

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: P237850

Luminaire Tested: **8VT2-LD5-22-DR-UNV-L850-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8VT2-LD5-22-DR-UNV-L850-CD2-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE STANDARD DISTRIBUTION  
8FT FIXTURE  
Light Source: (448) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

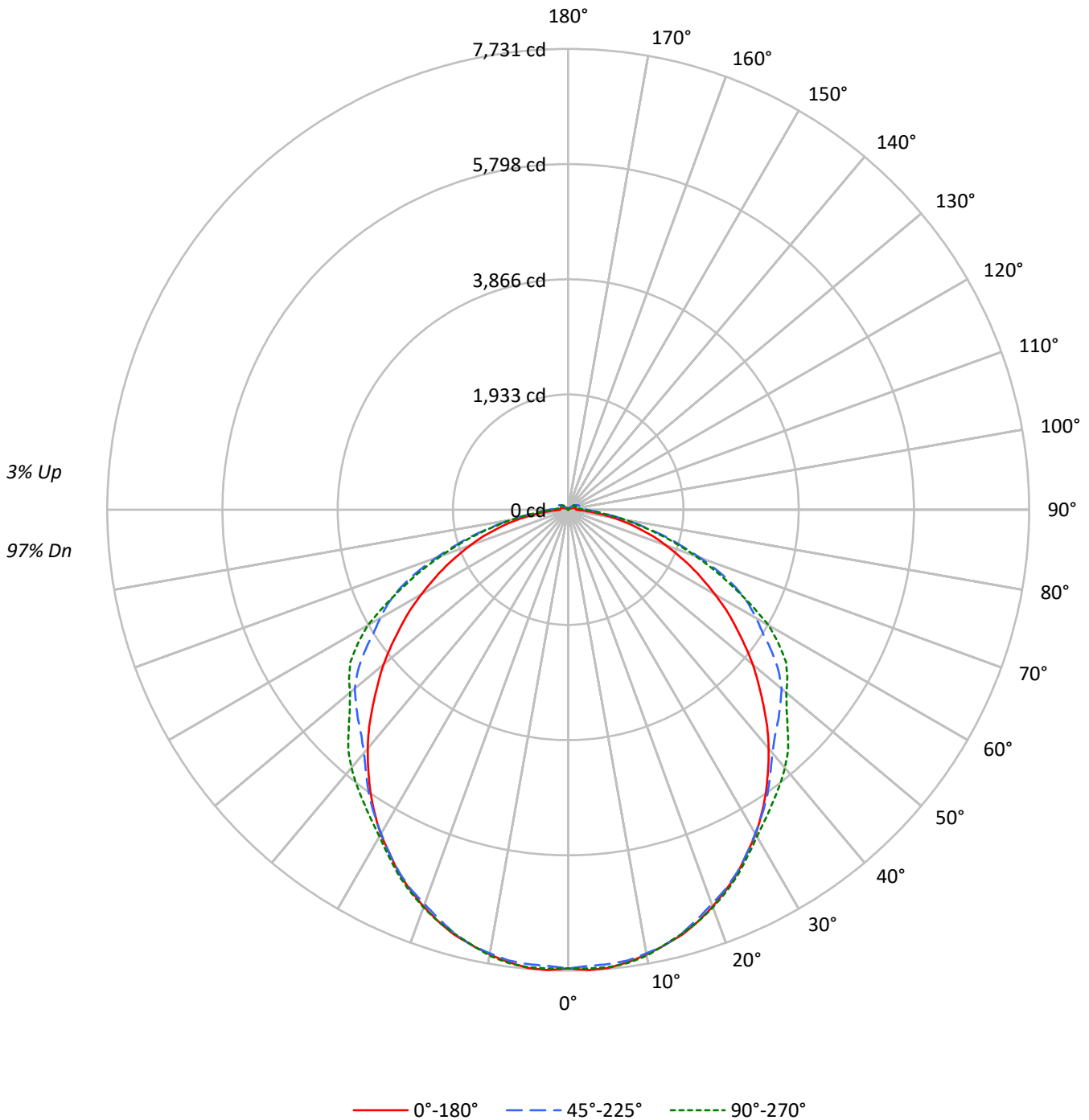
Lumens per Lamp: N/A  
Luminaire Lumens: 22805.0 lumens  
Efficiency: N/A  
Efficacy: 138.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 164.9  
Input Voltage (V): 120  
Input 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	109	109	109	104	104	104	99	99	99	97
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	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	45	55	49	44	53	48	43	41
6	69	55	46	40	67	54	46	39	52	45	39	50	43	38	48	42	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	19879	19879	19879
5°	19977	19423	19410
10°	19803	18986	18825
15°	19637	18449	18083
20°	19338	17743	17405
25°	18984	17127	16652
30°	18541	16355	15832
35°	17977	15641	15304
40°	17342	14848	14896
45°	16575	14563	14259
50°	15870	14468	13733
55°	15034	13862	13604
60°	14197	13120	12707
65°	13351	12375	10836
70°	12479	10487	8958
75°	11479	8359	6939
80°	10181	6004	4949
85°	8289	4111	2988



