

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: P470119

Luminaire Tested: **VHB2-24-N-UNV-L735-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470119
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-24-N-UNV-L735-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23710.5 lumens
Efficiency: N/A
Efficacy: 148.9 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

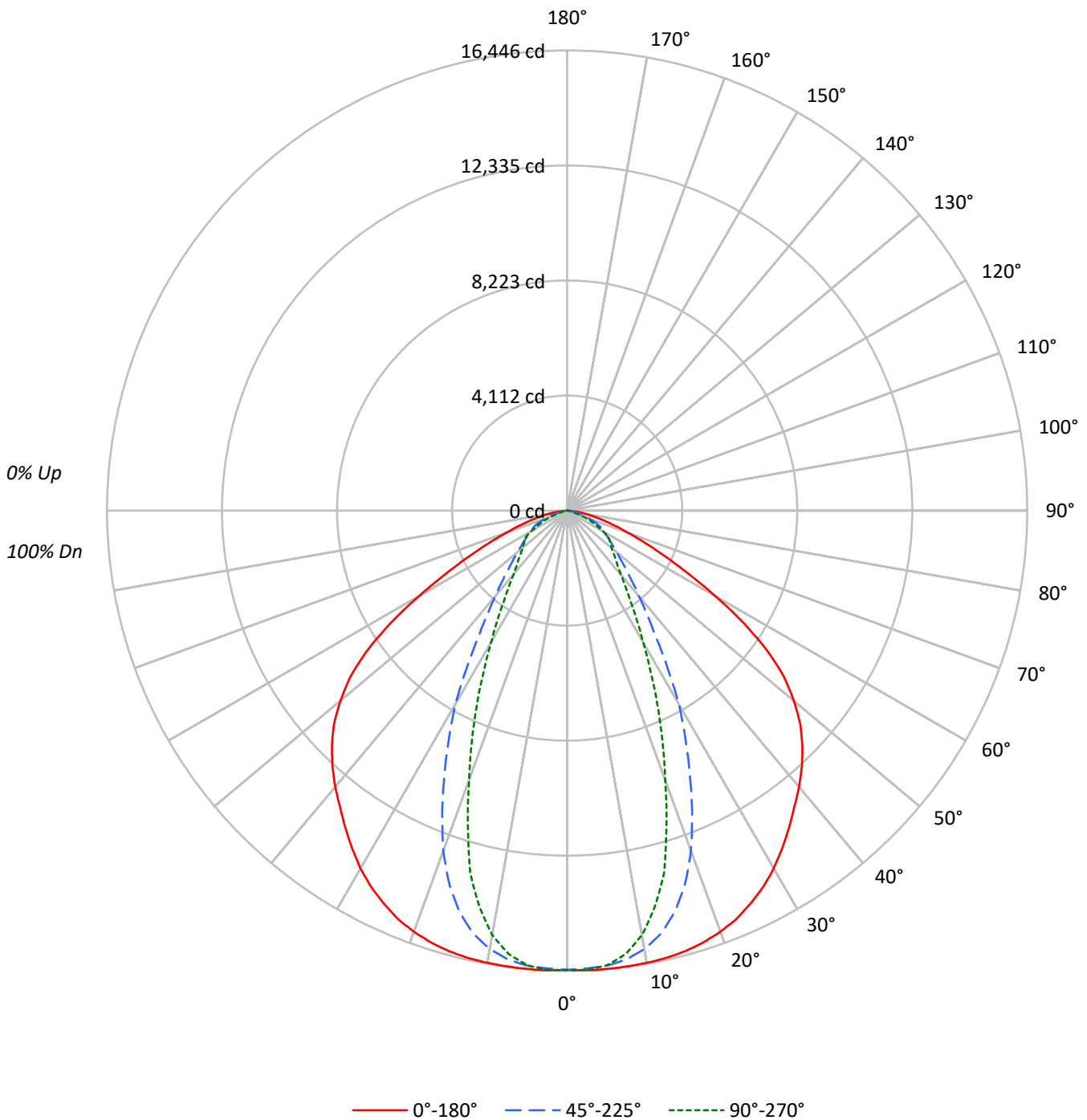
Input Watts (W): 159.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	100977	100977	100977
5°	101539	100797	100719
10°	102508	99357	96226
15°	103802	94586	85276
20°	104831	84706	67042
25°	105204	70334	51733
30°	104868	56631	38519
35°	103830	41657	29548
40°	103510	31985	23943
45°	103424	25847	21265
50°	101275	22184	19846
55°	93616	19857	19891
60°	75049	18749	18153
65°	55755	18289	14670
70°	41825	15040	9963
75°	31515	11390	5406
80°	22907	5558	4552
85°	14721	4757	3642



