

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: P563278

Luminaire Tested: **VHB-24-N-UNV-L740-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563278
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-24-N-UNV-L740-CD
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 70CRI, 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

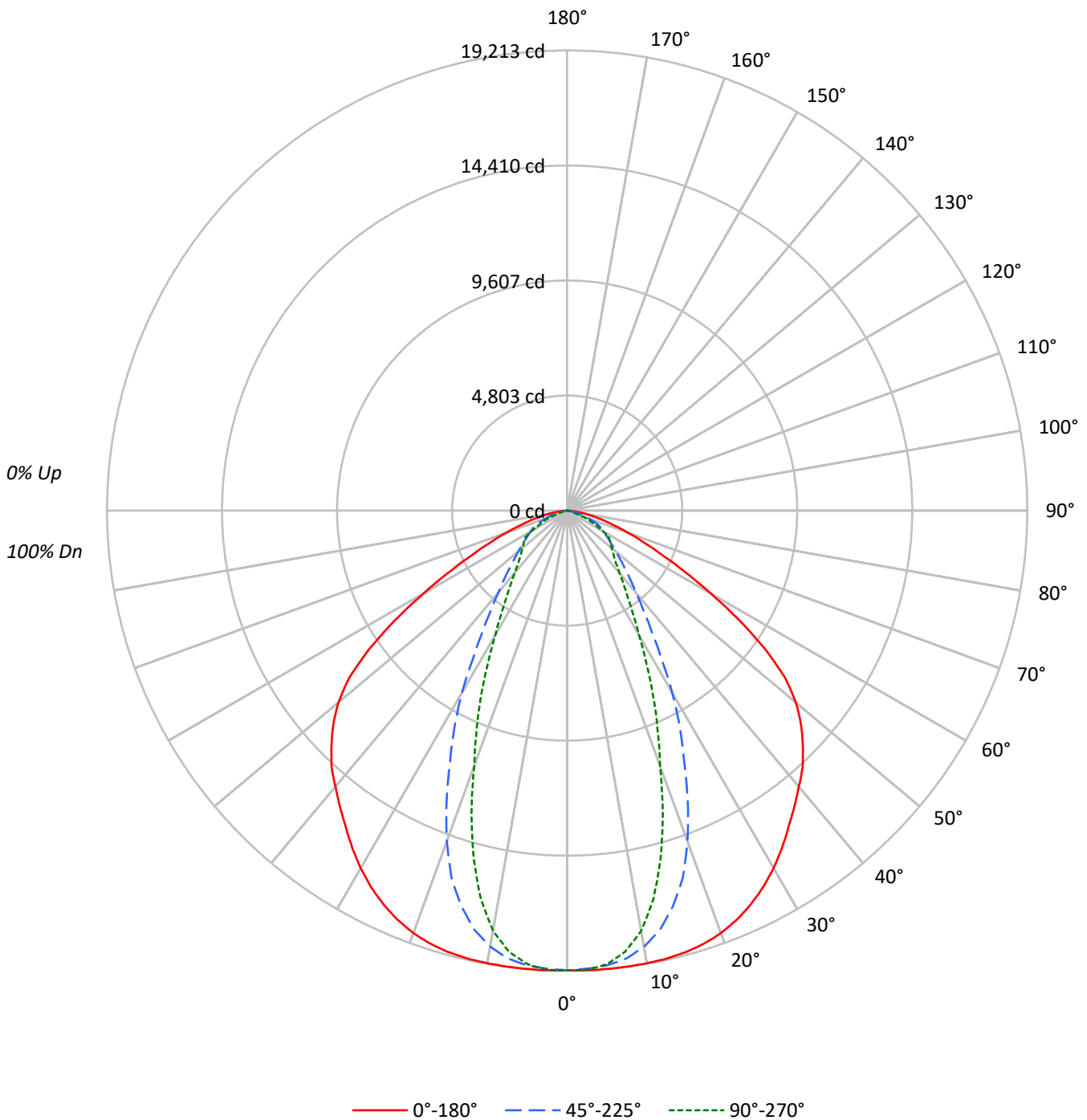
Lumens per Lamp: N/A
Luminaire Lumens: 27070.0 lumens
Efficiency: N/A
Efficacy: 164.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 165
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°	111851	111851	111851
5°	112377	111523	111200
10°	113556	109385	105390
15°	115177	103060	90871
20°	116418	91049	70355
25°	116650	74347	54515
30°	115996	59049	40348
35°	114672	43756	31375
40°	114492	33979	25894
45°	114734	27963	23002
50°	113106	24185	21939
55°	102678	21558	22168
60°	80725	20603	20199
65°	59958	19970	15202
70°	45986	15986	9280
75°	35003	11401	5120
80°	25702	5305	4134
85°	16080	4560	3677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1803.4	6.7
10°-20°	4747.3	17.5
20°-30°	5732.9	21.2
30°-40°	5125.9	18.9
40°-50°	4013.9	14.8
50°-60°	3032.8	11.2
60°-70°	1801.3	6.7
70°-80°	692.2	2.6
80°-90°	120.3	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°	12283.6	45.4
0°-40°	17409.4	64.3
0°-60°	24456.2	90.3
0°-90°	27070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	27070.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19195	19195	19195	19195	19195	
5°	19212	19128	19066	19040	19010	###
15°	19092	18462	17084	15655	15063	5394
25°	18143	16009	11563	9117	8479	8353
35°	16120	11471	6151	4796	4410	10109
45°	13922	5932	3393	2867	2791	10717