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	730.8	3.2
10°-20°	2080.7	9.1
20°-30°	3101.2	13.6
30°-40°	3668.9	16.1
40°-50°	3819.7	16.7
50°-60°	3593.3	15.8
60°-70°	2879.3	12.6
70°-80°	1672.8	7.3
80°-90°	590.0	2.6
90°-100°	227.9	1.0
100°-110°	173.2	0.8
110°-120°	131.8	0.6
120°-130°	80.4	0.4
130°-140°	39.3	0.2
140°-150°	12.7	0.1
150°-160°	2.0	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	5912.7	25.9
0°-40°	9581.6	42.0
0°-60°	16994.6	74.5
0°-90°	22136.8	97.1
90°-120°	532.9	2.3
90°-150°	665.2	2.9
90°-180°	668.0	2.9
0°-180°	22805.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7695	7695	7695	7695	7695	
5°	7717	7684	7654	7720	7703	732
15°	7382	7407	7360	7374	7365	2079
25°	6722	6745	6709	6758	6750	3091
35°	5780	5794	5827	5927	5985	3613
45°	4628	4675	4982	5226	5204	3576
55°	3433	3636	4176	4356	4458	3075
65°	2278	2849	3109	3081	3040	2256
75°	1236	1712	1618	1582	1560	1315
85°	344	524	535	515	485	366
90°	130	283	308	291	272	79
95°	133	208	233	202	186	108
105°	108	155	205	169	144	113
115°	55	100	177	158	138	57
125°	22	36	116	130	125	21
135°	8	8	55	86	91	7
145°	6	3	11	36	44	3
155°	3	3	3	3	6	1
165°	3	3	3	3	0	1
175°	6	6	3	3	3	1
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7695.1	7695.1	7695.1	7695.1	7695.1
2.5°	7731.1	7703.4	7661.8	7717.2	7703.4
5°	7717.2	7684.0	7653.5	7720.0	7703.4
7.5°	7656.3	7650.7	7628.6	7684.0	7670.1
10°	7575.9	7592.5	7556.5	7600.8	7598.1
12.5°	7481.7	7523.3	7481.7	7492.8	7476.1
15°	7381.9	7406.9	7359.8	7373.6	7365.3
17.5°	7243.4	7279.4	7201.8	7271.1	7243.4
20°	7085.4	7121.5	7041.1	7118.7	7099.3
22.5°	6908.1	6941.3	6891.5	6946.9	6933.0
25°	6722.4	6744.6	6708.6	6758.5	6750.1
27.5°	6492.4	6545.1	6498.0	6558.9	6534.0
30°	6287.4	6306.8	6273.5	6348.4	6329.0
32.5°	6040.8	6054.6	6054.6	6121.1	6154.4
35°	5780.3	5794.2	5827.4	5927.2	5985.3
37.5°	5506.0	5536.4	5566.9	5763.7	5827.4
40°	5228.9	5251.0	5325.9	5611.3	5652.8
42.5°	4940.7	4962.9	5134.7	5447.8	5461.6
