

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: P237859

Luminaire Tested: **8VT2-LD5-16-DR100-UNV-L850-CD2-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237859  
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: 8VT2-LD5-16-DR100-UNV-L850-CD2-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
INTERNAL PRISMATIC LENS/100% 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: 17471.0 lumens  
Efficiency: N/A  
Efficacy: 149.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')  
CIE Type: Direct

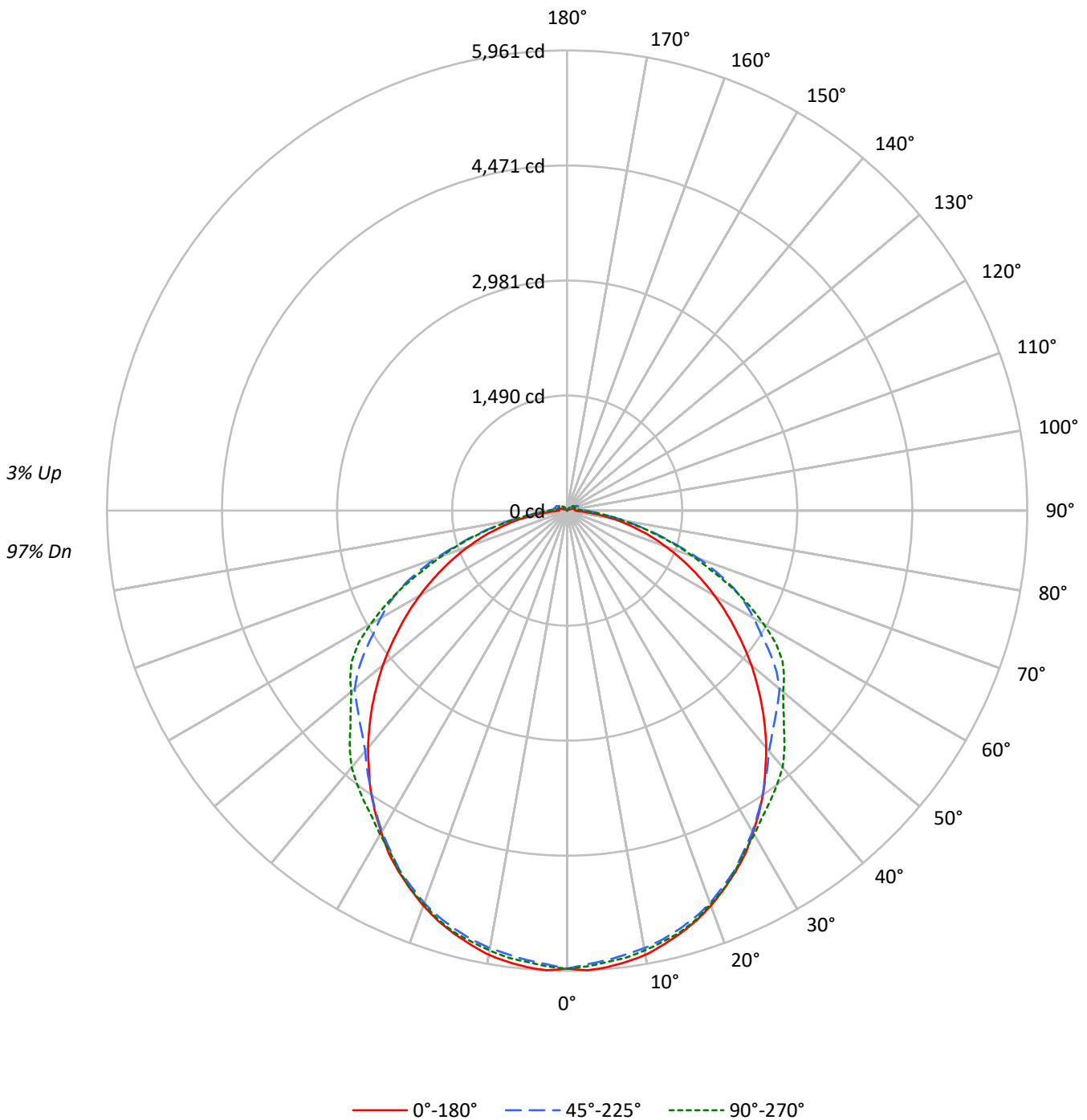
Input Watts (W): 117  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	80	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	64	57	52	62	56	51	59	54	50	47
5	75	62	52	46	72	60	52	45	58	50	44	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°	15329	15329	15329
5°	15372	14838	14791
10°	15278	14461	14334
15°	15086	14066	13882
20°	14864	13634	13306
25°	14578	13114	12703
30°	14198	12518	12123
35°	13793	11892	11735
40°	13303	11342	11447
45°	12779	11136	10880
50°	12233	11128	10500
55°	11613	10640	10395
60°	11010	10068	9625
65°	10363	9476	8381
70°	9699	8099	6837
75°	8959	6329	5281
80°	7931	4658	3732
85°	6036	3113	2404



