

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P393813

Luminaire Tested: **I3-FL-50L840-1D-UNV-STD-W-4**

Issue Date: 3/30/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393813  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2001-656-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/30/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: I3-FL-50L840-1D-UNV-STD-W-4  
Description: CORELITE I3, FROSTED TOP COVER  
5000 LUMENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4703.2 lumens  
Efficiency: N/A  
Efficacy: 140.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.43 / 1.49  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 3.92' x H: 0.17')  
CIE Type: Semi-Indirect

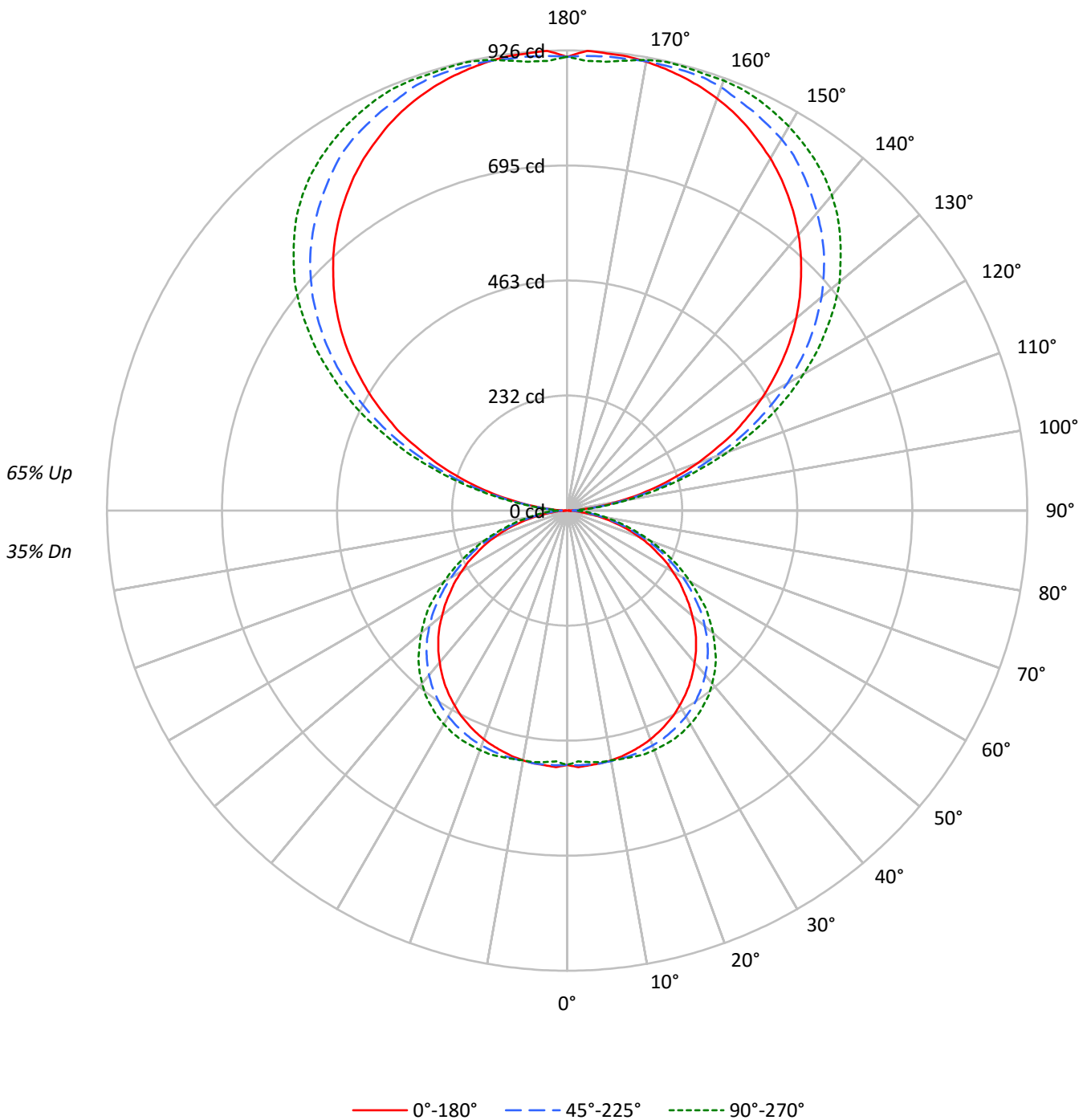
Input Watts (W): 33.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	0
RCR																		
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	94	90	86	83	85	81	78	75	66	63	61	51	49	48	37	36	36	29
2	86	78	72	67	77	71	66	61	57	53	50	44	42	40	33	31	30	24
3	78	69	61	55	70	62	56	51	50	46	42	39	36	33	29	27	25	20
4	71	60	53	47	64	55	48	43	44	39	35	35	31	28	25	23	21	17
5	65	54	46	40	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	37	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	18	19	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	14	13	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	15	16	13	11	9
10	44	32	25	20	40	30	23	19	24	19	16	19	16	13	14	12	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2813	2813	2813
5°	2827	2766	2723
10°	2828	2728	2691
15°	2822	2705	2680
20°	2822	2682	2676
25°	2815	2657	2666
30°	2804	2632	2642
35°	2791	2590	2603
40°	2763	2536	2546
45°	2735	2458	2467
50°	2672	2349	2347
55°	2595	2201	2207
60°	2508	2027	1993
65°	2385	1817	1770
70°	2214	1548	1496
75°	1928	1230	1190
80°	1504	875	871
85°	815	501	572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	1.0
10°-20°	143.5	3.1
20°-30°	226.3	4.8
30°-40°	284.4	6.0
40°-50°	305.8	6.5
50°-60°	281.3	6.0
60°-70°	215.5	4.6
70°-80°	122.7	2.6
80°-90°	38.3	0.8
90°-100°	51.2	1.1
100°-110°	222.9	4.7
110°-120°	408.1	8.7
120°-130°	526.0	11.2
130°-140°	559.7	11.9
