

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: io LED

Report Number: P397315

Luminaire Tested: **8VRVT2-LD5-12-DR100-W-UNV-LR63-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397315
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 8VRVT2-LD5-12-DR100-W-UNV-LR63-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1902.4 lumens
Efficiency: N/A
Efficacy: 7.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.58 / 1.57
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
CIE Type: Semi-Direct

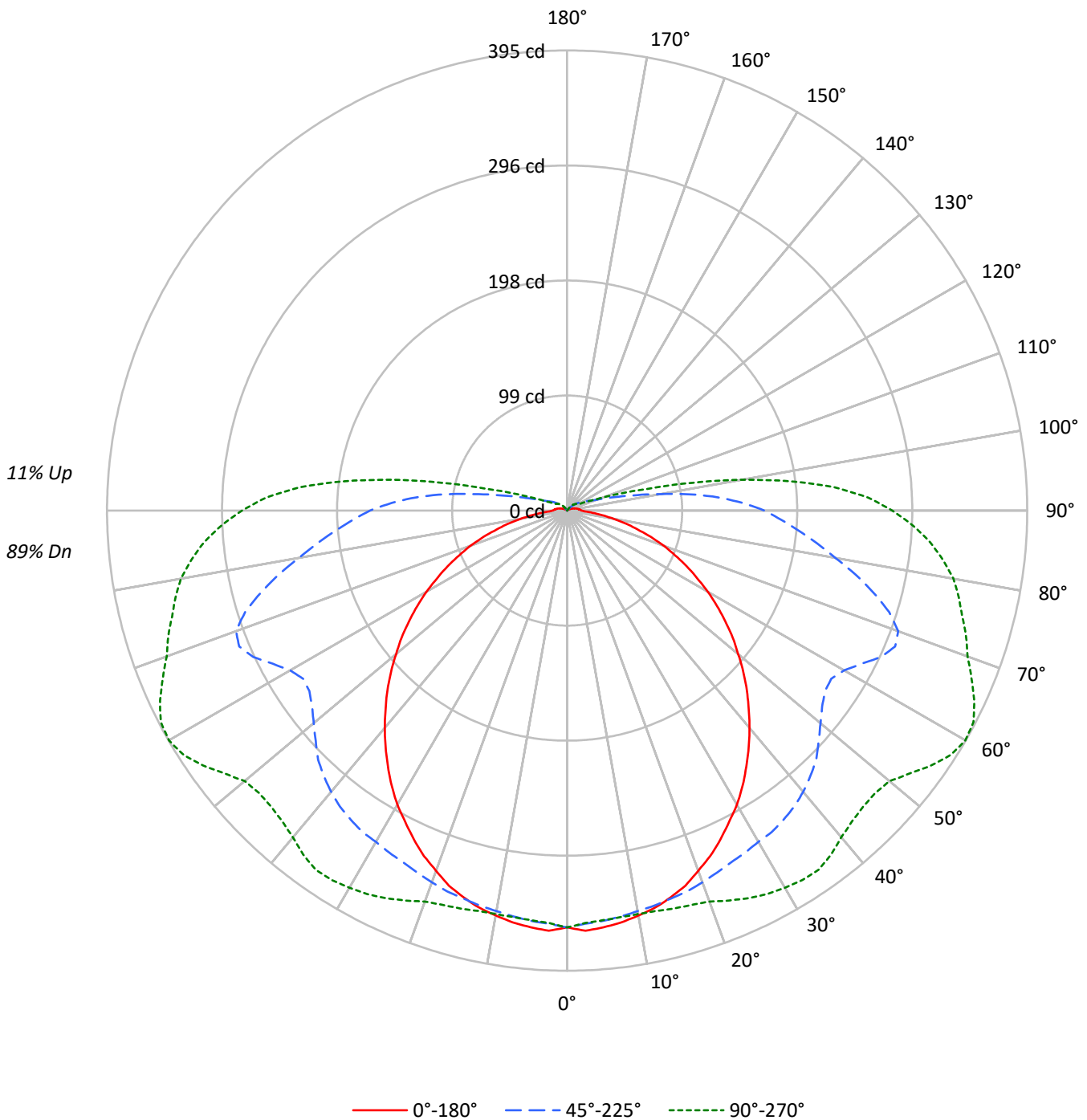
Input Watts (W): 262.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89				
1	101	94	88	82	97	91	85	80	84	80	75	78	74	71	73	70	67	64				
2	90	79	70	63	86	76	68	61	71	64	58	66	60	55	61	56	52	49				
3	81	68	58	50	77	65	56	49	61	53	47	56	50	44	52	47	42	39				
4	73	59	49	41	70	57	48	40	53	45	38	49	42	37	46	40	35	32				
5	67	52	42	35	64	50	41	34	47	39	32	44	37	31	41	35	30	27				
6	62	47	37	30	59	45	36	29	42	34	28	39	32	27	37	30	26	23				
7	57	42	32	26	54	41	32	25	38	30	24	36	29	23	33	27	22	20				
8	53	38	29	23	51	37	28	22	35	27	21	32	26	21	30	24	20	18				
9	49	35	26	20	47	34	25	20	32	24	19	30	23	18	28	22	18	16				
10	46	32	24	18	44	31	23	18	29	22	17	28	21	17	26	20	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	924	924	924
5°	930	897	889
10°	923	877	871
15°	914	864	868
20°	898	856	875
25°	879	850	906
30°	860	856	935
35°	834	869	962
40°	808	879	965
45°	782	884	985
50°	752	879	1039
55°	726	897	1164
60°	697	989	1293
65°	664	1183	1375
70°	632	1354	1442
75°	580	1406	1562
80°	534	1438	1733
85°	526	1535	1929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	1.8
10°-20°	98.2	5.2
20°-30°	155.8	8.2
30°-40°	202.0	10.6
40°-50°	227.9	12.0
50°-60°	246.8	13.0
60°-70°	265.5	14.0
70°-80°	252.8	13.3
80°-90°	207.2	10.9
90°-100°	137.2	7.2
100°-110°	49.4	2.6
110°-120°	15.0	0.8
120°-130°	7.3	0.4
130°-140°	3.0	0.2
140°-150°	0.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	287.9	15.1
0°-40°	489.9	25.7
0°-60°	964.6	50.7
0°-90°	1690.1	88.8
