

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: P364420

Luminaire Tested: **VHB-24-W-UNV-L850-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-24-W-UNV-L850-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 5000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23692.0 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

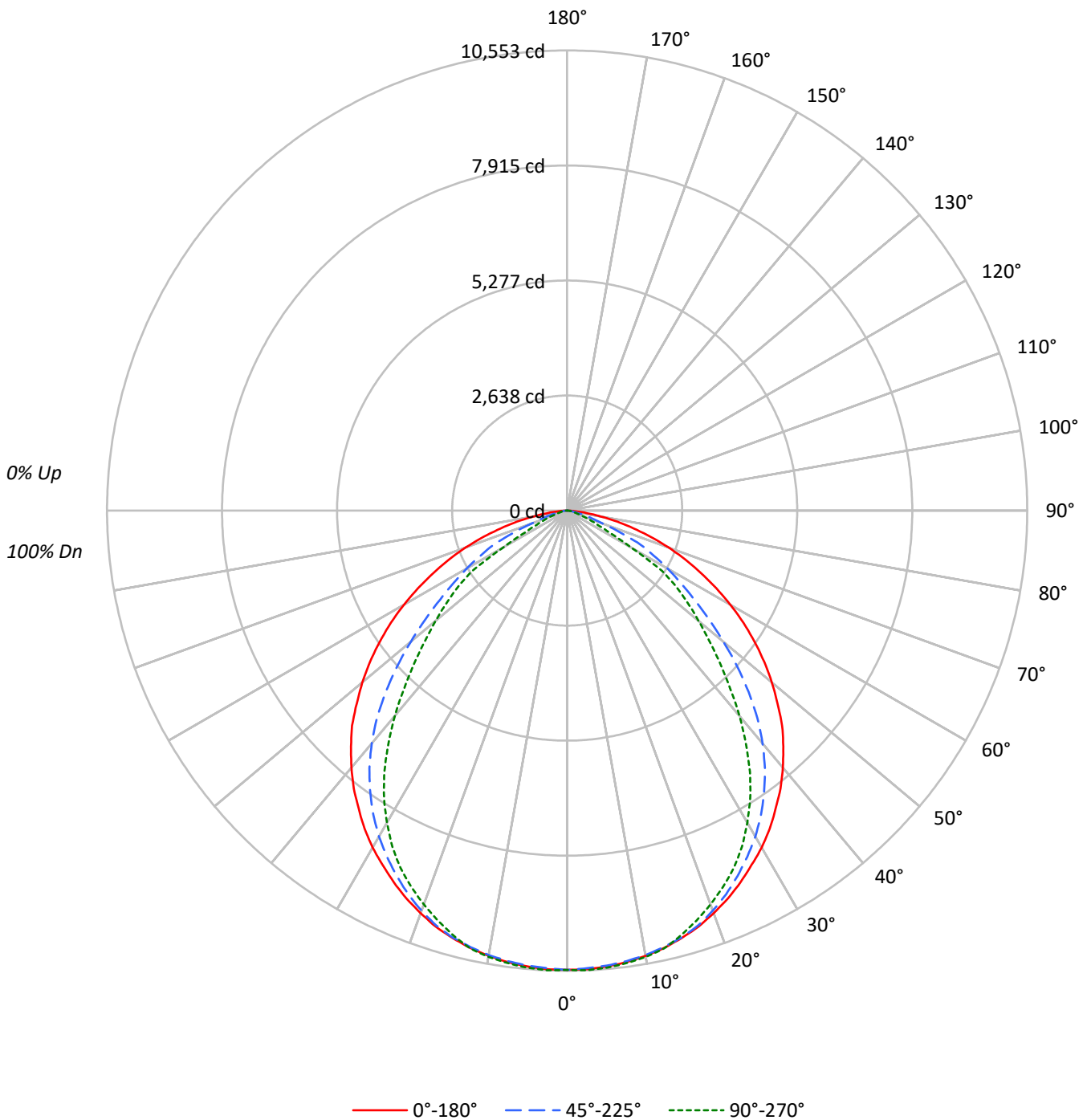
Input Watts (W): 174.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	100
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	64789	64789	64789
5°	64799	64667	64963
10°	64775	64635	64902
15°	64621	64554	64221
20°	64310	63911	62913
25°	63833	62747	61371
30°	63370	61301	58679
35°	62614	59153	54867
40°	61789	55972	49368
45°	60665	51190	43135
50°	58660	44817	37681
55°	56266	38178	32892
60°	53154	32746	20999
65°	49254	27314	11134
70°	44456	15522	7213
75°	37346	9508	4487
80°	28379	4800	3932
85°	17241	4368	3536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	997.2	4.2
10°-20°	2853.1	12.0
20°-30°	4253.1	18.0
30°-40°	4898.1	20.7
40°-50°	4558.4	19.2
50°-60°	3468.6	14.6
60°-70°	1861.9	7.9
70°-80°	685.0	2.9
80°-90°	116.5	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	8103.4	34.2
0°-40°	13001.6	54.9
0°-60°	21028.6	88.8
0°-90°	23692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10533	10533	10533	10533	10533	
5°	10495	10465	10474	10510	10522	998
15°	10148	10132	10138	10118	10085	2864
25°	9406	9398	9246	9114	9043	4335
35°	8339	8237	7878	7482	7307	5220
45°	6974	6638	5885	5186	4959	5359
55°	5247	4654	3560	3170	3067	4687
65°	3384	2486	1877	929	765	3356