140°-150°	514.9	10.9
150°-160°	407.9	8.7
160°-170°	258.3	5.5
170°-180°	87.5	1.9
0°-30°	418.6	8.9
0°-40°	703.0	14.9
0°-60°	1290.2	27.4
0°-90°	1666.7	35.4
90°-120°	682.2	14.5
90°-150°	2282.8	48.5
90°-180°	3036.0	64.6
0°-180°	4703.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	514	509	513	510	508	49
15°	502	499	509	513	513	142
25°	473	474	492	504	508	218
35°	428	434	458	473	478	268
45°	367	376	400	417	423	282
55°	287	299	317	334	340	257
65°	200	206	219	230	233	199
75°	105	108	115	122	126	111
85°	19	24	32	41	44	24
90°	1	4	12	17	19	3
95°	35	33	37	42	44	43
105°	188	198	213	226	230	201
115°	371	387	418	440	452	363
125°	530	553	595	625	637	473
135°	666	687	731	762	777	514
145°	775	791	827	852	866	485
155°	854	864	886	904	912	394
165°	903	903	916	922	923	255
175°	923	917	917	913	907	88
180°	913	913	913	913	913	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7
2.5°	516.9	515.6	514.3	511.7	511.7	510.5	510.5	510.5	510.5	511.7	513.0
5°	514.3	514.3	513.0	510.5	510.5	509.2	509.2	510.5	509.2	510.5	513.0
7.5°	513.0	513.0	511.7	509.2	509.2	509.2	509.2	509.2	509.2	510.5	513.0
10°	510.5	510.5	507.9	506.6	506.6	506.6	506.6	507.9	507.9	509.2	511.7
12.5°	506.6	505.3	504.0	502.8	502.8	502.8	504.0	505.3	505.3	507.9	510.5
15°	501.5	501.5	500.2	498.9	498.9	498.9	500.2	501.5	502.8	505.3	509.2
17.5°	496.3	496.3	495.1	495.1	495.1	495.1	496.3	497.6	500.2	502.8	506.6
20°	489.9	489.9	488.7	488.7	488.7	489.9	489.9	492.5	495.1	498.9	502.8
22.5°	482.2	482.2	482.2	481.0	482.2	483.5	484.8	487.4	489.9	493.8	498.9
25°	473.3	473.3	473.3	473.3	474.5	474.5	477.1	479.7	482.2	487.4	492.5
27.5°	464.3	464.3	464.3	463.0	465.6	466.8	468.1	472.0	474.5	481.0	486.1
30°	452.7	452.7	452.7	454.0	455.3	456.6	459.2	463.0	465.6	472.0	478.4
32.5°	441.2	441.2	441.2	441.2	445.0	446.3	447.6	451.5	456.6	463.0	469.4
35°	428.4	428.4	428.4	429.7	432.2	433.5	436.1	439.9	445.0	451.5	457.9
37.5°	414.3	415.5	415.5	416.8	419.4	422.0	424.5	428.4	433.5	439.9	446.3
40°	398.9	400.2	400.2	401.4	404.0	406.6	409.1	414.3	419.4	425.8	432.2
42.5°	383.5	384.8	384.8	387.3	389.9	392.5	395.0	400.2	405.3	411.7	416.8
45°	366.8	368.1	368.1	370.7	374.5	375.8	379.6	384.8	389.9	395.0	400.2
