

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: P237868

Luminaire Tested: **4VT2-LD5-11-FR50-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237868  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-13)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VT2-LD5-11-FR50-UNV-L850-CD1-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
FROSTED LENS/15% 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: 11257.0 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')  
CIE Type: Direct

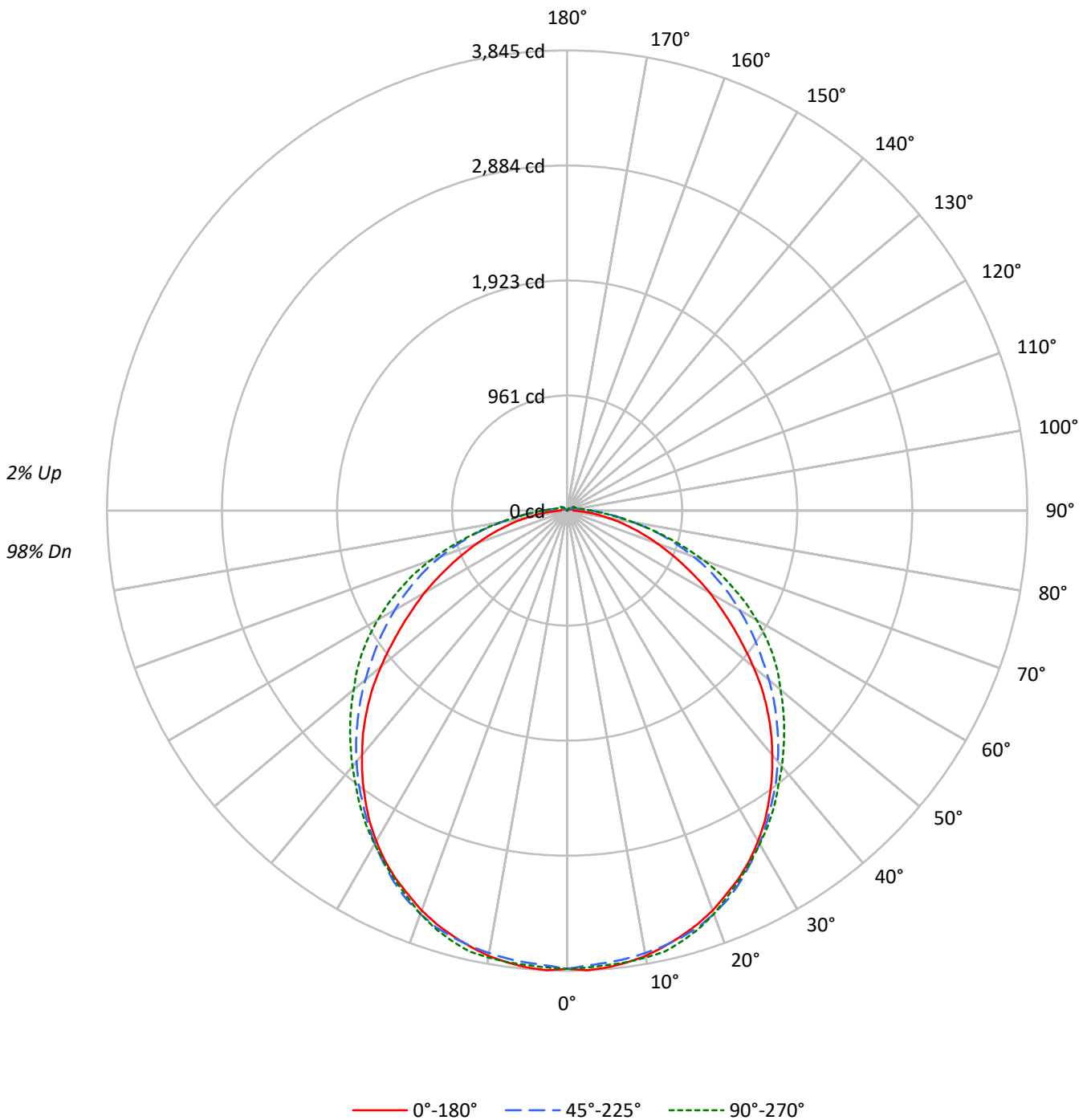
Input Watts (W): 82.44  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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	81
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	72	69	67
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56
4	81	69	60	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	29
9	56	42	34	29	54	42	34	28	40	33	28	39	33	28	38	32	28	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°	19780	19780	19780
5°	19807	19224	19215
10°	19684	18823	18791
15°	19483	18446	18281
20°	19267	17987	17583
25°	18982	17379	16796
30°	18599	16641	16097
35°	18056	15865	15425
40°	17396	15117	14707
45°	16636	14305	14055
50°	15594	13453	13390
55°	14368	12617	12802
60°	13323	11800	11964
65°	12059	10946	10915
70°	10863	9827	9560
75°	9626	8430	7691
80°	8299	6670	5763
85°	6875	5091	4098