75°	1572	1030	400	207	189	1685
85°	244	79	62	53	50	326
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10533.4	10533.4	10533.4	10533.4	10533.4
2.5°	10525.9	10493.9	10504.6	10538.7	10552.6
5°	10495.0	10465.1	10473.6	10509.9	10521.6
7.5°	10443.7	10414.9	10421.3	10455.5	10467.2
10°	10371.2	10341.3	10348.8	10381.9	10391.5
12.5°	10273.0	10245.3	10251.7	10275.2	10285.8
15°	10148.2	10132.2	10137.6	10118.3	10085.3
17.5°	10008.5	9985.0	9978.6	9893.2	9858.0
20°	9825.0	9816.4	9764.1	9658.5	9611.6
22.5°	9631.8	9615.8	9525.2	9398.2	9341.7
25°	9405.7	9398.2	9245.6	9114.4	9042.9
27.5°	9162.4	9144.3	8948.0	8783.7	8686.6
30°	8922.4	8877.6	8631.1	8400.7	8262.0
32.5°	8650.3	8566.0	8271.6	7977.1	7817.1
35°	8338.8	8237.4	7877.9	7482.1	7307.1
37.5°	8036.9	7884.3	7451.1	6956.1	6732.1
40°	7695.5	7476.7	6971.0	6396.0	6148.5
42.5°	7335.9	7069.2	6460.0	5791.1	5537.1
45°	6974.2	6638.2	5884.9	5186.1	4958.9
47.5°	6544.3	6187.9	5287.5	4608.9	4413.7
50°	6130.3	5714.2	4683.6	4071.2	3937.9
52.5°	5697.2	5192.5	4096.8	3616.7	3487.7
55°	5246.9	4653.8	3560.2	3169.7	3067.3
57.5°	4794.6	4100.0	3084.4	2763.2	2579.7
60°	4320.9	3550.6	2661.9	2245.8	1707.0
62.5°	3854.7	2978.7	2240.5	1408.3	1086.1
65°	3384.2	2485.8	1876.7	929.3	765.0
67.5°	2935.0	2008.9	1338.9	673.2	572.9
70°	2472.0	1643.0	863.1	482.2	401.1
72.5°	2007.9	1321.9	592.1	316.9	257.1
75°	1571.5	1029.5	400.1	207.0	188.8
77.5°	1177.8	710.5	223.0	153.6	144.0
80°	801.2	425.7	135.5	117.4	111.0
82.5°	480.1	203.8	98.2	86.4	83.2
85°	244.3	78.9	61.9	53.3	50.1
87.5°	72.5	39.5	27.7	21.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)