47.5°	348.9	350.1	350.1	352.7	356.5	359.1	361.7	366.8	370.7	377.1	382.2
50°	328.3	329.6	330.9	333.5	338.6	341.2	343.7	347.6	352.7	356.5	361.7
52.5°	309.1	309.1	310.4	312.9	316.8	319.4	320.6	324.5	330.9	336.0	341.2
55°	287.3	288.6	289.9	292.4	296.3	298.8	300.1	304.0	307.8	311.7	316.8
57.5°	268.1	268.1	269.3	271.9	275.7	277.0	278.3	280.9	286.0	289.9	293.7
60°	245.0	246.2	247.5	250.1	252.7	255.2	255.2	259.1	262.9	266.8	269.3
62.5°	224.4	224.4	225.7	228.3	229.6	232.1	232.1	236.0	238.6	242.4	245.0
65°	200.1	201.4	202.6	203.9	206.5	206.5	207.8	210.3	212.9	215.5	219.3
67.5°	178.3	178.3	179.6	180.8	182.1	182.1	183.4	186.0	188.5	191.1	193.7
70°	153.9	155.2	155.2	155.2	156.5	157.8	159.0	160.3	162.9	164.2	166.7
72.5°	129.5	129.5	130.8	130.8	132.1	133.4	134.7	136.0	137.2	139.8	141.1
75°	105.2	105.2	106.5	106.5	107.7	107.7	107.7	110.3	111.6	114.1	115.4
77.5°	80.8	82.1	82.1	82.1	83.4	84.6	84.6	85.9	88.5	89.8	91.1
80°	59.0	59.0	59.0	59.0	60.3	61.6	62.8	62.8	65.4	68.0	69.3
82.5°	37.2	37.2	38.5	39.8	39.8	41.0	42.3	43.6	46.2	47.5	48.7
85°	19.2	19.2	20.5	21.8	23.1	24.4	24.4	25.7	28.2	30.8	32.1
87.5°	6.4	7.7	7.7	9.0	10.3	11.5	12.8	14.1	16.7	19.2	20.5
90°	1.3	1.3	1.3	2.6	3.8	3.8	5.1	6.4	7.7	9.0	11.5
92.5°	11.5	11.5	10.3	11.5	11.5	11.5	11.5	12.8	14.1	14.1	16.7
95°	34.6	33.3	33.3	33.3	33.3	33.3	33.3	34.6	35.9	35.9	37.2
97.5°	66.7	66.7	65.4	65.4	66.7	66.7	66.7	68.0	70.5	69.3	71.8
100°	103.9	103.9	102.6	103.9	105.2	106.5	109.0	109.0	111.6	111.6	115.4
102.5°	146.2	146.2	144.9	147.5	148.8	151.3	151.3	153.9	157.8	157.8	162.9
105°	188.5	189.8	189.8	192.4	194.9	197.5	197.5	201.4	206.5	206.5	212.9
107.5°	234.7	236.0	236.0	238.6	241.1	243.7	245.0	250.1	255.2	256.5	264.2
110°	279.6	280.9	282.2	284.7	287.3	291.1	293.7	298.8	305.2	307.8	314.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	321.9	327.0	328.3	332.2	336.0	339.9	342.4	348.9	356.5	360.4	368.1
115°	370.7	373.2	374.5	378.4	383.5	387.3	389.9	396.3	404.0	409.1	418.1
117.5°	410.4	416.8	418.1	422.0	427.1	430.9	433.5	441.2	450.2	456.6	465.6
120°	452.7	457.9	463.0	465.6	469.4	474.5	477.1	484.8	495.1	501.5	511.7
122.5°	491.2	496.3	501.5	505.3	510.5	513.0	516.9	525.8	536.1	543.8	554.1