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	362.8	3.2
10°-20°	1044.3	9.3
20°-30°	1573.1	14.0
30°-40°	1873.4	16.6
40°-50°	1912.5	17.0
50°-60°	1713.9	15.2
60°-70°	1337.6	11.9
70°-80°	823.5	7.3
80°-90°	343.3	3.0
90°-100°	123.6	1.1
100°-110°	66.6	0.6
110°-120°	43.6	0.4
120°-130°	24.8	0.2
130°-140°	11.0	0.1
140°-150°	2.7	0.0
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2980.2	26.5
0°-40°	4853.6	43.1
0°-60°	8480.1	75.3
0°-90°	10984.5	97.6
90°-120°	233.9	2.1
90°-150°	272.3	2.4
90°-180°	273.0	2.4
0°-180°	11257.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3828	3828	3828	3828	3828	
5°	3832	3819	3792	3819	3813	364
15°	3681	3683	3692	3734	3723	1039
25°	3392	3420	3424	3418	3404	1561
35°	2943	3005	2980	3014	3016	1840
45°	2368	2429	2475	2545	2565	1823
55°	1686	1785	1929	2058	2098	1513
65°	1071	1183	1402	1517	1531	1066
75°	554	676	838	880	865	594
85°	169	263	345	345	332	174
90°	55	140	204	206	201	35
95°	50	79	128	133	129	40
105°	39	39	71	79	78	41
115°	21	19	48	64	66	21
125°	10	6	28	46	50	8
135°	4	3	11	25	29	3
145°	1	1	1	7	10	1
155°	1	1	1	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°	3828.3	3828.3	3828.3	3828.3	3828.3
2.5°	3844.9	3831.1	3804.7	3829.7	3821.4
5°	3832.4	3818.6	3792.3	3818.6	3813.0
7.5°	3808.9	3799.2	3777.0	3808.9	3806.1
10°	3778.4	3768.7	3754.9	3793.6	3792.3
12.5°	3732.7	3728.5	3727.1	3775.6	3772.9
15°	3681.4	3682.8	3692.5	3734.1	3723.0
17.5°	3623.2	3631.5	3648.2	3673.1	3662.0
20°	3555.3	3569.2	3585.8	3595.5	3585.8
22.5°	3472.2	3497.1	3513.8	3506.8	3494.4
25°	3391.8	3419.5	3423.7	3418.2	3404.3
27.5°	3297.6	3332.3	3319.8	3326.7	3311.5
30°	3189.5	3238.0	3214.5	3227.0	3217.3
32.5°	3074.5	3131.4	3099.5	3120.3	3123.0
35°	2942.9	3005.3	2980.3	3013.6	3016.4
37.5°	2809.9	2875.0	2863.9	2905.5	2898.6
40°	2665.8	2737.9	2737.9	2783.6	2790.5
42.5°	2523.1	2584.1	2610.4	2664.4	2678.3
45°	2367.9	2428.9	2474.6	2545.3	2564.7
47.5°	2208.6	2276.5	2341.6	2419.2	2448.3
50°	2032.6	2114.4	2200.3	2301.4	2327.7
52.5°	1855.3	1946.7	2058.9	2180.9	2218.3
55°	1686.2	1784.6	1928.7	2057.5	2097.7
57.5°	1525.5	1626.6	1795.7	1931.5	1966.1
60°	1378.6	1465.9	1664.1	1805.4	1826.2
62.5°	1220.7	1324.6	1535.2	1665.4	1689.0
65°	1071.0	1183.3	1402.2	1517.2	1531.0
67.5°	929.7	1044.7	1267.8	1368.9	1385.6
70°	798.1	920.0	1122.3	1206.8	1212.4
72.5°	677.5	796.7	978.2	1046.1	1036.4
75°	554.2	676.2	838.3	879.8	864.6
77.5°	450.3	561.1	696.9	727.4	703.9
80°	342.2	448.9	559.8	570.8	559.8
82.5°	250.8	350.5	446.1	448.9	432.3
85°	169.0	263.3	345.0	345.0	332.5
87.5°	95.6	192.6	263.3	266.0	252.2
90°	55.4	139.9	203.7	206.4	200.9
92.5°	51.3	101.1	159.3	163.5	158.0
95°	49.9	79.0	127.5	133.0	128.9
97.5°	48.5	63.7	106.7	110.8	108.1
100°	47.1	52.7	90.1	97.0	95.6
102.5°	43.0	45.7	79.0	85.9	84.5
105°	38.8	38.8	70.7	79.0	77.6
107.5°	34.6	33.3	63.7	74.8	73.4
110°	29.1	29.1	58.2	70.7	70.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	24.9	24.9	52.7	67.9	67.9
115°	20.8	19.4	48.5	63.7	66.5
117.5°	16.6	16.6	43.0	59.6	62.3
120°	13.9	12.5	37.4	55.4	59.6
122.5°	11.1	8.3	33.3	49.9	55.4
125°	9.7	5.5	27.7	45.7	49.9
127.5°	6.9	4.2	23.6	40.2	45.7
130°	5.5	4.2	19.4	34.6	40.2
132.5°	5.5	2.8	15.2	29.1	34.6
135°	4.2	2.8	11.1	24.9	29.1
137.5°	2.8	2.8	6.9	20.8	24.9
140°	2.8	2.8	4.2	15.2	19.4
142.5°	2.8	1.4	1.4	11.1	15.2
145°	1.4	1.4	1.4	6.9	9.7
147.5°	1.4	1.4	1.4	2.8	5.5
150°	1.4	1.4	1.4	0.0	1.4
152.5°	1.4	1.4	1.4	0.0	0.0
155°	1.4	1.4	1.4	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)