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1546.8	6.5
10°-20°	4121.8	17.4
20°-30°	5049.1	21.3
30°-40°	4534.5	19.1
40°-50°	3513.1	14.8
50°-60°	2628.9	11.1
60°-70°	1577.3	6.7
70°-80°	625.5	2.6
80°-90°	113.4	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°	10717.8	45.2
0°-40°	15252.3	64.3
0°-60°	21394.3	90.2
0°-90°	23710.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23710.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16417	16417	16417	16417	16417	
5°	16445	16373	16325	16321	16313	###
15°	16301	15873	14854	13755	13392	4606
25°	15502	13878	10364	8286	7623	7141
35°	13828	10226	5548	4252	3935	8662
45°	11890	5328	2971	2505	2445	9141
55°	8730	2827	1852	1794	1855	7662
65°	3831	1569	1257	1067	1008	3924
75°	1326	767	479	252	228	1462
85°	209	83	67	58	52	276
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16416.9	16416.9	16416.9	16416.9	16416.9
2.5°	16446.4	16386.4	16378.0	16419.1	16430.6
5°	16445.4	16372.7	16325.3	16321.1	16312.7
7.5°	16431.7	16335.8	16183.1	16062.0	15990.4
10°	16412.7	16244.2	15908.2	15559.5	15406.8
12.5°	16376.9	16101.0	15487.9	14817.0	14494.6
15°	16301.1	15873.4	14853.8	13755.2	13391.8
17.5°	16184.2	15532.2	14001.7	12413.3	11803.4
20°	16015.6	15101.4	12941.0	11005.0	10242.4
22.5°	15798.6	14546.3	11663.3	9498.8	8881.5
25°	15501.6	13878.5	10363.6	8286.4	7622.8
27.5°	15169.8	13127.4	9137.5	7016.1	6435.7
30°	14765.3	12214.2	7973.6	5903.8	5423.5
32.5°	14305.1	11273.6	6692.8	4957.9	4625.1
35°	13827.9	10225.6	5547.8	4252.2	3935.2
37.5°	13339.2	9036.4	4684.1	3646.6	3418.0
40°	12891.5	7710.3	3983.6	3164.2	2981.9
42.5°	12411.2	6465.2	3444.3	2778.6	2667.0
45°	11889.8	5327.7	2971.4	2504.8	2444.7
47.5°	11301.0	4494.5	2602.7	2295.2	2239.3
50°	10583.7	3817.2	2318.3	2077.1	2074.0
52.5°	9777.9	3285.3	2065.5	1919.1	1946.5
55°	8729.9	2827.1	1851.7	1793.8	1854.9
57.5°	7483.8	2453.2	1676.9	1696.9	1745.3
60°	6100.8	2116.1	1524.1	1541.0	1475.7
62.5°	4877.9	1821.2	1386.2	1297.7	1214.5
65°	3830.9	1569.4	1256.6	1067.0	1008.0
67.5°	2987.2	1336.7	1052.3	875.3	801.6
70°	2325.7	1135.5	836.3	671.0	554.0
72.5°	1776.9	944.8	659.4	411.8	312.8
75°	1326.1	766.8	479.3	251.7	227.5
77.5°	962.7	574.1	267.5	184.3	171.7
80°	646.7	387.6	156.9	134.8	128.5
82.5°	411.8	203.3	108.5	94.8	87.4
85°	208.6	83.2	67.4	57.9	51.6
87.5°	72.7	40.0	30.5	24.2	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)