125°	529.7	536.1	540.0	543.8	550.2	552.8	556.6	565.6	575.9	584.8	595.1
127.5°	566.9	570.7	577.1	579.7	586.1	588.7	592.5	602.8	613.1	622.0	632.3
130°	601.5	606.6	611.8	613.1	620.8	624.6	628.4	637.4	649.0	657.9	668.2
132.5°	634.9	637.4	643.8	647.7	654.1	657.9	661.8	669.5	681.0	690.0	700.3
135°	665.6	668.2	675.9	679.8	683.6	687.4	692.6	700.3	711.8	720.8	731.1
137.5°	696.4	699.0	706.7	710.5	713.1	716.9	720.8	728.5	740.0	749.0	758.0
140°	724.6	727.2	732.3	737.5	740.0	742.6	746.4	754.1	764.4	773.4	782.4
142.5°	750.3	752.9	758.0	763.1	767.0	767.0	770.8	777.2	788.8	797.7	805.4
145°	774.7	775.9	781.1	786.2	791.3	791.3	792.6	799.0	809.3	819.5	827.2
147.5°	797.7	799.0	802.9	808.0	811.9	813.1	815.7	818.3	828.5	838.8	847.8
150°	818.3	819.5	822.1	827.2	829.8	832.4	834.9	836.2	843.9	852.9	863.2
152.5°	836.2	837.5	840.1	843.9	846.5	849.0	851.6	855.5	859.3	868.3	874.7
155°	854.2	855.5	856.7	860.6	863.2	864.4	865.7	870.9	874.7	879.8	886.2
157.5°	869.6	869.6	870.9	873.4	876.0	876.0	877.3	882.4	886.2	891.4	895.2
160°	882.4	882.4	883.7	886.2	886.2	887.5	888.8	892.7	895.2	901.6	906.8
162.5°	893.9	892.7	893.9	895.2	895.2	895.2	896.5	899.1	902.9	908.0	913.2
165°	902.9	902.9	902.9	904.2	904.2	902.9	902.9	905.5	908.0	911.9	915.7
167.5°	910.6	910.6	909.3	910.6	909.3	909.3	908.0	909.3	910.6	914.5	917.0
170°	917.0	915.7	915.7	915.7	914.5	913.2	913.2	913.2	913.2	915.7	918.3
172.5°	922.2	920.9	919.6	919.6	917.0	915.7	915.7	914.5	914.5	915.7	917.0
175°	923.4	922.2	920.9	920.9	918.3	917.0	915.7	915.7	914.5	915.7	917.0
177.5°	926.0	924.7	922.2	922.2	919.6	917.0	917.0	915.7	914.5	915.7	915.7
180°	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7	511.7
2.5°	514.3	514.3	513.0	511.7	511.7	510.5	509.2	507.9	506.6	505.3
5°	514.3	513.0	511.7	511.7	510.5	510.5	510.5	509.2	507.9	507.9
7.5°	514.3	514.3	513.0	511.7	511.7	511.7	511.7	511.7	510.5	510.5
10°	514.3	513.0	513.0	513.0	511.7	513.0	513.0	511.7	511.7	510.5
12.5°	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	511.7
15°	510.5	511.7	511.7	513.0	513.0	513.0	514.3	514.3	513.0	513.0
17.5°	509.2	510.5	511.7	513.0	513.0	513.0	514.3	514.3	514.3	514.3
