

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: P236593

Luminaire Tested: **VRVT4LED-LD5-12-DRF-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236593
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-12-DRF-UNV-L840-CD1-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
4 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11599.0 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

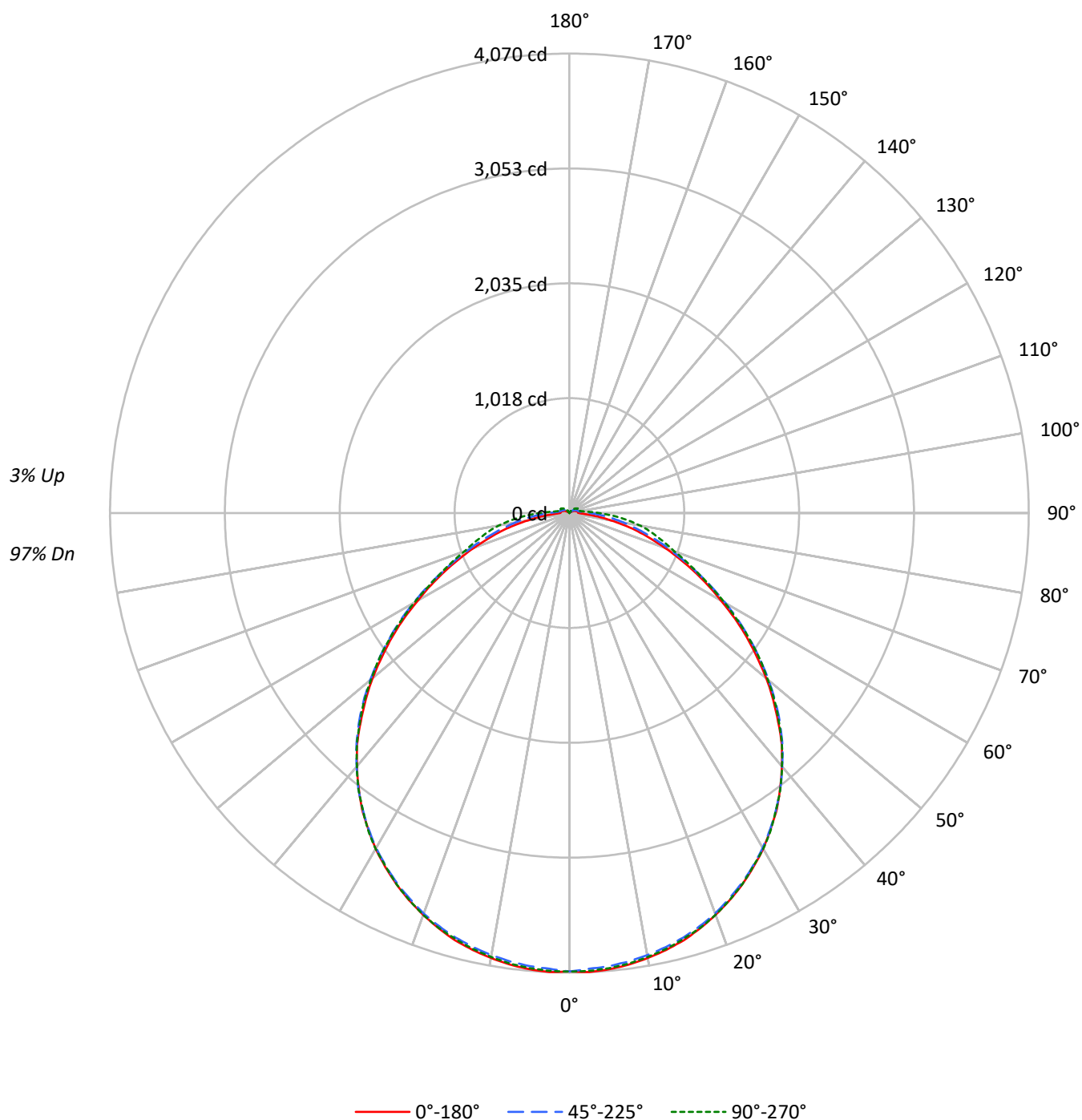
Input Watts (W): 92.53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	118	118	118	118	115	115	115	115		110	110	110		104	104	104		99	99	99
1	108	103	99	95	105	100	96	93		96	92	89		91	89	86		87	85	83
2	98	90	83	77	95	88	81	76		84	78	74		80	76	72		77	73	70
3	90	79	71	64	87	77	70	64		74	67	62		71	65	61		68	63	59
4	82	70	61	55	80	69	60	54		66	59	53		63	57	52		61	55	51
5	76	63	54	47	73	61	53	47		59	52	46		57	50	45		55	49	45
6	70	57	48	41	68	55	47	41		53	46	40		51	45	40		50	44	39
7	65	51	43	36	63	50	42	36		49	41	36		47	40	35		45	39	35
8	60	47	38	33	59	46	38	32		44	37	32		43	36	32		42	36	31
9	56	43	35	29	55	42	34	29		41	34	29		40	33	29		38	33	28
10	53	40	32	27	51	39	32	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10171	10171	10171
5°	10146	9945	9964
10°	10072	9750	9744
15°	9996	9553	9516
20°	9878	9338	9284
25°	9752	9093	9015
30°	9598	8824	8725
35°	9398	8510	8366
40°	9114	8139	7976
45°	8737	7712	7507
50°	8278	7169	6954
55°	7715	6542	6333
60°	7025	5848	5614
65°	6360	5093	4910
70°	5655	4385	4362
75°	4952	3752	4104
80°	4030	3193	3874
85°	3017	2635	3372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.3	3.3
10°-20°	1102.3	9.5
20°-30°	1669.9	14.4
30°-40°	2001.3	17.3
40°-50°	2029.3	17.5
50°-60°	1738.4	15.0
60°-70°	1239.2	10.7
70°-80°	752.6	6.5
80°-90°	350.0	3.0
