

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: P237870

Luminaire Tested: **8VT2-LD5-16-FR50-UNV-L840-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237870  
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: 8VT2-LD5-16-FR50-UNV-L840-CD2-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
FROSTED LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
8FT FIXTURE  
Light Source: (448) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16250.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')  
CIE Type: Direct

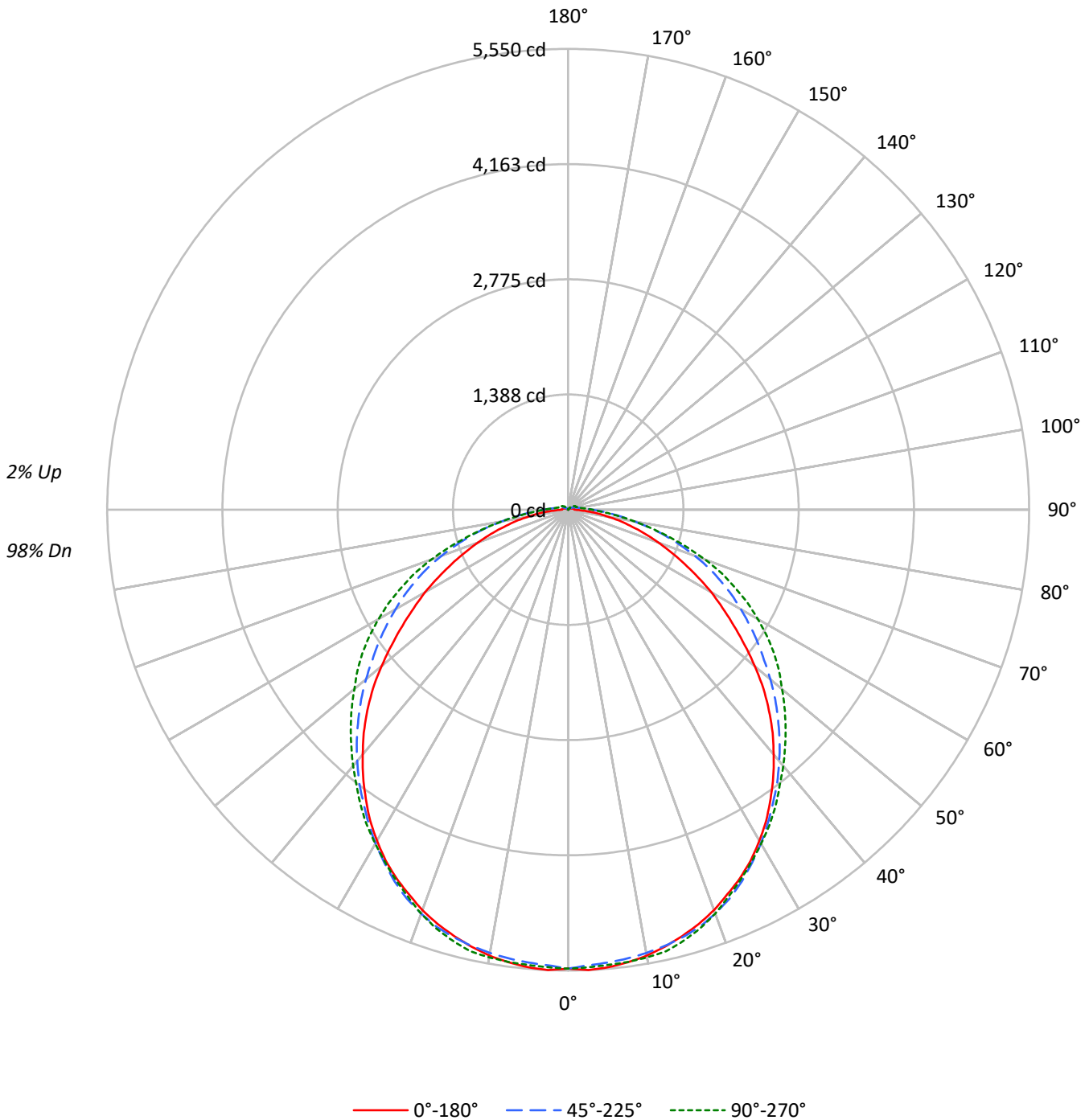
Input Watts (W): 117  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	14276	14276	14276
5°	14321	13892	13869
10°	14257	13619	13563
15°	14137	13361	13195
20°	14007	13044	12691
25°	13827	12618	12123
30°	13578	12097	11618
35°	13212	11548	11133
40°	12763	11018	10615
45°	12243	10442	10144
50°	11518	9836	9665
55°	10659	9242	9240
60°	9938	8662	8635
65°	9062	8056	7878
70°	8249	7256	6900
75°	7430	6250	5551
80°	6601	4973	4159
85°	5887	3828	2958



