

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: P395814

Luminaire Tested: **I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)**

Issue Date: 5/6/2020

Test Information

Test Method: LM-79-08
Report Number: P395814
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 (5000K)
Description: CORELITE I3, DOWNLIGHT TRAY
2000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2085.2 lumens
Efficiency: N/A
Efficacy: 117.1 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

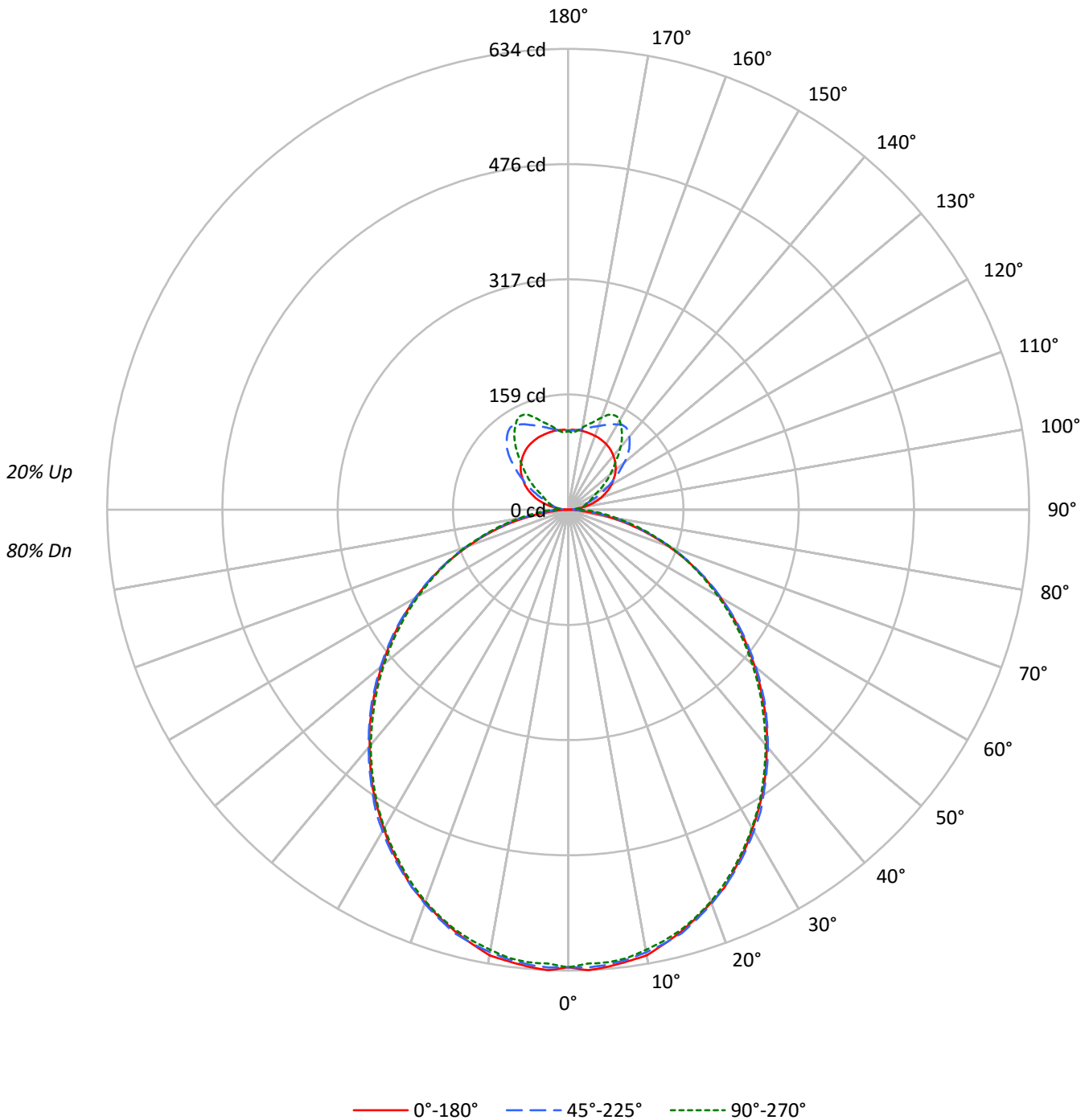
Input Watts (W): 17.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

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	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°	3459	3459	3459
5°	3469	3388	3351
10°	3448	3296	3242
15°	3379	3205	3126
20°	3313	3076	2992
25°	3233	2945	2842
30°	3140	2810	2689
35°	3053	2660	2532
40°	2944	2506	2368
45°	2838	2354	2195
50°	2726	2189	2020
55°	2607	2019	1842
60°	2475	1831	1659
65°	2323	1628	1462
70°	2106	1389	1255
75°	1814	1101	1008
80°	1385	793	752
85°	721	475	510