90°-100°	128.2	1.1
100°-110°	80.0	0.7
110°-120°	60.7	0.5
120°-130°	38.4	0.3
130°-140°	17.9	0.2
140°-150°	4.8	0.0
150°-160°	0.7	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	3156.6	27.2
0°-40°	5157.9	44.5
0°-60°	8925.5	77.0
0°-90°	11267.4	97.1
90°-120°	269.0	2.3
90°-150°	330.0	2.8
90°-180°	332.0	2.9
0°-180°	11599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4060	4060	4060	4060	4060	
5°	4056	4047	4028	4048	4046	385
15°	3917	3908	3893	3913	3905	1105
25°	3628	3624	3616	3633	3626	1671
35°	3203	3206	3197	3207	3195	2000
45°	2616	2636	2640	2637	2628	2017
55°	1919	1942	1952	1959	1947	1712
65°	1212	1236	1251	1256	1255	1204
75°	627	645	695	772	804	665
85°	178	207	314	416	439	188
90°	84	97	182	249	263	49
95°	77	74	111	141	147	62
105°	66	58	78	86	86	70
115°	41	38	64	80	84	42
125°	21	17	42	65	72	20
135°	11	8	17	37	45	8
145°	4	4	1	12	17	3
155°	3	3	1	0	0	1
165°	4	3	3	1	1	1
175°	4	4	3	1	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4060.3	4060.3	4060.3	4060.3	4060.3
2.5°	4069.6	4060.3	4040.4	4060.3	4059.0
5°	4056.3	4047.0	4028.5	4048.4	4045.7
7.5°	4035.1	4025.8	4005.9	4027.1	4024.5
10°	4001.9	3998.0	3976.7	3996.6	3992.6
12.5°	3963.5	3956.8	3938.3	3958.2	3954.2
15°	3917.0	3907.8	3893.2	3913.1	3905.1
17.5°	3856.0	3852.0	3837.4	3857.3	3852.0
20°	3787.0	3781.7	3773.8	3789.7	3787.0
22.5°	3711.4	3707.5	3696.8	3718.1	3708.8
25°	3627.9	3623.9	3615.9	3633.2	3626.5
27.5°	3533.7	3533.7	3523.1	3539.0	3527.1
30°	3434.2	3431.6	3424.9	3436.9	3434.2
32.5°	3318.8	3329.4	3313.5	3324.1	3324.1
35°	3203.4	3206.1	3196.8	3207.4	3195.4
37.5°	3068.1	3076.1	3072.1	3078.7	3072.1
40°	2928.8	2939.4	2932.8	2935.5	2930.2
42.5°	2785.6	2796.2	2794.9	2793.5	2788.2
45°	2615.8	2635.7	2639.7	2637.0	2627.7
47.5°	2448.6	2475.2	2477.8	2481.8	2468.5
