

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: P236584

Luminaire Tested: **VRVT4LED-LD5-9-DR-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236584
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-9-DR-UNV-L840-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH CLEAR ACRYLIC LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9002.0 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

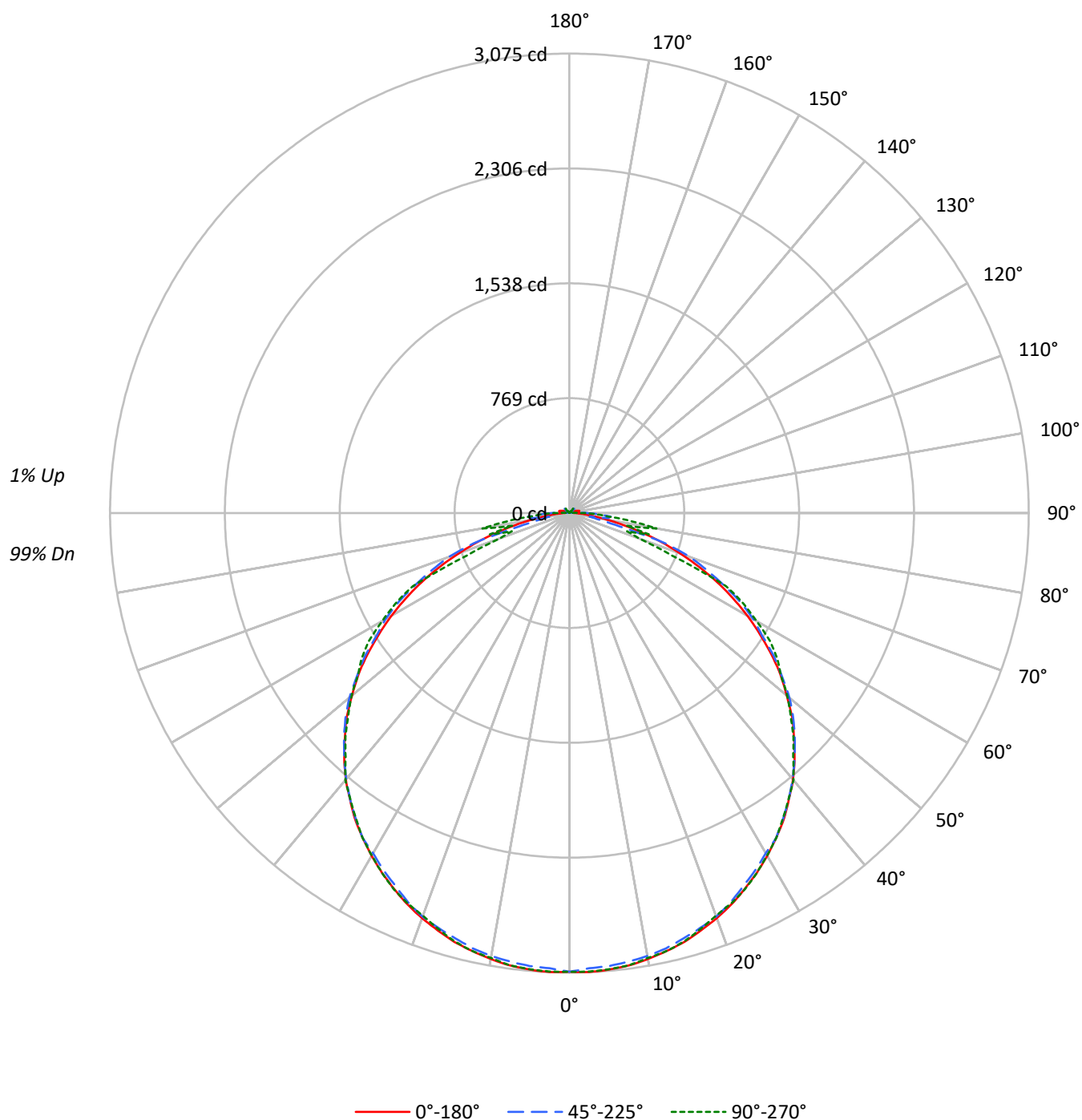
Input Watts (W): 64.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		110	110	110		106	106	106		101	101	101
1	108	104	99	96	106	101	97	94		97	94	91		93	90	88		89	87	85
2	99	90	84	78	96	88	82	77		85	79	75		81	77	73		78	74	71
3	90	79	71	65	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	62	55	80	69	61	54		66	59	54		64	58	53		61	56	52
5	76	63	54	47	73	62	53	47		59	52	46		57	51	46		55	50	45
6	70	56	47	41	68	55	47	41		54	46	40		52	45	40		50	44	39
7	65	51	42	36	63	50	42	36		49	41	36		47	40	35		46	40	35
8	60	47	38	32	59	46	38	32		44	37	32		43	36	32		42	36	31
9	56	43	34	29	55	42	34	29		41	34	29		40	33	28		39	33	28
10	53	39	31	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7690	7690	7690
5°	7671	7512	7546
10°	7628	7379	7377
15°	7584	7230	7232
20°	7524	7111	7028
25°	7462	6925	6908
30°	7400	6773	6722
35°	7340	6641	6527
40°	7247	6452	6350
45°	7101	6235	6059
50°	6902	5976	5773
55°	6636	5598	5523
60°	6243	5207	5121
65°	5707	4621	4527
70°	4929	3953	2176
75°	3923	1873	2813
80°	2770	896	3617
85°	1732	2330	1950



