

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: P395891

Luminaire Tested: **I3-WL-50L83050-1D-UNV-W2A-W-4 (4500K)**

Issue Date: 5/6/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P395891  
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-50L83050-1D-UNV-W2A-W-4 (4500K)  
Description: CORELITE I3, DOWNLIGHT TRAY  
5000 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: 5111.5 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

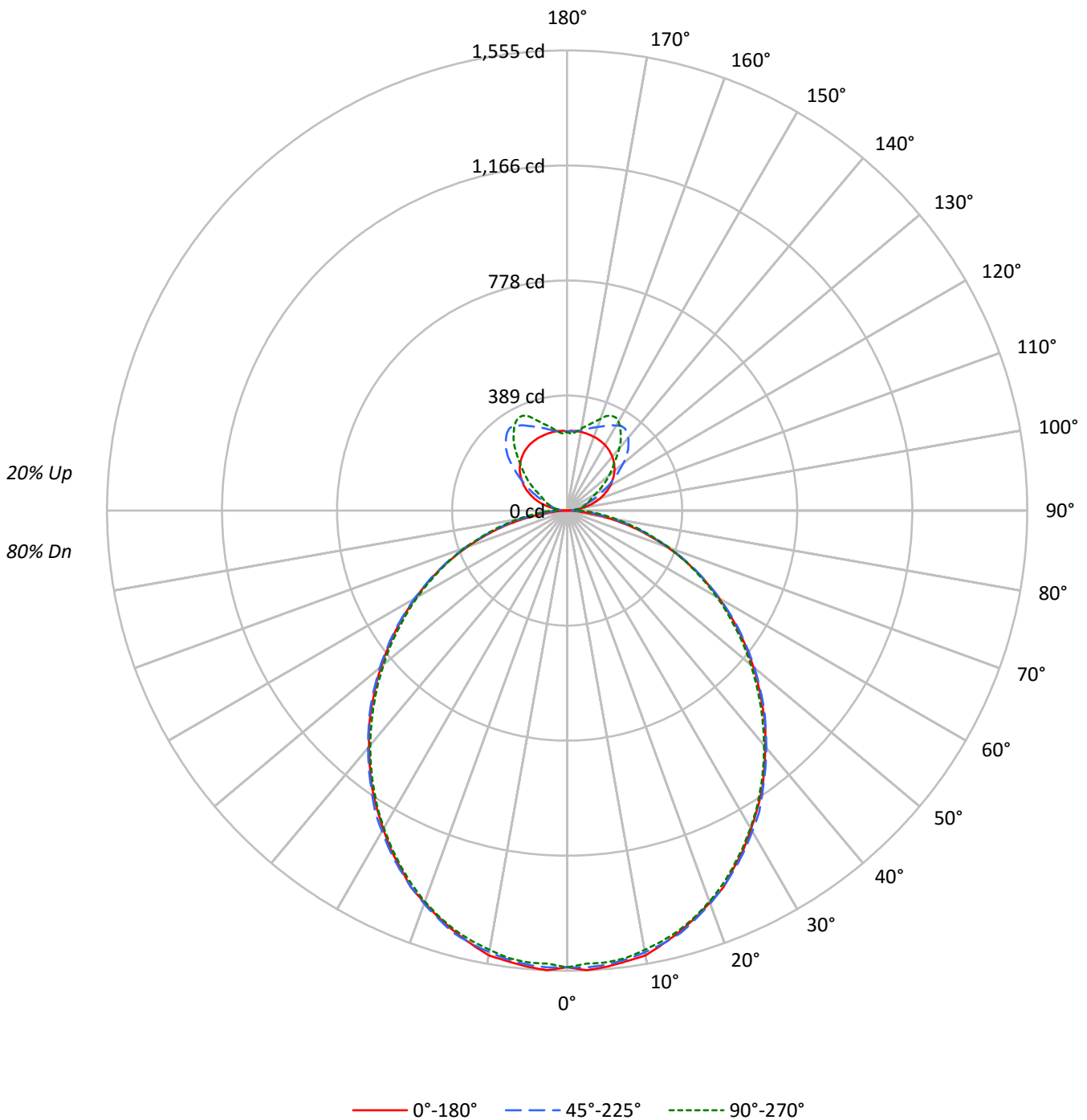
Input Watts (W): 53.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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°	8480	8480	8480
5°	8503	8305	8215
10°	8453	8080	7947
15°	8284	7856	7664
20°	8120	7540	7333
25°	7925	7220	6968
30°	7698	6888	6593
35°	7485	6520	6206
40°	7216	6142	5804
45°	6959	5771	5380
50°	6682	5366	4953
55°	6391	4950	4517
60°	6067	4490	4067
65°	5693	3990	3584
70°	5165	3407	3077
75°	4450	2699	2471
80°	3394	1944	1844
85°	1774	1162	1249



