

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: P599436

Luminaire Tested: **IFLD-S-SA3D-730-U-SLL-HSS**

Issue Date: 05/04/2022

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: P599436
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 05/04/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: IFLD-S-SA3D-730-U-SLL-HSS
 Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ SLL distribution lens with House Side Shield
 Light Source: (48) 3000K CCT, 70 CRI LEDs
 Ballast/Driver: ELECTRONIC DRIVER

Summary

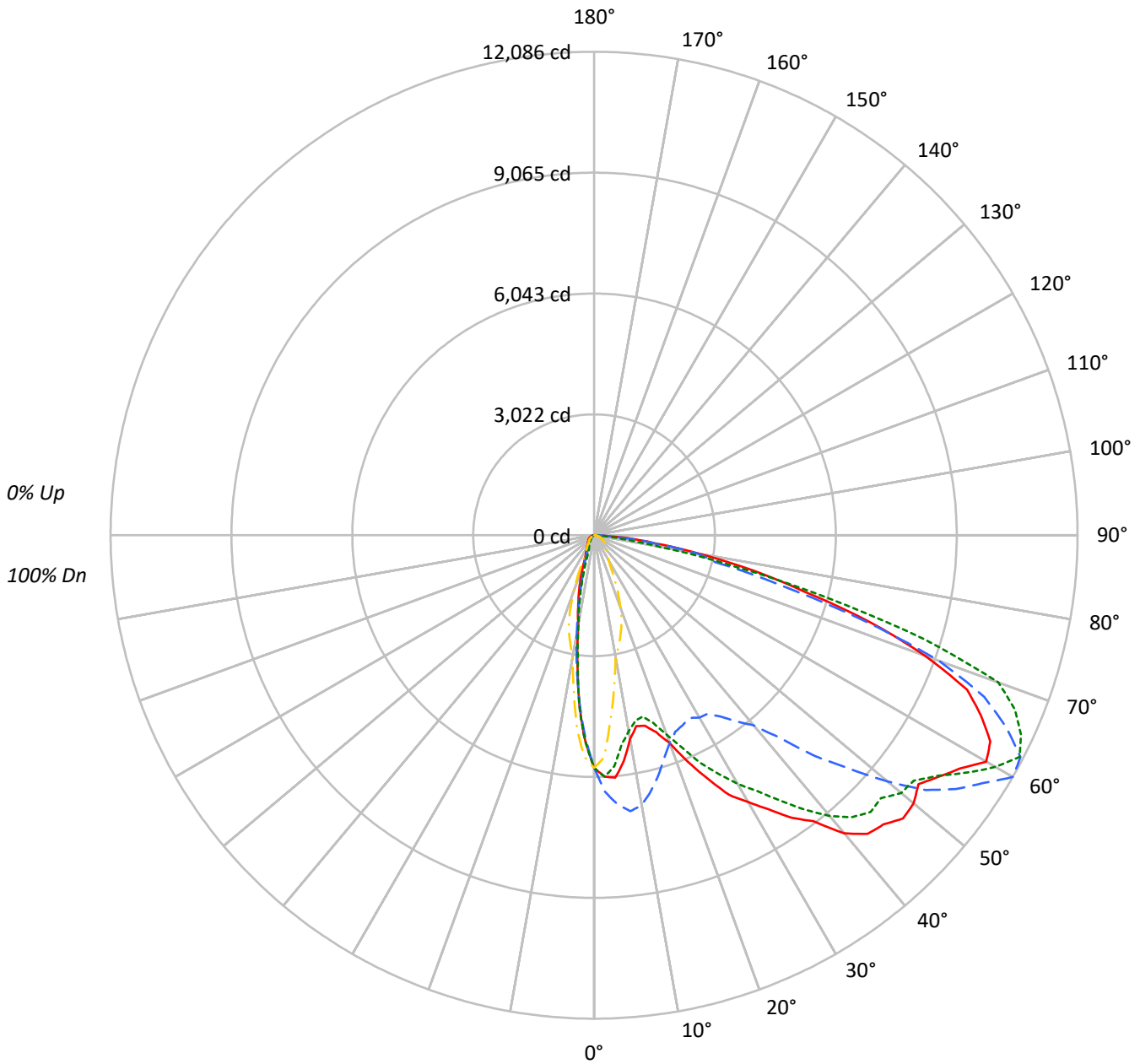
Lumens per Lamp: N/A
 Luminaire Lumens: 15457.8 lumens
 Efficiency: N/A
 Efficacy: 84.0 lumens/watt
 Spacing Criteria (0/90/45): 0.53 / 0.46 / 0.63
 Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
 CIE Type: Direct

