

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: P470131

Luminaire Tested: **VHB2-12-N-UNV-L835-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470131
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-12-N-UNV-L835-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

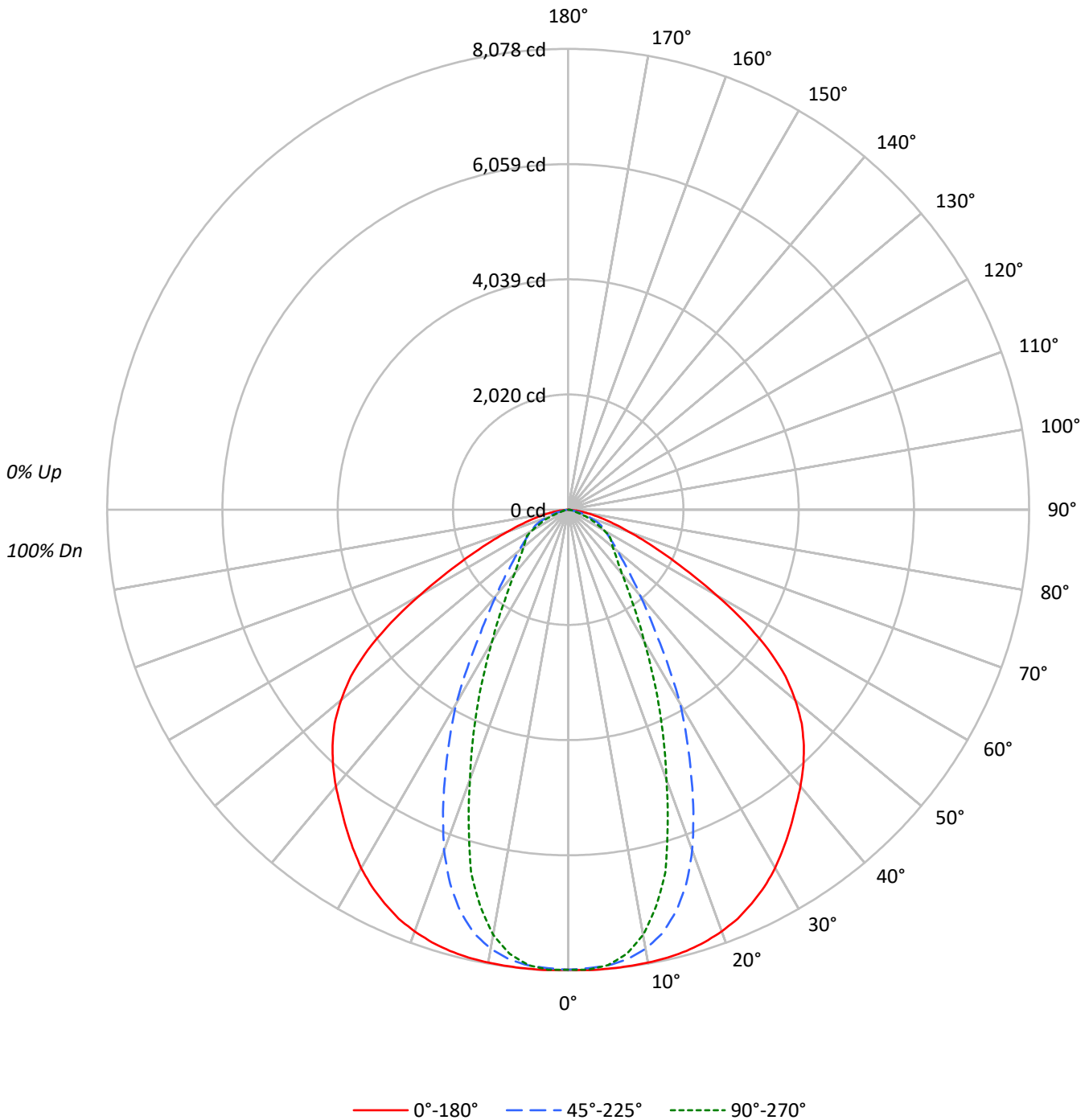
Lumens per Lamp: N/A
Luminaire Lumens: 11646.0 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 81.4
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: 24 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	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					100			
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55					55			
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	60	53	48	59	53	48	58	52	48	56	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42					42			
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38					38			
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	49598	49598	49598
5°	49873	49509	49471
10°	50350	48802	47264
15°	50985	46458	41885
20°	51490	41605	32929
25°	51674	34546	25410
30°	51509	27816	18920
35°	50999	20461	14514
40°	50841	15711	11760
45°	50799	12696	10445
50°	49743	10896	9748
55°	45982	9753	9770
60°	36863	9209	8916
65°	27385	8983	7206
70°	20543	7388	4893
75°	15480	5594	2657
80°	11253	2731	2235
85°	7227	2336	1793



