

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: P475366

Luminaire Tested: **14CZ2-48HE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475366
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-48HE-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4972.5 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

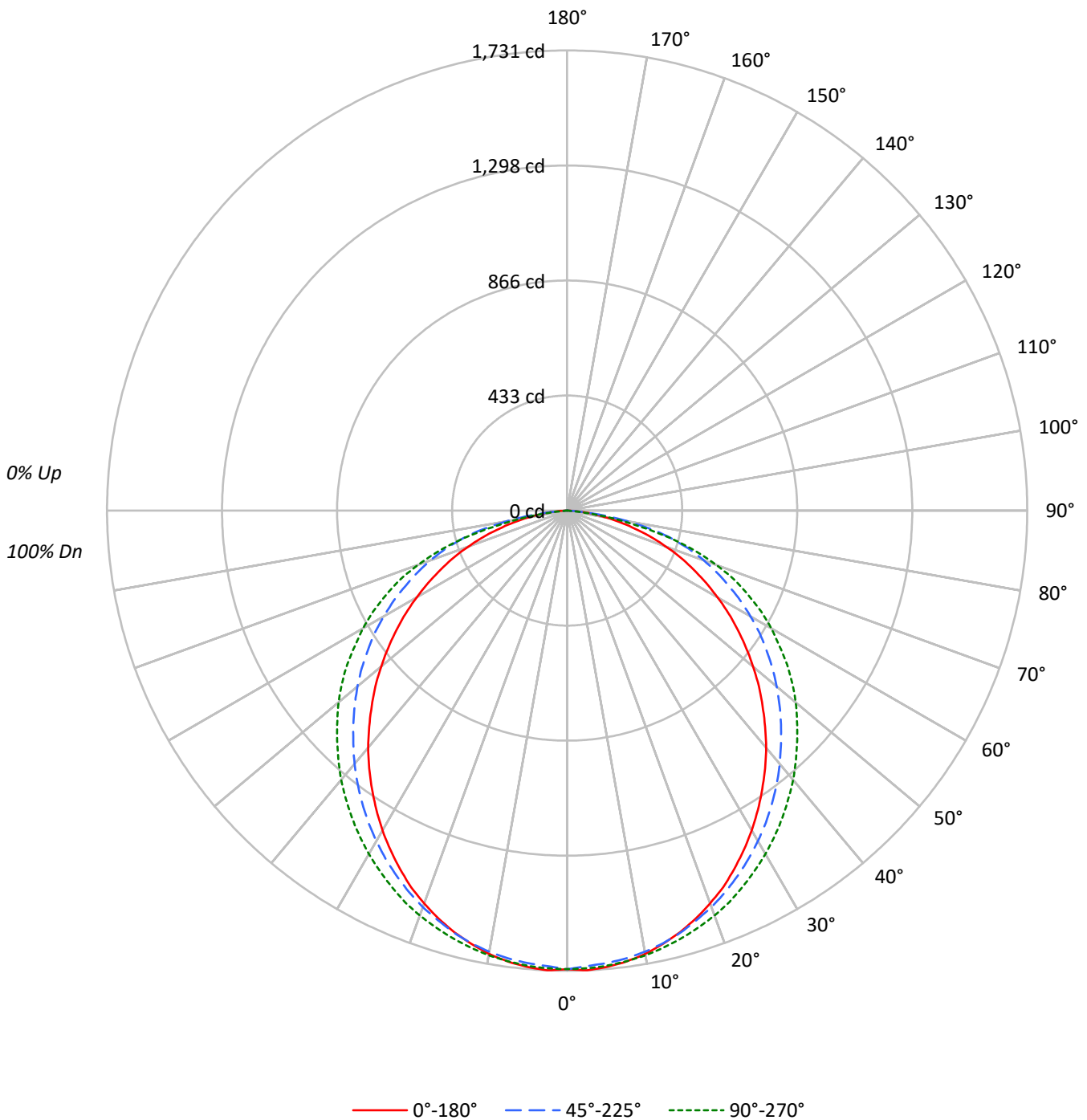
Input Watts (W): 35.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91		93	91	88		90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40		51	45	39		50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28		40	33	28		39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4642	4642	4642
5°	4655	4615	4642
10°	4627	4605	4641
15°	4574	4581	4639
20°	4503	4546	4642
25°	4417	4504	4637
30°	4317	4460	4635
35°	4203	4414	4635
40°	4091	4371	4646
45°	3956	4330	4657
50°	3822	4310	4701
55°	3677	4291	4740
60°	3514	4286	4774
65°	3336	4275	4784
70°	3106	4299	4692
75°	2754	4243	4209
80°	2311	3550	2865
85°	1621	1389	333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	3.3
10°-20°	465.8	9.4
20°-30°	701.9	14.1
30°-40°	842.5	16.9
40°-50°	877.1	17.6
50°-60°	810.5	16.3
60°-70°	649.1	13.1
70°-80°	388.4	7.8
80°-90°	74.0	1.5
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°	1330.9	26.8
0°-40°	2173.4	43.7
0°-60°	3861.0	77.6
0°-90°	4972.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4972.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1725	1725	1725	1725	1725	
5°	1723	1719	1708	1721	1718	164
15°	1642	1642	1644	1665	1665	463
25°	1488	1496	1517	1555	1562	685
35°	1279	1299	1344	1397	1411	801