TEST NUMBER: P395891

CATALOG NUMBER: I3-WL-50L83050-1D-UNV-W2A-W-4 (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	2.9
10°-20°	413.5	8.1
20°-30°	612.2	12.0
30°-40°	715.5	14.0
40°-50°	718.7	14.1
50°-60°	631.7	12.4
60°-70°	473.3	9.3
70°-80°	269.2	5.3
80°-90°	85.0	1.7
90°-100°	30.6	0.6
100°-110°	74.6	1.5
110°-120°	124.0	2.4
120°-130°	174.0	3.4
130°-140°	200.5	3.9
140°-150°	191.5	3.7
150°-160°	144.0	2.8
160°-170°	81.5	1.6
170°-180°	25.8	0.5
0°-30°	1171.5	22.9
0°-40°	1887.0	36.9
0°-60°	3237.4	63.3
0°-90°	4064.9	79.5
90°-120°	229.3	4.5
90°-150°	795.3	15.6
90°-180°	1047.0	20.5
0°-180°	5111.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1547	1531	1540	1535	1532	147
15°	1472	1459	1479	1468	1467	415
25°	1333	1329	1338	1333	1328	614
35°	1149	1140	1153	1144	1141	717
45°	933	932	940	929	923	720
55°	708	710	713	704	696	632
65°	478	479	482	478	472	472
75°	243	247	253	261	261	257
85°	42	55	74	91	95	54
90°	1	8	24	35	40	3
95°	22	22	22	25	26	24
105°	88	74	56	59	60	91
115°	144	179	110	89	88	142
125°	189	261	197	158	146	169
135°	224	285	291	242	224	173
145°	248	282	339	325	316	155
155°	261	277	316	348	354	121
165°	268	272	287	299	303	76
175°	270	268	268	268	264	26
180°	266	266	266	266	266	



