

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: P237865

Luminaire Tested: **4VT2-LD5-8-FR50-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237865  
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-LD5-8-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: 8613.0 lumens  
Efficiency: N/A  
Efficacy: 147.2 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

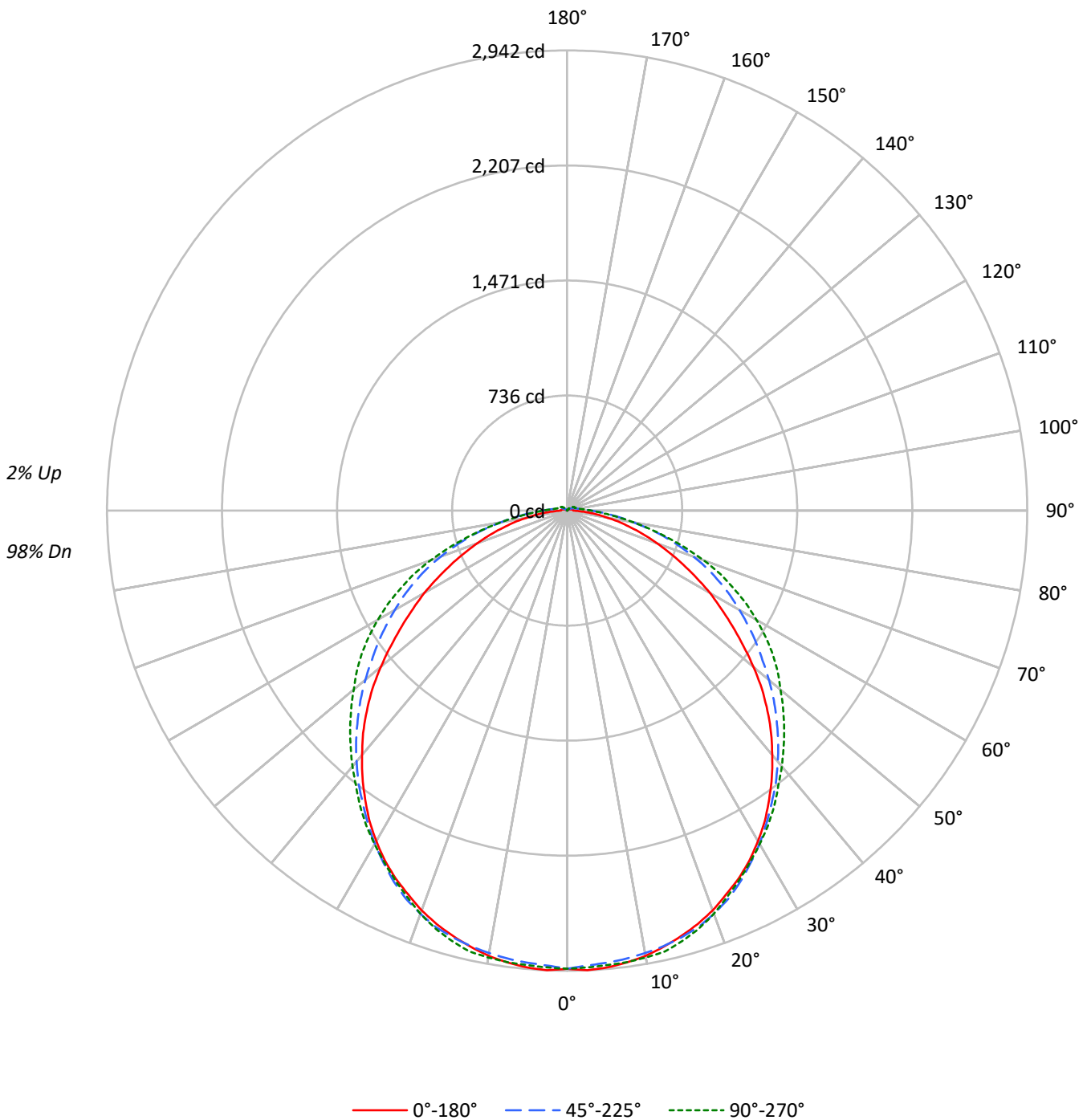
Input Watts (W): 58.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	15134	15134	15134
5°	15155	14709	14703
10°	15061	14402	14378
15°	14907	14114	13987
20°	14742	13763	13453
25°	14524	13297	12851
30°	14231	12733	12316
35°	13815	12139	11802
40°	13310	11567	11253
45°	12729	10945	10754
50°	11932	10293	10245
55°	10994	9653	9795
60°	10193	9028	9153
65°	9227	8374	8351
70°	8311	7519	7314
75°	7365	6450	5885
80°	6349	5103	4409
85°	5260	3896	3135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.6	3.2
10°-20°	799.0	9.3
20°-30°	1203.6	14.0
30°-40°	1433.4	16.6
40°-50°	1463.3	17.0
50°-60°	1311.4	15.2
60°-70°	1023.4	11.9
70°-80°	630.0	7.3
80°-90°	262.7	3.0
90°-100°	94.6	1.1
100°-110°	51.0	0.6
110°-120°	33.3	0.4
120°-130°	18.9	0.2
130°-140°	8.4	0.1
140°-150°	2.1	0.0
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2280.3	26.5
0°-40°	3713.6	43.1
0°-60°	6488.3	75.3
0°-90°	8404.5	97.6
90°-120°	178.9	2.1
90°-150°	208.3	2.4
90°-180°	209.0	2.4
0°-180°	8613.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2929	2929	2929	2929	2929	
5°	2932	2922	2902	2922	2918	279
15°	2817	2818	2825	2857	2848	795
25°	2595	2616	2620	2615	2605	1195
35°	2252	2299	2280	2306	2308	1408
45°	1812	1858	1893	1947	1962	1395
55°	1290	1365	1476	1574	1605	1158
65°	820	905	1073	1161	1171	815
75°	424	517	641	673	662	454
85°	129	201	264	264	254	133
90°	42	107	156	158	154	27
95°	38	60	98	102	99	31
105°	30	30	54	60	59	31
115°	16	15	37	49	51	16
125°	7	4	21	35	38	6
135°	3	2	8	19	22	2
145°	1	1	1	5	7	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°	2929.1	2929.1	2929.1	2929.1	2929.1
2.5°	2941.8	2931.2	2911.1	2930.2	2923.8
5°	2932.3	2921.7	2901.6	2921.7	2917.5
7.5°	2914.3	2906.9	2889.9	2914.3	2912.2
