

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P237856

Luminaire Tested: **4VRVT2-LD5-11-DR100-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P237856  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VRVT2-LD5-11-DR100-UNV-L850-CD1-WL-U  
Description: METALUX VRVT2 LED LUMINAIRE  
INTERNAL PRISMATIC LENS/100% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
4FT FIXTURE  
Light Source: (224) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

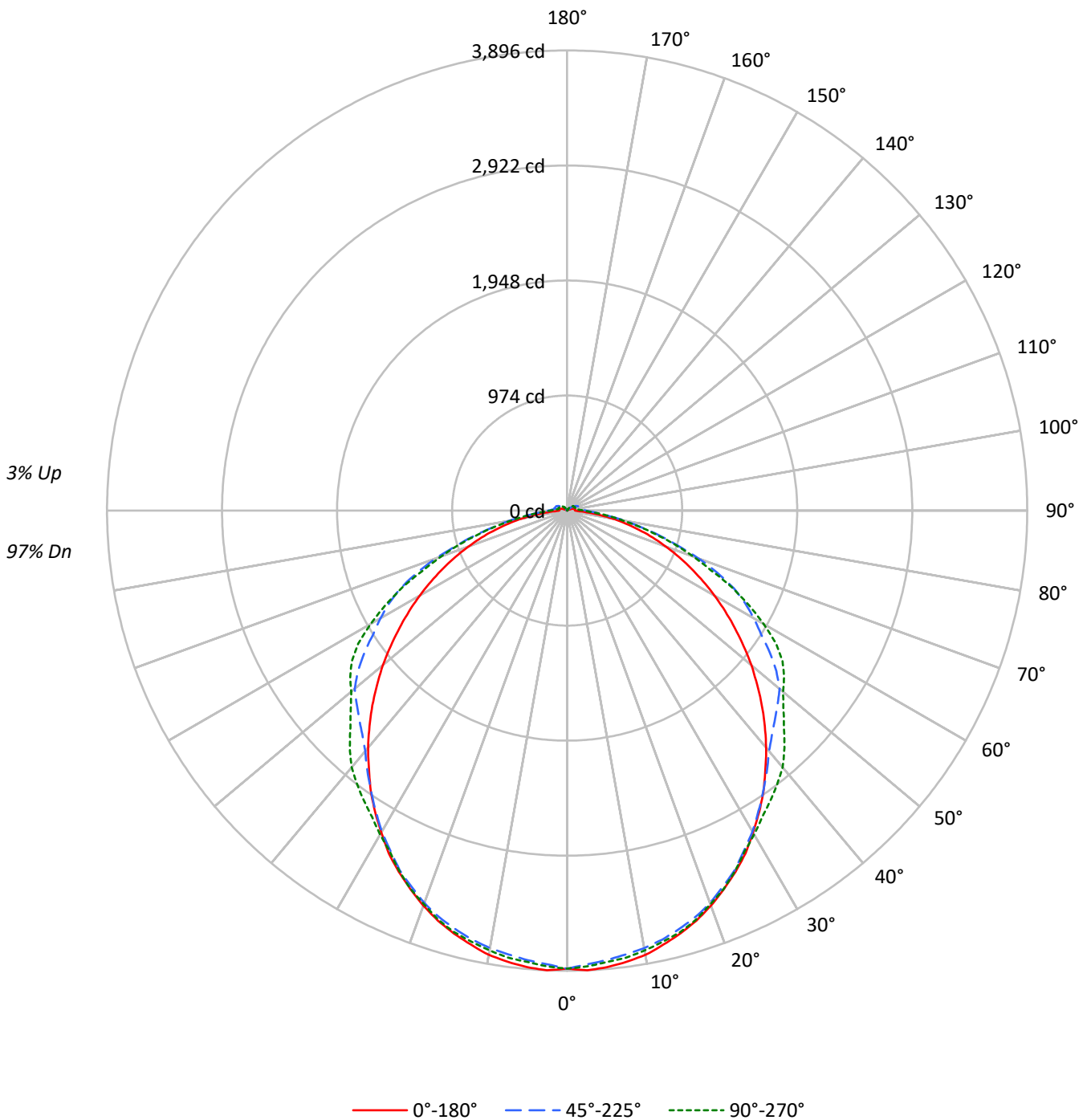
Lumens per Lamp: N/A  
Luminaire Lumens: 11418.0 lumens  
Efficiency: N/A  
Efficacy: 138.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 82.44  
Input Voltage (V): 120  
Input 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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	99	99	99	97													
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	87	85	83	87	85	83	80													
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	76	72	69	76	72	69	66													
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	67	62	58	67	62	58	56													
4	81	69	60	53	79	67	59	53	64	57	52	62	56	51	59	54	50	59	54	50	59	54	50	47													
5	75	62	52	46	72	60	52	45	58	50	44	55	49	44	53	48	43	53	48	43	53	48	43	41													
6	69	55	46	40	67	54	46	39	52	45	39	50	43	38	48	42	38	48	42	38	48	42	38	36													
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	44	38	33	44	38	33	31													
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	40	34	30	40	34	30	28													
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	37	31	27	37	31	27	25													
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	35	29	25	35	29	25	23													

