

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: P563305

Luminaire Tested: **VHB-48-N-UNV-L740-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563305
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-48-N-UNV-L740-CD
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 70CRI, 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

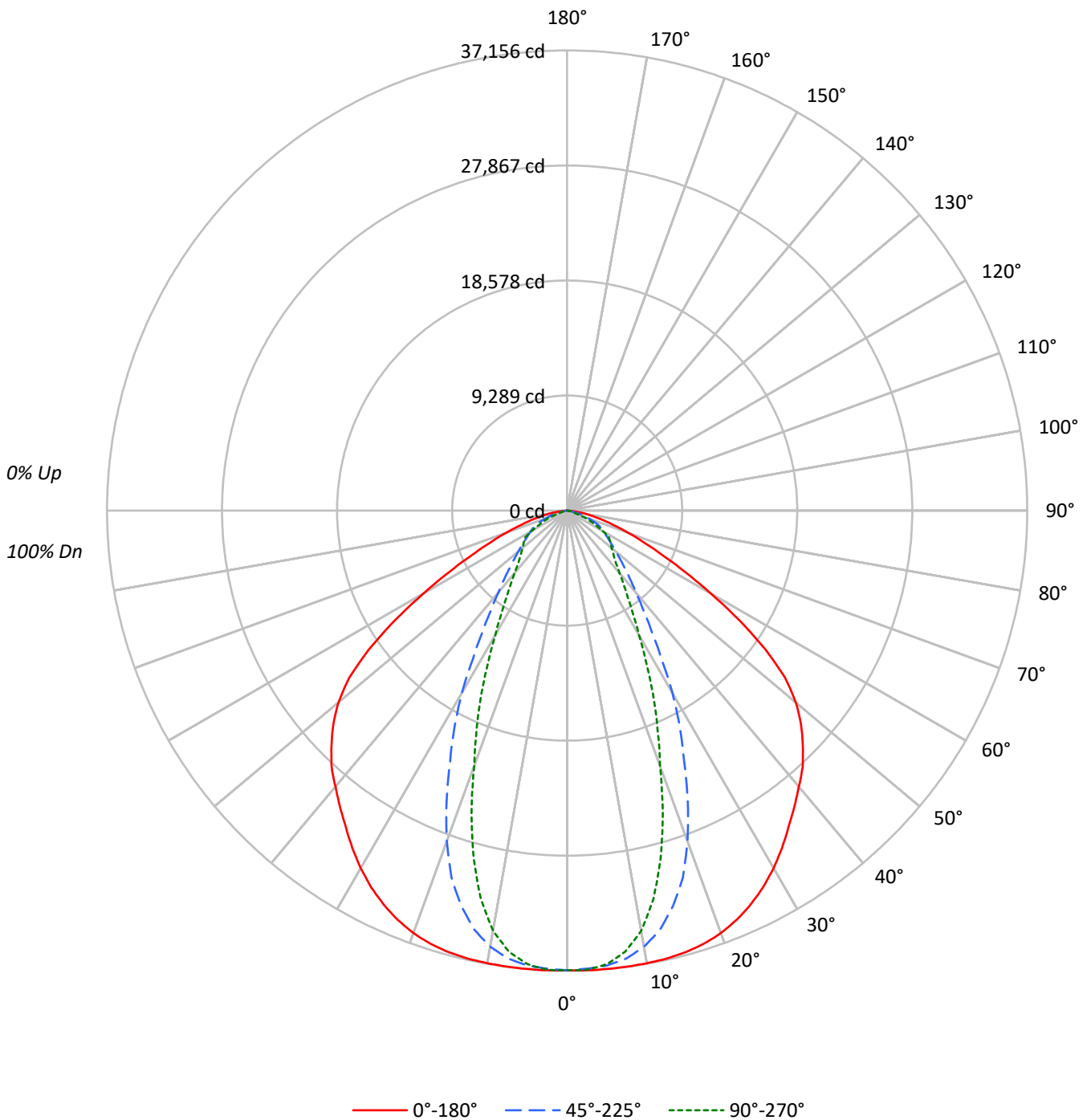
Lumens per Lamp: N/A
Luminaire Lumens: 52351.0 lumens
Efficiency: N/A
Efficacy: 161.6 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 324
Input Voltage (V): NR
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: 25 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	108	104	101	109	105	102	100	101	99	96	97	95	94	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	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	144207	144207	144207
5°	144885	143784	143368
10°	146406	141028	135877
15°	148495	132874	117158
20°	150094	117387	90708
25°	150395	95855	70285
30°	149552	76130	52020
35°	147844	56414	40451
40°	147612	43809	33385
45°	147923	36052	29656
50°	145824	31181	28286
55°	132380	27795	28581
60°	104077	26563	26042
65°	77302	25746	19599
70°	59289	20610	11964
75°	45130	14699	6600
80°	33137	6839	5331
85°	20731	5875	4743



