

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: P#

Luminaire Tested: **VT4S-LD5-18-PC-L850-CD2-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT4S-LD5-18-PC-L850-CD2-U  
Description: VT4S VAPORTIGHT FIXTURE WITH 5000K LED AND CLEAR POLYCARBONATE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

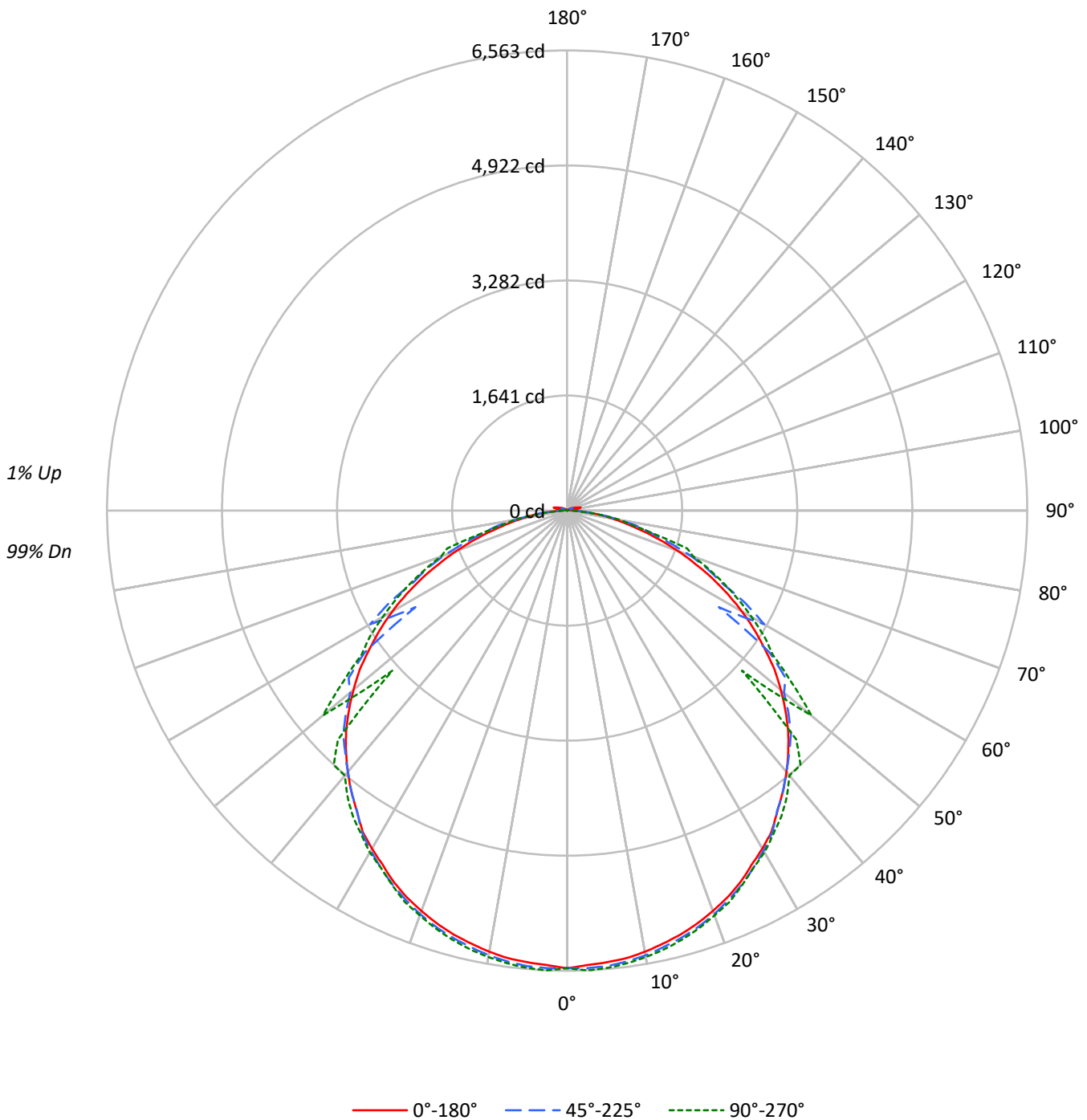
Lumens per Lamp: N/A  
Luminaire Lumens: 19204.1 lumens  
Efficiency: N/A  
Efficacy: 139.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')  
CIE Type: Direct