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.8	6.5
10°-20°	2024.5	17.4
20°-30°	2480.0	21.3
30°-40°	2227.2	19.1
40°-50°	1725.6	14.8
50°-60°	1291.3	11.1
60°-70°	774.7	6.7
70°-80°	307.2	2.6
80°-90°	55.7	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°	5264.3	45.2
0°-40°	7491.5	64.3
0°-60°	10508.4	90.2
0°-90°	11646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8064	8064	8064	8064	8064	
5°	8078	8042	8019	8016	8012	770
15°	8007	7797	7296	6756	6578	2262
25°	7614	6817	5090	4070	3744	3508
35°	6792	5022	2725	2089	1933	4254
45°	5840	2617	1460	1230	1201	4490
55°	4288	1389	910	881	911	3763
65°	1882	771	617	524	495	1927
75°	651	377	235	124	112	718
85°	102	41	33	28	25	136
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8063.6	8063.6	8063.6	8063.6	8063.6
2.5°	8078.1	8048.6	8044.5	8064.6	8070.3
5°	8077.6	8041.9	8018.6	8016.5	8012.4
7.5°	8070.8	8023.8	7948.7	7889.2	7854.1
10°	8061.5	7978.7	7813.7	7642.5	7567.4
12.5°	8043.9	7908.4	7607.3	7277.7	7119.4
15°	8006.7	7796.6	7295.8	6756.2	6577.7
17.5°	7949.3	7629.0	6877.3	6097.1	5797.6
20°	7866.5	7417.4	6356.3	5405.4	5030.8
22.5°	7759.9	7144.8	5728.7	4665.6	4362.4
25°	7614.0	6816.8	5090.3	4070.1	3744.1
27.5°	7451.0	6447.9	4488.1	3446.1	3161.1
30°	7252.4	5999.3	3916.4	2899.8	2663.9
32.5°	7026.3	5537.3	3287.3	2435.2	2271.7
35°	6791.9	5022.5	2724.9	2088.6	1932.9
37.5°	6551.9	4438.4	2300.7	1791.1	1678.8
40°	6332.0	3787.1	1956.7	1554.2	1464.6
42.5°	6096.1	3175.6	1691.8	1364.8	1310.0
45°	5840.0	2616.8	1459.5	1230.3	1200.8
47.5°	5550.8	2207.6	1278.4	1127.3	1099.9
50°	5198.4	1874.9	1138.7	1020.2	1018.7
52.5°	4802.7	1613.6	1014.5	942.6	956.1
55°	4287.9	1388.6	909.5	881.1	911.1
57.5°	3675.9	1204.9	823.6	833.5	857.3
60°	2996.6	1039.4	748.6	756.9	724.8
62.5°	2395.9	894.5	680.8	637.4	596.5
65°	1881.6	770.9	617.2	524.1	495.1
67.5°	1467.2	656.5	516.8	429.9	393.7
70°	1142.3	557.7	410.8	329.6	272.1
72.5°	872.8	464.1	323.9	202.3	153.7
75°	651.4	376.6	235.4	123.6	111.8
77.5°	472.9	282.0	131.4	90.5	84.3
80°	317.7	190.4	77.1	66.2	63.1
82.5°	202.3	99.9	53.3	46.6	42.9
85°	102.4	40.9	33.1	28.5	25.4
87.5°	35.7	19.7	15.0	11.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)