

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: P470155

Luminaire Tested: **VHB2-9-N-UNV-L950-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470155
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-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

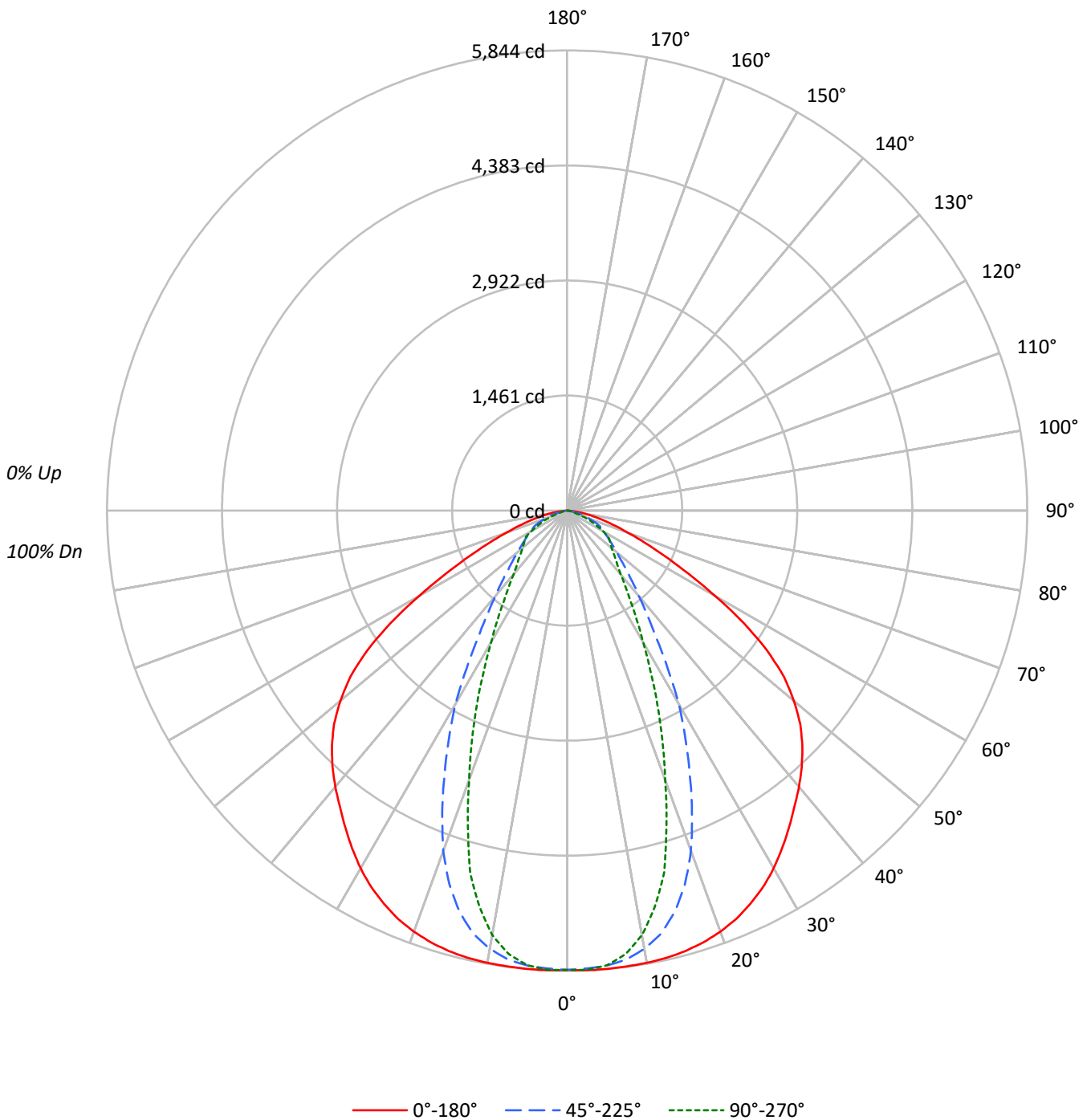
Lumens per Lamp: N/A
Luminaire Lumens: 8424.7 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