Input Watts (W): 184.1
 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: P599436
CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

Luminous Intensity Polar Plot



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

TEST NUMBER: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

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	95	90	103	98	93	89	94	90	86	90	86	83	86	83	81	79	79	79	79
2	94	84	76	69	91	82	75	68	78	72	66	75	70	65	72	67	63	61	61	61	61
3	84	72	62	54	81	70	61	53	67	59	52	64	57	51	61	55	50	48	48	48	48
4	76	62	51	44	73	60	51	43	58	49	43	55	48	42	53	46	41	39	39	39	39
5	69	54	44	36	67	53	43	36	51	42	35	48	41	35	46	40	34	32	32	32	32
6	63	48	38	30	61	47	37	30	45	36	30	43	35	30	41	35	29	27	27	27	27
7	58	43	33	26	56	42	33	26	40	32	26	39	31	26	37	31	25	23	23	23	23
8	54	39	29	23	52	38	29	23	37	28	23	35	28	22	34	27	22	20	20	20	20
9	50	35	26	20	49	35	26	20	34	26	20	32	25	20	31	25	20	18	18	18	18
10	47	33	24	18	46	32	24	18	31	23	18	30	23	18	29	23	18	16	16	16	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	83413	83413	83413	83413
5°	87658	83435	60956	61312
10°	75376	72489	33326	32545
15°	73292	69674	21650	16314
20°	84479	80950	11600	5801
25°	106222	99359	7517	4510
30°	127581	118892	6089	3694
35°	151080	141751	4990	2964
40°	182281	171608	4408	2243
45°	207527	198479	4106	1508
50°	232810	223776	4055	922
55°	263276	262348	4029	413
60°	324887	332588	3674	118
65°	362507	399795	3365	0
70°	369640	451223	3118	0
75°	300769	332814	2978	0
80°	218690	139198	3075	0
85°	141385	58458	4084	0

TEST NUMBER: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.5	2.9
10°-20°	865.8	5.6
20°-30°	1198.2	7.8
30°-40°	1693.3	11.0
40°-50°	2305.5	14.9
50°-60°	3053.5	19.8
60°-70°	3545.3	22.9
70°-80°	2007.7	13.0
80°-90°	346.9	2.2
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°	2505.5	16.2
0°-40°	4198.9	27.2
0°-60°	9557.8	61.8
0°-90°	15457.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15457.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5812	5812	5812	5812	5812	
5°	6084	5791	4231	4256	6084	546
15°	4933	4689	1457	1098	4933	1447
25°	6708	6274	475	285	6708	3128
35°	8623	8091	285	169	8623	5436
45°	10225	9779	202	74	10225	7927
55°	10522	10485	161	16	10522	9533
65°	10675	11773	99	0	10675	10406
75°	5424	6002	54	0	5424	5920
85°	859	355	25	0	859	1032
90°	0	0	0	0	0	

