

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: P470156

Luminaire Tested: **VHB2-12-N-UNV-L950-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470156
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-L950-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10695.3 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

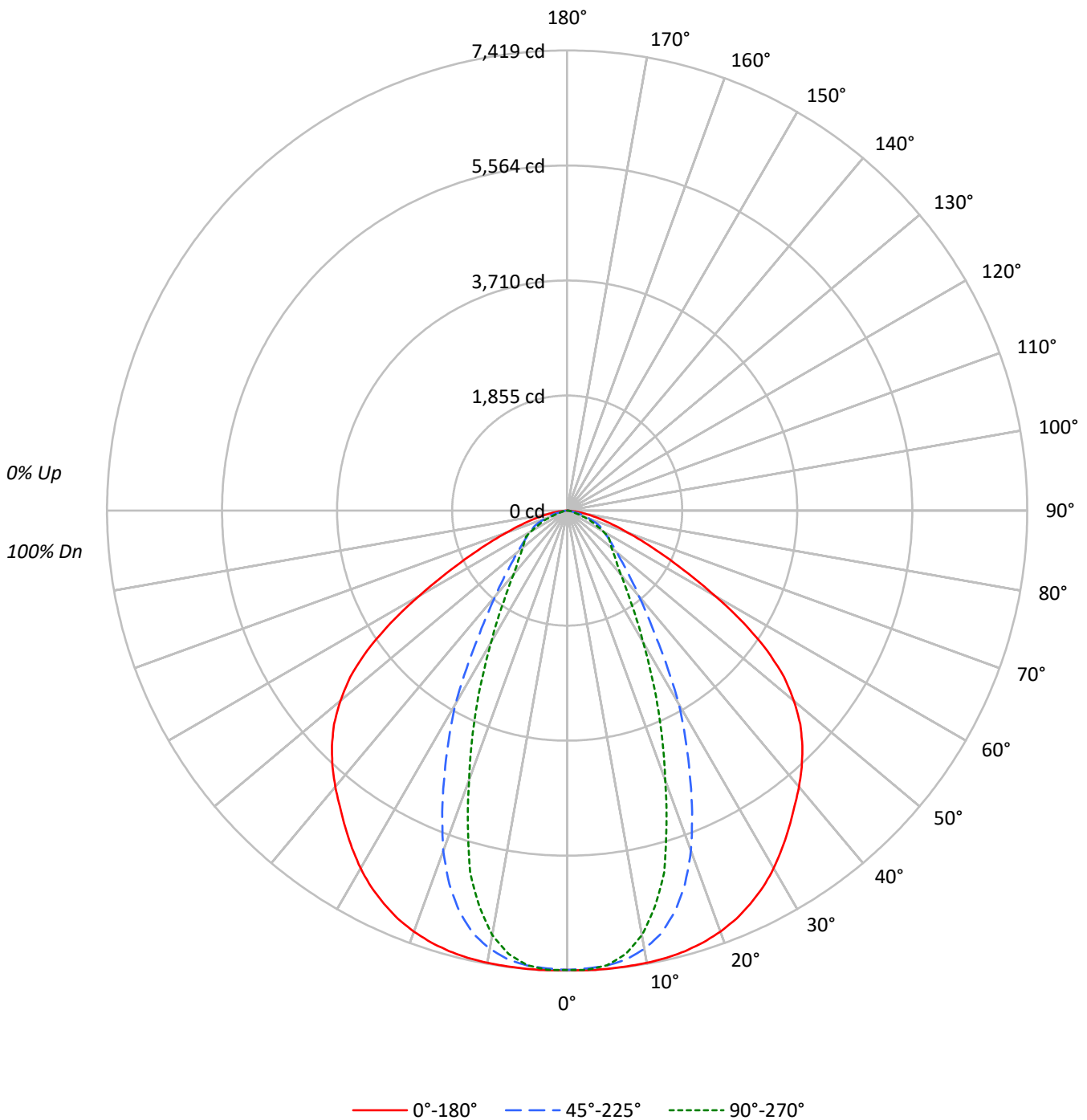
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	45548	45548	45548
5°	45802	45467	45432
10°	46239	44818	43406
15°	46823	42666	38466
20°	47287	38209	30241
25°	47456	31726	23336
30°	47304	25545	17375
35°	46836	18791	13329
40°	46691	14428	10800
45°	46652	11659	9593
50°	45683	10007	8952
55°	42228	8957	8972
60°	33853	8457	8189
65°	25149	8249	6618
70°	18867	6785	4494
75°	14216	5138	2438
80°	10332	2508	2054
85°	6641	2145	1644