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	558.8	3.2
10°-20°	1590.9	9.1
20°-30°	2369.2	13.6
30°-40°	2803.5	16.0
40°-50°	2927.8	16.8
50°-60°	2754.4	15.8
60°-70°	2209.1	12.6
70°-80°	1282.1	7.3
80°-90°	456.7	2.6
90°-100°	178.2	1.0
100°-110°	134.1	0.8
110°-120°	101.9	0.6
120°-130°	62.4	0.4
130°-140°	30.5	0.2
140°-150°	10.0	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4518.9	25.9
0°-40°	7322.4	41.9
0°-60°	13004.6	74.4
0°-90°	16952.5	97.0
90°-120°	414.3	2.4
90°-150°	517.3	3.0
90°-180°	519.0	3.0
0°-180°	17471.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5934	5934	5934	5934	5934	
5°	5938	5906	5847	5877	5870	564
15°	5671	5628	5612	5669	5654	1599
25°	5162	5132	5137	5173	5149	2376
35°	4435	4429	4431	4528	4590	2769
45°	3568	3587	3810	3998	3971	2751
55°	2652	2784	3205	3322	3407	2374
65°	1768	2200	2381	2364	2351	1757
75°	965	1323	1225	1202	1187	1023
85°	250	409	405	396	390	280
90°	102	218	244	229	216	61
95°	104	161	180	159	144	84
105°	85	121	159	129	112	88
115°	44	76	138	123	106	45
125°	17	30	91	100	95	17
135°	8	6	42	68	70	6
145°	4	4	8	30	34	3
155°	2	2	2	2	4	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°	5933.8	5933.8	5933.8	5933.8	5933.8
2.5°	5961.4	5929.6	5882.9	5925.3	5910.5
5°	5938.1	5906.3	5846.9	5876.6	5870.2
7.5°	5895.7	5853.3	5800.3	5846.9	5842.7
10°	5844.8	5796.0	5755.7	5800.3	5785.4
12.5°	5760.0	5721.8	5692.1	5745.1	5721.8
15°	5670.9	5628.5	5611.6	5668.8	5654.0
17.5°	5569.2	5535.3	5522.5	5554.3	5556.5
20°	5446.2	5420.8	5410.2	5452.6	5427.1
22.5°	5306.3	5270.3	5272.4	5316.9	5304.2
25°	5162.1	5132.5	5136.7	5172.7	5149.4
27.5°	5005.3	4971.3	4962.9	5001.0	4977.7
30°	4814.5	4808.1	4801.7	4833.5	4846.3
32.5°	4630.0	4627.9	4615.2	4659.7	4704.2
35°	4435.0	4428.6	4430.7	4528.3	4589.7
37.5°	4218.8	4225.1	4250.6	4407.4	4468.9
40°	4011.0	4013.1	4068.2	4303.6	4343.8
42.5°	3790.5	3794.8	3928.3	4176.4	4167.9
45°	3567.9	3587.0	3809.6	3998.3	3970.7
47.5°	3336.8	3372.9	3699.4	3799.0	3801.1
50°	3116.4	3163.0	3593.4	3616.7	3650.6
52.5°	2881.0	2972.2	3415.3	3447.1	3542.5
55°	2652.1	2783.5	3205.4	3322.0	3406.8
57.5°	2427.4	2620.3	2978.6	3163.0	3209.6
60°	2204.8	2474.0	2792.0	2942.5	2938.3
62.5°	1986.4	2334.1	2597.0	2666.9	2656.3
65°	1768.1	2200.5	2380.7	2363.8	2351.1
67.5°	1566.7	2018.2	2105.1	2035.2	2014.0
70°	1354.7	1797.7	1808.3	1738.4	1734.1
72.5°	1163.9	1560.3	1496.7	1462.8	1464.9
75°	964.6	1322.9	1225.3	1202.0	1187.2
77.5°	778.0	1062.1	966.7	962.5	954.0
80°	593.6	818.3	756.8	737.8	725.0
82.5°	413.4	591.5	553.3	553.3	544.8
85°	250.2	409.2	404.9	396.4	390.1
87.5°	139.9	282.0	303.2	294.7	277.7
90°	101.8	218.4	243.8	229.0	216.2
92.5°	101.8	184.4	203.5	186.6	171.7
95°	103.9	161.1	180.2	159.0	144.2
97.5°	103.9	148.4	169.6	144.2	129.3
100°	99.6	137.8	163.2	135.7	118.7
102.5°	93.3	129.3	159.0	131.4	114.5
105°	84.8	120.8	159.0	129.3	112.4
107.5°	74.2	112.4	154.8	129.3	110.2
110°	63.6	101.8	152.6	127.2	110.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	89.0	146.3	125.1	108.1
115°	44.5	76.3	137.8	123.0	106.0
117.5°	36.0	63.6	127.2	118.7	103.9
120°	29.7	50.9	114.5	112.4	101.8
122.5°	21.2	38.2	103.9	108.1	99.6
125°	17.0	29.7	91.2	99.6	95.4
127.5°	14.8	19.1	78.4	93.3	91.2
130°	10.6	12.7	65.7	84.8	84.8
132.5°	8.5	8.5	53.0	76.3	78.4
135°	8.5	6.4	42.4	67.8	70.0
137.5°	6.4	6.4	33.9	57.2	61.5
140°	4.2	4.2	23.3	46.6	53.0
142.5°	4.2	4.2	14.8	38.2	42.4
145°	4.2	4.2	8.5	29.7	33.9
147.5°	4.2	2.1	4.2	21.2	25.4
150°	4.2	2.1	2.1	12.7	17.0
152.5°	2.1	2.1	2.1	6.4	10.6
155°	2.1	2.1	2.1	2.1	4.2
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)