50°	2277.5	2294.8	2305.4	2306.7	2294.8
52.5°	2091.8	2119.7	2130.3	2135.6	2127.6
55°	1919.4	1941.9	1952.5	1959.2	1947.2
57.5°	1736.3	1752.3	1778.8	1780.1	1766.8
60°	1549.3	1578.5	1597.1	1595.7	1586.4
62.5°	1382.2	1399.4	1422.0	1420.6	1411.4
65°	1212.4	1236.3	1250.9	1256.2	1254.8
67.5°	1050.6	1073.1	1093.0	1110.2	1116.9
70°	900.7	917.9	948.4	978.9	988.2
72.5°	756.1	777.3	818.4	868.8	891.4
75°	627.4	644.7	695.1	772.0	803.8
77.5°	501.4	516.0	586.3	687.1	721.6
80°	375.4	401.9	488.1	600.9	634.0
82.5°	270.6	294.5	399.3	508.0	539.9
85°	177.7	206.9	314.4	416.5	439.1
87.5°	112.7	138.0	241.4	329.0	346.2
90°	83.6	96.8	181.7	249.4	262.6
92.5°	78.3	80.9	136.6	188.4	196.3
95°	76.9	74.3	111.4	140.6	147.2
97.5°	75.6	69.0	96.8	114.1	116.7
100°	74.3	65.0	88.9	99.5	99.5
102.5°	71.6	61.0	82.2	91.5	91.5
105°	66.3	58.4	78.3	86.2	86.2
107.5°	61.0	54.4	74.3	84.9	84.9
110°	54.4	50.4	71.6	83.6	84.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	47.8	45.1	67.6	82.2	84.9
115°	41.1	38.5	63.7	79.6	83.6
117.5°	35.8	33.2	59.7	76.9	82.2
120°	30.5	26.5	54.4	74.3	80.9
122.5°	25.2	21.2	49.1	69.0	76.9
125°	21.2	17.2	42.4	65.0	71.6
127.5°	18.6	13.3	35.8	58.4	66.3
130°	14.6	11.9	29.2	51.7	59.7
132.5°	11.9	9.3	23.9	45.1	53.1
135°	10.6	8.0	17.2	37.1	45.1
137.5°	8.0	6.6	11.9	30.5	38.5
140°	6.6	5.3	6.6	23.9	30.5
142.5°	5.3	4.0	4.0	17.2	23.9
145°	4.0	4.0	1.3	11.9	17.2
147.5°	4.0	2.7	1.3	6.6	10.6
150°	2.7	2.7	1.3	2.7	5.3
152.5°	2.7	2.7	1.3	0.0	1.3
155°	2.7	2.7	1.3	0.0	0.0
157.5°	2.7	2.7	1.3	0.0	0.0
160°	2.7	2.7	1.3	0.0	0.0
162.5°	4.0	2.7	1.3	1.3	0.0
165°	4.0	2.7	2.7	1.3	1.3
167.5°	4.0	4.0	2.7	1.3	1.3
170°	4.0	2.7	2.7	1.3	1.3
172.5°	4.0	2.7	2.7	1.3	1.3
175°	4.0	4.0	2.7	1.3	1.3
177.5°	4.0	4.0	2.7	1.3	1.3
180°	2.7	2.7	2.7	2.7	2.7

(END OF REPORT)