55°	10107	3219	2122	2114	2182	8875
65°	4348	1807	1448	1208	1102	4480
75°	1555	869	506	250	227	1702
85°	240	84	68	60	55	320
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19194.7	19194.7	19194.7	19194.7	19194.7
2.5°	19212.8	19149.4	19144.4	19185.2	19191.3
5°	19211.5	19127.7	19065.6	19040.5	19010.4
7.5°	19205.6	19078.8	18869.3	18668.2	18574.9
10°	19191.3	18966.2	18486.3	18029.1	17811.2
12.5°	19160.1	18765.1	17917.6	17077.4	16620.2
15°	19091.9	18462.3	17083.5	15655.4	15063.0
17.5°	18968.5	18044.5	16061.3	14045.7	13283.2
20°	18773.5	17513.2	14682.5	12209.7	11345.5
22.5°	18493.3	16819.0	13163.6	10556.7	9866.2
25°	18142.7	16008.7	11563.3	9116.8	8478.8
27.5°	17726.3	15063.0	10184.4	7776.3	7147.9
30°	17239.1	13958.3	8775.7	6509.9	5996.5
32.5°	16694.5	12794.9	7304.8	5544.0	5121.6
35°	16119.9	11471.2	6150.9	4796.0	4410.5
37.5°	15578.9	10053.9	5209.0	4134.2	3863.6
40°	15051.2	8565.1	4466.9	3611.1	3404.1
42.5°	14553.2	7140.8	3899.6	3173.1	3037.6
45°	13922.5	5931.9	3393.2	2866.7	2791.2
47.5°	13253.3	5006.6	2991.0	2617.5	2591.3
50°	12476.5	4264.7	2667.8	2401.0	2420.1
52.5°	11468.7	3678.1	2361.4	2247.7	2304.1
55°	10106.7	3218.6	2122.0	2113.6	2182.0
57.5°	8511.2	2779.2	1932.9	1985.7	2062.2
60°	6926.6	2426.2	1767.8	1844.4	1733.2
62.5°	5533.3	2101.9	1611.1	1470.9	1375.4
65°	4348.5	1807.2	1448.3	1207.8	1102.5
67.5°	3467.5	1533.2	1218.4	961.1	873.7
70°	2699.1	1289.1	938.3	721.8	544.7
72.5°	2068.4	1077.3	732.4	410.6	310.0
75°	1554.7	869.0	506.4	250.2	227.4
77.5°	1108.3	645.2	270.4	180.7	167.6
80°	765.9	414.2	158.1	130.4	123.2
82.5°	475.1	200.0	107.8	93.3	87.4
85°	240.5	83.8	68.2	59.8	55.0
87.5°	80.2	40.8	31.0	28.8	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)