

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: P470153

Luminaire Tested: **VHB2-18-N-UNV-L940-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470153
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-18-N-UNV-L940-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

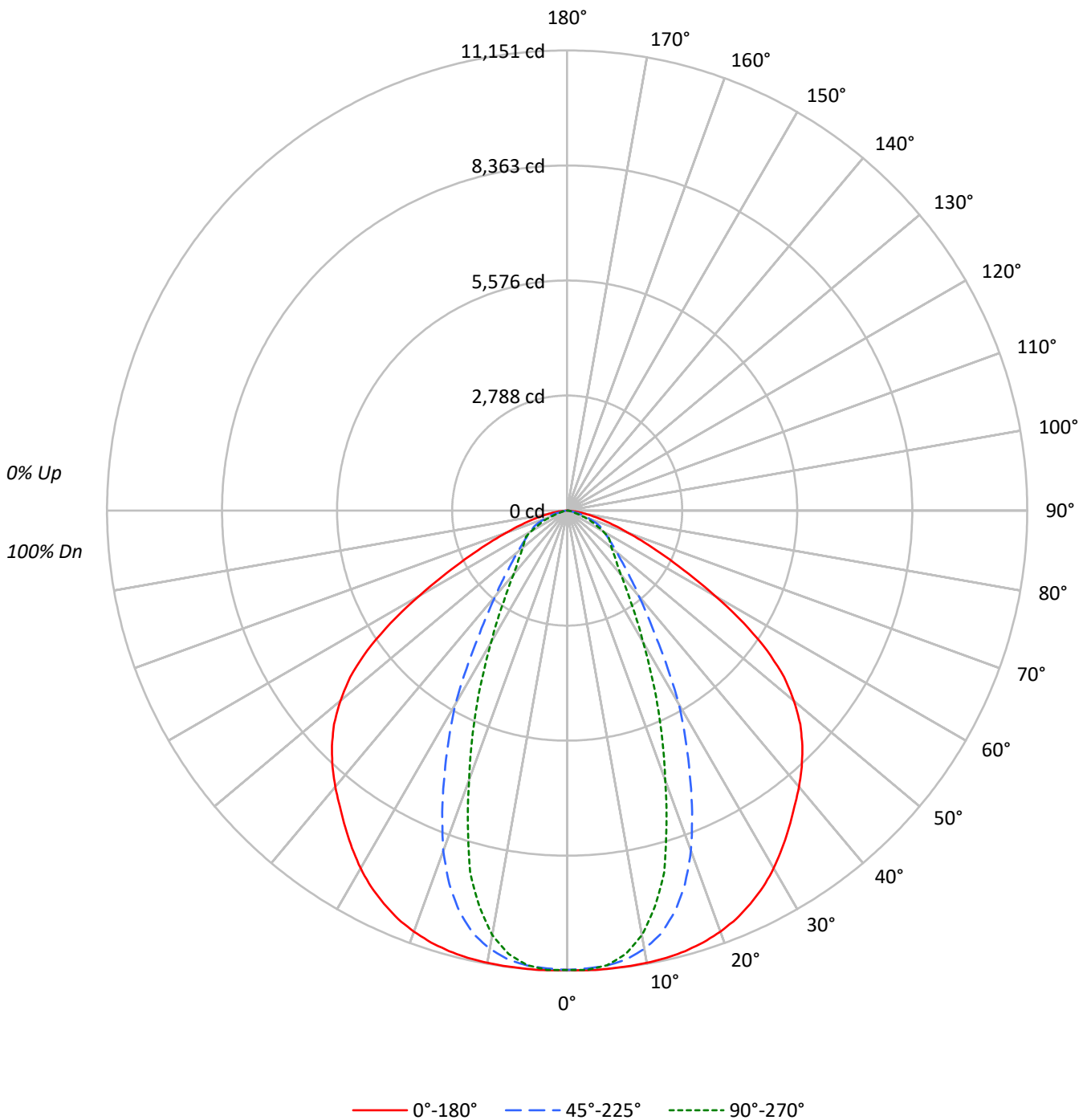
Lumens per Lamp: N/A
Luminaire Lumens: 16075.7 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 122.3
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°	68462	68462	68462
5°	68843	68340	68287
10°	69501	67364	65241
15°	70377	64129	57817
20°	71075	57431	45454
25°	71328	47686	35075
30°	71101	38396	26116
35°	70397	28243	20033
40°	70179	21686	16233
45°	70121	17524	14418
50°	68664	15040	13455
55°	63471	13463	13486
60°	50883	12712	12308
65°	37801	12400	9946
70°	28357	10197	6755
75°	21367	7721	3667
80°	15532	3769	3085
85°	9979	3225	2470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1048.8	6.5
10°-20°	2794.6	17.4
20°-30°	3423.3	21.3
30°-40°	3074.4	19.1
40°-50°	2381.9	14.8
50°-60°	1782.4	11.1
60°-70°	1069.4	6.7
70°-80°	424.1	2.6
80°-90°	76.9	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°	7266.6	45.2
0°-40°	10341.0	64.3
0°-60°	14505.3	90.2
0°-90°	16075.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16075.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11131	11131	11131	11131	11131	
5°	11150	11101	11068	11066	11060	###
15°	11052	10762	10071	9326	9080	3123
25°	10510	9410	7026	5618	5168	4842
35°	9375	6933	3761	2883	2668	5873
45°	8061	3612	2015	1698	1658	6198
55°	5919	1917	1256	1216	1258	5195
65°	2597	1064	852	723	683	2660
