

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: P395810

Luminaire Tested: **I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)**

Issue Date: 5/6/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395810  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2001-656-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)  
Description: CORELITE I3, DOWNLIGHT TRAY  
2000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1857.4 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.32  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 3.92' x H: 0.17')  
CIE Type: Semi-Direct

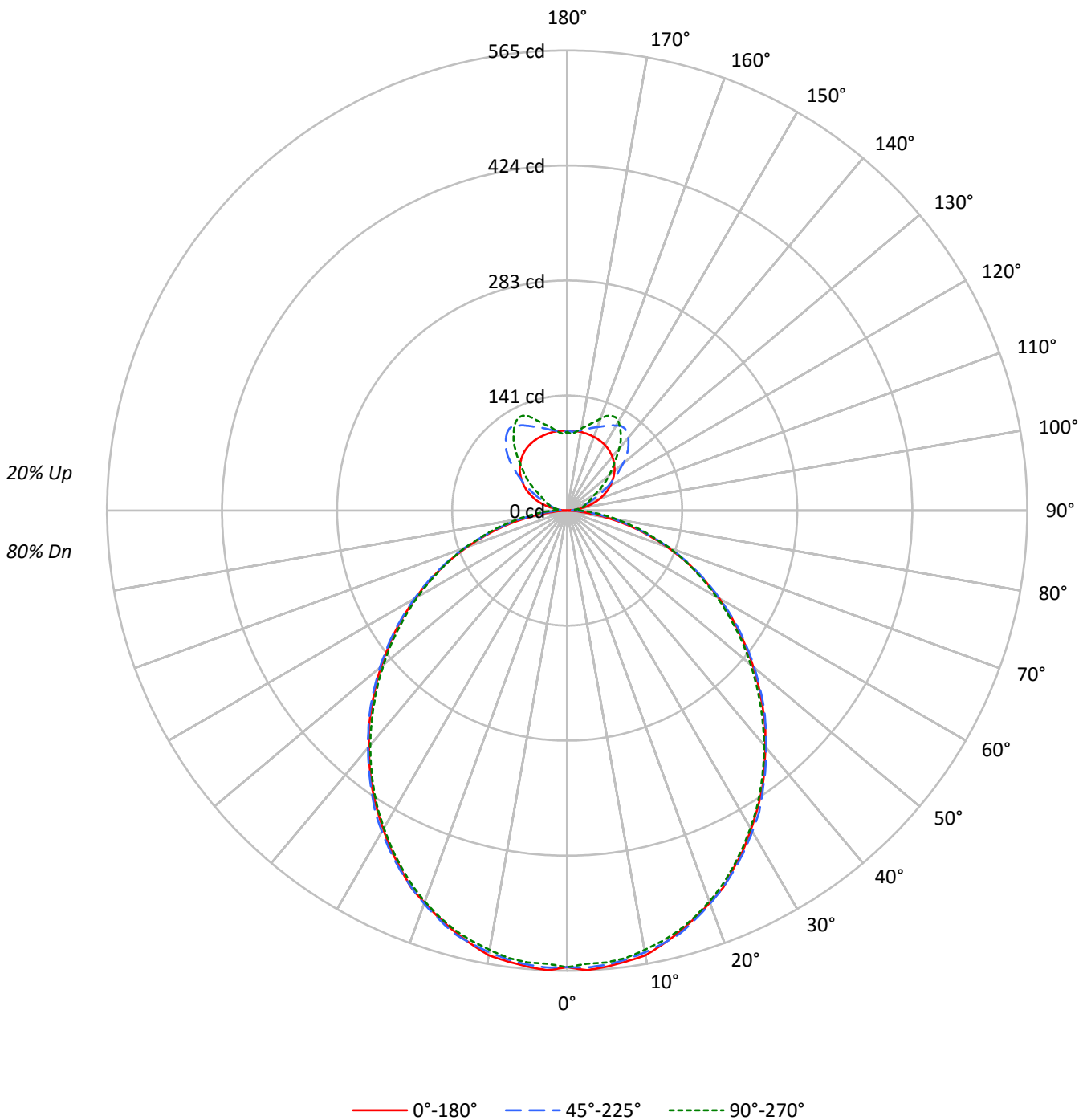
Input Watts (W): 17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80
1	104	100	96	92	99	95	92	88	87	85	82	80	78	76	73	72	70	67
2	95	87	80	75	90	83	78	73	77	72	68	70	67	63	65	62	59	56
3	87	77	69	62	82	73	66	61	68	62	57	62	57	53	57	53	50	47
4	79	68	59	53	75	65	57	52	60	54	49	55	50	46	51	47	43	40
5	73	61	52	46	69	58	50	44	54	47	42	50	44	40	46	41	38	35
6	67	55	46	40	64	53	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	31	41	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	33	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	49	37	30	25	34	28	24	32	27	23	30	25	22	20

