

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: P470150

Luminaire Tested: **VHB2-9-N-UNV-L940-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470150
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-9-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

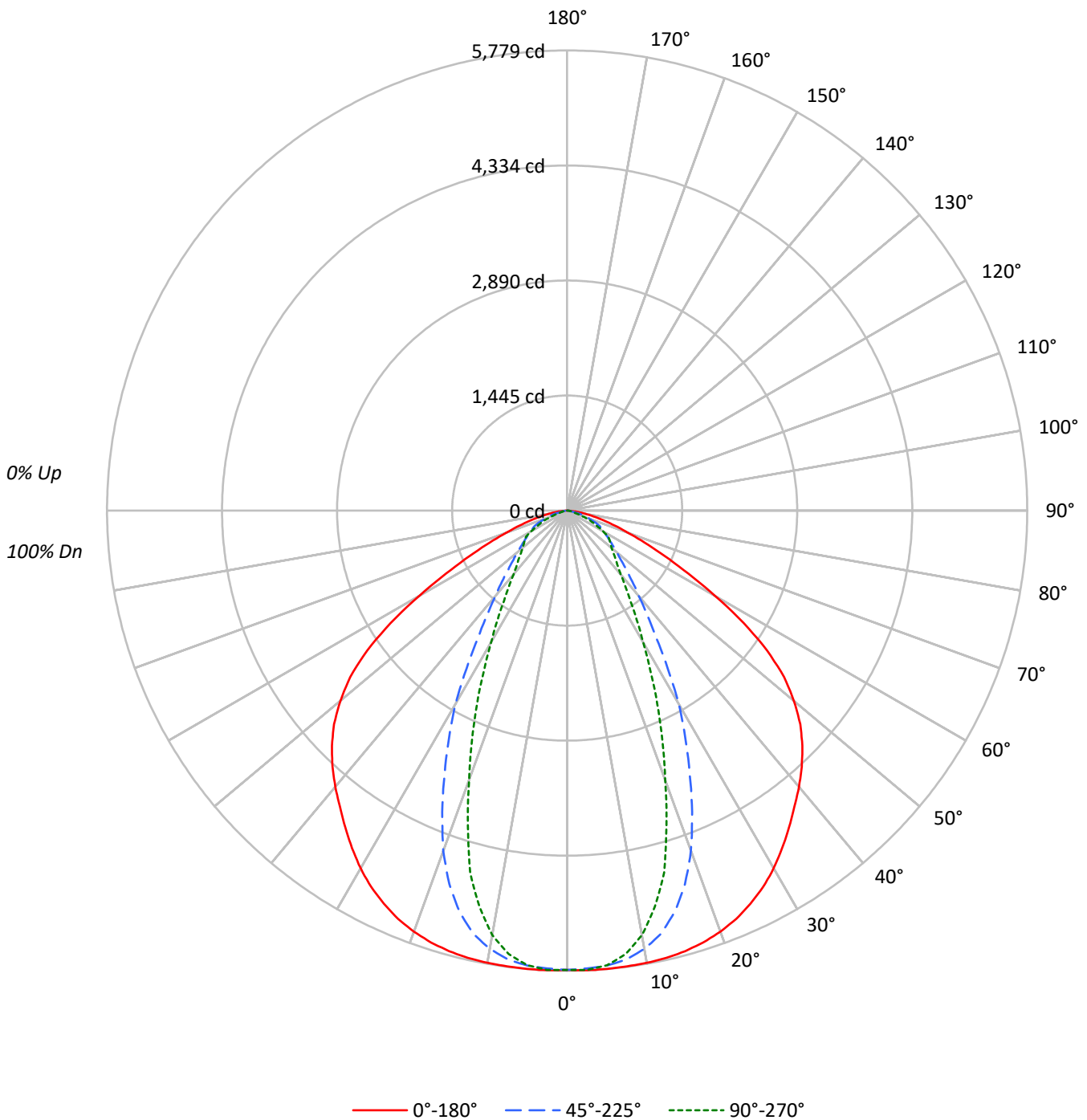
Lumens per Lamp: N/A
Luminaire Lumens: 8331.1 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 64.2
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: 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°	35480	35480	35480
5°	35677	35417	35389
10°	36018	34911	33810
15°	36472	33234	29963
20°	36834	29763	23556
25°	36965	24713	18177
30°	36847	19898	13534
35°	36483	14637	10382
40°	36369	11239	8412
45°	36340	9081	7472
50°	35585	7795	6973
55°	32893	6977	6989
60°	26370	6587	6378
65°	19590	6426	5155
70°	14696	5285	3501
75°	11074	4002	1899
80°	8048	1952	1601
85°	5173	1673	1277