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	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°	35879	35879	35879
5°	36078	35815	35787
10°	36423	35303	34191
15°	36882	33608	30300
20°	37248	30097	23821
25°	37380	24990	18382
30°	37261	20122	13686
35°	36892	14801	10499
40°	36778	11365	8507
45°	36748	9184	7556
50°	35984	7882	7051
55°	33262	7055	7068
60°	26666	6661	6450
65°	19811	6498	5213
70°	14862	5345	3541
75°	11198	4047	1920
80°	8140	1976	1619
85°	5229	1694	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	549.6	6.5
10°-20°	1464.5	17.4
20°-30°	1794.0	21.3
30°-40°	1611.2	19.1
40°-50°	1248.3	14.8
50°-60°	934.1	11.1
60°-70°	560.4	6.7
70°-80°	222.2	2.6
80°-90°	40.3	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°	3808.2	45.2
0°-40°	5419.4	64.3
0°-60°	7601.7	90.2
0°-90°	8424.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8424.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5833	5833	5833	5833	5833	
5°	5843	5818	5801	5799	5796	557
15°	5792	5640	5278	4887	4758	1637
25°	5508	4931	3682	2944	2708	2537
35°	4913	3633	1971	1511	1398	3078
45°	4225	1893	1056	890	869	3248
55°	3102	1004	658	637	659	2722
65°	1361	558	446	379	358	1394
75°	471	272	170	89	81	519
85°	74	30	24	21	18	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5833.2	5833.2	5833.2	5833.2	5833.2
2.5°	5843.6	5822.3	5819.3	5833.9	5838.0
5°	5843.3	5817.5	5800.6	5799.1	5796.1
7.5°	5838.4	5804.4	5750.1	5707.0	5681.6
10°	5831.7	5771.8	5652.4	5528.5	5474.3
12.5°	5818.9	5720.9	5503.1	5264.7	5150.2
15°	5792.0	5640.1	5277.8	4887.4	4758.3
17.5°	5750.5	5518.8	4975.0	4410.6	4193.9
20°	5690.6	5365.7	4598.1	3910.2	3639.3
22.5°	5613.5	5168.5	4144.1	3375.0	3155.7
25°	5507.9	4931.2	3682.3	2944.3	2708.5
27.5°	5390.0	4664.4	3246.7	2492.9	2286.7
30°	5246.3	4339.9	2833.1	2097.7	1927.0
32.5°	5082.8	4005.7	2378.0	1761.6	1643.4
35°	4913.2	3633.3	1971.2	1510.9	1398.2
37.5°	4739.6	3210.8	1664.3	1295.7	1214.5
40°	4580.5	2739.6	1415.4	1124.3	1059.5
42.5°	4409.9	2297.2	1223.8	987.3	947.6
45°	4224.6	1893.0	1055.8	890.0	868.7
47.5°	4015.4	1597.0	924.8	815.5	795.7
50°	3760.5	1356.3	823.7	738.0	736.9
52.5°	3474.2	1167.3	733.9	681.9	691.6
55°	3101.8	1004.5	657.9	637.4	659.1
57.5°	2659.1	871.6	595.8	602.9	620.1
60°	2167.7	751.9	541.5	547.5	524.3
62.5°	1733.2	647.1	492.5	461.1	431.5
65°	1361.2	557.6	446.5	379.1	358.2
67.5°	1061.4	474.9	373.9	311.0	284.8
70°	826.4	403.4	297.2	238.4	196.9
72.5°	631.4	335.7	234.3	146.3	111.2
75°	471.2	272.5	170.3	89.4	80.8
77.5°	342.1	204.0	95.1	65.5	61.0
80°	229.8	137.7	55.8	47.9	45.7
82.5°	146.3	72.2	38.5	33.7	31.1
85°	74.1	29.6	24.0	20.6	18.3
87.5°	25.8	14.2	10.9	8.6	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)