Input Watts (W): 137.5  
Input Voltage (V): NR  
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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53		63	57	52		61	56	51	49
5	75	62	53	47	73	61	53	46	59	52	46		57	50	45		55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40		51	45	40		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	28		40	33	28		38	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	25	24

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

	0°	45°	90°
0°	31139	31139	31139
5°	30654	30575	30747
10°	30313	29895	30102
15°	29951	29207	29466
20°	29557	28526	28781
25°	29159	27785	28036
30°	28683	26995	27363
35°	28089	25936	26713
40°	27538	25075	25740
45°	26865	24406	25345
50°	25831	23126	26465
55°	24446	21647	22385
60°	22754	21643	20717
65°	20526	17827	18665
70°	17628	15405	16321
75°	14022	11854	12518
80°	10720	8435	8915
85°	6828	4313	3777



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	619.4	3.2
10°-20°	1779.7	9.3
20°-30°	2710.4	14.1
30°-40°	3297.8	17.2
40°-50°	3434.9	17.9
50°-60°	3139.4	16.3
60°-70°	2390.7	12.4
70°-80°	1297.7	6.8
80°-90°	357.3	1.9
90°-100°	45.8	0.2
100°-110°	62.2	0.3
110°-120°	41.5	0.2
120°-130°	16.0	0.1
130°-140°	6.5	0.0
140°-150°	2.0	0.0
150°-160°	1.2	0.0
160°-170°	1.0	0.0
170°-180°	0.4	0.0
0°-30°	5109.6	26.6
0°-40°	8407.4	43.8
0°-60°	14981.7	78.0
0°-90°	19027.4	99.1
90°-120°	149.6	0.8
90°-150°	174.1	0.9
90°-180°	177.0	0.9
0°-180°	19204.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6526	6526	6526	6526	6526	
5°	6467	6494	6522	6546	6549	615
15°	6258	6288	6306	6330	6334	1767
25°	5848	5878	5888	5898	5898	2694
35°	5227	5265	5226	5290	5327	3278
45°	4459	4469	4514	4728	4623	3432
55°	3442	3452	3524	3762	3578	3078
65°	2286	2355	2419	2469	2472	2255
75°	1101	1224	1238	1264	1264	1187
85°	296	321	302	251	251	319
90°	59	84	79	73	70	41
95°	47	38	41	23	22	68
105°	170	220	22	23	20	174
115°	88	55	87	12	12	89
125°	40	30	12	3	4	37
135°	17	13	5	3	3	14
145°	5	3	3	3	1	4
155°	3	3	3	3	3	1
165°	4	4	4	4	4	1
175°	4	4	4	4	4	0
180°	4	4	4	4	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6526.0	6526.0	6526.0	6526.0	6526.0
2.5°	6488.8	6509.3	6531.1	6554.1	6563.1
5°	6467.1	6493.9	6522.1	6546.5	6549.0
7.5°	6440.2	6467.1	6486.3	6506.8	6513.2
10°	6388.9	6427.4	6440.2	6454.2	6465.8
12.5°	6326.2	6362.0	6373.6	6401.7	6408.1