45°	4627.6	4674.7	4982.2	5226.1	5203.9
47.5°	4331.1	4389.3	4827.1	4943.5	4965.6
50°	4042.9	4109.4	4671.9	4716.2	4774.4
52.5°	3732.5	3860.0	4450.2	4511.2	4633.1
55°	3433.3	3635.5	4175.9	4356.0	4458.5
57.5°	3147.9	3411.1	3876.6	4156.5	4184.2
60°	2843.0	3219.9	3638.3	3876.6	3879.4
62.5°	2552.1	3037.0	3402.8	3494.2	3455.4
65°	2277.8	2848.6	3109.1	3081.3	3039.8
67.5°	1997.9	2607.5	2746.1	2685.1	2657.4
70°	1743.0	2347.0	2341.5	2288.8	2272.2
72.5°	1499.1	2022.8	1967.4	1920.3	1906.4
75°	1235.9	1712.5	1618.3	1582.2	1560.1
77.5°	997.6	1391.0	1263.6	1249.7	1233.1
80°	762.0	1061.3	975.4	978.2	961.5
82.5°	526.5	762.0	714.9	709.4	690.0
85°	343.6	523.7	534.8	515.4	484.9
87.5°	185.7	365.8	390.7	376.9	354.7
90°	130.2	282.6	307.6	291.0	271.6
92.5°	130.2	238.3	260.5	235.5	218.9
95°	133.0	207.8	232.8	202.3	185.7
97.5°	133.0	188.4	216.1	182.9	163.5
100°	127.5	177.3	210.6	174.6	155.2
102.5°	119.2	166.3	207.8	169.0	149.6
105°	108.1	155.2	205.1	169.0	144.1
107.5°	94.2	144.1	202.3	166.3	144.1
110°	80.4	130.2	196.7	166.3	141.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	69.3	116.4	188.4	163.5	141.3
115°	55.4	99.8	177.3	157.9	138.5
117.5°	44.3	83.1	163.5	152.4	135.8
120°	36.0	66.5	149.6	146.9	133.0
122.5°	27.7	49.9	133.0	138.5	127.5
125°	22.2	36.0	116.4	130.2	124.7
127.5°	16.6	24.9	99.8	121.9	116.4
130°	13.9	13.9	83.1	110.8	108.1
132.5°	11.1	11.1	69.3	99.8	102.5
135°	8.3	8.3	55.4	85.9	91.4
137.5°	8.3	5.5	41.6	74.8	80.4
140°	5.5	5.5	30.5	61.0	66.5
142.5°	5.5	5.5	19.4	49.9	55.4
145°	5.5	2.8	11.1	36.0	44.3
147.5°	5.5	2.8	5.5	24.9	33.3
150°	2.8	2.8	2.8	16.6	22.2
152.5°	2.8	2.8	2.8	8.3	11.1
155°	2.8	2.8	2.8	2.8	5.5
157.5°	2.8	2.8	2.8	2.8	0.0
160°	2.8	2.8	2.8	2.8	0.0
162.5°	2.8	2.8	2.8	2.8	0.0
165°	2.8	2.8	2.8	2.8	0.0
167.5°	5.5	2.8	2.8	2.8	0.0
170°	5.5	2.8	2.8	2.8	0.0
172.5°	5.5	5.5	2.8	2.8	0.0
175°	5.5	5.5	2.8	2.8	2.8
177.5°	5.5	5.5	2.8	2.8	2.8
180°	2.8	2.8	2.8	2.8	2.8

(END OF REPORT)