TEST NUMBER: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0
2.5°	6039.1	6167.0	6171.2	6228.9	6286.7	6286.7	6423.0	6389.9	6270.2	6249.6	6162.9
5°	6084.5	6129.9	6162.9	6456.0	6703.6	6678.9	6753.2	6703.6	6472.5	6175.3	5973.0
7.5°	5692.3	5741.9	5873.9	6373.4	6707.8	6819.2	6959.6	6650.0	6406.4	5869.8	5481.8
10°	5172.2	5267.2	5510.7	6080.3	6493.1	6848.1	6848.1	6600.5	6129.9	5605.6	5130.9
12.5°	4883.3	5073.1	5205.2	5783.1	6319.8	6563.3	6555.0	6423.0	6117.5	5457.0	4920.4
15°	4932.8	4986.5	5267.2	5717.1	6072.1	6059.7	6208.3	6167.0	5952.4	5589.1	4998.8
17.5°	5159.8	5242.4	5485.9	5717.1	5886.3	5836.8	5832.7	6030.8	6043.2	5812.0	5291.9
20°	5531.3	5774.9	5890.5	5960.6	5754.2	5543.7	5519.0	5795.5	6010.2	6096.9	5642.8
22.5°	6125.7	6286.7	6522.0	6162.9	5626.3	5362.1	5312.6	5618.0	6051.4	6435.3	6096.9
25°	6707.8	6831.6	7058.6	6596.3	5770.8	5324.9	5238.3	5502.4	6208.3	6905.9	6645.9
27.5°	7322.8	7430.2	7454.9	6914.2	5849.2	5250.6	5147.4	5502.4	6340.4	7153.6	7302.2
30°	7698.5	7826.4	7851.2	7194.9	5977.1	5312.6	5263.0	5527.2	6431.2	7364.1	7772.8
32.5°	8119.5	8152.5	8131.9	7244.4	6117.5	5494.2	5287.8	5692.3	6534.4	7615.9	8202.1
35°	8623.1	8680.9	8470.4	7471.4	6431.2	5609.8	5535.5	5894.6	6711.9	7731.5	8722.2
37.5°	9007.0	9188.6	8713.9	7558.1	6493.1	5853.3	5865.7	6315.6	6835.7	7871.8	9295.9
40°	9729.4	9423.9	9126.7	7855.3	6728.4	6266.1	6200.0	6749.1	7252.7	7962.6	9671.6
42.5°	10125.6	9964.7	9287.7	7884.2	7091.7	6835.7	6852.3	7240.3	7471.4	8218.6	9774.8
45°	10224.7	10055.5	9506.5	7904.9	7450.8	7508.6	7793.4	7867.7	7793.4	8387.8	9968.8
47.5°	10476.5	10109.1	9481.7	8181.4	8032.8	8255.7	8619.0	8780.0	8231.0	8325.9	10059.6
50°	10427.0	10216.5	9428.0	8297.0	8742.8	9333.1	9576.6	9510.6	8718.0	8197.9	9960.5
52.5°	10220.6	9993.6	9593.2	8610.7	9407.4	10121.5	10460.0	10294.9	9151.5	8486.9	9894.5
55°	10521.9	10348.6	9807.8	9035.9	9906.9	10815.0	11054.4	10930.6	9684.0	8755.2	10270.1
57.5°	10848.0	10810.9	10389.8	9535.4	10497.2	11529.1	11529.1	11376.4	10146.3	9143.2	10827.4
60°	11318.6	11401.2	10819.1	9865.6	10699.4	11487.8	12086.4	11908.9	10612.7	9824.3	11458.9
62.5°	11165.9	11430.1	11372.3	10575.6	10930.6	11690.1	12016.2	12148.3	11190.6	10654.0	12301.0
65°	10674.7	10955.3	11368.1	11042.0	10757.2	11198.9	11364.0	11764.4	11479.6	11434.2	12647.8
67.5°	10088.5	10394.0	10649.9	11355.7	10406.3	10699.4	10554.9	10682.9	11165.9	12288.6	12845.9
70°	8808.9	9101.9	9506.5	10658.1	9477.6	9213.4	9176.2	9114.3	9865.6	11983.2	11946.0
72.5°	7244.4	7380.6	8049.3	8664.4	7013.2	6963.7	7021.5	6951.3	7822.3	10848.0	10233.0
75°	5424.0	5560.2	5940.0	6654.1	4775.9	4491.1	4821.3	5147.4	5973.0	8420.8	7351.7
77.5°	4078.3	4251.7	4491.1	4978.2	3504.6	3058.7	3104.2	3413.7	4317.7	6744.9	4119.6