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

	0°	45°	90°
0°	3081	3081	3081
5°	3090	3018	2986
10°	3072	2936	2888
15°	3010	2855	2785
20°	2951	2740	2665
25°	2880	2623	2532
30°	2797	2503	2396
35°	2720	2369	2256
40°	2622	2232	2109
45°	2528	2097	1955
50°	2428	1949	1800
55°	2323	1799	1641
60°	2204	1632	1477
65°	2069	1450	1302
70°	1876	1238	1118
75°	1616	981	898
80°	1234	707	670
85°	645	422	454



TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.0	2.9
10°-20°	150.2	8.1
20°-30°	222.5	12.0
30°-40°	260.0	14.0
40°-50°	261.2	14.1
50°-60°	229.5	12.4
60°-70°	172.0	9.3
70°-80°	97.8	5.3
80°-90°	30.9	1.7
90°-100°	11.1	0.6
100°-110°	27.1	1.5
110°-120°	45.1	2.4
120°-130°	63.2	3.4
130°-140°	72.9	3.9
140°-150°	69.6	3.7
150°-160°	52.3	2.8
160°-170°	29.6	1.6
170°-180°	9.4	0.5
0°-30°	425.7	22.9
0°-40°	685.7	36.9
0°-60°	1176.4	63.3
0°-90°	1477.1	79.5
90°-120°	83.3	4.5
90°-150°	289.0	15.6
90°-180°	380.0	20.5
0°-180°	1857.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	562	556	560	558	557	53
15°	535	530	537	534	533	151
25°	484	483	486	484	482	223
35°	417	414	419	416	415	261
45°	339	339	342	338	335	262
55°	257	258	259	256	253	230
65°	174	174	175	174	172	171
75°	88	90	92	95	95	93
85°	15	20	27	33	35	20
90°	0	3	8	13	15	1
95°	8	8	8	9	10	9
105°	32	27	20	21	22	33
115°	52	65	40	32	32	52
125°	69	95	72	57	53	62
135°	82	103	106	88	82	63
145°	90	102	123	118	115	56
155°	95	101	115	127	128	44
165°	97	99	104	109	110	28
175°	98	97	97	97	96	9
180°	97	97	97	97	97	



TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6
2.5°	564.9	564.0	561.6	559.2	558.7	558.3	558.3	557.8	557.8	558.7	561.6
5°	562.1	561.6	559.2	556.9	556.4	556.4	555.9	555.9	555.9	556.9	559.7
7.5°	558.3	557.3	555.0	552.6	552.1	552.1	552.1	551.6	552.1	552.6	555.9
10°	554.5	554.0	551.6	548.8	547.8	547.8	547.4	546.4	546.4	547.4	550.7
12.5°	545.0	544.5	542.1	540.2	540.2	540.7	540.7	541.2	541.2	542.1	544.5
15°	535.0	534.6	532.2	530.3	530.3	530.3	529.8	529.8	530.3	533.1	537.4
17.5°	524.1	523.6	521.8	519.9	519.9	519.9	519.4	519.4	519.9	521.3	525.5
20°	512.3	511.8	509.9	508.0	508.0	508.0	507.5	508.0	508.0	509.9	513.7
22.5°	500.9	499.9	497.6	495.7	494.7	494.7	494.7	494.2	495.2	496.6	500.4
25°	484.3	483.8	482.9	481.4	482.4	482.9	481.9	481.0	481.0	482.9	486.2
27.5°	469.1	468.2	466.7	465.3	464.4	464.8	465.3	466.3	467.7	468.2	471.0
30°	451.6	451.1	449.7	447.8	448.2	448.7	448.7	448.7	449.7	453.9	454.9
32.5°	434.5	434.0	432.6	430.7	431.2	431.6	431.2	431.6	432.6	434.5	438.7
35°	417.4	416.5	415.0	414.6	414.1	414.1	414.1	414.6	415.0	416.5	418.8
37.5°	398.0	397.0	396.1	394.6	395.6	396.5	397.0	396.5	397.0	398.9	399.9
40°	378.5	378.0	377.1	376.1	376.6	377.1	376.6	378.0	379.0	379.9	380.4
42.5°	360.0	359.1	358.1	357.6	357.6	358.1	358.1	359.1	359.1	361.4	361.0
45°	339.1	338.7	338.2	338.2	338.7	338.7	338.7	339.1	339.6	341.0	341.5
47.5°	318.7	318.3	318.3	318.3	318.3	318.7	319.2	320.6	319.7	320.2	320.6
50°	298.3	297.9	297.9	297.9	298.8	298.8	299.8	300.2	300.7	299.8	300.2
52.5°	277.5	277.0	278.0	278.0	278.9	278.9	280.3	278.9	279.8	279.4	279.4
55°	257.1	256.6	257.6	257.1	258.0	258.0	259.0	259.5	259.0	259.0	259.0
57.5°	236.2	235.7	236.2	236.7	237.2	237.2	238.6	238.6	237.2	238.1	237.6
60°	215.3	214.9	215.3	215.8	216.3	216.3	216.8	215.8	216.8	217.2	216.8
62.5°	194.5	194.0	194.9	194.5	194.9	195.4	195.4	196.8	196.4	196.4	195.9
65°	173.6	173.1	173.1	173.1	173.6	174.1	174.5	175.0	175.0	175.5	175.0
67.5°	152.3	151.8	152.3	151.8	152.3	152.7	153.7	154.2	154.2	154.6	154.2
70°	130.4	130.9	130.4	130.9	131.4	131.9	132.3	133.3	133.3	133.3	133.3
72.5°	109.1	108.6	108.6	108.1	109.1	109.6	110.0	111.5	111.5	111.9	111.9
75°	88.2	87.3	87.7	87.3	89.2	89.6	89.6	91.1	91.5	92.5	92.0
77.5°	67.8	67.8	66.9	68.3	68.8	69.7	70.7	71.6	72.1	73.5	73.5
80°	48.4	48.4	47.9	48.9	50.8	51.2	52.6	53.1	54.5	55.5	56.0
82.5°	30.8	30.8	30.8	32.3	33.7	34.2	35.6	37.0	37.9	39.4	39.8
85°	15.2	16.1	16.1	18.0	19.0	19.9	20.4	22.3	23.7	25.6	27.0
87.5°	4.7	5.2	5.7	6.6	8.5	9.0	10.0	11.9	13.3	15.2	16.6
90°	0.5	0.5	0.9	1.4	2.4	2.8	3.8	4.7	6.2	7.6	8.5
92.5°	3.3	3.3	3.8	3.8	3.8	3.8	3.8	4.3	4.7	5.7	6.2
95°	8.1	12.8	7.6	7.1	8.1	8.1	8.5	8.1	8.1	8.1	8.1
97.5°	13.3	23.7	15.7	10.9	10.4	10.9	10.9	11.9	12.3	12.8	12.8
100°	19.4	29.9	27.5	18.0	14.7	14.2	14.2	14.2	14.7	15.2	15.7
102.5°	25.6	34.2	39.4	28.0	20.9	19.0	18.0	17.5	17.1	17.5	17.5
105°	31.8	38.4	48.4	37.9	29.9	27.0	24.2	20.9	20.4	20.4	20.4
107.5°	37.5	42.7	55.0	49.3	38.9	36.0	32.7	27.5	24.2	23.7	23.2
110°	42.7	47.0	59.8	58.8	48.9	44.6	41.7	36.0	31.3	28.0	26.6



TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	47.4	51.2	63.1	66.9	59.8	54.5	50.3	44.6	39.4	35.1	31.8
115°	52.2	55.5	65.9	73.5	69.3	65.0	60.2	53.1	47.9	43.6	39.8
117.5°	56.9	59.8	68.8	78.3	77.3	74.5	70.7	62.1	56.0	51.7	47.4
120°	61.2	64.0	71.6	81.6	84.4	82.1	79.7	72.1	64.5	59.8	56.0
122.5°	65.0	67.4	74.5	84.4	89.6	89.2	86.8	81.6	74.0	68.3	63.6
125°	68.8	71.1	77.3	86.3	93.4	94.9	93.9	89.6	84.0	77.3	71.6
127.5°	72.6	74.5	80.2	88.2	96.3	99.1	99.6	96.8	92.5	86.8	80.6
130°	75.9	77.8	82.5	89.6	98.2	101.5	103.4	102.9	99.6	95.8	89.6
132.5°	78.7	80.2	84.9	91.1	99.1	102.9	105.8	108.1	105.8	102.9	98.7
135°	81.6	83.0	86.8	92.5	99.6	103.4	107.2	111.0	111.5	109.1	105.8
137.5°	84.0	84.9	88.7	93.4	99.6	103.4	107.2	112.4	115.3	114.3	111.5
140°	86.3	87.3	90.1	94.9	100.1	103.4	106.7	112.9	116.7	118.1	116.7
142.5°	88.2	89.2	91.5	95.8	100.1	102.9	106.2	111.9	117.2	120.0	121.0
145°	90.1	90.6	93.0	96.3	100.1	102.5	105.3	111.0	116.2	120.5	123.3
147.5°	91.5	92.0	93.4	96.8	100.1	102.0	104.4	109.1	114.3	119.1	123.3
150°	93.0	93.0	94.4	96.8	100.1	101.5	103.4	107.7	111.9	116.7	120.5
152.5°	93.9	93.9	95.3	97.2	99.6	101.0	102.9	106.2	110.0	114.3	118.1
155°	94.9	94.9	95.8	97.2	99.6	100.6	102.0	104.8	108.1	111.5	114.8
157.5°	95.8	95.8	96.3	97.7	99.1	100.1	101.5	103.9	106.2	109.1	111.9
160°	96.3	96.3	96.8	97.7	98.7	99.6	100.6	102.5	104.8	106.7	109.1
162.5°	96.8	96.8	97.2	97.7	98.7	99.1	99.6	101.5	102.9	104.8	106.7
165°	97.2	97.2	97.2	97.7	98.2	98.7	99.1	100.1	101.5	102.9	104.4
167.5°	97.7	97.7	97.7	97.7	98.2	98.2	98.7	99.1	100.1	101.0	102.0
170°	98.2	97.7	97.7	98.2	97.7	97.7	98.2	98.7	98.7	99.6	100.1
172.5°	98.2	98.2	97.7	97.7	97.7	97.7	97.7	97.7	97.7	98.2	98.7
175°	98.2	98.2	97.7	97.7	97.7	97.2	97.2	97.2	97.2	97.2	97.2
177.5°	98.2	98.2	97.7	97.7	97.2	97.2	97.2	97.2	97.2	97.2	97.2
180°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8



TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6
2.5°	564.4	562.1	561.1	560.6	560.2	559.7	558.7	557.8	556.9	556.9
5°	562.1	559.7	558.7	558.3	557.8	557.3	556.9	556.9	556.9	556.9
7.5°	558.3	555.9	555.0	554.5	554.5	554.0	554.0	554.0	553.5	554.0
10°	552.6	550.2	549.7	549.3	548.8	547.8	547.8	547.8	547.4	547.8
12.5°	545.5	543.1	542.6	542.1	541.7	541.2	541.2	540.7	540.7	541.2
15°	538.4	535.0	534.1	534.1	533.6	533.1	533.6	533.1	533.1	533.1
17.5°	527.9	526.5	525.1	524.1	523.6	523.2	523.2	522.7	522.7	522.7
20°	514.2	514.2	514.2	511.8	511.3	510.8	510.8	510.8	510.8	510.8
22.5°	500.9	498.5	500.4	499.0	498.0	497.1	497.6	497.6	497.6	497.6
25°	486.2	484.3	484.8	485.2	484.3	482.9	482.9	482.9	482.9	482.4
27.5°	470.5	469.1	468.6	469.1	470.1	469.1	467.7	466.3	466.7	466.7
30°	453.4	453.0	452.5	451.6	452.5	453.0	450.6	450.1	450.1	450.1
32.5°	436.4	435.9	434.5	433.5	434.0	435.0	434.0	433.1	433.1	433.1
35°	419.3	417.4	416.0	415.5	415.5	416.5	416.0	414.6	414.6	414.6
37.5°	399.4	399.9	397.5	397.0	397.0	397.0	398.0	395.6	396.1	395.6
40°	379.9	380.4	379.0	377.6	378.0	377.1	378.5	376.1	376.1	376.1
42.5°	360.5	359.5	360.0	357.2	357.6	357.6	358.1	356.7	356.2	355.7
45°	340.6	339.6	339.1	337.7	337.7	337.2	337.2	335.3	335.3	335.3
47.5°	319.7	319.2	318.3	317.3	317.3	316.8	315.9	315.4	314.9	314.9
50°	299.8	298.3	296.9	297.4	296.9	296.4	295.5	295.0	294.6	294.1
52.5°	278.4	278.4	276.5	276.5	276.5	276.1	275.1	274.2	274.2	273.7
55°	257.6	257.1	255.7	255.2	255.7	255.2	254.2	253.3	253.3	252.8
57.5°	236.7	235.7	235.3	235.3	234.8	234.8	233.4	232.4	232.9	232.4
60°	215.3	215.3	214.9	214.4	214.4	213.9	212.5	212.5	212.5	212.0
62.5°	194.9	194.9	194.0	193.5	194.0	193.5	193.0	192.6	192.1	191.6
65°	173.6	174.1	173.1	173.6	173.6	172.7	172.7	172.2	172.2	171.7
67.5°	153.7	153.7	153.2	153.2	153.7	153.2	153.2	152.7	152.7	152.3
70°	133.3	134.2	133.8	133.8	133.8	133.3	133.3	133.3	132.8	133.3
72.5°	112.9	112.9	112.9	112.9	112.9	113.4	113.4	113.4	113.4	112.9
75°	93.9	94.4	93.9	94.4	94.9	94.9	94.9	94.9	95.3	94.9
77.5°	75.4	75.9	75.9	76.8	76.8	76.8	77.3	77.3	77.3	77.3
80°	57.9	58.3	58.8	59.8	59.8	60.7	61.2	61.2	61.2	61.2
82.5°	41.7	43.2	43.6	45.1	45.5	45.5	46.5	47.0	47.0	47.0
85°	28.9	30.4	31.3	32.3	33.2	33.2	34.2	34.2	34.6	34.6
87.5°	18.0	19.4	20.4	21.8	22.3	22.8	23.2	23.7	24.2	24.2
90°	10.0	10.9	11.9	12.8	12.8	13.3	13.8	14.2	14.7	14.7
92.5°	7.1	7.6	8.5	9.0	9.0	9.5	10.0	10.0	10.4	10.4
95°	8.1	8.5	8.5	9.0	9.0	9.0	9.5	9.5	9.5	9.5
97.5°	12.3	12.3	12.3	11.9	11.9	11.9	11.9	11.9	11.9	11.9
100°	16.1	16.6	16.6	16.6	17.1	17.1	17.1	17.1	16.6	16.6
102.5°	18.0	18.5	19.0	19.4	19.4	19.4	19.9	19.9	19.9	19.9
105°	20.4	20.4	20.9	21.3	21.3	21.3	21.8	21.8	21.8	21.8
107.5°	23.2	23.2	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
110°	26.6	26.6	26.6	26.1	26.6	26.1	26.1	26.1	26.1	26.1