45°	1040	1070	1138	1205	1224	803
55°	784	826	915	985	1010	701
65°	524	578	671	737	751	519
75°	265	332	408	414	405	283
85°	52	77	45	18	11	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1725.0	1725.0	1725.0	1725.0	1725.0
2.5°	1730.9	1725.9	1715.0	1725.9	1723.4
5°	1723.4	1719.2	1708.4	1720.9	1718.4
7.5°	1710.9	1707.6	1699.2	1712.5	1710.0
10°	1693.4	1690.9	1685.1	1700.1	1698.4
12.5°	1669.2	1670.1	1666.7	1685.1	1683.4
15°	1641.7	1641.7	1644.2	1665.1	1665.1
17.5°	1609.3	1610.9	1615.9	1643.4	1644.2
20°	1572.6	1576.8	1587.6	1615.9	1620.9
22.5°	1533.5	1538.5	1553.5	1586.8	1594.3
25°	1487.7	1496.0	1516.8	1555.1	1561.8
27.5°	1439.3	1451.8	1477.7	1519.3	1527.6
30°	1389.4	1402.7	1435.2	1480.2	1491.8
32.5°	1335.2	1352.7	1391.9	1439.3	1452.7
35°	1279.4	1298.6	1343.6	1396.9	1411.0
37.5°	1223.6	1244.4	1295.2	1352.7	1366.9
40°	1164.5	1188.6	1244.4	1303.6	1322.7
42.5°	1102.0	1128.6	1190.3	1255.3	1273.6
45°	1039.5	1070.3	1137.8	1205.3	1223.6
47.5°	978.7	1010.4	1083.7	1153.6	1172.8
50°	912.9	949.6	1029.5	1098.7	1122.8
52.5°	848.8	889.6	973.7	1043.7	1067.8
55°	783.8	826.3	914.6	985.4	1010.4
57.5°	720.5	765.5	858.8	928.7	946.2
60°	653.0	702.2	796.3	867.1	887.1
62.5°	589.7	640.5	735.5	803.8	823.0
65°	523.9	578.1	671.4	737.2	751.3
67.5°	462.3	516.4	610.6	667.2	681.4
70°	394.8	454.8	546.4	594.7	596.4
72.5°	330.7	391.5	480.6	511.4	507.3
75°	264.9	331.5	408.1	414.0	404.8
77.5°	205.7	272.4	324.9	306.5	288.2
80°	149.1	214.1	229.1	200.7	184.9
82.5°	98.3	149.9	138.3	99.1	85.0
85°	52.5	76.6	45.0	18.3	10.8
87.5°	20.0	13.3	5.0	4.2	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)