TEST NUMBER: P395814

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	2.9
10°-20°	168.7	8.1
20°-30°	249.7	12.0
30°-40°	291.9	14.0
40°-50°	293.2	14.1
50°-60°	257.7	12.4
60°-70°	193.1	9.3
70°-80°	109.8	5.3
80°-90°	34.7	1.7
90°-100°	12.5	0.6
100°-110°	30.4	1.5
110°-120°	50.6	2.4
120°-130°	71.0	3.4
130°-140°	81.8	3.9
140°-150°	78.1	3.7
150°-160°	58.8	2.8
160°-170°	33.2	1.6
170°-180°	10.5	0.5
0°-30°	477.9	22.9
0°-40°	769.8	36.9
0°-60°	1320.7	63.3
0°-90°	1658.2	79.5
90°-120°	93.5	4.5
90°-150°	324.4	15.6
90°-180°	427.0	20.5
0°-180°	2085.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	629	629	629	629	629	
5°	631	625	628	626	625	60
15°	601	595	603	599	598	169
25°	544	542	546	544	542	251
35°	469	465	470	466	465	293
45°	381	380	383	379	376	294
55°	289	290	291	287	284	258
65°	195	195	196	195	193	193
75°	99	101	103	106	106	105
85°	17	22	30	37	39	22
90°	0	3	10	14	16	1
95°	9	9	9	10	11	10
105°	36	30	23	24	24	37
115°	59	73	45	36	36	58
125°	77	106	80	64	60	69
135°	92	116	119	98	92	71
145°	101	115	138	133	129	63
155°	106	113	129	142	144	49
165°	109	111	117	122	124	31
175°	110	109	109	109	108	11
180°	109	109	109	109	109	



TEST NUMBER: P395814

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4
2.5°	634.2	633.1	630.5	627.8	627.3	626.7	626.7	626.2	626.2	627.3	630.5
5°	631.0	630.5	627.8	625.1	624.6	624.6	624.1	624.1	624.1	625.1	628.3
7.5°	626.7	625.7	623.0	620.3	619.8	619.8	619.8	619.3	619.8	620.3	624.1
10°	622.5	621.9	619.3	616.1	615.0	615.0	614.5	613.4	613.4	614.5	618.2
12.5°	611.8	611.3	608.6	606.5	606.5	607.0	607.0	607.6	607.6	608.6	611.3
15°	600.6	600.1	597.4	595.3	595.3	595.3	594.8	594.8	595.3	598.5	603.3
17.5°	588.4	587.9	585.7	583.6	583.6	583.6	583.1	583.1	583.6	585.2	590.0
20°	575.1	574.5	572.4	570.3	570.3	570.3	569.8	570.3	570.3	572.4	576.7
22.5°	562.3	561.2	558.6	556.4	555.4	555.4	555.4	554.8	555.9	557.5	561.8
25°	543.7	543.1	542.1	540.5	541.5	542.1	541.0	539.9	539.9	542.1	545.8
27.5°	526.6	525.6	524.0	522.4	521.3	521.8	522.4	523.4	525.0	525.6	528.8
30°	506.9	506.4	504.8	502.7	503.2	503.7	503.7	503.7	504.8	509.6	510.6
32.5°	487.8	487.2	485.6	483.5	484.0	484.6	484.0	484.6	485.6	487.8	492.5
35°	468.6	467.5	465.9	465.4	464.9	464.9	464.9	465.4	465.9	467.5	470.2
37.5°	446.8	445.7	444.6	443.0	444.1	445.2	445.7	445.2	445.7	447.8	448.9
40°	424.9	424.4	423.3	422.3	422.8	423.3	422.8	424.4	425.5	426.5	427.1
42.5°	404.2	403.1	402.0	401.5	401.5	402.0	402.0	403.1	403.1	405.8	405.2
45°	380.7	380.2	379.7	379.7	380.2	380.2	380.2	380.7	381.3	382.9	383.4
47.5°	357.8	357.3	357.3	357.3	357.3	357.8	358.4	360.0	358.9	359.4	360.0
50°	334.9	334.4	334.4	334.4	335.5	335.5	336.5	337.1	337.6	336.5	337.1
52.5°	311.5	311.0	312.0	312.0	313.1	313.1	314.7	313.1	314.2	313.6	313.6
55°	288.6	288.1	289.1	288.6	289.7	289.7	290.7	291.3	290.7	290.7	290.7
57.5°	265.2	264.6	265.2	265.7	266.2	266.2	267.8	267.8	266.2	267.3	266.8
60°	241.7	241.2	241.7	242.3	242.8	242.8	243.3	242.3	243.3	243.9	243.3
62.5°	218.3	217.8	218.8	218.3	218.8	219.4	219.4	221.0	220.4	220.4	219.9
65°	194.9	194.4	194.4	194.4	194.9	195.4	196.0	196.5	196.5	197.0	196.5
67.5°	170.9	170.4	170.9	170.4	170.9	171.5	172.5	173.1	173.1	173.6	173.1
70°	146.4	147.0	146.4	147.0	147.5	148.0	148.6	149.6	149.6	149.6	149.6
72.5°	122.5	121.9	121.9	121.4	122.5	123.0	123.5	125.1	125.1	125.7	125.7
75°	99.0	98.0	98.5	98.0	100.1	100.6	100.6	102.2	102.8	103.8	103.3
77.5°	76.1	76.1	75.1	76.7	77.2	78.3	79.3	80.4	80.9	82.5	82.5
80°	54.3	54.3	53.8	54.8	57.0	57.5	59.1	59.6	61.2	62.3	62.8
82.5°	34.6	34.6	34.6	36.2	37.8	38.3	39.9	41.5	42.6	44.2	44.7
85°	17.0	18.1	18.1	20.2	21.3	22.4	22.9	25.0	26.6	28.8	30.4
87.5°	5.3	5.9	6.4	7.5	9.6	10.1	11.2	13.3	14.9	17.0	18.6
90°	0.5	0.5	1.1	1.6	2.7	3.2	4.3	5.3	6.9	8.5	9.6
92.5°	3.7	3.7	4.3	4.3	4.3	4.3	4.3	4.8	5.3	6.4	6.9
95°	9.1	14.4	8.5	8.0	9.1	9.1	9.6	9.1	9.1	9.1	9.1
97.5°	14.9	26.6	17.6	12.2	11.7	12.2	12.2	13.3	13.8	14.4	14.4
100°	21.8	33.5	30.9	20.2	16.5	16.0	16.0	16.0	16.5	17.0	17.6
102.5°	28.8	38.3	44.2	31.4	23.4	21.3	20.2	19.7	19.2	19.7	19.7
105°	35.7	43.1	54.3	42.6	33.5	30.4	27.2	23.4	22.9	22.9	22.9
107.5°	42.1	47.9	61.8	55.4	43.7	40.5	36.7	30.9	27.2	26.6	26.1
110°	47.9	52.7	67.1	66.0	54.8	50.1	46.9	40.5	35.1	31.4	29.8