90°-120°	201.5	10.6
90°-150°	212.3	11.2
90°-180°	212.0	11.1
0°-180°	1902.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	359	358	354	354	353	34
15°	344	343	345	352	354	97
25°	311	316	333	360	367	143
35°	268	283	324	363	376	168
45°	218	244	302	343	359	168
55°	166	202	270	352	382	148
65°	113	158	297	375	386	112
75°	62	150	272	329	351	67
85°	22	109	200	283	313	22
90°	12	83	169	250	279	7
95°	11	59	130	202	230	8
105°	7	22	46	64	72	8
115°	4	10	19	18	17	4
125°	1	3	11	12	10	1
135°	1	0	4	7	7	0
145°	0	0	0	2	2	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8
2.5°	361.0	360.3	359.4	359.1	359.1	359.1	359.1	358.4	357.5	356.2	354.9
5°	359.1	358.4	357.5	357.5	357.1	357.5	357.5	356.8	356.2	354.9	353.6
7.5°	356.5	356.2	354.9	354.3	354.3	354.3	354.9	354.3	353.9	352.7	351.4
10°	353.0	352.3	351.7	351.7	352.0	352.0	352.0	352.3	351.7	350.1	349.1
12.5°	349.1	348.2	347.5	347.5	347.9	347.9	348.2	348.2	348.2	347.2	347.2
15°	343.7	343.4	342.1	342.4	342.4	343.1	343.4	343.7	343.4	344.3	344.7
17.5°	337.6	337.3	336.0	336.0	336.7	337.0	337.9	339.2	339.9	341.1	342.7
20°	329.0	329.0	328.3	329.0	330.3	330.9	331.5	333.8	335.1	337.6	339.5
22.5°	321.0	320.3	320.3	321.0	322.3	323.9	325.1	328.3	330.6	333.8	336.3
25°	311.4	311.1	310.7	312.3	314.3	315.9	318.1	321.9	325.1	329.0	333.1
27.5°	301.1	300.8	301.5	302.7	306.3	308.5	310.4	315.5	319.4	325.5	330.9
30°	291.5	290.6	291.2	293.1	297.6	300.8	302.7	308.5	313.9	321.0	328.3
32.5°	280.3	279.4	280.7	283.5	288.7	291.9	295.4	301.5	307.9	316.5	327.1
35°	268.2	268.5	269.1	273.6	279.1	282.9	286.4	294.4	302.4	313.0	323.9
37.5°	256.0	255.4	257.9	263.1	269.5	274.3	277.8	286.1	297.3	308.8	320.3
40°	243.5	244.2	246.1	251.9	258.6	264.7	268.5	279.4	291.5	303.4	315.2
42.5°	230.7	232.3	234.3	241.0	249.3	254.1	259.9	271.7	284.5	297.0	309.1
45°	218.2	219.5	222.4	229.8	237.8	244.2	250.6	263.1	277.1	290.3	302.4
47.5°	205.1	206.4	210.2	217.9	226.9	233.9	240.7	254.1	268.5	281.9	292.8
50°	191.7	193.6	197.4	205.1	217.0	223.4	230.1	244.8	258.3	271.4	283.9
52.5°	179.2	180.2	186.2	193.6	205.8	213.1	219.5	234.6	247.4	262.1	275.9
