

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: METALUX

Report Number: P237804

Luminaire Tested: **4VRVT2-LD5-4-FR50-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237804  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VRVT2-LD5-4-FR50-UNV-L840-CD1-WL-U  
Description: METALUX VRVT2 LED LUMINAIRE  
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
4FT FIXTURE  
Light Source: (112) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4100.0 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')  
CIE Type: Direct

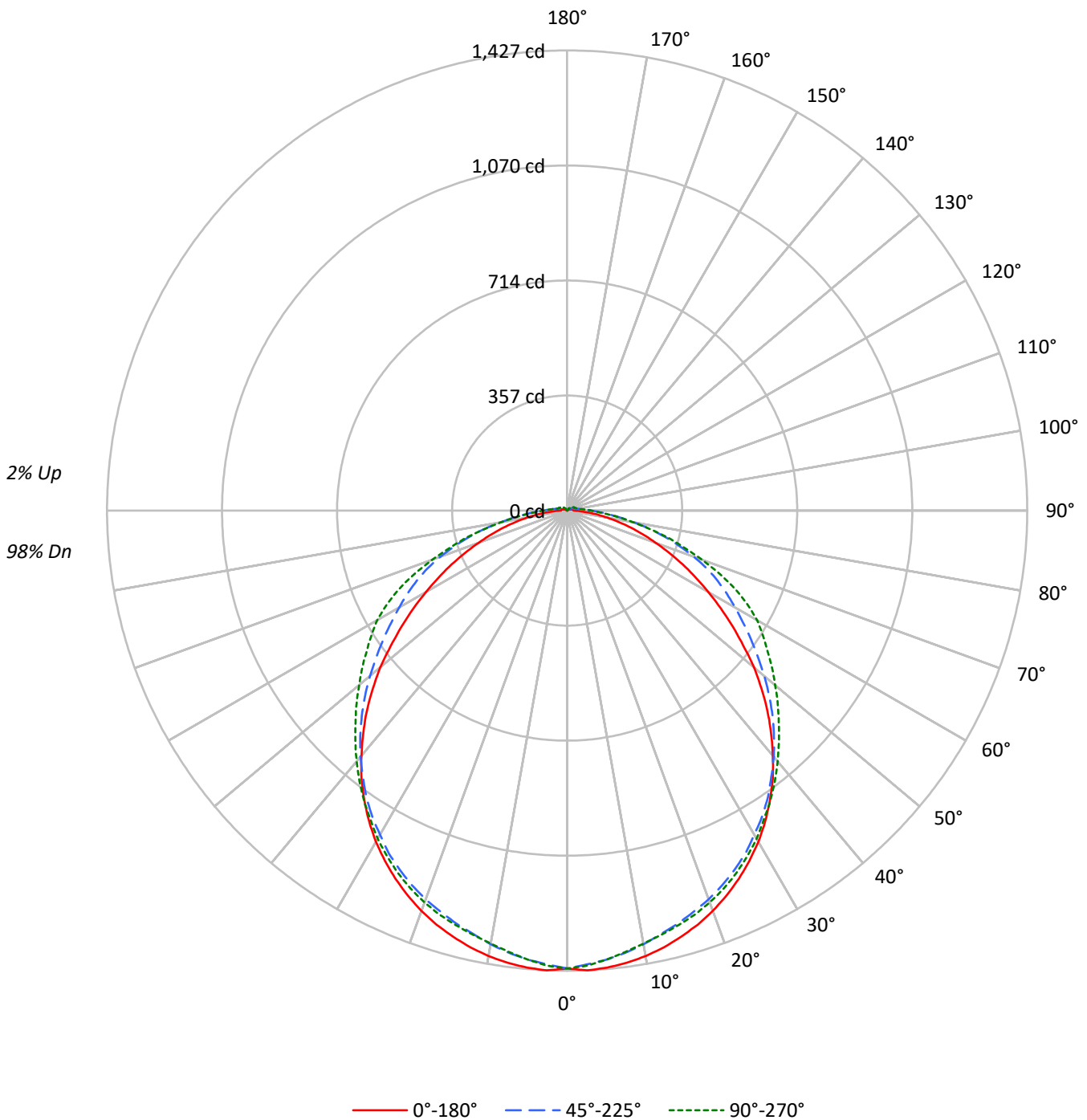
Input Watts (W): 29.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	7336	7336	7336
5°	7352	7086	7044
10°	7307	6846	6754
15°	7238	6626	6536
20°	7158	6435	6340
25°	7049	6237	6122
30°	6916	6008	5880
35°	6727	5776	5617
40°	6475	5504	5353
45°	6173	5207	5086
50°	5803	4878	4843
55°	5340	4550	4628
60°	4888	4264	4456
65°	4446	4016	4096
70°	3965	3656	3499
75°	3552	3137	2877
80°	3063	2500	2132
85°	2555	1883	1515



