

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: P563383

Luminaire Tested: **VHB-48-W-UNV-L940-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364417)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-48-W-UNV-L940-CD
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 90CRI, 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

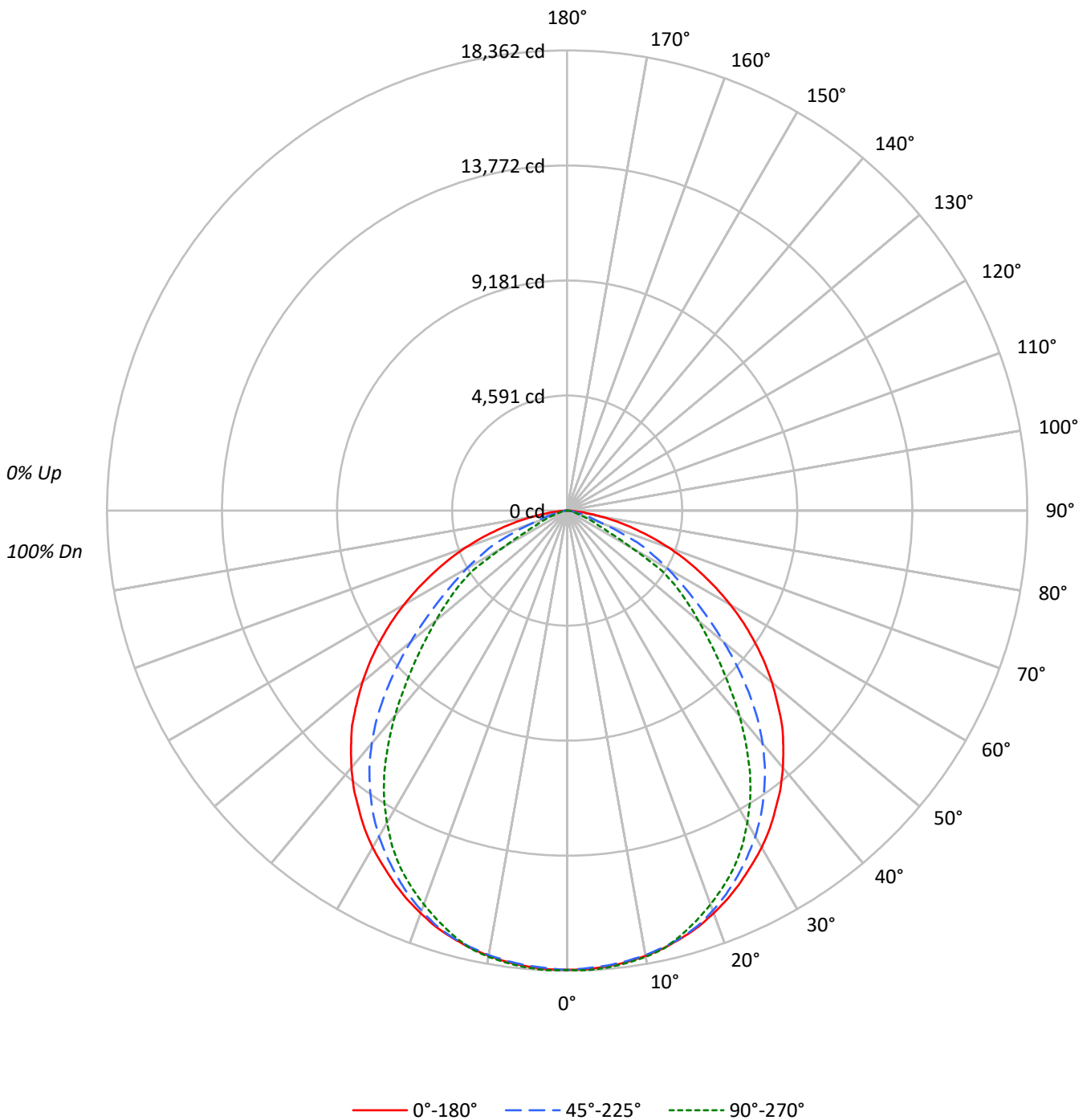
Lumens per Lamp: N/A
Luminaire Lumens: 41225.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')
CIE Type: Direct