TEST NUMBER: P395891

CATALOG NUMBER: I3-WL-50L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9
2.5°	1554.6	1552.0	1545.5	1539.0	1537.7	1536.4	1536.4	1535.1	1535.1	1537.7	1545.5
5°	1546.8	1545.5	1539.0	1532.4	1531.1	1531.1	1529.8	1529.8	1529.8	1532.4	1540.3
7.5°	1536.4	1533.7	1527.2	1520.7	1519.4	1519.4	1519.4	1518.1	1519.4	1520.7	1529.8
10°	1525.9	1524.6	1518.1	1510.3	1507.6	1507.6	1506.3	1503.7	1503.7	1506.3	1515.5
12.5°	1499.8	1498.5	1492.0	1486.8	1486.8	1488.1	1488.1	1489.4	1489.4	1492.0	1498.5
15°	1472.4	1471.1	1464.6	1459.3	1459.3	1459.3	1458.0	1458.0	1459.3	1467.2	1478.9
17.5°	1442.4	1441.1	1435.8	1430.6	1430.6	1430.6	1429.3	1429.3	1430.6	1434.5	1446.3
20°	1409.7	1408.4	1403.2	1398.0	1398.0	1398.0	1396.7	1398.0	1398.0	1403.2	1413.7
22.5°	1378.4	1375.8	1369.3	1364.1	1361.4	1361.4	1361.4	1360.1	1362.8	1366.7	1377.1
25°	1332.7	1331.4	1328.8	1324.9	1327.5	1328.8	1326.2	1323.6	1323.6	1328.8	1338.0
27.5°	1291.0	1288.3	1284.4	1280.5	1277.9	1279.2	1280.5	1283.1	1287.0	1288.3	1296.2
30°	1242.7	1241.4	1237.4	1232.2	1233.5	1234.8	1234.8	1234.8	1237.4	1249.2	1251.8
32.5°	1195.7	1194.4	1190.4	1185.2	1186.5	1187.8	1186.5	1187.8	1190.4	1195.7	1207.4
35°	1148.7	1146.1	1142.2	1140.8	1139.5	1139.5	1139.5	1140.8	1142.2	1146.1	1152.6
37.5°	1095.2	1092.6	1089.9	1086.0	1088.6	1091.2	1092.6	1091.2	1092.6	1097.8	1100.4
40°	1041.6	1040.3	1037.7	1035.1	1036.4	1037.7	1036.4	1040.3	1042.9	1045.6	1046.9
42.5°	990.7	988.1	985.5	984.2	984.2	985.5	985.5	988.1	988.1	994.7	993.3
45°	933.3	932.0	930.7	930.7	932.0	932.0	932.0	933.3	934.6	938.5	939.8
47.5°	877.2	875.9	875.9	875.9	875.9	877.2	878.5	882.4	879.8	881.1	882.4
50°	821.0	819.7	819.7	819.7	822.3	822.3	825.0	826.3	827.6	825.0	826.3
52.5°	763.6	762.3	764.9	764.9	767.5	767.5	771.4	767.5	770.1	768.8	768.8
55°	707.5	706.2	708.8	707.5	710.1	710.1	712.7	714.0	712.7	712.7	712.7
57.5°	650.0	648.7	650.0	651.4	652.7	652.7	656.6	656.6	652.7	655.3	654.0
60°	592.6	591.3	592.6	593.9	595.2	595.2	596.5	593.9	596.5	597.8	596.5
62.5°	535.2	533.9	536.5	535.2	536.5	537.8	537.8	541.7	540.4	540.4	539.1
65°	477.7	476.4	476.4	476.4	477.7	479.1	480.4	481.7	481.7	483.0	481.7
67.5°	419.0	417.7	419.0	417.7	419.0	420.3	422.9	424.2	424.2	425.5	424.2
70°	359.0	360.3	359.0	360.3	361.6	362.9	364.2	366.8	366.8	366.8	366.8
72.5°	300.2	298.9	298.9	297.6	300.2	301.5	302.8	306.7	306.7	308.1	308.1
75°	242.8	240.2	241.5	240.2	245.4	246.7	246.7	250.6	251.9	254.5	253.2
77.5°	186.7	186.7	184.0	188.0	189.3	191.9	194.5	197.1	198.4	202.3	202.3
80°	133.1	133.1	131.8	134.4	139.7	141.0	144.9	146.2	150.1	152.7	154.0
82.5°	84.8	84.8	84.8	88.8	92.7	94.0	97.9	101.8	104.4	108.3	109.6
85°	41.8	44.4	44.4	49.6	52.2	54.8	56.1	61.3	65.3	70.5	74.4
87.5°	13.1	14.4	15.7	18.3	23.5	24.8	27.4	32.6	36.5	41.8	45.7
90°	1.3	1.3	2.6	3.9	6.5	7.8	10.4	13.1	17.0	20.9	23.5
92.5°	9.1	9.1	10.4	10.4	10.4	10.4	10.4	11.7	13.1	15.7	17.0
95°	22.2	35.2	20.9	19.6	22.2	22.2	23.5	22.2	22.2	22.2	22.2
97.5°	36.5	65.3	43.1	30.0	28.7	30.0	30.0	32.6	33.9	35.2	35.2
100°	53.5	82.2	75.7	49.6	40.5	39.2	39.2	39.2	40.5	41.8	43.1
102.5°	70.5	94.0	108.3	77.0	57.4	52.2	49.6	48.3	47.0	48.3	48.3
105°	87.5	105.7	133.1	104.4	82.2	74.4	66.6	57.4	56.1	56.1	56.1
107.5°	103.1	117.5	151.4	135.8	107.0	99.2	90.1	75.7	66.6	65.3	64.0
110°	117.5	129.2	164.5	161.9	134.4	122.7	114.9	99.2	86.2	77.0	73.1