10°	2890.9	2883.5	2872.9	2902.6	2901.6
12.5°	2856.0	2852.8	2851.7	2888.8	2886.7
15°	2816.7	2817.8	2825.2	2857.0	2848.5
17.5°	2772.2	2778.6	2791.3	2810.4	2801.9
20°	2720.3	2730.9	2743.6	2751.0	2743.6
22.5°	2656.7	2675.7	2688.5	2683.2	2673.6
25°	2595.2	2616.4	2619.6	2615.3	2604.7
27.5°	2523.1	2549.6	2540.0	2545.3	2533.7
30°	2440.4	2477.5	2459.5	2469.0	2461.6
32.5°	2352.4	2395.9	2371.5	2387.4	2389.5
35°	2251.7	2299.4	2280.3	2305.8	2307.9
37.5°	2149.9	2199.8	2191.3	2223.1	2217.8
40°	2039.7	2094.8	2094.8	2129.8	2135.1
42.5°	1930.5	1977.1	1997.3	2038.6	2049.2
45°	1811.7	1858.4	1893.4	1947.4	1962.3
47.5°	1689.8	1741.8	1791.6	1851.0	1873.2
50°	1555.2	1617.7	1683.5	1760.9	1781.0
52.5°	1419.5	1489.5	1575.3	1668.6	1697.3
55°	1290.2	1365.4	1475.7	1574.3	1605.0
57.5°	1167.2	1244.6	1373.9	1477.8	1504.3
60°	1054.8	1121.6	1273.2	1381.3	1397.2
62.5°	934.0	1013.5	1174.6	1274.3	1292.3
65°	819.5	905.3	1072.8	1160.8	1171.4
67.5°	711.3	799.3	970.0	1047.4	1060.1
70°	610.6	703.9	858.7	923.4	927.6
72.5°	518.4	609.6	748.4	800.4	793.0
75°	424.0	517.3	641.4	673.2	661.5
77.5°	344.5	429.3	533.2	556.6	538.5
80°	261.8	343.5	428.3	436.8	428.3
82.5°	191.9	268.2	341.4	343.5	330.8
85°	129.3	201.4	264.0	264.0	254.4
87.5°	73.1	147.4	201.4	203.5	192.9
90°	42.4	107.1	155.8	158.0	153.7
92.5°	39.2	77.4	121.9	125.1	120.9
95°	38.2	60.4	97.5	101.8	98.6
97.5°	37.1	48.8	81.6	84.8	82.7
100°	36.0	40.3	68.9	74.2	73.1
102.5°	32.9	35.0	60.4	65.7	64.7
105°	29.7	29.7	54.1	60.4	59.4
107.5°	26.5	25.4	48.8	57.2	56.2
110°	22.3	22.3	44.5	54.1	54.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	19.1	19.1	40.3	51.9	51.9
115°	15.9	14.8	37.1	48.8	50.9
117.5°	12.7	12.7	32.9	45.6	47.7
120°	10.6	9.5	28.6	42.4	45.6
122.5°	8.5	6.4	25.4	38.2	42.4
125°	7.4	4.2	21.2	35.0	38.2
127.5°	5.3	3.2	18.0	30.7	35.0
130°	4.2	3.2	14.8	26.5	30.7
132.5°	4.2	2.1	11.7	22.3	26.5
135°	3.2	2.1	8.5	19.1	22.3
137.5°	2.1	2.1	5.3	15.9	19.1
140°	2.1	2.1	3.2	11.7	14.8
142.5°	2.1	1.1	1.1	8.5	11.7
145°	1.1	1.1	1.1	5.3	7.4
147.5°	1.1	1.1	1.1	2.1	4.2
150°	1.1	1.1	1.1	0.0	1.1
152.5°	1.1	1.1	1.1	0.0	0.0
155°	1.1	1.1	1.1	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)