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.9	3.2
10°-20°	836.7	9.3
20°-30°	1277.9	14.2
30°-40°	1563.1	17.4
40°-50°	1640.4	18.2
50°-60°	1495.4	16.6
60°-70°	1093.6	12.1
70°-80°	480.8	5.3
80°-90°	221.0	2.5
90°-100°	39.7	0.4
100°-110°	21.1	0.2
110°-120°	15.1	0.2
120°-130°	9.2	0.1
130°-140°	11.5	0.1
140°-150°	3.7	0.0
150°-160°	1.1	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	2405.4	26.7
0°-40°	3968.5	44.1
0°-60°	7104.3	78.9
0°-90°	8899.7	98.9
90°-120°	75.9	0.8
90°-150°	100.3	1.1
90°-180°	102.0	1.1
0°-180°	9002.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3070	3070	3070	3070	3070	
5°	3067	3063	3043	3064	3064	292
15°	2972	2968	2947	2977	2968	838
25°	2776	2773	2754	2780	2779	1280
35°	2502	2503	2495	2497	2493	1564
45°	2126	2127	2134	2128	2121	1640
55°	1651	1672	1671	1698	1698	1473
65°	1088	1102	1135	1180	1157	1073
75°	497	519	347	242	551	536
85°	102	72	278	301	254	117
90°	30	79	117	104	88	21
95°	48	26	20	17	16	44
105°	60	19	14	12	11	62
115°	28	21	11	9	9	29
125°	13	11	10	7	7	12
135°	6	4	10	20	10	5
145°	3	3	2	11	8	2
155°	2	3	3	2	1	1
165°	3	3	3	2	2	1
175°	3	3	3	3	2	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3069.8	3069.8	3069.8	3069.8	3069.8
2.5°	3074.8	3070.8	3048.8	3069.8	3070.8
5°	3066.8	3062.8	3042.8	3063.8	3063.8
7.5°	3053.8	3047.8	3027.8	3052.8	3052.8
10°	3030.8	3028.8	3009.8	3026.8	3022.8
12.5°	3002.8	2998.8	2983.8	3000.8	3002.8
15°	2971.8	2967.8	2946.8	2976.8	2967.8
17.5°	2928.8	2931.8	2911.8	2931.8	2918.8
20°	2884.8	2887.8	2873.8	2867.8	2866.8
22.5°	2834.8	2832.8	2820.8	2817.8	2827.8
25°	2775.8	2772.8	2753.8	2779.8	2778.8
27.5°	2714.8	2713.8	2694.8	2726.8	2715.8
30°	2647.8	2647.8	2628.8	2655.8	2645.8
32.5°	2576.9	2580.9	2575.9	2580.9	2576.9
35°	2501.9	2502.9	2494.9	2496.9	2492.9
37.5°	2413.9	2419.9	2411.9	2414.9	2409.9
40°	2328.9	2325.9	2324.9	2329.9	2332.9