TEST NUMBER: P395810

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	30.4	29.9	29.9	29.4	29.4	29.4	28.9	28.9	28.9	28.9
115°	36.5	34.2	33.2	32.3	32.3	32.3	31.8	31.8	31.8	31.8
117.5°	44.1	40.8	38.9	37.0	36.5	36.0	35.1	35.1	34.6	34.6
120°	52.2	48.9	46.0	43.6	42.7	42.2	40.8	39.8	38.9	38.9
122.5°	59.8	56.4	53.6	51.2	50.3	49.3	47.9	47.0	46.0	46.0
125°	67.4	64.0	61.2	58.8	57.4	56.4	55.0	54.1	53.1	53.1
127.5°	75.4	71.1	68.3	65.9	64.5	64.0	62.1	61.2	60.2	60.2
130°	84.4	79.2	75.4	72.6	71.6	70.7	69.3	68.3	67.4	67.4
132.5°	93.4	88.2	84.0	80.2	78.7	77.8	75.9	74.9	74.0	74.0
135°	102.0	97.2	93.0	89.2	87.7	86.3	84.4	82.5	81.6	81.6
137.5°	108.6	105.3	101.5	98.2	96.8	95.3	93.4	91.5	90.1	90.6
140°	114.3	111.5	109.1	106.7	105.3	104.4	102.5	101.0	99.6	99.6
142.5°	119.5	117.2	114.8	112.9	112.4	111.9	110.5	109.1	108.1	108.1
145°	124.3	122.8	121.0	118.6	118.1	117.6	116.2	115.3	114.8	114.8
147.5°	125.7	126.2	125.7	124.3	123.8	123.3	122.4	121.4	121.0	121.0
150°	124.7	126.6	127.6	127.6	127.6	127.6	127.6	126.6	126.2	126.2
152.5°	121.9	124.7	126.6	128.1	128.5	129.0	129.0	129.5	129.0	129.0
155°	118.6	121.4	124.3	125.7	126.6	127.1	128.1	128.5	129.0	128.5
157.5°	114.8	117.2	119.1	121.9	122.8	123.8	124.7	125.7	126.2	125.7
160°	111.5	113.4	114.8	116.7	117.2	118.1	119.1	119.5	120.5	120.0
162.5°	108.1	109.6	111.0	111.9	112.9	113.4	114.3	114.8	115.3	114.8
165°	105.8	106.7	107.2	108.1	108.6	109.1	109.6	110.0	110.0	110.0
167.5°	102.9	103.9	104.4	104.8	105.3	105.8	105.8	106.2	106.2	106.2
170°	100.6	101.0	101.5	102.0	102.0	102.5	102.5	102.5	102.9	102.5
172.5°	98.7	98.7	98.7	99.1	99.1	99.1	99.1	99.1	99.1	98.7
175°	97.7	97.7	97.2	97.2	97.2	97.2	97.2	96.8	96.3	95.8
177.5°	97.2	96.8	96.8	96.3	96.3	96.3	95.8	95.3	94.9	94.4
180°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8

(END OF REPORT)