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	523.8	3.2
10°-20°	1507.5	9.3
20°-30°	2270.8	14.0
30°-40°	2704.3	16.6
40°-50°	2760.8	17.0
50°-60°	2474.2	15.2
60°-70°	1930.9	11.9
70°-80°	1188.7	7.3
80°-90°	495.6	3.0
90°-100°	178.5	1.1
100°-110°	96.2	0.6
110°-120°	62.9	0.4
120°-130°	35.7	0.2
130°-140°	15.8	0.1
140°-150°	3.9	0.0
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4302.1	26.5
0°-40°	7006.4	43.1
0°-60°	12241.4	75.3
0°-90°	15856.6	97.6
90°-120°	337.6	2.1
90°-150°	393.0	2.4
90°-180°	393.0	2.4
0°-180°	16250.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5526	5526	5526	5526	5526	
5°	5532	5512	5474	5512	5504	525
15°	5314	5316	5330	5390	5374	1500
25°	4896	4936	4942	4934	4914	2254
35°	4248	4338	4302	4350	4354	2656
45°	3418	3506	3572	3674	3702	2631
55°	2434	2576	2784	2970	3028	2185
65°	1546	1708	2024	2190	2210	1539
75°	800	976	1210	1270	1248	857
85°	244	380	498	498	480	251
90°	80	202	294	298	290	51
95°	72	114	184	192	186	58
105°	56	56	102	114	112	59
115°	30	28	70	92	96	30
125°	14	8	40	66	72	12
135°	6	4	16	36	42	5
145°	2	2	2	10	14	2
155°	2	2	2	0	0	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°	5526.3	5526.3	5526.3	5526.3	5526.3
2.5°	5550.3	5530.3	5492.3	5528.3	5516.3
5°	5532.3	5512.3	5474.3	5512.3	5504.3
7.5°	5498.3	5484.3	5452.3	5498.3	5494.3
10°	5454.3	5440.3	5420.3	5476.3	5474.3
12.5°	5388.3	5382.3	5380.3	5450.3	5446.3
15°	5314.3	5316.3	5330.3	5390.3	5374.3
17.5°	5230.3	5242.3	5266.3	5302.3	5286.3
20°	5132.3	5152.3	5176.3	5190.3	5176.3
22.5°	5012.3	5048.3	5072.3	5062.3	5044.3
25°	4896.3	4936.3	4942.3	4934.3	4914.3
27.5°	4760.3	4810.3	4792.3	4802.3	4780.3
30°	4604.3	4674.3	4640.3	4658.3	4644.3
32.5°	4438.2	4520.3	4474.2	4504.3	4508.3
35°	4248.2	4338.2	4302.2	4350.2	4354.2
37.5°	4056.2	4150.2	4134.2	4194.2	4184.2
40°	3848.2	3952.2	3952.2	4018.2	4028.2
42.5°	3642.2	3730.2	3768.2	3846.2	3866.2
45°	3418.2	3506.2	3572.2	3674.2	3702.2
47.5°	3188.2	3286.2	3380.2	3492.2	3534.2
50°	2934.2	3052.2	3176.2	3322.2	3360.2
52.5°	2678.1	2810.2	2972.2	3148.2	3202.2
55°	2434.1	2576.1	2784.2	2970.2	3028.2
57.5°	2202.1	2348.1	2592.1	2788.2	2838.2
60°	1990.1	2116.1	2402.1	2606.1	2636.1
62.5°	1762.1	1912.1	2216.1	2404.1	2438.1
65°	1546.1	1708.1	2024.1	2190.1	2210.1
67.5°	1342.1	1508.1	1830.1	1976.1	2000.1
70°	1152.1	1328.1	1620.1	1742.1	1750.1
72.5°	978.1	1150.1	1412.1	1510.1	1496.1
75°	800.0	976.1	1210.1	1270.1	1248.1
77.5°	650.0	810.0	1006.1	1050.1	1016.1
80°	494.0	648.0	808.0	824.0	808.0
82.5°	362.0	506.0	644.0	648.0	624.0
85°	244.0	380.0	498.0	498.0	480.0
87.5°	138.0	278.0	380.0	384.0	364.0
90°	80.0	202.0	294.0	298.0	290.0
92.5°	74.0	146.0	230.0	236.0	228.0
95°	72.0	114.0	184.0	192.0	186.0
97.5°	70.0	92.0	154.0	160.0	156.0
100°	68.0	76.0	130.0	140.0	138.0
102.5°	62.0	66.0	114.0	124.0	122.0
105°	56.0	56.0	102.0	114.0	112.0
107.5°	50.0	48.0	92.0	108.0	106.0
110°	42.0	42.0	84.0	102.0	102.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	36.0	36.0	76.0	98.0	98.0
115°	30.0	28.0	70.0	92.0	96.0
117.5°	24.0	24.0	62.0	86.0	90.0
120°	20.0	18.0	54.0	80.0	86.0
122.5°	16.0	12.0	48.0	72.0	80.0
125°	14.0	8.0	40.0	66.0	72.0
127.5°	10.0	6.0	34.0	58.0	66.0
130°	8.0	6.0	28.0	50.0	58.0
132.5°	8.0	4.0	22.0	42.0	50.0
135°	6.0	4.0	16.0	36.0	42.0
137.5°	4.0	4.0	10.0	30.0	36.0
140°	4.0	4.0	6.0	22.0	28.0
142.5°	4.0	2.0	2.0	16.0	22.0
145°	2.0	2.0	2.0	10.0	14.0
147.5°	2.0	2.0	2.0	4.0	8.0
150°	2.0	2.0	2.0	0.0	2.0
152.5°	2.0	2.0	2.0	0.0	0.0
155°	2.0	2.0	2.0	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)