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

	0°	45°	90°
0°	20036	20036	20036
5°	20057	19371	19333
10°	19900	18857	18735
15°	19614	18321	18144
20°	19289	17737	17392
25°	18881	17040	16605
30°	18348	16246	15846
35°	17783	15415	15339
40°	17106	14681	14962
45°	16383	14392	14221
50°	15626	14359	13725
55°	14769	13704	13588
60°	13925	12939	12580
65°	13010	12146	10954
70°	12049	10348	8936
75°	10950	8053	6902
80°	9407	5893	4877
85°	6651	3904	3142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	365.2	3.2
10°-20°	1039.7	9.1
20°-30°	1548.4	13.6
30°-40°	1832.2	16.0
40°-50°	1913.4	16.8
50°-60°	1800.1	15.8
60°-70°	1443.7	12.6
70°-80°	837.9	7.3
80°-90°	298.5	2.6
90°-100°	116.5	1.0
100°-110°	87.6	0.8
110°-120°	66.6	0.6
120°-130°	40.8	0.4
130°-140°	20.0	0.2
140°-150°	6.6	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2953.3	25.9
0°-40°	4785.5	41.9
0°-60°	8499.0	74.4
0°-90°	11079.1	97.0
90°-120°	270.7	2.4
90°-150°	338.1	3.0
90°-180°	339.0	3.0
0°-180°	11418.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3878	3878	3878	3878	3878	
5°	3881	3860	3821	3841	3836	368
15°	3706	3678	3667	3705	3695	1045
25°	3374	3354	3357	3381	3365	1553
35°	2898	2894	2896	2959	3000	1810
45°	2332	2344	2490	2613	2595	1798
55°	1733	1819	2095	2171	2226	1552
65°	1156	1438	1556	1545	1536	1148
75°	630	864	801	786	776	669
85°	164	267	265	259	255	183
90°	66	143	159	150	141	40
95°	68	105	118	104	94	55
105°	55	79	104	84	73	58
115°	29	50	90	80	69	30
125°	11	19	60	65	62	11
135°	6	4	28	44	46	4
145°	3	3	6	19	22	2
155°	1	1	1	1	3	1
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°	3878.0	3878.0	3878.0	3878.0	3878.0
2.5°	3896.0	3875.2	3844.7	3872.4	3862.7
5°	3880.8	3860.0	3821.2	3840.6	3836.4
7.5°	3853.0	3825.3	3790.7	3821.2	3818.4
10°	3819.8	3787.9	3761.6	3790.7	3781.0
12.5°	3764.4	3739.4	3720.0	3754.7	3739.4
15°	3706.2	3678.5	3667.4	3704.8	3695.1
17.5°	3639.7	3617.5	3609.2	3630.0	3631.4
20°	3559.3	3542.7	3535.8	3563.5	3546.9
22.5°	3467.9	3444.3	3445.7	3474.8	3466.5
25°	3373.7	3354.3	3357.0	3380.6	3365.4
27.5°	3271.1	3249.0	3243.4	3268.4	3253.1
30°	3146.4	3142.3	3138.1	3158.9	3167.2
32.5°	3025.9	3024.5	3016.2	3045.3	3074.4
35°	2898.4	2894.3	2895.7	2959.4	2999.6
37.5°	2757.1	2761.3	2777.9	2880.4	2920.6
40°	2621.3	2622.7	2658.8	2812.5	2838.9
42.5°	2477.3	2480.0	2567.3	2729.4	2723.9
45°	2331.8	2344.2	2489.7	2613.0	2595.0
47.5°	2180.8	2204.3	2417.7	2482.8	2484.2
50°	2036.7	2067.2	2348.4	2363.6	2385.8
52.5°	1882.9	1942.5	2232.0	2252.8	2315.2
55°	1733.2	1819.1	2094.9	2171.1	2226.5
57.5°	1586.4	1712.5	1946.6	2067.2	2097.6
60°	1440.9	1616.9	1824.7	1923.1	1920.3
62.5°	1298.2	1525.4	1697.2	1742.9	1736.0
65°	1155.5	1438.1	1555.9	1544.8	1536.5
67.5°	1023.9	1319.0	1375.8	1330.1	1316.2
70°	885.3	1174.9	1181.8	1136.1	1133.3
72.5°	760.6	1019.7	978.2	956.0	957.4
75°	630.4	864.5	800.8	785.6	775.9
77.5°	508.5	694.1	631.8	629.0	623.5
80°	387.9	534.8	494.6	482.2	473.8
82.5°	270.2	386.6	361.6	361.6	356.1
85°	163.5	267.4	264.6	259.1	254.9
87.5°	91.4	184.3	198.1	192.6	181.5
90°	66.5	142.7	159.3	149.6	141.3
92.5°	66.5	120.5	133.0	121.9	112.2
95°	67.9	105.3	117.8	103.9	94.2
97.5°	67.9	97.0	110.8	94.2	84.5
100°	65.1	90.1	106.7	88.7	77.6
102.5°	61.0	84.5	103.9	85.9	74.8
105°	55.4	79.0	103.9	84.5	73.4
107.5°	48.5	73.4	101.1	84.5	72.0
110°	41.6	66.5	99.8	83.1	72.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	36.0	58.2	95.6	81.7	70.7
115°	29.1	49.9	90.1	80.4	69.3
117.5°	23.6	41.6	83.1	77.6	67.9
120°	19.4	33.3	74.8	73.4	66.5
122.5°	13.9	24.9	67.9	70.7	65.1
125°	11.1	19.4	59.6	65.1	62.3
127.5°	9.7	12.5	51.3	61.0	59.6
130°	6.9	8.3	43.0	55.4	55.4
132.5°	5.5	5.5	34.6	49.9	51.3
135°	5.5	4.2	27.7	44.3	45.7
137.5°	4.2	4.2	22.2	37.4	40.2
140°	2.8	2.8	15.2	30.5	34.6
142.5°	2.8	2.8	9.7	24.9	27.7
145°	2.8	2.8	5.5	19.4	22.2
147.5°	2.8	1.4	2.8	13.9	16.6
150°	2.8	1.4	1.4	8.3	11.1
152.5°	1.4	1.4	1.4	4.2	6.9
155°	1.4	1.4	1.4	1.4	2.8
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)