80°	2646.0	2625.3	3087.6	3426.1	2637.7	2720.3	2604.7	2831.7	3128.9	3607.8	2105.2
82.5°	1527.3	1547.9	1742.0	1964.9	1836.9	2101.1	1514.9	2530.4	2233.2	1469.5	784.3
85°	858.6	895.7	1073.2	1362.2	1151.7	771.9	631.6	1254.9	1403.5	602.7	379.8
87.5°	86.7	74.3	144.5	516.0	313.7	128.0	189.9	301.3	338.5	227.0	111.5
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: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0
2.5°	6039.1	6039.1	5935.9	5762.5	5692.3	5568.5	5399.2	5452.9	5395.1	5184.6	5130.9
5°	5791.4	5593.3	5378.6	5114.4	4961.7	4648.0	4548.9	4371.4	4400.3	4222.8	4231.1
7.5°	5275.4	5118.5	4755.3	4408.6	4107.2	3834.8	3450.9	3306.4	3166.1	3095.9	3178.5
10°	4974.1	4681.0	4185.7	3731.6	3331.2	3087.6	2831.7	2633.6	2452.0	2315.7	2286.8
12.5°	4755.3	4495.2	3896.7	3343.6	3029.9	2831.7	2596.4	2324.0	2146.5	1911.2	1841.0
15°	4689.3	4371.4	3739.8	3190.8	2885.4	2559.3	2291.0	2022.7	1791.5	1543.8	1457.1
17.5°	4916.3	4548.9	3735.7	3067.0	2637.7	2286.8	1915.3	1614.0	1378.7	1151.7	1098.0
20°	5300.2	4738.8	3855.4	2992.7	2402.4	1931.8	1510.8	1209.5	945.3	796.7	759.5
22.5°	5737.7	5060.8	3867.8	2794.6	2167.1	1576.8	1102.1	796.7	648.1	577.9	557.3
25°	6274.4	5576.7	4016.4	2633.6	1890.6	1197.1	784.3	610.9	524.2	483.0	474.7
27.5°	6716.0	5935.9	4177.4	2464.3	1618.1	887.5	615.1	499.5	454.1	412.8	408.7
30°	7174.2	6348.7	4222.8	2361.1	1382.8	730.6	528.4	441.7	392.1	371.5	367.4
32.5°	7574.6	6798.6	4367.3	2191.9	1159.9	643.9	478.8	396.3	363.3	330.2	326.1
35°	8090.6	7058.6	4437.5	2101.1	1077.4	582.0	437.6	363.3	313.7	293.1	284.8
37.5°	8643.7	7310.4	4482.9	2030.9	1007.2	544.9	412.8	342.6	297.2	268.3	260.1
40°	9159.7	7665.4	4416.8	1944.2	953.5	499.5	396.3	317.8	276.6	247.7	235.3
42.5°	9556.0	8012.2	4396.2	1861.7	895.7	483.0	375.6	305.5	260.1	227.0	222.9
45°	9778.9	8247.5	4251.7	1795.6	850.3	491.2	367.4	289.0	247.7	218.8	202.3
47.5°	9725.2	8429.1	4288.8	1775.0	788.4	458.2	363.3	276.6	227.0	202.3	189.9
50°	10022.4	8796.5	4226.9	1708.9	743.0	412.8	396.3	276.6	222.9	194.0	181.6
52.5°	10072.0	9130.8	4359.0	1589.2	672.8	379.8	392.1	272.4	214.6	185.8	169.2
55°	10484.8	9518.9	4614.9	1523.2	615.1	330.2	359.1	264.2	194.0	169.2	161.0
57.5°	11046.2	10323.8	4780.1	1461.3	536.6	289.0	301.3	260.1	177.5	156.9	144.5
60°	11586.9	10645.8	4792.4	1349.8	462.3	260.1	235.3	260.1	165.1	140.3	128.0
62.5°	11991.4	10645.8	4709.9	1254.9	404.5	231.2	206.4	247.7	148.6	123.8	115.6
65°	11772.7	10360.9	4495.2	1176.4	367.4	202.3	177.5	189.9	132.1	107.3	99.1
67.5°	11380.5	9473.4	4020.5	1081.5	363.3	177.5	152.7	140.3	115.6	94.9	86.7
70°	10753.1	8276.4	3347.7	974.2	355.0	161.0	136.2	119.7	103.2	82.6	74.3
72.5°	8664.4	6835.7	2749.2	912.3	346.7	140.3	115.6	103.2	86.7	70.2	61.9