55°	165.8	167.7	173.1	180.5	193.9	201.6	209.0	223.4	237.8	253.1	270.1
57.5°	152.6	154.2	160.0	168.3	182.7	190.1	197.1	212.8	227.5	246.7	268.8
60°	139.5	141.4	147.2	156.8	171.2	178.9	186.2	202.9	222.1	245.8	274.3
62.5°	125.8	129.0	133.1	145.0	159.7	167.4	176.3	195.5	220.8	250.9	284.8
65°	113.3	114.9	121.3	133.4	149.1	158.1	168.3	193.0	225.0	261.8	297.3
67.5°	100.2	102.4	109.4	122.9	140.5	151.0	163.8	195.5	234.6	273.6	304.7
70°	88.3	89.9	98.6	113.3	134.4	148.2	163.8	201.9	243.9	278.1	302.4
72.5°	75.2	77.8	88.3	106.2	131.8	148.5	167.0	208.6	245.8	272.0	289.9
75°	62.4	66.2	80.0	100.5	131.2	150.1	169.9	207.7	236.8	256.7	272.3
77.5°	51.8	56.6	72.0	96.6	129.9	148.5	166.7	196.5	219.8	238.7	253.5
80°	40.0	47.4	65.3	91.8	124.2	140.2	154.9	180.5	199.4	217.6	233.6
82.5°	30.4	38.7	58.2	84.5	112.3	125.8	137.3	160.0	179.8	197.1	216.6
85°	21.8	30.7	50.2	73.6	97.0	108.8	119.4	140.8	160.3	179.8	199.7
87.5°	15.0	24.0	42.6	63.0	83.8	93.4	103.7	124.2	143.4	162.2	184.0
90°	12.2	19.5	35.5	54.1	72.0	82.6	91.5	110.1	129.3	149.1	169.3
92.5°	11.5	16.3	29.8	45.8	62.4	71.0	79.4	96.3	114.2	132.8	150.7
95°	10.6	13.1	23.4	37.1	51.2	58.9	65.6	81.6	96.6	113.0	130.2
97.5°	9.9	10.6	17.9	28.8	40.6	47.0	52.5	65.0	78.4	90.9	106.6
100°	9.0	9.3	13.8	22.4	31.0	36.5	41.0	51.2	60.8	70.7	81.3
102.5°	8.0	8.0	10.6	16.6	24.3	27.8	31.7	40.0	47.0	53.4	61.4
105°	7.0	7.0	8.3	12.8	18.2	21.8	24.3	30.4	35.8	40.6	45.8
107.5°	6.4	6.1	6.7	9.9	14.4	17.0	19.5	24.0	28.2	31.4	34.9
110°	5.1	5.1	5.4	8.0	11.8	13.8	16.0	19.5	23.0	25.3	27.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	4.5	4.2	4.2	6.4	9.6	11.5	13.1	16.6	19.5	21.4	22.4
115°	3.5	3.5	3.2	4.8	7.7	9.6	10.9	14.1	16.6	18.2	19.2
117.5°	2.9	2.9	2.9	3.5	6.4	7.7	9.3	12.2	14.4	16.0	17.0
120°	2.2	2.2	2.2	2.2	4.8	6.1	7.7	10.2	12.5	14.1	15.0
122.5°	1.9	1.6	1.6	1.6	3.2	4.8	5.8	8.3	10.6	12.2	13.4
125°	1.3	1.3	1.3	1.0	2.2	3.2	4.5	6.7	8.6	10.2	11.2
127.5°	1.0	1.0	1.0	1.0	1.0	1.9	2.9	5.1	7.0	8.6	9.6
130°	1.0	1.0	0.6	0.6	0.3	1.0	1.6	3.5	5.1	6.7	8.0