42.5°	2230.9	2211.9	2229.9	2233.9	2216.9
45°	2125.9	2126.9	2133.9	2127.9	2120.9
47.5°	2022.9	2018.9	2032.9	2019.9	2007.9
50°	1898.9	1927.9	1921.9	1899.9	1904.9
52.5°	1782.9	1804.9	1792.9	1797.9	1783.9
55°	1650.9	1671.9	1670.9	1697.9	1697.9
57.5°	1513.9	1535.9	1530.9	1566.9	1590.9
60°	1376.9	1398.9	1421.9	1444.9	1446.9
62.5°	1231.9	1253.9	1289.9	1309.9	1313.9
65°	1087.9	1101.9	1134.9	1179.9	1156.9
67.5°	937.9	947.9	993.9	1000.9	744.0
70°	785.0	798.0	855.0	528.0	493.0
72.5°	646.0	651.0	672.0	441.0	404.0
75°	497.0	519.0	347.0	242.0	551.0
77.5°	370.0	387.0	200.0	400.0	390.0
80°	258.0	278.0	137.0	357.0	592.0
82.5°	168.0	130.0	259.0	403.0	419.0
85°	102.0	72.0	278.0	301.0	254.0
87.5°	63.0	55.0	187.0	191.0	177.0
90°	30.0	79.0	117.0	104.0	88.0
92.5°	28.0	56.0	52.0	42.0	39.0
95°	48.0	26.0	20.0	17.0	16.0
97.5°	67.0	17.0	14.0	12.0	12.0
100°	68.0	16.0	14.0	12.0	11.0
102.5°	68.0	17.0	14.0	12.0	11.0
105°	60.0	19.0	14.0	12.0	11.0
107.5°	51.0	21.0	13.0	12.0	11.0
110°	43.0	24.0	13.0	11.0	11.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	34.0	23.0	12.0	10.0	10.0
115°	28.0	21.0	11.0	9.0	9.0
117.5°	23.0	19.0	11.0	9.0	8.0
120°	19.0	17.0	11.0	8.0	8.0
122.5°	16.0	15.0	11.0	7.0	7.0
125°	13.0	11.0	10.0	7.0	7.0
127.5°	11.0	8.0	12.0	7.0	6.0
130°	9.0	7.0	21.0	7.0	7.0
132.5°	7.0	5.0	43.0	9.0	7.0
135°	6.0	4.0	10.0	20.0	10.0
137.5°	5.0	4.0	7.0	62.0	28.0
140°	4.0	3.0	7.0	10.0	39.0
142.5°	3.0	3.0	5.0	7.0	7.0
145°	3.0	3.0	2.0	11.0	8.0
147.5°	3.0	2.0	2.0	12.0	13.0
150°	2.0	2.0	2.0	4.0	7.0
152.5°	2.0	2.0	2.0	2.0	2.0
155°	2.0	3.0	3.0	2.0	1.0
157.5°	2.0	3.0	3.0	2.0	1.0
160°	3.0	3.0	3.0	2.0	1.0
162.5°	3.0	3.0	3.0	2.0	2.0
165°	3.0	3.0	3.0	2.0	2.0
167.5°	3.0	3.0	3.0	2.0	2.0
170°	3.0	3.0	3.0	2.0	2.0
172.5°	3.0	3.0	3.0	2.0	2.0
175°	3.0	3.0	3.0	3.0	2.0
177.5°	3.0	3.0	3.0	3.0	2.0
180°	3.0	3.0	3.0	3.0	3.0

(END OF REPORT)