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CATALOG NUMBER: I3-WL-50L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	130.5	141.0	173.6	184.0	164.5	150.1	138.4	122.7	108.3	96.6	87.5
115°	143.6	152.7	181.4	202.3	190.6	178.8	165.8	146.2	131.8	120.1	109.6
117.5°	156.6	164.5	189.3	215.4	212.8	204.9	194.5	171.0	154.0	142.3	130.5
120°	168.4	176.2	197.1	224.5	232.3	225.8	219.3	198.4	177.5	164.5	154.0
122.5°	178.8	185.4	204.9	232.3	246.7	245.4	238.9	224.5	203.6	188.0	174.9
125°	189.3	195.8	212.8	237.6	257.1	261.1	258.5	246.7	231.0	212.8	197.1
127.5°	199.7	204.9	220.6	242.8	265.0	272.8	274.1	266.3	254.5	238.9	221.9
130°	208.9	214.1	227.1	246.7	270.2	279.3	284.6	283.3	274.1	263.7	246.7
132.5°	216.7	220.6	233.7	250.6	272.8	283.3	291.1	297.6	291.1	283.3	271.5
135°	224.5	228.4	238.9	254.5	274.1	284.6	295.0	305.4	306.7	300.2	291.1
137.5°	231.0	233.7	244.1	257.1	274.1	284.6	295.0	309.4	317.2	314.6	306.7
140°	237.6	240.2	248.0	261.1	275.4	284.6	293.7	310.7	321.1	325.0	321.1
142.5°	242.8	245.4	251.9	263.7	275.4	283.3	292.4	308.1	322.4	330.2	332.9
145°	248.0	249.3	255.8	265.0	275.4	281.9	289.8	305.4	319.8	331.6	339.4
147.5°	251.9	253.2	257.1	266.3	275.4	280.6	287.2	300.2	314.6	327.6	339.4
150°	255.8	255.8	259.8	266.3	275.4	279.3	284.6	296.3	308.1	321.1	331.6
152.5°	258.5	258.5	262.4	267.6	274.1	278.0	283.3	292.4	302.8	314.6	325.0
155°	261.1	261.1	263.7	267.6	274.1	276.7	280.6	288.5	297.6	306.7	315.9
157.5°	263.7	263.7	265.0	268.9	272.8	275.4	279.3	285.9	292.4	300.2	308.1
160°	265.0	265.0	266.3	268.9	271.5	274.1	276.7	281.9	288.5	293.7	300.2
162.5°	266.3	266.3	267.6	268.9	271.5	272.8	274.1	279.3	283.3	288.5	293.7
165°	267.6	267.6	267.6	268.9	270.2	271.5	272.8	275.4	279.3	283.3	287.2
167.5°	268.9	268.9	268.9	268.9	270.2	270.2	271.5	272.8	275.4	278.0	280.6
170°	270.2	268.9	268.9	270.2	268.9	268.9	270.2	271.5	271.5	274.1	275.4
172.5°	270.2	270.2	268.9	268.9	268.9	268.9	268.9	268.9	268.9	270.2	271.5
175°	270.2	270.2	268.9	268.9	268.9	267.6	267.6	267.6	267.6	267.6	267.6
177.5°	270.2	270.2	268.9	268.9	267.6	267.6	267.6	267.6	267.6	267.6	267.6
180°	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9
2.5°	1553.3	1546.8	1544.2	1542.9	1541.6	1540.3	1537.7	1535.1	1532.4	1532.4
5°	1546.8	1540.3	1537.7	1536.4	1535.1	1533.7	1532.4	1532.4	1532.4	1532.4
7.5°	1536.4	1529.8	1527.2	1525.9	1525.9	1524.6	1524.6	1524.6	1523.3	1524.6
10°	1520.7	1514.2	1512.9	1511.6	1510.3	1507.6	1507.6	1507.6	1506.3	1507.6
12.5°	1501.1	1494.6	1493.3	1492.0	1490.7	1489.4	1489.4	1488.1	1488.1	1489.4