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	697.8	6.5
10°-20°	1859.3	17.4
20°-30°	2277.6	21.3
30°-40°	2045.4	19.1
40°-50°	1584.7	14.8
50°-60°	1185.8	11.1
60°-70°	711.5	6.7
70°-80°	282.1	2.6
80°-90°	51.2	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°	4834.6	45.2
0°-40°	6880.0	64.3
0°-60°	9650.5	90.2
0°-90°	10695.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10695.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7405	7405	7405	7405	7405	
5°	7418	7385	7364	7362	7358	708
15°	7353	7160	6700	6205	6041	2078
25°	6992	6260	4675	3738	3438	3221
35°	6238	4612	2502	1918	1775	3907
45°	5363	2403	1340	1130	1103	4124
55°	3938	1275	835	809	837	3456
65°	1728	708	567	481	455	1770
75°	598	346	216	114	103	659
85°	94	38	30	26	23	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7405.3	7405.3	7405.3	7405.3	7405.3
2.5°	7418.6	7391.6	7387.8	7406.3	7411.5
5°	7418.2	7385.4	7364.0	7362.1	7358.3
7.5°	7412.0	7368.8	7299.9	7245.2	7212.9
10°	7403.4	7327.4	7175.9	7018.6	6949.7
12.5°	7387.3	7262.8	6986.3	6683.6	6538.2
15°	7353.1	7160.2	6700.3	6204.7	6040.8
17.5°	7300.3	7006.2	6315.9	5599.4	5324.3
20°	7224.3	6811.9	5837.4	4964.1	4620.1
22.5°	7126.4	6561.5	5261.1	4284.7	4006.3
25°	6992.5	6260.3	4674.8	3737.8	3438.5
27.5°	6842.8	5921.5	4121.7	3164.8	2903.0
30°	6660.3	5509.6	3596.7	2663.1	2446.4
32.5°	6452.7	5085.3	3019.0	2236.4	2086.3
35°	6237.5	4612.5	2502.5	1918.1	1775.1
37.5°	6017.0	4076.1	2112.9	1644.9	1541.8
40°	5815.1	3477.9	1796.9	1427.3	1345.1
42.5°	5598.4	2916.3	1553.7	1253.4	1203.0
45°	5363.2	2403.2	1340.3	1129.9	1102.8
47.5°	5097.6	2027.4	1174.0	1035.3	1010.1
50°	4774.1	1721.9	1045.8	937.0	935.5
52.5°	4410.6	1481.9	931.7	865.7	878.0
55°	3937.9	1275.2	835.3	809.1	836.7
57.5°	3375.8	1106.6	756.4	765.4	787.3
60°	2751.9	954.5	687.5	695.1	665.7
62.5°	2200.3	821.5	625.3	585.4	547.8
65°	1728.0	707.9	566.8	481.3	454.7
67.5°	1347.5	602.9	474.7	394.8	361.6
70°	1049.1	512.2	377.3	302.7	249.9
72.5°	801.5	426.2	297.4	185.8	141.1
75°	598.2	345.9	216.2	113.6	102.6
77.5°	434.3	258.9	120.7	83.1	77.4
80°	291.7	174.8	70.8	60.8	58.0
82.5°	185.8	91.7	48.9	42.8	39.4
85°	94.1	37.5	30.4	26.1	23.3
87.5°	32.8	18.1	13.8	10.9	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)