15°	6258.3	6287.8	6305.7	6330.0	6333.9
17.5°	6175.1	6204.5	6225.0	6239.1	6248.1
20°	6075.2	6099.5	6125.1	6135.4	6144.3
22.5°	5971.5	5986.8	6011.2	6027.8	6043.2
25°	5848.5	5878.0	5888.2	5898.5	5898.5
27.5°	5697.4	5741.0	5748.6	5733.3	5746.1
30°	5566.8	5596.2	5601.4	5583.4	5628.3
32.5°	5428.5	5429.8	5445.1	5441.3	5470.7
35°	5227.4	5264.6	5226.1	5290.2	5327.3
37.5°	5055.8	5086.6	5054.5	5151.9	5145.5
40°	4866.3	4895.8	4863.7	4947.0	4932.9
42.5°	4667.8	4693.4	4685.7	4724.2	4925.2
45°	4459.1	4469.3	4514.1	4728.0	4623.0
47.5°	4223.4	4232.4	4279.8	4202.9	3380.8
50°	3977.6	3986.5	4036.5	3175.9	4546.1
52.5°	3729.1	3716.3	3926.3	4270.8	4042.9
55°	3442.3	3452.5	3524.2	3762.4	3578.0
57.5°	3166.9	3190.0	2566.3	3310.4	3328.3
60°	2880.1	2922.3	3242.5	3029.9	3038.9
62.5°	2583.0	2654.7	2867.3	2750.7	2759.7
65°	2285.9	2355.0	2419.1	2469.0	2471.6
67.5°	1969.6	2075.9	2157.8	2138.6	2191.1
70°	1680.2	1631.5	1856.9	1850.5	1911.9
72.5°	1380.5	1499.6	1525.2	1324.1	1794.1
75°	1101.3	1224.3	1238.3	1264.0	1264.0
77.5°	852.9	924.6	1030.9	980.9	945.1
80°	655.7	676.2	738.9	762.0	749.2
82.5°	487.9	459.7	509.7	531.5	481.5
85°	295.8	321.4	302.2	251.0	251.0
87.5°	121.7	153.7	135.7	124.2	110.1
90°	58.9	84.5	79.4	73.0	70.4
92.5°	61.5	58.9	42.3	29.5	23.1
95°	47.4	38.4	41.0	23.1	21.8
97.5°	89.6	28.2	28.2	20.5	16.6
100°	166.5	24.3	25.6	20.5	14.1
102.5°	198.5	35.9	25.6	20.5	20.5
105°	170.3	220.3	21.8	23.1	20.5
107.5°	144.7	99.9	16.6	20.5	23.1
110°	121.7	70.4	14.1	19.2	21.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	102.4	52.5	14.1	14.1	19.2
115°	88.4	55.1	87.1	11.5	11.5
117.5°	74.3	87.1	38.4	9.0	11.5
120°	60.2	49.9	23.1	11.5	7.7
122.5°	47.4	37.1	15.4	3.8	7.7
125°	39.7	29.5	11.5	2.6	3.8
127.5°	32.0	24.3	7.7	2.6	2.6
130°	25.6	23.1	5.1	2.6	2.6
132.5°	21.8	16.6	14.1	2.6	2.6
135°	16.6	12.8	5.1	2.6	2.6
137.5°	12.8	10.2	3.8	2.6	2.6
140°	10.2	7.7	2.6	2.6	1.3
142.5°	7.7	5.1	2.6	2.6	1.3
145°	5.1	2.6	2.6	2.6	1.3
147.5°	3.8	2.6	2.6	2.6	2.6
150°	2.6	2.6	2.6	2.6	2.6
152.5°	2.6	2.6	2.6	2.6	2.6
155°	2.6	2.6	2.6	2.6	2.6
157.5°	2.6	2.6	2.6	2.6	2.6
160°	2.6	2.6	2.6	2.6	2.6
162.5°	3.8	3.8	3.8	3.8	2.6
165°	3.8	3.8	3.8	3.8	3.8
167.5°	3.8	3.8	3.8	3.8	3.8
170°	3.8	3.8	3.8	3.8	3.8
172.5°	3.8	3.8	3.8	3.8	3.8
175°	3.8	3.8	3.8	3.8	3.8
177.5°	3.8	3.8	3.8	3.8	3.8
180°	3.8	3.8	3.8	3.8	3.8

(END OF REPORT)