

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: P395501

Luminaire Tested: **I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)**

Issue Date: 5/6/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395501  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2001-656-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)  
Description: CORELITE I3, FROSTED TOP COVER  
2000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2260.8 lumens  
Efficiency: N/A  
Efficacy: 133.0 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

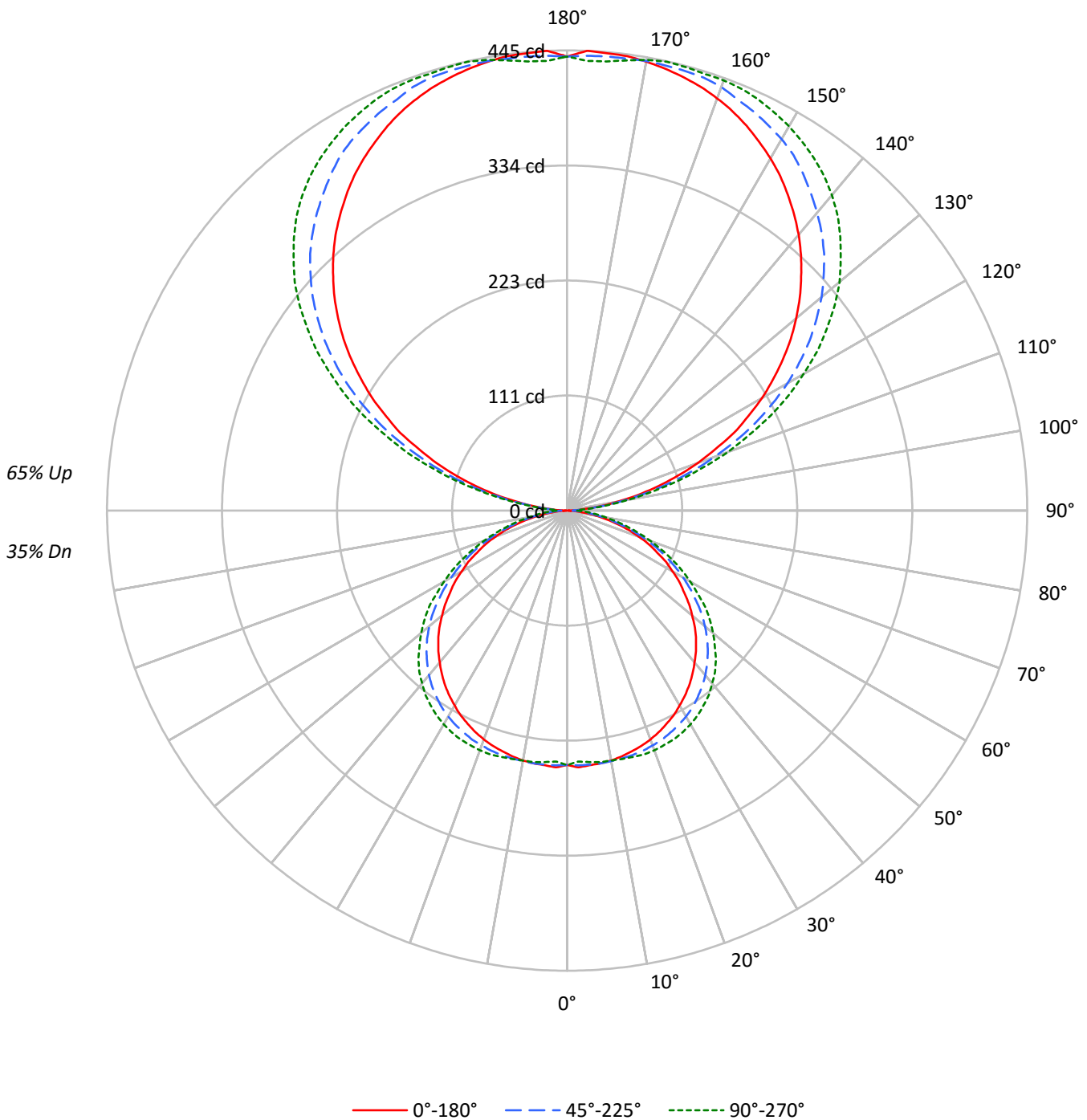
Input Watts (W): 17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P395501

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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°	1352	1352	1352
5°	1359	1330	1309
10°	1359	1312	1294
15°	1356	1300	1288
20°	1356	1289	1286
25°	1353	1277	1281
30°	1348	1266	1270
35°	1342	1245	1251
40°	1328	1219	1223
45°	1314	1182	1186
50°	1284	1129	1128
55°	1248	1058	1061
60°	1206	975	958
65°	1147	873	851
70°	1065	744	719
75°	927	592	572
80°	724	420	418
85°	390	241	275



TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.5	1.0
10°-20°	69.0	3.1
20°-30°	108.8	4.8
30°-40°	136.7	6.0
40°-50°	147.0	6.5
50°-60°	135.2	6.0
60°-70°	103.6	4.6
70°-80°	59.0	2.6
80°-90°	18.4	0.8
90°-100°	24.6	1.1
100°-110°	107.1	4.7
110°-120°	196.2	8.7
120°-130°	252.8	11.2
130°-140°	269.0	11.9
140°-150°	247.5	10.9
150°-160°	196.1	8.7
160°-170°	124.2	5.5
170°-180°	42.0	1.9
0°-30°	201.2	8.9
0°-40°	337.9	14.9
0°-60°	620.2	27.4
0°-90°	801.2	35.4
90°-120°	327.9	14.5
90°-150°	1097.3	48.5
90°-180°	1460.0	64.6
0°-180°	2260.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	246	246	246	246	246	
5°	247	245	247	245	244	24
15°	241	240	245	247	247	68
25°	228	228	237	242	244	105
35°	206	208	220	228	230	129
45°	176	181	192	200	204	136
55°	138	144	152	160	163	124
65°	96	99	105	110	112	95
75°	51	52	56	59	60	53
85°	9	12	15	20	21	12
90°	1	2	6	8	9	1
95°	17	16	18	20	21	21
105°	91	95	102	108	110	96
115°	178	186	201	212	217	175
125°	255	266	286	300	306	227
135°	320	330	351	366	374	247
145°	372	380	398	409	416	233
155°	411	416	426	435	438	189
165°	434	434	440	443	444	123
175°	444	441	441	439	436	42
180°	439	439	439	439	439	



TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0
2.5°	248.5	247.8	247.2	246.0	246.0	245.4	245.4	245.4	245.4	246.0	246.6
5°	247.2	247.2	246.6	245.4	245.4	244.8	244.8	245.4	244.8	245.4	246.6
7.5°	246.6	246.6	246.0	244.8	244.8	244.8	244.8	244.8	244.8	245.4	246.6
10°	245.4	245.4	244.1	243.5	243.5	243.5	243.5	244.1	244.1	244.8	246.0
12.5°	243.5	242.9	242.3	241.7	241.7	241.7	242.3	242.9	242.9	244.1	245.4
15°	241.1	241.1	240.4	239.8	239.8	239.8	240.4	241.1	241.7	242.9	244.8
17.5°	238.6	238.6	238.0	238.0	238.0	238.0	238.6	239.2	240.4	241.7	243.5
20°	235.5	235.5	234.9	234.9	234.9	235.5	235.5	236.7	238.0	239.8	241.7
22.5°	231.8	231.8	231.8	231.2	231.8	232.4	233.0	234.3	235.5	237.4	239.8
25°	227.5	227.5	227.5	227.5	228.1	228.1	229.3	230.6	231.8	234.3	236.7
27.5°	223.2	223.2	223.2	222.6	223.8	224.4	225.0	226.9	228.1	231.2	233.7
30°	217.6	217.6	217.6	218.2	218.9	219.5	220.7	222.6	223.8	226.9	230.0
32.5°	212.1	212.1	212.1	212.1	213.9	214.5	215.2	217.0	219.5	222.6	225.6
35°	205.9	205.9	205.9	206.5	207.8	208.4	209.6	211.5	213.9	217.0	220.1
37.5°	199.1	199.8	199.8	200.4	201.6	202.8	204.1	205.9	208.4	211.5	214.5
40°	191.7	192.4	192.4	193.0	194.2	195.4	196.7	199.1	201.6	204.7	207.8
42.5°	184.3	185.0	185.0	186.2	187.4	188.7	189.9	192.4	194.8	197.9	200.4
45°	176.3	176.9	176.9	178.2	180.0	180.6	182.5	185.0	187.4	189.9	192.4
47.5°	167.7	168.3	168.3	169.5	171.4	172.6	173.9	176.3	178.2	181.3	183.7
50°	157.8	158.4	159.1	160.3	162.8	164.0	165.2	167.1	169.5	171.4	173.9
52.5°	148.6	148.6	149.2	150.4	152.3	153.5	154.1	156.0	159.1	161.5	164.0
55°	138.1	138.7	139.3	140.6	142.4	143.6	144.3	146.1	148.0	149.8	152.3
57.5°	128.9	128.9	129.5	130.7	132.6	133.2	133.8	135.0	137.5	139.3	141.2
60°	117.8	118.4	119.0	120.2	121.5	122.7	122.7	124.5	126.4	128.2	129.5
62.5°	107.9	107.9	108.5	109.7	110.4	111.6	111.6	113.4	114.7	116.5	117.8
65°	96.2	96.8	97.4	98.0	99.3	99.3	99.9	101.1	102.3	103.6	105.4
67.5°	85.7	85.7	86.3	86.9	87.5	87.5	88.2	89.4	90.6	91.9	93.1
70°	74.0	74.6	74.6	74.6	75.2	75.8	76.4	77.1	78.3	78.9	80.1
72.5°	62.3	62.3	62.9	62.9	63.5	64.1	64.7	65.4	66.0	67.2	67.8
75°	50.6	50.6	51.2	51.2	51.8	51.8	51.8	53.0	53.6	54.9	55.5
77.5°	38.8	39.5	39.5	39.5	40.1	40.7	40.7	41.3	42.5	43.2	43.8
80°	28.4	28.4	28.4	28.4	29.0	29.6	30.2	30.2	31.4	32.7	33.3
82.5°	17.9	17.9	18.5	19.1	19.1	19.7	20.3	21.0	22.2	22.8	23.4
85°	9.2	9.2	9.9	10.5	11.1	11.7	11.7	12.3	13.6	14.8	15.4
87.5°	3.1	3.7	3.7	4.3	4.9	5.5	6.2	6.8	8.0	9.2	9.9
90°	0.6	0.6	0.6	1.2	1.8	1.8	2.5	3.1	3.7	4.3	5.5
92.5°	5.5	5.5	4.9	5.5	5.5	5.5	5.5	6.2	6.8	6.8	8.0
95°	16.6	16.0	16.0	16.0	16.0	16.0	16.0	16.6	17.3	17.3	17.9
97.5°	32.1	32.1	31.4	31.4	32.1	32.1	32.1	32.7	33.9	33.3	34.5
100°	49.9	49.9	49.3	49.9	50.6	51.2	52.4	52.4	53.6	53.6	55.5
102.5°	70.3	70.3	69.7	70.9	71.5	72.7	72.7	74.0	75.8	75.8	78.3
105°	90.6	91.2	91.2	92.5	93.7	94.9	94.9	96.8	99.3	99.3	102.3
107.5°	112.8	113.4	113.4	114.7	115.9	117.1	117.8	120.2	122.7	123.3	127.0
110°	134.4	135.0	135.6	136.9	138.1	140.0	141.2	143.6	146.7	148.0	151.0



TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	154.7	157.2	157.8	159.7	161.5	163.4	164.6	167.7	171.4	173.2	176.9
115°	178.2	179.4	180.0	181.9	184.3	186.2	187.4	190.5	194.2	196.7	201.0
117.5°	197.3	200.4	201.0	202.8	205.3	207.2	208.4	212.1	216.4	219.5	223.8
120°	217.6	220.1	222.6	223.8	225.6	228.1	229.3	233.0	238.0	241.1	246.0
122.5°	236.1	238.6	241.1	242.9	245.4	246.6	248.5	252.8	257.7	261.4	266.3
125°	254.6	257.7	259.6	261.4	264.5	265.7	267.6	271.9	276.8	281.1	286.1
127.5°	272.5	274.4	277.4	278.7	281.7	283.0	284.8	289.8	294.7	299.0	303.9
130°	289.1	291.6	294.1	294.7	298.4	300.2	302.1	306.4	312.0	316.3	321.2
132.5°	305.2	306.4	309.5	311.3	314.4	316.3	318.1	321.8	327.4	331.7	336.6
135°	320.0	321.2	324.9	326.8	328.6	330.5	332.9	336.6	342.2	346.5	351.4
137.5°	334.8	336.0	339.7	341.6	342.8	344.6	346.5	350.2	355.7	360.0	364.4
140°	348.3	349.6	352.0	354.5	355.7	357.0	358.8	362.5	367.4	371.8	376.1
142.5°	360.7	361.9	364.4	366.8	368.7	368.7	370.5	373.6	379.2	383.5	387.2
145°	372.4	373.0	375.5	377.9	380.4	380.4	381.0	384.1	389.0	394.0	397.7
147.5°	383.5	384.1	385.9	388.4	390.3	390.9	392.1	393.3	398.3	403.2	407.5
150°	393.3	394.0	395.2	397.7	398.9	400.1	401.4	402.0	405.7	410.0	414.9
152.5°	402.0	402.6	403.8	405.7	406.9	408.1	409.4	411.2	413.1	417.4	420.5
155°	410.6	411.2	411.8	413.7	414.9	415.5	416.2	418.6	420.5	422.9	426.0
157.5°	418.0	418.0	418.6	419.9	421.1	421.1	421.7	424.2	426.0	428.5	430.3
160°	424.2	424.2	424.8	426.0	426.0	426.6	427.2	429.1	430.3	433.4	435.9
162.5°	429.7	429.1	429.7	430.3	430.3	430.3	430.9	432.2	434.0	436.5	439.0
165°	434.0	434.0	434.0	434.6	434.6	434.0	434.0	435.3	436.5	438.3	440.2
167.5°	437.7	437.7	437.1	437.7	437.1	437.1	436.5	437.1	437.7	439.6	440.8
170°	440.8	440.2	440.2	440.2	439.6	439.0	439.0	439.0	439.0	440.2	441.4
172.5°	443.3	442.7	442.0	442.0	440.8	440.2	440.2	439.6	439.6	440.2	440.8
175°	443.9	443.3	442.7	442.7	441.4	440.8	440.2	440.2	439.6	440.2	440.8
177.5°	445.1	444.5	443.3	443.3	442.0	440.8	440.8	440.2	439.6	440.2	440.2
180°	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0



TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0	246.0
2.5°	247.2	247.2	246.6	246.0	246.0	245.4	244.8	244.1	243.5	242.9
5°	247.2	246.6	246.0	246.0	245.4	245.4	245.4	244.8	244.1	244.1
7.5°	247.2	247.2	246.6	246.0	246.0	246.0	246.0	246.0	245.4	245.4
10°	247.2	246.6	246.6	246.6	246.0	246.6	246.6	246.0	246.0	245.4
12.5°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.0
15°	245.4	246.0	246.0	246.6	246.6	246.6	247.2	247.2	246.6	246.6
17.5°	244.8	245.4	246.0	246.6	246.6	246.6	247.2	247.2	247.2	247.2
20°	243.5	244.1	244.8	245.4	245.4	246.0	246.0	246.6	246.6	246.6
22.5°	241.1	241.7	242.9	243.5	244.1	244.8	245.4	245.4	245.4	245.4
25°	238.6	239.8	240.4	241.7	242.3	242.9	243.5	243.5	243.5	244.1
27.5°	235.5	236.7	238.6	239.2	239.8	240.4	241.1	241.7	241.7	241.7
30°	231.8	233.7	234.9	236.1	236.7	237.4	238.0	238.0	238.6	238.6
32.5°	227.5	229.3	230.6	231.8	232.4	233.0	234.3	234.3	234.9	234.9
35°	221.9	223.8	225.6	226.9	227.5	228.1	229.3	230.0	230.0	230.0
37.5°	216.4	218.2	220.1	221.9	222.6	223.2	224.4	224.4	225.0	225.0
40°	209.6	211.5	213.3	215.2	215.2	216.4	217.0	217.6	218.2	218.2
42.5°	202.8	204.7	205.9	207.8	208.4	209.0	209.6	210.9	210.9	211.5
45°	194.8	196.7	197.9	199.8	200.4	201.0	202.2	202.8	203.5	203.5
47.5°	186.2	187.4	188.7	190.5	191.7	192.4	193.0	193.6	194.2	193.6
50°	176.3	177.6	179.4	181.3	181.9	182.5	183.7	183.7	184.3	184.3
52.5°	165.8	167.7	168.9	170.8	171.4	172.0	173.2	173.2	173.9	173.9
55°	154.1	155.4	156.6	159.7	160.3	160.9	162.1	162.1	162.8	163.4
57.5°	143.0	143.6	145.5	146.7	148.0	148.0	148.6	149.2	149.8	149.8
60°	131.3	131.9	133.2	135.0	135.0	135.6	136.9	136.9	137.5	137.5
62.5°	119.0	120.2	121.5	123.3	122.7	123.3	124.5	124.5	125.2	125.2
65°	106.7	107.3	108.5	109.7	110.4	110.4	111.0	111.6	112.2	112.2
67.5°	93.7	94.9	95.6	97.4	96.8	97.4	98.0	98.0	98.6	98.6
70°	81.4	82.0	83.2	83.8	83.8	84.5	85.1	85.1	85.1	85.7
72.5°	69.1	69.7	70.3	70.9	70.9	71.5	72.1	72.1	72.7	72.7
75°	56.1	57.3	58.0	59.2	58.6	59.2	60.4	60.4	60.4	60.4
77.5°	45.0	45.6	46.9	47.5	47.5	47.5	48.7	48.1	48.7	48.7
80°	33.9	34.5	35.8	36.4	36.4	37.0	37.6	37.6	37.6	38.2
82.5°	24.0	25.3	26.5	27.1	27.1	27.7	28.4	28.4	29.0	29.0
85°	16.6	17.9	19.1	19.1	19.7	20.3	21.0	21.0	21.0	21.0
87.5°	11.1	11.7	12.3	12.9	13.6	13.6	14.2	14.2	14.8	14.8
90°	6.2	6.8	7.4	8.0	8.0	8.6	8.6	9.2	9.2	9.2
92.5°	8.6	8.6	9.2	9.9	9.9	9.9	9.9	10.5	10.5	10.5
95°	18.5	19.1	19.1	20.3	20.3	20.3	21.0	21.0	21.0	21.0
97.5°	35.8	35.8	35.8	37.0	37.0	37.0	37.6	37.6	37.6	38.2
100°	56.1	56.7	56.7	58.6	58.0	59.2	59.2	59.2	59.2	59.8
102.5°	78.9	80.1	80.8	82.6	82.6	82.6	83.8	83.2	83.8	83.8
105°	103.6	104.8	105.4	107.3	108.5	108.5	109.7	109.1	109.7	110.4
107.5°	128.2	130.1	131.3	133.2	134.4	135.0	135.0	135.6	136.3	136.9
110°	153.5	155.4	158.4	160.3	160.9	162.1	162.8	163.4	164.0	165.2