75°	899	520	325	171	154	991
85°	141	56	46	39	35	187
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11130.6	11130.6	11130.6	11130.6	11130.6
2.5°	11150.6	11109.9	11104.2	11132.1	11139.9
5°	11149.9	11100.6	11068.5	11065.6	11059.9
7.5°	11140.6	11075.6	10972.1	10890.0	10841.4
10°	11127.8	11013.5	10785.7	10549.3	10445.8
12.5°	11103.5	10916.4	10500.8	10045.8	9827.3
15°	11052.1	10762.1	10070.8	9326.0	9079.6
17.5°	10972.8	10530.8	9493.1	8416.2	8002.7
20°	10858.5	10238.7	8774.0	7461.4	6944.3
22.5°	10711.4	9862.3	7907.7	6440.1	6021.7
25°	10510.0	9409.5	7026.5	5618.2	5168.3
27.5°	10285.1	8900.4	6195.2	4756.9	4363.4
30°	10010.9	8281.2	5406.1	4002.8	3677.1
32.5°	9698.8	7643.5	4537.7	3361.5	3135.8
35°	9375.3	6932.9	3761.4	2883.0	2668.0
37.5°	9043.9	6126.6	3175.8	2472.4	2317.4
40°	8740.4	5227.5	2700.9	2145.3	2021.7
42.5°	8414.7	4383.4	2335.2	1883.9	1808.2
45°	8061.2	3612.1	2014.6	1698.2	1657.5
47.5°	7662.0	3047.2	1764.6	1556.1	1518.3
50°	7175.7	2588.1	1571.8	1408.3	1406.1
52.5°	6629.4	2227.4	1400.4	1301.2	1319.7
55°	5918.8	1916.8	1255.5	1216.2	1257.6
57.5°	5074.0	1663.2	1136.9	1150.5	1183.3
60°	4136.3	1434.7	1033.4	1044.8	1000.5
62.5°	3307.2	1234.8	939.8	879.8	823.4
65°	2597.3	1064.1	852.0	723.4	683.4
67.5°	2025.3	906.2	713.4	593.5	543.5
70°	1576.8	769.8	567.0	454.9	375.6
72.5°	1204.8	640.6	447.1	279.2	212.1
75°	899.1	519.9	324.9	170.7	154.3
77.5°	652.7	389.2	181.4	125.0	116.4
80°	438.5	262.8	106.4	91.4	87.1
82.5°	279.2	137.8	73.6	64.3	59.3
85°	141.4	56.4	45.7	39.3	35.0
87.5°	49.3	27.1	20.7	16.4	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)