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3487.6	6.7
10°-20°	9180.8	17.5
20°-30°	11086.8	21.2
30°-40°	9913.0	18.9
40°-50°	7762.6	14.8
50°-60°	5865.2	11.2
60°-70°	3483.5	6.7
70°-80°	1338.7	2.6
80°-90°	232.6	0.4
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°	23755.3	45.4
0°-40°	33668.3	64.3
0°-60°	47296.1	90.3
0°-90°	52351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	52351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	37121	37121	37121	37121	37121	
5°	37153	36991	36871	36823	36764	###
15°	36922	35704	33038	30276	29130	10432
25°	35086	30960	22362	17631	16397	16155
35°	31174	22184	11895	9275	8530	19549
45°	26925	11472	6562	5544	5398	20725
55°	19545	6224	4104	4088	4220	17164
65°	8410	3495	2801	2336	2132	8665
75°	3007	1680	979	484	440	3292
85°	465	162	132	116	106	620
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	37120.9	37120.9	37120.9	37120.9	37120.9
2.5°	37155.9	37033.3	37023.6	37102.5	37114.3
5°	37153.3	36991.2	36871.2	36822.6	36764.4
7.5°	37141.9	36896.6	36491.5	36102.6	35922.1
10°	37114.3	36679.0	35750.9	34866.6	34445.3
12.5°	37053.9	36290.0	34651.1	33026.3	32142.0
15°	36922.0	35704.5	33038.1	30276.2	29130.5
17.5°	36683.3	34896.4	31061.1	27163.1	25688.5
20°	36306.2	33868.9	28394.7	23612.5	21941.2
22.5°	35764.5	32526.5	25457.2	20415.7	19080.3
25°	35086.5	30959.5	22362.5	17631.1	16397.3
27.5°	34281.1	29130.5	19695.7	15038.7	13823.3
30°	33339.0	26994.0	16971.5	12589.5	11596.7
32.5°	32285.6	24744.2	14126.8	10721.6	9904.8
35°	31174.5	22184.2	11895.4	9275.0	8529.5
37.5°	30128.2	19443.4	10073.8	7995.2	7471.8
40°	29107.7	16564.2	8638.6	6983.5	6583.2
42.5°	28144.6	13809.7	7541.5	6136.4	5874.5
45°	26924.8	11471.8	6562.2	5543.9	5398.0
47.5°	25630.6	9682.3	5784.3	5062.1	5011.3
50°	24128.4	8247.5	5159.3	4643.4	4680.2
52.5°	22179.4	7113.1	4566.7	4346.9	4455.9
55°	19545.4	6224.5	4103.8	4087.6	4219.9
57.5°	16459.9	5374.8	3738.1	3840.2	3988.2
60°	13395.4	4692.0	3418.8	3566.9	3351.8
62.5°	10701.0	4064.8	3115.7	2844.6	2659.8
65°	8409.5	3495.0	2800.8	2335.7	2132.1
67.5°	6705.8	2965.1	2356.3	1858.8	1689.7
70°	5219.8	2492.9	1814.5	1395.8	1053.3
72.5°	4000.0	2083.4	1416.4	794.0	599.6
75°	3006.7	1680.5	979.3	484.0	439.7
77.5°	2143.4	1247.8	522.9	349.5	324.1
80°	1481.2	801.1	305.7	252.3	238.3
82.5°	918.9	386.7	208.5	180.4	169.1
85°	465.1	162.1	131.8	115.6	106.4
87.5°	155.0	78.8	60.0	55.6	50.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)