15°	1481.5	1472.4	1469.8	1469.8	1468.5	1467.2	1468.5	1467.2	1467.2	1467.2
17.5°	1452.8	1448.9	1445.0	1442.4	1441.1	1439.8	1439.8	1438.5	1438.5	1438.5
20°	1415.0	1415.0	1415.0	1408.4	1407.1	1405.8	1405.8	1405.8	1405.8	1405.8
22.5°	1378.4	1371.9	1377.1	1373.2	1370.6	1368.0	1369.3	1369.3	1369.3	1369.3
25°	1338.0	1332.7	1334.0	1335.3	1332.7	1328.8	1328.8	1328.8	1328.8	1327.5
27.5°	1294.9	1291.0	1289.7	1291.0	1293.6	1291.0	1287.0	1283.1	1284.4	1284.4
30°	1247.9	1246.6	1245.3	1242.7	1245.3	1246.6	1240.1	1238.7	1238.7	1238.7
32.5°	1200.9	1199.6	1195.7	1193.1	1194.4	1197.0	1194.4	1191.8	1191.8	1191.8
35°	1153.9	1148.7	1144.8	1143.5	1143.5	1146.1	1144.8	1140.8	1140.8	1140.8
37.5°	1099.1	1100.4	1093.9	1092.6	1092.6	1092.6	1095.2	1088.6	1089.9	1088.6
40°	1045.6	1046.9	1042.9	1039.0	1040.3	1037.7	1041.6	1035.1	1035.1	1035.1
42.5°	992.0	989.4	990.7	982.9	984.2	984.2	985.5	981.6	980.3	979.0
45°	937.2	934.6	933.3	929.4	929.4	928.1	928.1	922.9	922.9	922.9
47.5°	879.8	878.5	875.9	873.3	873.3	872.0	869.3	868.0	866.7	866.7
50°	825.0	821.0	817.1	818.4	817.1	815.8	813.2	811.9	810.6	809.3
52.5°	766.2	766.2	761.0	761.0	761.0	759.7	757.1	754.5	754.5	753.2
55°	708.8	707.5	703.6	702.3	703.6	702.3	699.7	697.0	697.0	695.7
57.5°	651.4	648.7	647.4	647.4	646.1	646.1	642.2	639.6	640.9	639.6
60°	592.6	592.6	591.3	590.0	590.0	588.7	584.8	584.8	584.8	583.5
62.5°	536.5	536.5	533.9	532.6	533.9	532.6	531.3	530.0	528.7	527.3
65°	477.7	479.1	476.4	477.7	477.7	475.1	475.1	473.8	473.8	472.5
67.5°	422.9	422.9	421.6	421.6	422.9	421.6	421.6	420.3	420.3	419.0
70°	366.8	369.4	368.1	368.1	368.1	366.8	366.8	366.8	365.5	366.8
72.5°	310.7	310.7	310.7	310.7	310.7	312.0	312.0	312.0	312.0	310.7
75°	258.5	259.8	258.5	259.8	261.1	261.1	261.1	261.1	262.4	261.1
77.5°	207.5	208.9	208.9	211.5	211.5	211.5	212.8	212.8	212.8	212.8
80°	159.2	160.6	161.9	164.5	164.5	167.1	168.4	168.4	168.4	168.4
82.5°	114.9	118.8	120.1	124.0	125.3	125.3	127.9	129.2	129.2	129.2
85°	79.6	83.5	86.2	88.8	91.4	91.4	94.0	94.0	95.3	95.3
87.5°	49.6	53.5	56.1	60.0	61.3	62.7	64.0	65.3	66.6	66.6
90°	27.4	30.0	32.6	35.2	35.2	36.5	37.9	39.2	40.5	40.5
92.5°	19.6	20.9	23.5	24.8	24.8	26.1	27.4	27.4	28.7	28.7
95°	22.2	23.5	23.5	24.8	24.8	24.8	26.1	26.1	26.1	26.1
97.5°	33.9	33.9	33.9	32.6	32.6	32.6	32.6	32.6	32.6	32.6
100°	44.4	45.7	45.7	45.7	47.0	47.0	47.0	47.0	45.7	45.7
102.5°	49.6	50.9	52.2	53.5	53.5	53.5	54.8	54.8	54.8	54.8
105°	56.1	56.1	57.4	58.7	58.7	58.7	60.0	60.0	60.0	60.0
107.5°	64.0	64.0	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
110°	73.1	73.1	73.1	71.8	73.1	71.8	71.8	71.8	71.8	71.8