132.5°	0.6	0.6	0.6	0.3	0.3	0.3	0.6	2.2	3.8	5.1	6.1
135°	0.6	0.6	0.3	0.3	0.0	0.0	0.0	1.3	2.6	3.5	4.5
137.5°	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3	1.3	2.2	3.2
140°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.9
142.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6
145°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8	357.8
2.5°	354.9	355.5	355.5	355.5	355.5	355.5	354.9	354.6	354.3	354.3
5°	353.3	353.9	354.3	354.3	354.3	354.3	353.9	353.6	353.3	353.0
7.5°	351.4	352.3	353.0	353.3	353.3	353.3	353.0	353.0	352.3	352.0
10°	349.5	350.4	351.4	352.0	352.3	352.3	352.3	352.3	352.0	351.7
12.5°	348.2	349.8	351.1	351.7	351.7	352.0	352.7	352.7	352.3	352.0
15°	346.6	349.1	350.7	351.7	351.7	352.3	353.6	353.6	353.3	353.6
17.5°	345.3	347.9	350.4	352.0	352.7	353.6	354.6	354.9	355.2	354.9
20°	342.7	346.9	350.4	352.3	353.6	353.9	356.2	357.8	357.8	357.1
22.5°	341.8	346.6	350.7	354.9	355.5	356.8	359.7	361.3	362.3	362.3
25°	339.9	346.3	352.3	357.5	359.7	361.3	364.2	366.7	366.1	367.1
27.5°	338.9	346.6	352.7	359.1	362.3	363.9	368.0	369.6	370.6	371.2
30°	338.3	346.9	353.6	360.7	363.2	366.4	370.3	372.8	374.1	373.8
32.5°	337.3	345.9	354.6	360.7	364.5	367.1	370.9	373.8	375.7	376.0
35°	335.1	345.0	353.0	360.3	363.2	366.4	370.9	372.5	375.7	376.3
37.5°	332.2	341.8	349.5	357.5	360.3	362.9	368.3	369.9	371.2	372.2
40°	327.7	336.7	345.0	352.7	355.2	358.1	361.9	364.5	366.4	366.1
42.5°	321.9	330.3	338.3	346.6	348.5	351.7	356.5	359.4	361.3	361.9
45°	312.7	322.3	331.5	338.9	342.7	346.3	351.7	354.9	357.1	359.4
47.5°	303.7	315.5	326.1	334.4	338.9	342.4	349.1	353.9	357.5	358.7
50°	296.7	308.8	321.0	333.5	338.3	342.7	350.4	355.5	359.4	361.3
52.5°	290.9	305.6	321.0	336.3	343.1	348.5	357.5	363.9	369.0	370.6
55°	288.7	307.2	326.7	344.3	352.0	359.1	369.3	375.4	380.5	381.5
57.5°	292.5	317.5	338.9	357.1	364.8	370.6	380.5	385.6	389.8	390.4
60°	303.1	329.3	351.7	367.4	375.4	380.5	387.9	391.7	394.6	394.6
62.5°	316.2	339.9	359.4	372.5	378.3	382.1	386.6	391.1	392.0	393.3
65°	326.1	346.6	360.0	369.6	374.7	376.3	381.1	383.1	385.6	385.6
