

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: P236624

Luminaire Tested: **VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
10 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (560) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24393.0 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

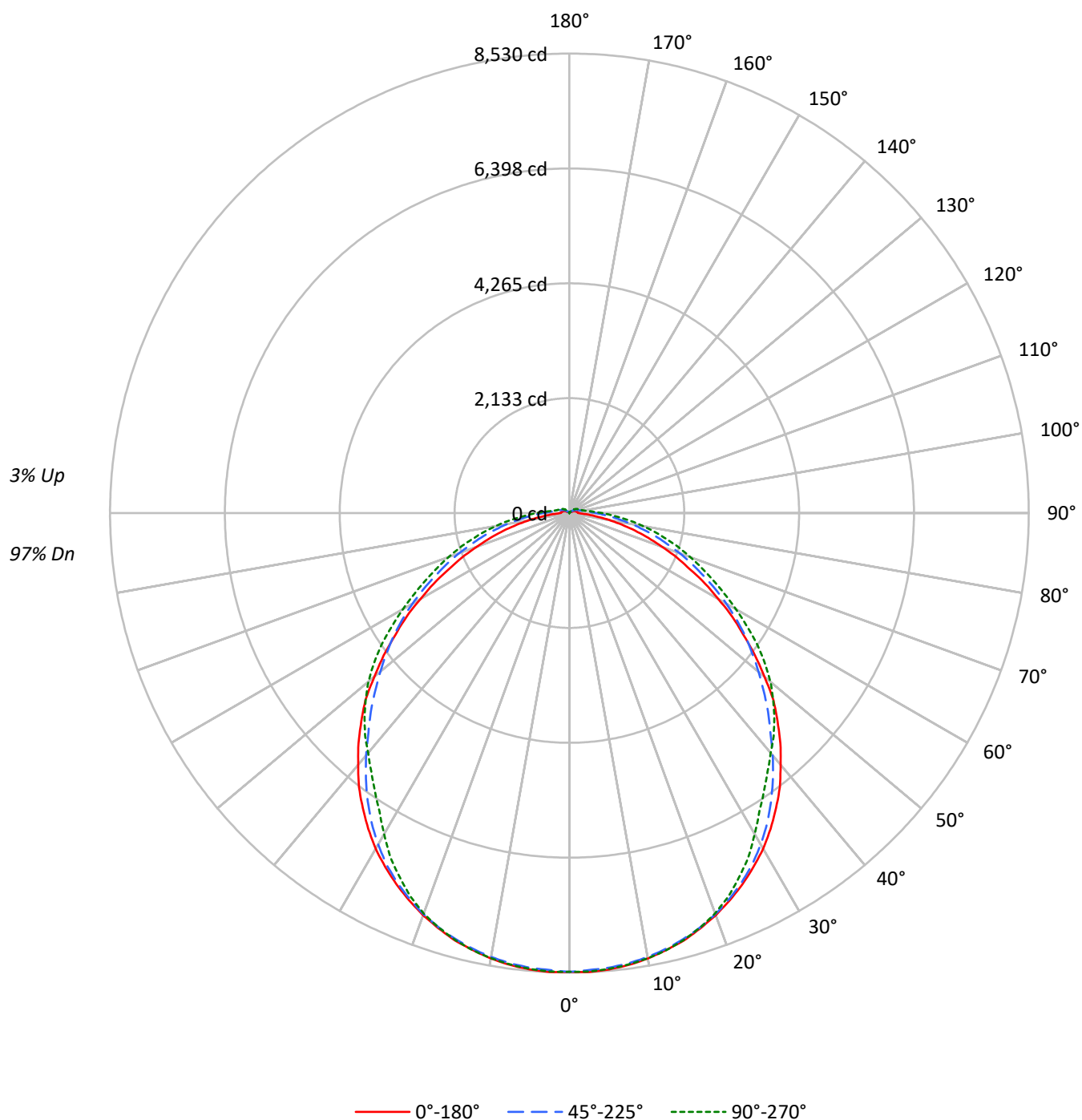
Input Watts (W): 179.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P236624