TEST NUMBER: P395891

CATALOG NUMBER: I3-WL-50L83050-1D-UNV-W2A-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	83.5	82.2	82.2	80.9	80.9	80.9	79.6	79.6	79.6	79.6
115°	100.5	94.0	91.4	88.8	88.8	88.8	87.5	87.5	87.5	87.5
117.5°	121.4	112.3	107.0	101.8	100.5	99.2	96.6	96.6	95.3	95.3
120°	143.6	134.4	126.6	120.1	117.5	116.2	112.3	109.6	107.0	107.0
122.5°	164.5	155.3	147.5	141.0	138.4	135.8	131.8	129.2	126.6	126.6
125°	185.4	176.2	168.4	161.9	157.9	155.3	151.4	148.8	146.2	146.2
127.5°	207.5	195.8	188.0	181.4	177.5	176.2	171.0	168.4	165.8	165.8
130°	232.3	218.0	207.5	199.7	197.1	194.5	190.6	188.0	185.4	185.4
132.5°	257.1	242.8	231.0	220.6	216.7	214.1	208.9	206.2	203.6	203.6
135°	280.6	267.6	255.8	245.4	241.5	237.6	232.3	227.1	224.5	224.5
137.5°	298.9	289.8	279.3	270.2	266.3	262.4	257.1	251.9	248.0	249.3
140°	314.6	306.7	300.2	293.7	289.8	287.2	281.9	278.0	274.1	274.1
142.5°	328.9	322.4	315.9	310.7	309.4	308.1	304.1	300.2	297.6	297.6
145°	342.0	338.1	332.9	326.3	325.0	323.7	319.8	317.2	315.9	315.9
147.5°	345.9	347.2	345.9	342.0	340.7	339.4	336.8	334.2	332.9	332.9
150°	343.3	348.5	351.1	351.1	351.1	351.1	351.1	348.5	347.2	347.2
152.5°	335.5	343.3	348.5	352.4	353.7	355.0	355.0	356.4	355.0	355.0
155°	326.3	334.2	342.0	345.9	348.5	349.8	352.4	353.7	355.0	353.7
157.5°	315.9	322.4	327.6	335.5	338.1	340.7	343.3	345.9	347.2	345.9
160°	306.7	312.0	315.9	321.1	322.4	325.0	327.6	328.9	331.6	330.2
162.5°	297.6	301.5	305.4	308.1	310.7	312.0	314.6	315.9	317.2	315.9
165°	291.1	293.7	295.0	297.6	298.9	300.2	301.5	302.8	302.8	302.8
167.5°	283.3	285.9	287.2	288.5	289.8	291.1	291.1	292.4	292.4	292.4
170°	276.7	278.0	279.3	280.6	280.6	281.9	281.9	281.9	283.3	281.9
172.5°	271.5	271.5	271.5	272.8	272.8	272.8	272.8	272.8	272.8	271.5
175°	268.9	268.9	267.6	267.6	267.6	267.6	267.6	266.3	265.0	263.7
177.5°	267.6	266.3	266.3	265.0	265.0	265.0	263.7	262.4	261.1	259.8
180°	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3	266.3

(END OF REPORT)