67.5°	326.7	343.1	352.7	360.3	363.2	365.5	371.2	373.5	375.4	375.7
70°	318.1	329.3	340.2	346.9	350.1	354.6	360.0	363.5	365.5	365.8
72.5°	304.3	314.6	325.5	335.7	340.2	344.0	351.1	355.9	357.8	359.1
75°	287.7	298.9	312.0	324.2	328.7	332.5	342.4	346.9	350.7	351.1
77.5°	269.8	283.2	298.6	311.7	317.5	324.2	332.2	338.9	341.8	344.3
80°	251.9	269.1	284.8	300.2	305.6	313.3	322.9	330.6	333.8	336.7
82.5°	234.9	254.4	273.6	289.3	295.4	302.1	312.0	320.7	323.5	325.5
85°	220.2	240.3	259.2	275.2	282.9	288.7	299.9	307.2	311.4	313.0
87.5°	204.5	225.0	243.5	260.8	267.2	273.0	284.5	292.5	296.3	297.3
90°	189.1	210.2	227.5	242.6	250.3	257.3	267.9	275.2	279.1	279.1
92.5°	169.6	189.8	208.0	221.8	229.1	234.9	246.4	251.9	258.3	258.3
95°	147.2	164.8	181.8	195.8	201.9	208.0	217.6	225.0	228.5	230.1
97.5°	121.9	135.4	150.7	162.2	170.6	172.5	183.0	190.4	194.2	193.0
100°	91.8	102.4	114.6	124.2	130.6	134.1	141.4	145.6	151.4	152.0
102.5°	68.5	76.2	83.2	88.6	93.8	95.4	100.5	104.6	107.2	110.1
105°	50.2	54.7	58.9	62.7	63.7	66.6	70.7	73.6	72.0	72.3
107.5°	37.4	39.7	41.9	43.2	44.8	46.7	47.7	47.7	49.3	49.9
110°	28.5	29.8	30.7	31.0	31.7	31.7	31.7	31.7	32.0	32.6



TEST NUMBER: P397315

CATALOG NUMBER: 8VRVT2-LD5-12-DR100-W-UNV-LR63-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	22.7	23.4	23.4	23.4	23.0	23.0	22.7	22.4	21.8	22.4
115°	19.5	19.5	18.9	18.6	18.2	17.9	17.3	16.6	16.3	17.0
117.5°	17.3	17.0	16.6	15.7	15.4	15.0	14.4	14.1	13.4	13.1
120°	15.4	15.4	14.7	14.4	14.1	13.4	12.8	12.5	11.8	11.5
122.5°	13.8	13.8	13.4	13.1	12.8	12.5	11.8	11.5	10.9	10.9
125°	11.8	12.2	12.2	11.8	11.5	11.5	10.9	10.6	10.2	10.2
127.5°	10.2	10.6	10.9	10.9	10.6	10.6	10.2	9.9	9.6	9.3
130°	8.6	9.3	9.3	9.6	9.6	9.3	9.3	9.0	8.6	8.6
132.5°	7.0	7.7	8.0	8.0	8.3	8.3	8.3	8.0	8.0	7.7
135°	5.4	6.1	6.4	6.7	6.7	7.0	7.0	6.7	6.7	6.7
137.5°	4.2	4.5	5.1	5.4	5.4	5.4	5.4	5.4	5.4	5.4
140°	2.6	3.2	3.8	3.8	4.2	4.2	4.2	4.2	4.2	4.2
142.5°	1.3	1.9	2.2	2.6	2.6	2.9	2.9	2.9	2.9	2.9
145°	0.3	0.6	1.0	1.3	1.6	1.6	1.6	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)