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CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	53.2	57.5	70.8	75.1	67.1	61.2	56.4	50.1	44.2	39.4	35.7
115°	58.6	62.3	74.0	82.5	77.7	72.9	67.6	59.6	53.8	49.0	44.7
117.5°	63.9	67.1	77.2	87.9	86.8	83.6	79.3	69.8	62.8	58.0	53.2
120°	68.7	71.9	80.4	91.6	94.8	92.1	89.5	80.9	72.4	67.1	62.8
122.5°	72.9	75.6	83.6	94.8	100.6	100.1	97.4	91.6	83.1	76.7	71.4
125°	77.2	79.9	86.8	96.9	104.9	106.5	105.4	100.6	94.2	86.8	80.4
127.5°	81.5	83.6	90.0	99.0	108.1	111.3	111.8	108.6	103.8	97.4	90.5
130°	85.2	87.3	92.7	100.6	110.2	114.0	116.1	115.5	111.8	107.6	100.6
132.5°	88.4	90.0	95.3	102.2	111.3	115.5	118.7	121.4	118.7	115.5	110.8
135°	91.6	93.2	97.4	103.8	111.8	116.1	120.3	124.6	125.1	122.5	118.7
137.5°	94.2	95.3	99.6	104.9	111.8	116.1	120.3	126.2	129.4	128.3	125.1
140°	96.9	98.0	101.2	106.5	112.4	116.1	119.8	126.7	131.0	132.6	131.0
142.5°	99.0	100.1	102.8	107.6	112.4	115.5	119.3	125.7	131.5	134.7	135.8
145°	101.2	101.7	104.4	108.1	112.4	115.0	118.2	124.6	130.5	135.3	138.4
147.5°	102.8	103.3	104.9	108.6	112.4	114.5	117.1	122.5	128.3	133.7	138.4
150°	104.4	104.4	106.0	108.6	112.4	114.0	116.1	120.9	125.7	131.0	135.3
152.5°	105.4	105.4	107.0	109.2	111.8	113.4	115.5	119.3	123.5	128.3	132.6
155°	106.5	106.5	107.6	109.2	111.8	112.9	114.5	117.7	121.4	125.1	128.9
157.5°	107.6	107.6	108.1	109.7	111.3	112.4	114.0	116.6	119.3	122.5	125.7
160°	108.1	108.1	108.6	109.7	110.8	111.8	112.9	115.0	117.7	119.8	122.5
162.5°	108.6	108.6	109.2	109.7	110.8	111.3	111.8	114.0	115.5	117.7	119.8
165°	109.2	109.2	109.2	109.7	110.2	110.8	111.3	112.4	114.0	115.5	117.1
167.5°	109.7	109.7	109.7	109.7	110.2	110.2	110.8	111.3	112.4	113.4	114.5
170°	110.2	109.7	109.7	110.2	109.7	109.7	110.2	110.8	110.8	111.8	112.4
172.5°	110.2	110.2	109.7	109.7	109.7	109.7	109.7	109.7	109.7	110.2	110.8
175°	110.2	110.2	109.7	109.7	109.7	109.2	109.2	109.2	109.2	109.2	109.2
177.5°	110.2	110.2	109.7	109.7	109.2	109.2	109.2	109.2	109.2	109.2	109.2
180°	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6