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P236624

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U

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		109	109	109		104	104	104		99	99	99
1	108	103	98	94	104	100	96	92		95	92	89		91	88	85		87	84	82
2	98	89	82	77	95	87	81	75		83	78	73		79	75	71		76	72	69
3	89	79	70	64	86	77	69	63		73	67	61		70	65	60		67	62	58
4	82	70	61	54	79	68	60	54		65	58	52		62	56	51		60	55	50
5	75	62	53	47	73	61	53	46		58	51	45		56	50	45		54	48	44
6	69	56	47	41	67	55	47	40		53	45	40		51	44	39		49	43	39
7	64	51	42	36	62	50	42	36		48	41	35		46	40	35		45	39	34
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		41	35	31
9	56	43	35	29	54	42	34	29		41	33	28		39	33	28		38	32	28
10	53	39	32	26	51	39	31	26		38	31	26		36	30	26		35	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21335	21335	21335
5°	21270	20910	20917
10°	21131	20517	20477
15°	20962	20086	19987
20°	20722	19604	19391
25°	20436	19024	18542
30°	20108	18301	17481
35°	19621	17383	16493
40°	18988	16295	15827
45°	18248	15245	15371
50°	17184	14255	14766
55°	15860	13359	13849
60°	14477	12313	12624
65°	12957	11158	11502
70°	11467	10070	10553
75°	9933	8936	9531
80°	8062	7660	8432
85°	6040	6459	7243



TEST NUMBER: P236624

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	806.8	3.3
10°-20°	2313.0	9.5
20°-30°	3475.2	14.2
30°-40°	4074.3	16.7
40°-50°	4117.7	16.9
50°-60°	3625.4	14.9
60°-70°	2704.5	11.1
70°-80°	1699.7	7.0
80°-90°	801.8	3.3
90°-100°	337.7	1.4
100°-110°	196.3	0.8
110°-120°	125.9	0.5
120°-130°	70.7	0.3
130°-140°	31.7	0.1
140°-150°	8.9	0.0
150°-160°	1.8	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	6595.0	27.0
0°-40°	10669.3	43.7
0°-60°	18412.3	75.5
0°-90°	23618.3	96.8
90°-120°	659.9	2.7
90°-150°	771.2	3.2
90°-180°	775.0	3.2
0°-180°	24393.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8517	8517	8517	8517	8517	
5°	8503	8492	8470	8486	8493	808
15°	8214	8200	8186	8196	8203	2316
25°	7602	7595	7565	7512	7459	3503
35°	6688	6681	6530	6346	6299	4181
45°	5463	5431	5218	5298	5380	4209
55°	3946	3930	3987	4203	4258	3540
65°	2470	2513	2740	2909	2939	2468
75°	1258	1362	1656	1827	1867	1341
85°	356	499	771	922	943	376
90°	166	293	487	588	605	99
95°	151	219	324	376	382	122
105°	123	146	198	218	223	129
115°	75	82	136	163	173	75
125°	37	32	82	114	127	35
135°	19	15	34	64	75	15
145°	8	7	4	21	28	6
155°	6	6	4	1	0	3
165°	7	6	5	2	1	2
175°	7	7	5	3	2	1
180°	5	5	5	5	5	