20°	506.6	507.9	509.2	510.5	510.5	511.7	511.7	513.0	513.0	513.0
22.5°	501.5	502.8	505.3	506.6	507.9	509.2	510.5	510.5	510.5	510.5
25°	496.3	498.9	500.2	502.8	504.0	505.3	506.6	506.6	506.6	507.9
27.5°	489.9	492.5	496.3	497.6	498.9	500.2	501.5	502.8	502.8	502.8
30°	482.2	486.1	488.7	491.2	492.5	493.8	495.1	495.1	496.3	496.3
32.5°	473.3	477.1	479.7	482.2	483.5	484.8	487.4	487.4	488.7	488.7
35°	461.7	465.6	469.4	472.0	473.3	474.5	477.1	478.4	478.4	478.4
37.5°	450.2	454.0	457.9	461.7	463.0	464.3	466.8	466.8	468.1	468.1
40°	436.1	439.9	443.8	447.6	447.6	450.2	451.5	452.7	454.0	454.0
42.5°	422.0	425.8	428.4	432.2	433.5	434.8	436.1	438.6	438.6	439.9
45°	405.3	409.1	411.7	415.5	416.8	418.1	420.7	422.0	423.2	423.2
47.5°	387.3	389.9	392.5	396.3	398.9	400.2	401.4	402.7	404.0	402.7
50°	366.8	369.4	373.2	377.1	378.4	379.6	382.2	382.2	383.5	383.5
52.5°	345.0	348.9	351.4	355.3	356.5	357.8	360.4	360.4	361.7	361.7
55°	320.6	323.2	325.8	332.2	333.5	334.7	337.3	337.3	338.6	339.9
57.5°	297.6	298.8	302.7	305.2	307.8	307.8	309.1	310.4	311.7	311.7
60°	273.2	274.5	277.0	280.9	280.9	282.2	284.7	284.7	286.0	286.0
62.5°	247.5	250.1	252.7	256.5	255.2	256.5	259.1	259.1	260.4	260.4
65°	221.9	223.2	225.7	228.3	229.6	229.6	230.9	232.1	233.4	233.4
67.5°	194.9	197.5	198.8	202.6	201.4	202.6	203.9	203.9	205.2	205.2
70°	169.3	170.6	173.1	174.4	174.4	175.7	177.0	177.0	177.0	178.3
72.5°	143.6	144.9	146.2	147.5	147.5	148.8	150.1	150.1	151.3	151.3
75°	116.7	119.3	120.6	123.1	121.8	123.1	125.7	125.7	125.7	125.7
77.5°	93.6	94.9	97.5	98.8	98.8	98.8	101.3	100.0	101.3	101.3
80°	70.5	71.8	74.4	75.7	75.7	77.0	78.2	78.2	78.2	79.5
82.5°	50.0	52.6	55.1	56.4	56.4	57.7	59.0	59.0	60.3	60.3
85°	34.6	37.2	39.8	39.8	41.0	42.3	43.6	43.6	43.6	43.6
87.5°	23.1	24.4	25.7	26.9	28.2	28.2	29.5	29.5	30.8	30.8
90°	12.8	14.1	15.4	16.7	16.7	18.0	18.0	19.2	19.2	19.2
92.5°	18.0	18.0	19.2	20.5	20.5	20.5	20.5	21.8	21.8	21.8
95°	38.5	39.8	39.8	42.3	42.3	42.3	43.6	43.6	43.6	43.6
97.5°	74.4	74.4	74.4	77.0	77.0	77.0	78.2	78.2	78.2	79.5
100°	116.7	118.0	118.0	121.8	120.6	123.1	123.1	123.1	123.1	124.4
102.5°	164.2	166.7	168.0	171.9	171.9	171.9	174.4	173.1	174.4	174.4