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CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4	629.4
2.5°	633.7	631.0	629.9	629.4	628.9	628.3	627.3	626.2	625.1	625.1
5°	631.0	628.3	627.3	626.7	626.2	625.7	625.1	625.1	625.1	625.1
7.5°	626.7	624.1	623.0	622.5	622.5	621.9	621.9	621.9	621.4	621.9
10°	620.3	617.7	617.1	616.6	616.1	615.0	615.0	615.0	614.5	615.0
12.5°	612.4	609.7	609.2	608.6	608.1	607.6	607.6	607.0	607.0	607.6
15°	604.4	600.6	599.6	599.6	599.0	598.5	599.0	598.5	598.5	598.5
17.5°	592.7	591.1	589.5	588.4	587.9	587.3	587.3	586.8	586.8	586.8
20°	577.2	577.2	577.2	574.5	574.0	573.5	573.5	573.5	573.5	573.5
22.5°	562.3	559.6	561.8	560.2	559.1	558.0	558.6	558.6	558.6	558.6
25°	545.8	543.7	544.2	544.7	543.7	542.1	542.1	542.1	542.1	541.5
27.5°	528.2	526.6	526.1	526.6	527.7	526.6	525.0	523.4	524.0	524.0
30°	509.1	508.5	508.0	506.9	508.0	508.5	505.9	505.3	505.3	505.3
32.5°	489.9	489.4	487.8	486.7	487.2	488.3	487.2	486.2	486.2	486.2
35°	470.7	468.6	467.0	466.5	466.5	467.5	467.0	465.4	465.4	465.4
37.5°	448.3	448.9	446.2	445.7	445.7	445.7	446.8	444.1	444.6	444.1
40°	426.5	427.1	425.5	423.9	424.4	423.3	424.9	422.3	422.3	422.3
42.5°	404.7	403.6	404.2	401.0	401.5	401.5	402.0	400.4	399.9	399.4
45°	382.3	381.3	380.7	379.1	379.1	378.6	378.6	376.5	376.5	376.5
47.5°	358.9	358.4	357.3	356.2	356.2	355.7	354.6	354.1	353.6	353.6
50°	336.5	334.9	333.3	333.9	333.3	332.8	331.7	331.2	330.7	330.1
52.5°	312.6	312.6	310.4	310.4	310.4	309.9	308.8	307.8	307.8	307.2
55°	289.1	288.6	287.0	286.5	287.0	286.5	285.4	284.3	284.3	283.8
57.5°	265.7	264.6	264.1	264.1	263.6	263.6	262.0	260.9	261.4	260.9
60°	241.7	241.7	241.2	240.7	240.7	240.1	238.6	238.6	238.6	238.0
62.5°	218.8	218.8	217.8	217.3	217.8	217.3	216.7	216.2	215.7	215.1
65°	194.9	195.4	194.4	194.9	194.9	193.8	193.8	193.3	193.3	192.8
67.5°	172.5	172.5	172.0	172.0	172.5	172.0	172.0	171.5	171.5	170.9
70°	149.6	150.7	150.2	150.2	150.2	149.6	149.6	149.6	149.1	149.6
72.5°	126.7	126.7	126.7	126.7	126.7	127.3	127.3	127.3	127.3	126.7
75°	105.4	106.0	105.4	106.0	106.5	106.5	106.5	106.5	107.0	106.5
77.5°	84.7	85.2	85.2	86.3	86.3	86.3	86.8	86.8	86.8	86.8
80°	65.0	65.5	66.0	67.1	67.1	68.2	68.7	68.7	68.7	68.7
82.5°	46.9	48.5	49.0	50.6	51.1	51.1	52.2	52.7	52.7	52.7
85°	32.5	34.1	35.1	36.2	37.3	37.3	38.3	38.3	38.9	38.9
87.5°	20.2	21.8	22.9	24.5	25.0	25.6	26.1	26.6	27.2	27.2
90°	11.2	12.2	13.3	14.4	14.4	14.9	15.4	16.0	16.5	16.5
92.5°	8.0	8.5	9.6	10.1	10.1	10.6	11.2	11.2	11.7	11.7
95°	9.1	9.6	9.6	10.1	10.1	10.1	10.6	10.6	10.6	10.6
97.5°	13.8	13.8	13.8	13.3	13.3	13.3	13.3	13.3	13.3	13.3
100°	18.1	18.6	18.6	18.6	19.2	19.2	19.2	19.2	18.6	18.6
102.5°	20.2	20.8	21.3	21.8	21.8	21.8	22.4	22.4	22.4	22.4
105°	22.9	22.9	23.4	24.0	24.0	24.0	24.5	24.5	24.5	24.5
107.5°	26.1	26.1	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
110°	29.8	29.8	29.8	29.3	29.8	29.3	29.3	29.3	29.3	29.3