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.2	3.2
10°-20°	378.0	9.2
20°-30°	570.4	13.9
30°-40°	680.6	16.6
40°-50°	694.0	16.9
50°-60°	621.3	15.2
60°-70°	491.1	12.0
70°-80°	303.9	7.4
80°-90°	127.9	3.1
90°-100°	45.6	1.1
100°-110°	24.2	0.6
110°-120°	15.9	0.4
120°-130°	9.2	0.2
130°-140°	4.1	0.1
140°-150°	0.6	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1081.6	26.4
0°-40°	1762.2	43.0
0°-60°	3077.6	75.1
0°-90°	4000.5	97.6
90°-120°	85.6	2.1
90°-150°	99.5	2.4
90°-180°	100.0	2.4
0°-180°	4100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1422	1412	1398	1402	1398	135
15°	1368	1346	1326	1334	1331	386
25°	1260	1233	1229	1242	1241	580
35°	1096	1076	1085	1098	1098	685
45°	879	872	901	923	928	676
55°	627	641	696	745	758	561
65°	395	422	514	567	575	392
75°	204	247	312	324	323	218
85°	63	98	128	128	123	65
90°	21	51	76	77	74	14
95°	19	29	47	49	47	15
105°	15	14	25	29	28	16
115°	8	7	17	23	23	8
125°	3	2	11	17	19	3
135°	1	1	4	9	11	1
145°	0	0	0	0	0	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°	22.5°	45°	67.5°	90°
0°	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1427.2	1419.2	1408.5	1415.8	1412.5
5°	1422.5	1411.8	1397.8	1402.5	1397.8
7.5°	1414.5	1401.1	1383.1	1385.1	1380.4
10°	1402.5	1386.4	1365.7	1367.7	1363.0
12.5°	1387.1	1367.7	1345.0	1352.3	1347.7
15°	1367.7	1345.7	1326.3	1334.3	1331.0
17.5°	1346.3	1322.3	1304.2	1316.9	1314.3
20°	1320.9	1294.2	1282.9	1294.9	1292.9
22.5°	1292.2	1263.5	1257.5	1270.8	1268.8
25°	1259.5	1232.7	1228.7	1242.1	1240.8
27.5°	1224.1	1196.0	1198.0	1209.4	1208.7
30°	1186.0	1161.3	1160.6	1176.0	1175.3
32.5°	1143.2	1118.5	1125.2	1137.2	1135.2
35°	1096.4	1076.4	1085.1	1098.4	1098.4
37.5°	1047.7	1029.0	1040.3	1054.3	1057.7
40°	992.2	978.2	996.9	1013.6	1015.6
42.5°	936.1	926.7	949.4	968.2	972.2
45°	878.6	871.9	900.7	923.4	928.1
47.5°	817.2	817.2	849.9	877.3	886.0
50°	756.4	756.4	797.8	831.9	841.9
52.5°	688.9	698.2	745.7	786.4	801.1
55°	626.7	640.8	695.5	745.0	758.4
57.5°	565.3	582.6	646.8	704.2	719.6
60°	505.8	529.2	601.3	662.8	680.2
62.5°	449.7	474.4	557.9	618.0	630.1
65°	394.9	422.3	514.5	567.3	574.6
67.5°	342.1	377.5	469.0	509.1	511.8
70°	291.3	332.7	417.6	447.7	443.7
72.5°	247.2	288.6	364.8	385.5	378.8
75°	204.5	247.2	312.0	324.1	323.4
77.5°	164.4	206.5	260.6	267.3	260.6
80°	126.3	168.4	209.8	213.1	207.1
82.5°	94.2	130.3	165.0	167.0	163.7
85°	62.8	98.2	127.6	128.3	122.9
87.5°	38.1	71.5	97.6	98.9	94.9
90°	20.7	51.4	76.2	76.8	74.2
92.5°	19.4	37.4	58.8	60.1	58.8
95°	18.7	28.7	47.4	48.8	47.4
97.5°	18.7	23.4	38.8	40.8	39.4
100°	17.4	19.4	32.7	34.7	34.1
102.5°	16.7	16.0	28.7	31.4	30.1
105°	14.7	14.0	25.4	28.7	28.1
107.5°	13.4	12.0	23.4	26.7	26.1
110°	11.4	10.7	21.4	25.4	25.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	9.4	8.7	19.4	24.1	24.1
115°	8.0	7.3	17.4	23.4	23.4
117.5°	6.7	6.0	16.0	22.0	22.7
120°	5.3	4.7	14.0	20.0	21.4
122.5°	4.7	3.3	12.0	18.7	20.0
125°	3.3	2.0	10.7	16.7	18.7
127.5°	2.7	2.0	8.7	14.7	16.7
130°	2.0	1.3	7.3	13.4	14.7
132.5°	2.0	1.3	5.3	11.4	12.7
135°	1.3	1.3	4.0	9.4	11.4
137.5°	1.3	0.7	2.7	7.3	9.4
140°	1.3	0.7	1.3	6.0	7.3
142.5°	0.7	0.7	0.7	4.0	5.3
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)