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	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89					87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67					65				
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59					57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52					50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46					44				
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41					39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37					36				
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34					32				
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31					29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	71203	71203	71203
5°	71214	71069	71395
10°	71188	71034	71327
15°	71019	70945	70579
20°	70677	70239	69141
25°	70153	68959	67447
30°	69643	67370	64489
35°	68813	65008	60298
40°	67906	61514	54255
45°	66671	56258	47405
50°	64469	49254	41411
55°	61837	41958	36149
60°	58417	35987	23078
65°	54128	30017	12235
70°	48856	17058	7928
75°	41044	10451	4932
80°	31191	5275	4318
85°	18952	4796	3896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1735.2	4.2
10°-20°	4964.5	12.0
20°-30°	7400.5	18.0
30°-40°	8522.9	20.7
40°-50°	7931.8	19.2
50°-60°	6035.6	14.6
60°-70°	3239.8	7.9
70°-80°	1191.9	2.9
80°-90°	202.7	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°	14100.3	34.2
0°-40°	22623.2	54.9
0°-60°	36590.6	88.8
0°-90°	41225.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	41225.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18328	18328	18328	18328	18328	
5°	18262	18210	18224	18288	18308	###
15°	17658	17630	17640	17606	17549	4984
25°	16366	16353	16088	15859	15735	7544
35°	14510	14333	13708	13019	12714	9083
45°	12135	11551	10240	9024	8629	9326
55°	9130	8098	6195	5516	5337	8155
65°	5888	4325	3266	1617	1331	5839
75°	2734	1791	696	360	329	2931
85°	425	137	108	93	87	567
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18328.5	18328.5	18328.5	18328.5	18328.5
2.5°	18315.4	18259.7	18278.4	18337.8	18361.9
5°	18261.6	18209.6	18224.4	18287.7	18308.1
7.5°	18172.6	18122.4	18133.6	18193.0	18213.4
10°	18046.3	17994.4	18007.3	18064.8	18081.5
12.5°	17875.4	17827.2	17838.4	17879.3	17897.8
15°	17658.3	17630.3	17639.8	17606.2	17548.8
17.5°	17415.2	17374.3	17363.1	17214.7	17153.3
20°	17095.9	17081.0	16990.0	16806.3	16724.5
22.5°	16759.8	16731.8	16574.1	16353.1	16254.8
25°	16366.3	16353.1	16087.9	15859.4	15735.0
27.5°	15943.0	15911.4	15569.7	15284.0	15114.9
30°	15525.2	15447.3	15018.5	14617.4	14376.2
32.5°	15051.8	14905.1	14392.8	13880.5	13602.1
35°	14509.9	14333.4	13707.7	13019.0	12714.5
37.5°	13984.4	13718.9	12965.2	12103.9	11714.0
40°	13390.4	13009.8	12130.0	11129.2	10698.5
42.5°	12764.7	12300.6	11240.7	10076.7	9634.7
45°	12135.3	11550.7	10240.0	9024.1	8628.6
47.5°	11387.2	10767.3	9200.5	8019.7	7680.0
50°	10667.1	9943.1	8149.7	7084.2	6852.0
52.5°	9913.4	9035.3	7128.7	6293.3	6068.6
55°	9130.0	8097.6	6194.9	5515.5	5337.3
57.5°	8342.7	7134.3	5367.0	4808.2	4488.9
60°	7518.6	6178.2	4631.8	3907.8	2970.3
62.5°	6707.2	5183.0	3898.5	2450.5	1889.8
65°	5888.5	4325.4	3265.5	1616.9	1331.0
67.5°	5107.1	3495.7	2329.8	1171.3	996.8
70°	4301.3	2858.9	1501.8	839.1	698.0
72.5°	3493.8	2300.1	1030.4	551.5	447.3
75°	2734.5	1791.4	696.3	360.2	328.6
77.5°	2049.4	1236.3	387.9	267.2	250.7
80°	1394.2	740.8	235.8	204.2	193.0
82.5°	835.5	354.6	170.8	150.4	144.8
85°	425.2	137.3	107.6	92.7	87.4
87.5°	126.3	68.6	48.2	37.2	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)