TEST NUMBER: P395501

CATALOG NUMBER: I3-FL-20L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	180.0	181.9	184.3	186.8	186.2	188.0	189.3	189.9	190.5	189.9
115°	204.1	206.5	209.0	211.5	211.5	212.7	215.2	215.8	215.8	217.0
117.5°	226.9	230.0	232.4	234.9	235.5	236.7	238.6	240.4	240.4	241.7
120°	249.1	252.8	255.2	257.7	258.9	259.6	261.4	263.9	263.9	263.9
122.5°	270.0	273.1	276.2	278.7	279.9	281.1	282.4	285.4	285.4	286.7
125°	289.8	293.5	296.5	299.0	300.2	301.5	303.9	305.8	306.4	306.4
127.5°	308.3	312.0	315.0	318.1	318.7	320.0	322.4	324.9	325.5	326.1
130°	325.5	329.2	332.3	335.4	336.6	337.2	340.3	342.2	343.4	344.0
132.5°	340.9	344.6	347.7	350.8	352.0	353.3	355.1	358.2	358.8	358.8
135°	355.1	358.8	361.9	365.6	366.2	367.4	369.9	371.8	373.0	373.6
137.5°	368.1	371.8	375.5	378.5	379.8	380.4	382.9	385.3	386.6	387.2
140°	379.8	383.5	387.2	389.6	390.3	392.1	394.0	396.4	397.7	398.3
142.5°	390.9	394.0	397.0	400.1	400.7	402.0	403.8	406.3	407.5	408.1
145°	400.7	403.8	406.3	408.8	409.4	410.6	412.5	414.3	415.5	416.2
147.5°	410.0	412.5	414.9	416.8	417.4	418.6	419.9	421.1	422.3	422.9
150°	418.0	419.2	421.7	422.9	423.5	424.8	426.0	427.2	428.5	429.1
152.5°	424.2	426.0	427.2	429.1	429.7	430.3	431.6	432.8	434.0	434.0
155°	429.1	430.9	432.2	434.0	434.6	435.3	436.5	437.1	438.3	438.3
157.5°	432.8	434.6	435.9	437.1	437.7	438.3	439.0	440.2	441.4	441.4
160°	437.1	437.7	438.3	439.6	439.6	440.2	440.8	441.4	442.7	442.7
162.5°	440.8	441.4	440.2	440.8	440.2	440.8	441.4	442.0	442.7	442.7
165°	442.0	443.3	442.7	443.3	443.3	443.3	443.3	443.9	443.9	443.9
167.5°	442.0	443.3	442.7	442.7	443.3	443.3	443.9	444.5	444.5	444.5
170°	442.0	442.7	442.0	441.4	442.0	442.0	442.0	442.7	442.7	442.7
172.5°	441.4	442.0	440.8	440.2	440.2	440.2	439.6	439.6	439.0	439.0
175°	440.8	440.8	439.6	439.0	439.0	439.0	437.7	437.1	436.5	435.9
177.5°	440.2	440.2	438.3	437.7	437.7	437.1	437.1	435.9	435.9	435.3
180°	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0	439.0

(END OF REPORT)