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	543.5	6.5
10°-20°	1448.3	17.4
20°-30°	1774.1	21.3
30°-40°	1593.3	19.1
40°-50°	1234.4	14.8
50°-60°	923.7	11.1
60°-70°	554.2	6.7
70°-80°	219.8	2.6
80°-90°	39.9	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°	3765.9	45.2
0°-40°	5359.1	64.3
0°-60°	7517.2	90.2
0°-90°	8331.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8331.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5768	5768	5768	5768	5768	
5°	5778	5753	5736	5735	5732	551
15°	5728	5577	5219	4833	4705	1618
25°	5447	4876	3641	2912	2678	2509
35°	4859	3593	1949	1494	1383	3043
45°	4178	1872	1044	880	859	3212
55°	3067	993	651	630	652	2692
65°	1346	551	442	375	354	1379
75°	466	269	168	88	80	514
85°	73	29	24	20	18	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5768.4	5768.4	5768.4	5768.4	5768.4
2.5°	5778.7	5757.6	5754.7	5769.1	5773.2
5°	5778.3	5752.8	5736.2	5734.7	5731.7
7.5°	5773.5	5739.9	5686.2	5643.6	5618.5
10°	5766.9	5707.7	5589.6	5467.1	5413.4
12.5°	5754.3	5657.3	5441.9	5206.2	5092.9
15°	5727.6	5577.4	5219.1	4833.1	4705.4
17.5°	5686.6	5457.5	4919.7	4361.6	4147.3
20°	5627.3	5306.1	4547.0	3866.8	3598.8
22.5°	5551.1	5111.1	4098.1	3337.5	3120.7
25°	5446.7	4876.4	3641.4	2911.6	2678.4
27.5°	5330.2	4612.5	3210.6	2465.2	2261.3
30°	5188.0	4291.7	2801.6	2074.4	1905.6
32.5°	5026.3	3961.2	2351.6	1742.1	1625.1
35°	4858.7	3592.9	1949.3	1494.1	1382.7
37.5°	4686.9	3175.1	1645.8	1281.3	1201.0
40°	4529.6	2709.1	1399.7	1111.8	1047.7
42.5°	4360.9	2271.7	1210.2	976.3	937.1
45°	4177.7	1872.0	1044.0	880.1	859.0
47.5°	3970.8	1579.2	914.5	806.4	786.8
50°	3718.8	1341.2	814.6	729.8	728.7
52.5°	3435.6	1154.3	725.8	674.3	683.9
55°	3067.4	993.3	650.6	630.3	651.7
57.5°	2629.6	862.0	589.2	596.2	613.3
60°	2143.6	743.5	535.5	541.5	518.5
62.5°	1713.9	639.9	487.0	456.0	426.7
65°	1346.0	551.4	441.5	374.9	354.2
67.5°	1049.6	469.7	369.7	307.6	281.6
70°	817.2	399.0	293.9	235.8	194.7
72.5°	624.4	332.0	231.7	144.7	109.9
75°	466.0	269.4	168.4	88.5	79.9
77.5°	338.3	201.7	94.0	64.8	60.3
80°	227.2	136.2	55.1	47.4	45.2
82.5°	144.7	71.4	38.1	33.3	30.7
85°	73.3	29.2	23.7	20.4	18.1
87.5°	25.5	14.1	10.7	8.5	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)