TEST NUMBER: P236624

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8516.7	8516.7	8516.7	8516.7	8516.7
2.5°	8530.2	8517.7	8490.7	8505.2	8518.8
5°	8503.2	8491.7	8469.9	8485.5	8492.8
7.5°	8461.6	8448.0	8430.4	8441.8	8452.2
10°	8396.0	8388.8	8368.0	8381.5	8390.8
12.5°	8307.6	8304.5	8285.8	8305.6	8311.8
15°	8214.0	8200.5	8186.0	8196.4	8202.6
17.5°	8083.0	8080.9	8067.4	8078.8	8068.4
20°	7944.7	7942.6	7922.8	7928.0	7909.3
22.5°	7779.3	7784.5	7754.3	7726.3	7705.5
25°	7602.5	7595.2	7565.1	7512.0	7459.0
27.5°	7405.9	7401.8	7353.9	7258.3	7199.0
30°	7194.8	7178.2	7103.3	6959.8	6880.7
32.5°	6950.4	6944.2	6830.8	6656.1	6565.6
35°	6688.3	6681.1	6530.3	6346.2	6299.4
37.5°	6417.9	6394.0	6207.8	6063.3	6045.6
40°	6101.8	6086.2	5871.9	5784.6	5814.7
42.5°	5798.1	5776.2	5523.5	5530.8	5611.9
45°	5463.2	5431.0	5217.8	5297.8	5380.0
47.5°	5136.6	5055.5	4891.2	5061.7	5132.5
50°	4727.9	4700.9	4584.4	4787.2	4872.5
52.5°	4346.2	4328.5	4279.7	4515.7	4571.9
55°	3945.8	3930.2	3987.4	4202.7	4257.8
57.5°	3589.1	3566.2	3679.6	3880.3	3906.3
60°	3192.8	3188.7	3362.4	3561.0	3567.2
62.5°	2845.5	2814.3	3050.4	3226.1	3242.8
65°	2470.0	2512.7	2740.4	2908.9	2939.1
67.5°	2157.0	2210.0	2455.5	2635.4	2652.0
70°	1826.3	1892.8	2177.8	2354.6	2391.0
72.5°	1540.3	1622.4	1890.7	2088.3	2129.9
75°	1258.4	1362.4	1655.7	1827.3	1866.8
77.5°	997.4	1121.1	1390.5	1594.3	1628.7
80°	750.9	880.9	1171.1	1352.0	1380.1
82.5°	534.6	671.8	948.5	1130.5	1165.9
85°	355.7	499.2	770.7	922.5	943.3
87.5°	229.8	373.4	611.5	738.4	756.1
90°	166.4	293.3	486.7	587.6	605.3
92.5°	157.0	247.5	392.1	467.0	468.0
95°	150.8	219.4	324.5	376.5	381.7
97.5°	146.6	199.7	276.6	311.0	313.0
100°	141.4	179.9	244.4	267.3	270.4
102.5°	133.1	161.2	216.3	241.3	242.3
105°	122.7	145.6	197.6	218.4	222.6
107.5°	111.3	129.0	178.9	201.8	207.0
110°	98.8	113.4	164.3	188.2	195.5



TEST NUMBER: P236624

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L850-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	87.4	96.7	149.8	175.8	183.0
115°	74.9	82.2	136.2	163.3	172.6
117.5°	63.4	67.6	121.7	150.8	162.2
120°	54.1	54.1	108.2	139.4	149.8
122.5°	44.7	42.6	95.7	126.9	138.3
125°	37.4	32.2	82.2	114.4	126.9
127.5°	31.2	25.0	69.7	101.9	113.4
130°	27.0	20.8	56.2	89.4	100.9
132.5°	21.8	17.7	44.7	77.0	87.4
135°	18.7	14.6	34.3	64.5	74.9
137.5°	15.6	12.5	23.9	53.0	62.4
140°	12.5	10.4	15.6	42.6	49.9
142.5°	10.4	8.3	8.3	31.2	39.5
145°	8.3	7.3	4.2	20.8	28.1
147.5°	7.3	6.2	4.2	13.5	18.7
150°	6.2	5.2	4.2	5.2	10.4
152.5°	6.2	5.2	4.2	1.0	2.1
155°	6.2	6.2	4.2	1.0	0.0
157.5°	6.2	6.2	4.2	1.0	0.0
160°	6.2	6.2	4.2	2.1	0.0
162.5°	6.2	6.2	5.2	2.1	0.0
165°	7.3	6.2	5.2	2.1	1.0
167.5°	7.3	7.3	5.2	2.1	1.0
170°	7.3	7.3	5.2	3.1	1.0
172.5°	7.3	7.3	5.2	3.1	1.0
175°	7.3	7.3	5.2	3.1	2.1
177.5°	7.3	7.3	5.2	3.1	2.1
180°	5.2	5.2	5.2	5.2	5.2

(END OF REPORT)