105°	215.5	218.0	219.3	223.2	225.7	225.7	228.3	227.0	228.3	229.6
107.5°	266.8	270.6	273.2	277.0	279.6	280.9	280.9	282.2	283.4	284.7
110°	319.4	323.2	329.6	333.5	334.7	337.3	338.6	339.9	341.2	343.7





TEST NUMBER: P393813

CATALOG NUMBER: I3-FL-50L840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	374.5	378.4	383.5	388.6	387.3	391.2	393.7	395.0	396.3	395.0
115°	424.5	429.7	434.8	439.9	439.9	442.5	447.6	448.9	448.9	451.5
117.5°	472.0	478.4	483.5	488.7	489.9	492.5	496.3	500.2	500.2	502.8
120°	518.1	525.8	531.0	536.1	538.7	540.0	543.8	548.9	548.9	548.9
122.5°	561.8	568.2	574.6	579.7	582.3	584.8	587.4	593.8	593.8	596.4
125°	602.8	610.5	616.9	622.0	624.6	627.2	632.3	636.1	637.4	637.4
127.5°	641.3	649.0	655.4	661.8	663.1	665.6	670.8	675.9	677.2	678.5
130°	677.2	684.9	691.3	697.7	700.3	701.6	708.0	711.8	714.4	715.7
132.5°	709.2	716.9	723.4	729.8	732.3	734.9	738.7	745.2	746.4	746.4
135°	738.7	746.4	752.9	760.6	761.8	764.4	769.5	773.4	775.9	777.2
137.5°	765.7	773.4	781.1	787.5	790.0	791.3	796.5	801.6	804.2	805.4
140°	790.0	797.7	805.4	810.6	811.9	815.7	819.5	824.7	827.2	828.5
142.5°	813.1	819.5	826.0	832.4	833.7	836.2	840.1	845.2	847.8	849.0
145°	833.7	840.1	845.2	850.3	851.6	854.2	858.0	861.9	864.4	865.7
147.5°	852.9	858.0	863.2	867.0	868.3	870.9	873.4	876.0	878.5	879.8
150°	869.6	872.1	877.3	879.8	881.1	883.7	886.2	888.8	891.4	892.7
152.5°	882.4	886.2	888.8	892.7	893.9	895.2	897.8	900.3	902.9	902.9
155°	892.7	896.5	899.1	902.9	904.2	905.5	908.0	909.3	911.9	911.9
157.5°	900.3	904.2	906.8	909.3	910.6	911.9	913.2	915.7	918.3	918.3
160°	909.3	910.6	911.9	914.5	914.5	915.7	917.0	918.3	920.9	920.9
162.5°	917.0	918.3	915.7	917.0	915.7	917.0	918.3	919.6	920.9	920.9
165°	919.6	922.2	920.9	922.2	922.2	922.2	922.2	923.4	923.4	923.4
167.5°	919.6	922.2	920.9	920.9	922.2	922.2	923.4	924.7	924.7	924.7
170°	919.6	920.9	919.6	918.3	919.6	919.6	919.6	920.9	920.9	920.9
172.5°	918.3	919.6	917.0	915.7	915.7	915.7	914.5	914.5	913.2	913.2
175°	917.0	917.0	914.5	913.2	913.2	913.2	910.6	909.3	908.0	906.8
177.5°	915.7	915.7	911.9	910.6	910.6	909.3	909.3	906.8	906.8	905.5
180°	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2	913.2

(END OF REPORT)