75°	6001.9	4367.3	2117.6	780.2	338.5	128.0	107.3	90.8	74.3	57.8	53.7
77.5°	3599.5	2918.4	1366.3	586.2	222.9	103.2	90.8	70.2	61.9	49.5	45.4
80°	1684.2	1378.7	553.1	227.0	107.3	74.3	61.9	53.7	49.5	41.3	37.2
82.5°	660.5	582.0	268.3	132.1	86.7	57.8	49.5	45.4	41.3	33.0	28.9
85°	355.0	313.7	128.0	90.8	61.9	41.3	41.3	37.2	33.0	28.9	24.8
87.5°	78.4	57.8	53.7	53.7	45.4	33.0	33.0	28.9	24.8	20.6	16.5
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: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0
2.5°	5102.0	5164.0	5064.9	5126.8	5040.1	5106.2	5114.4	5052.5	5069.0	5151.6	5188.7
5°	4346.6	4305.4	4214.5	4185.7	4189.8	4136.1	4156.8	4185.7	4231.1	4255.8	4330.1
7.5°	3133.0	3228.0	3223.9	3294.0	3298.2	3289.9	3232.1	3108.3	3149.6	3116.5	3157.8
10°	2241.4	2282.7	2361.1	2406.5	2489.1	2443.7	2311.6	2262.1	2237.3	2233.2	2274.5
12.5°	1791.5	1692.4	1684.2	1700.7	1742.0	1688.3	1622.2	1564.5	1593.4	1651.1	1696.6
15°	1387.0	1304.4	1197.1	1180.6	1188.8	1164.1	1093.9	1019.6	1040.2	1098.0	1131.0
17.5°	1065.0	970.0	895.7	846.2	829.7	743.0	639.8	577.9	561.4	557.3	586.2
20°	718.2	701.7	689.4	627.4	627.4	503.6	416.9	371.5	371.5	379.8	383.9
22.5°	536.6	516.0	520.1	507.7	474.7	375.6	330.2	317.8	317.8	326.1	326.1
25°	466.4	437.6	429.3	425.2	392.1	322.0	289.0	276.6	276.6	284.8	284.8
27.5°	396.3	388.0	375.6	359.1	330.2	276.6	255.9	243.5	247.7	251.8	247.7
30°	363.3	342.6	326.1	326.1	293.1	247.7	231.2	222.9	214.6	222.9	227.0
32.5°	322.0	309.6	301.3	289.0	251.8	218.8	202.3	194.0	189.9	189.9	194.0
35°	276.6	276.6	268.3	251.8	218.8	198.1	177.5	169.2	165.1	169.2	169.2
37.5°	247.7	235.3	239.4	222.9	194.0	173.4	152.7	144.5	144.5	140.3	144.5
40°	231.2	210.5	198.1	189.9	173.4	148.6	132.1	123.8	119.7	119.7	119.7
42.5°	206.4	189.9	165.1	161.0	156.9	128.0	107.3	103.2	99.1	94.9	94.9
45°	194.0	169.2	148.6	128.0	128.0	107.3	90.8	82.6	78.4	74.3	78.4
47.5°	177.5	152.7	128.0	107.3	103.2	86.7	70.2	61.9	57.8	57.8	57.8
50°	169.2	136.2	111.5	90.8	78.4	70.2	53.7	45.4	41.3	41.3	41.3
52.5°	156.9	128.0	99.1	78.4	61.9	53.7	41.3	33.0	28.9	28.9	28.9
55°	140.3	115.6	86.7	66.0	53.7	41.3	28.9	20.6	16.5	16.5	16.5
57.5°	132.1	103.2	74.3	57.8	41.3	28.9	16.5	12.4	12.4	8.3	12.4
60°	119.7	90.8	61.9	45.4	33.0	20.6	12.4	4.1	4.1	4.1	4.1
62.5°	103.2	78.4	53.7	37.2	24.8	12.4	4.1	0.0	0.0	0.0	0.0
65°	86.7	61.9	41.3	28.9	16.5	4.1	0.0	0.0	0.0	0.0	0.0
67.5°	74.3	53.7	33.0	20.6	12.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	66.0	45.4	24.8	16.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	53.7	37.2	20.6	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	45.4	28.9	12.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	37.2	20.6	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	28.9	16.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.8	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.4	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P599436
