0	1872.0	1850.5	1850.5	1828.9	1828.9	1764.4	1764.4	1742.9
37.5°	1721.4	1699.8	1742.9	1764.4	1785.9	1721.4	1721.4	1635.3	1613.8	1635.3	1635.3
40°	1613.8	1613.8	1613.8	1678.3	1699.8	1656.8	1592.3	1549.2	1549.2	1549.2	1570.7
42.5°	1570.7	1527.7	1506.2	1549.2	1613.8	1570.7	1506.2	1484.7	1484.7	1506.2	1506.2
45°	1506.2	1484.7	1463.2	1441.6	1527.7	1463.2	1441.6	1420.1	1420.1	1420.1	1441.6
47.5°	1441.6	1420.1	1377.1	1377.1	1398.6	1377.1	1355.6	1355.6	1355.6	1398.6	1398.6
50°	1398.6	1377.1	1334.1	1334.1	1334.1	1334.1	1312.5	1312.5	1312.5	1334.1	1355.6
52.5°	1334.1	1312.5	1291.0	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1291.0	1312.5
55°	1269.5	1248.0	1226.5	1226.5	1248.0	1248.0	1226.5	1248.0	1226.5	1248.0	1269.5
57.5°	1205.0	1183.4	1161.9	1183.4	1205.0	1183.4	1183.4	1183.4	1183.4	1183.4	1205.0
60°	1118.9	1118.9	1118.9	1118.9	1161.9	1161.9	1161.9	1161.9	1118.9	1140.4	1161.9
62.5°	1075.9	1054.3	1054.3	1075.9	1097.4	1097.4	1118.9	1097.4	1075.9	1097.4	1097.4
65°	989.8	989.8	989.8	1011.3	1011.3	1032.8	1032.8	1032.8	1011.3	1032.8	1032.8
67.5°	925.2	925.2	925.2	925.2	968.3	968.3	968.3	968.3	946.7	946.7	968.3
70°	817.6	839.2	817.6	860.7	903.7	882.2	903.7	903.7	882.2	860.7	903.7
72.5°	753.1	753.1	753.1	753.1	817.6	817.6	817.6	839.2	817.6	796.1	817.6
75°	667.0	667.0	667.0	688.5	731.6	731.6	731.6	731.6	731.6	710.1	710.1
77.5°	581.0	602.5	581.0	602.5	645.5	624.0	645.5	667.0	645.5	624.0	624.0
80°	494.9	494.9	494.9	516.4	537.9	537.9	537.9	559.4	537.9	516.4	516.4
82.5°	387.3	387.3	408.8	408.8	430.3	430.3	430.3	451.9	430.3	408.8	408.8
85°	301.2	301.2	301.2	322.8	322.8	344.3	344.3	365.8	365.8	344.3	344.3
87.5°	193.7	172.1	193.7	193.7	215.2	215.2	193.7	172.1	193.7	172.1	150.6
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: P599050
 CATALOG NUMBER: IFLD-L-SA8D-760-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2	15492.2
2.5°	14136.7	14524.0	14803.7	14997.4	15277.1	15815.0	16030.2	16417.5	16525.1	16589.6
5°	12157.1	12565.9	13168.4	13598.7	14093.6	15104.9	15879.5	16460.5	16718.7	16955.4
7.5°	9532.0	10070.0	10694.0	11253.4	12071.0	13319.0	14330.3	15535.3	15987.1	16223.8
10°	7444.9	7939.8	8628.3	9316.9	10457.3	11511.6	12953.2	14050.6	14674.6	14846.7
12.5°	6283.0	6863.9	7681.6	8520.7	9230.8	10435.7	11898.9	13491.2	14072.1	14179.7
15°	5336.2	6132.3	6971.5	7832.2	8649.8	9704.2	11274.9	13211.4	14072.1	14179.7
17.5°	4411.0	5121.0	6110.8	7036.1	7982.8	9424.4	11382.5	13448.1	14308.8	14631.6
20°	3507.3	4195.8	4970.4	6132.3	7423.4	8951.1	11619.2	14244.3	15384.7	15728.9
22.5°	2904.8	3206.0	3959.1	5078.0	6605.7	8628.3	11855.9	15492.2	16697.2	16826.3
25°	2539.0	2754.2	3227.6	4281.9	5960.2	8413.1	12415.3	16933.9	18483.1	18483.1
27.5°	2366.9	2452.9	2775.7	3722.4	5508.4	8219.5	12974.8	18526.1	19967.8	20269.0
30°	2323.8	2539.0	2711.1	3313.6	5013.5	7681.6	13491.2	19774.1	21258.8	21280.3
32.5°	2280.8	2237.8	2366.9	2883.3	4411.0	7122.1	13921.5	21043.6	22205.5	22270.1
35°	1785.9	1872.0	2087.1	2539.0	3959.1	6713.3	14136.7	21732.2	23410.5	23475.0
37.5°	1678.3	1785.9	1958.0	2345.4	3657.9	6369.0	14201.2	23066.2	24680.0	24809.1
40°	1635.3	1721.4	1850.5	2173.2	3421.2	5938.7	14330.3	24443.3	26552.0	26379.8
42.5°	1549.2	1656.8	1785.9	2087.1	3227.6	5615.9	14351.8	25196.4	27541.8	27541.8
45°	1527.7	1592.3	1742.9	2087.1	3012.4	5336.2	14007.6	25949.5	28682.2	28337.9
47.5°	1441.6	1570.7	1699.8	2022.6	2754.2	5056.5	13598.7	26336.8	28832.8	28725.2
50°	1420.1	1549.2	1764.4	1915.0	2603.6	4927.4	13512.7	27305.1	29134.0	29112.5
52.5°	1377.1	1506.2	1828.9	1828.9	2409.9	4755.3	13921.5	27735.4	29198.6	29370.7
55°	1312.5	1506.2	1699.8	1678.3	2237.8	4540.1	14373.4	28854.3	30339.0	30295.9
57.5°	1269.5	1463.2	1613.8	1527.7	2044.1	4389.5	15040.4	29930.1	31716.1	31414.8
60°	1205.0	1463.2	1441.6	1420.1	1893.5	4260.4	15599.8	30145.3	32017.3	32211.0
62.5°	1161.9	1527.7	1269.5	1312.5	1764.4	4195.8	15363.1	28531.5	31608.5	31780.6
65°	1118.9	1312.5	1161.9	1205.0	1721.4	4066.7	14437.9	26595.0	29844.1	30597.2
67.5°	1032.8	1075.9	1075.9	1118.9	1678.3	3765.5	12544.4	23109.3	27154.5	27563.3
70°	946.7	968.3	968.3	1032.8	1635.3	3421.2	10349.7	19989.3	23561.1	24335.7
72.5°	860.7	860.7	860.7	946.7	1506.2	3141.5	8520.7	15363.1	19580.5	20118.4
75°	753.1	753.1	753.1	839.2	1355.6	2861.8	6713.3	11425.5	14416.4	15191.0
77.5°	667.0	667.0	645.5	753.1	1183.4	2323.8	4841.3	8068.9	10156.0	10801.5
80°	559.4	537.9	537.9	602.5	925.2	1678.3	3120.0	5702.0	7079.1	7358.8
82.5°	451.9	430.3	408.8	451.9	667.0	1054.3	1936.5	3980.6	4540.1	4368.0
85°	430.3	451.9	365.8	344.3	473.4	688.5	1226.5	2452.9	2044.1	2044.1
87.5°	172.1	150.6	150.6	129.1	236.7	258.2	537.9	451.9	344.3	344.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)