TEST NUMBER: P395814

CATALOG NUMBER: I3-WL-20L83050-1D-UNV-W2A-W-4 (5000K)

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	34.1	33.5	33.5	33.0	33.0	33.0	32.5	32.5	32.5	32.5
115°	41.0	38.3	37.3	36.2	36.2	36.2	35.7	35.7	35.7	35.7
117.5°	49.5	45.8	43.7	41.5	41.0	40.5	39.4	39.4	38.9	38.9
120°	58.6	54.8	51.7	49.0	47.9	47.4	45.8	44.7	43.7	43.7
122.5°	67.1	63.4	60.2	57.5	56.4	55.4	53.8	52.7	51.7	51.7
125°	75.6	71.9	68.7	66.0	64.4	63.4	61.8	60.7	59.6	59.6
127.5°	84.7	79.9	76.7	74.0	72.4	71.9	69.8	68.7	67.6	67.6
130°	94.8	88.9	84.7	81.5	80.4	79.3	77.7	76.7	75.6	75.6
132.5°	104.9	99.0	94.2	90.0	88.4	87.3	85.2	84.1	83.1	83.1
135°	114.5	109.2	104.4	100.1	98.5	96.9	94.8	92.7	91.6	91.6
137.5°	121.9	118.2	114.0	110.2	108.6	107.0	104.9	102.8	101.2	101.7
140°	128.3	125.1	122.5	119.8	118.2	117.1	115.0	113.4	111.8	111.8
142.5°	134.2	131.5	128.9	126.7	126.2	125.7	124.1	122.5	121.4	121.4
145°	139.5	137.9	135.8	133.1	132.6	132.1	130.5	129.4	128.9	128.9
147.5°	141.1	141.6	141.1	139.5	139.0	138.4	137.4	136.3	135.8	135.8
150°	140.0	142.2	143.2	143.2	143.2	143.2	143.2	142.2	141.6	141.6
152.5°	136.8	140.0	142.2	143.8	144.3	144.8	144.8	145.4	144.8	144.8
155°	133.1	136.3	139.5	141.1	142.2	142.7	143.8	144.3	144.8	144.3
157.5°	128.9	131.5	133.7	136.8	137.9	139.0	140.0	141.1	141.6	141.1
160°	125.1	127.3	128.9	131.0	131.5	132.6	133.7	134.2	135.3	134.7
162.5°	121.4	123.0	124.6	125.7	126.7	127.3	128.3	128.9	129.4	128.9
165°	118.7	119.8	120.3	121.4	121.9	122.5	123.0	123.5	123.5	123.5
167.5°	115.5	116.6	117.1	117.7	118.2	118.7	118.7	119.3	119.3	119.3
170°	112.9	113.4	114.0	114.5	114.5	115.0	115.0	115.0	115.5	115.0
172.5°	110.8	110.8	110.8	111.3	111.3	111.3	111.3	111.3	111.3	110.8
175°	109.7	109.7	109.2	109.2	109.2	109.2	109.2	108.6	108.1	107.6
177.5°	109.2	108.6	108.6	108.1	108.1	108.1	107.6	107.0	106.5	106.0
180°	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6	108.6

(END OF REPORT)