 CATALOG NUMBER: IFLD-S-SA3D-730-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0	5812.0
2.5°	5242.4	5217.6	5341.5	5543.7	5646.9	5849.2	5898.7	6026.7	5993.7	6039.1
5°	4338.4	4387.9	4569.5	4866.7	4974.1	5267.2	5543.7	5820.3	5997.8	6084.5
7.5°	3219.7	3384.8	3607.8	3880.2	4156.8	4540.6	5011.2	5333.2	5506.6	5692.3
10°	2398.3	2575.8	2831.7	3100.0	3550.0	3979.3	4449.8	4850.2	4998.8	5172.2
12.5°	1886.4	2163.0	2460.2	2749.2	3017.5	3426.1	4008.2	4590.2	4751.2	4883.3
15°	1312.7	1651.1	2076.3	2452.0	2827.6	3182.6	3785.2	4491.1	4709.9	4932.8
17.5°	726.5	994.8	1481.9	2010.3	2563.4	3108.3	3859.6	4672.7	5003.0	5159.8
20°	421.0	528.4	875.1	1502.5	2233.2	2947.3	3896.7	5015.4	5452.9	5531.3
22.5°	346.7	383.9	495.3	941.2	1828.6	2844.1	4086.6	5494.2	5940.0	6125.7
25°	297.2	326.1	383.9	565.5	1382.8	2625.3	4206.3	6092.7	6505.5	6707.8
27.5°	264.2	293.1	338.5	416.9	941.2	2324.0	4404.4	6633.5	7046.3	7322.8
30°	231.2	255.9	301.3	355.0	652.2	1985.5	4573.7	7029.7	7611.8	7698.5
32.5°	206.4	227.0	260.1	305.5	483.0	1506.7	4709.9	7438.4	7929.6	8119.5
35°	177.5	202.3	222.9	260.1	367.4	1135.2	4627.3	7756.3	8396.1	8623.1
37.5°	156.9	173.4	194.0	218.8	309.6	887.5	4458.1	8136.0	8796.5	9007.0
40°	132.1	144.5	169.2	194.0	280.7	685.2	4264.1	8594.2	9357.9	9729.4
42.5°	111.5	123.8	140.3	181.6	231.2	507.7	3871.9	8949.2	9811.9	10125.6
45°	86.7	103.2	128.0	181.6	185.8	375.6	3467.4	9213.4	10067.9	10224.7
47.5°	66.0	82.6	123.8	156.9	148.6	260.1	2988.6	9514.7	10332.0	10476.5
50°	49.5	66.0	140.3	136.2	123.8	198.1	2687.2	9725.2	10348.6	10427.0
52.5°	33.0	49.5	115.6	103.2	103.2	173.4	2604.7	9717.0	10389.8	10220.6
55°	24.8	37.2	66.0	74.3	90.8	152.7	2530.4	10026.6	10402.2	10521.9
57.5°	16.5	28.9	45.4	57.8	78.4	132.1	2377.6	10398.1	10786.1	10848.0
60°	8.3	20.6	33.0	45.4	66.0	115.6	2163.0	10670.5	11252.6	11318.6
62.5°	4.1	12.4	24.8	37.2	53.7	90.8	1940.1	10237.1	11050.3	11165.9
65°	0.0	8.3	16.5	24.8	33.0	66.0	1576.8	9242.3	10249.5	10674.7
67.5°	0.0	0.0	8.3	16.5	20.6	49.5	1188.8	8408.5	9510.6	10088.5
70°	0.0	0.0	4.1	4.1	12.4	37.2	759.5	6963.7	8491.0	8808.9
72.5°	0.0	0.0	0.0	0.0	4.1	24.8	441.7	5172.2	6654.1	7244.4
75°	0.0	0.0	0.0	0.0	0.0	20.6	222.9	3327.1	4631.5	5424.0
77.5°	0.0	0.0	0.0	0.0	0.0	16.5	119.7	2146.5	3413.7	4078.3
80°	0.0	0.0	0.0	0.0	0.0	4.1	70.2	1246.6	2183.6	2646.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	28.9	610.9	1304.4	1527.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	8.3	326.1	652.2	858.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	45.4	86.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)