

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: P475364

Luminaire Tested: **14CZ2-44-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475364
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

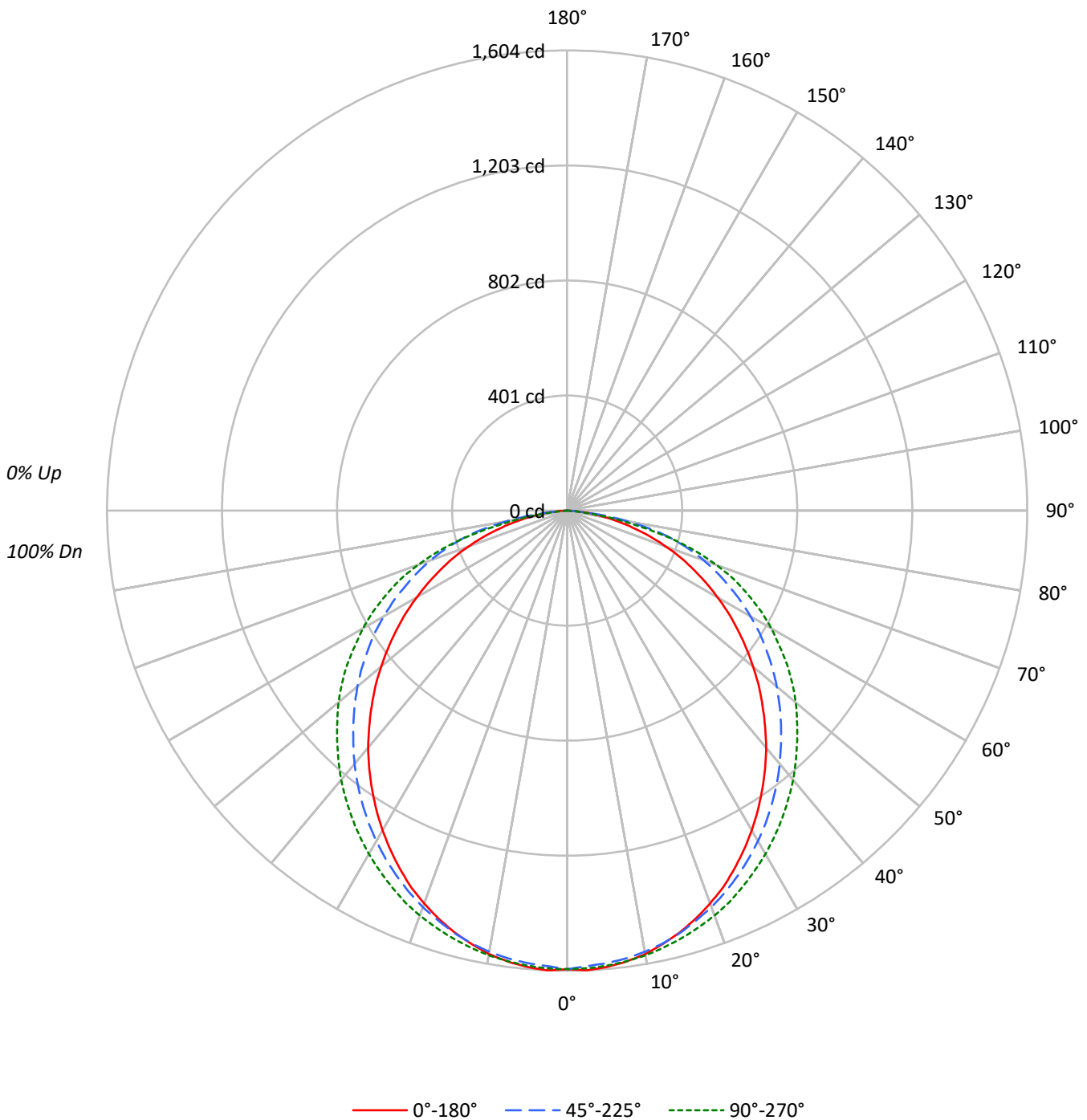
Lumens per Lamp: N/A
Luminaire Lumens: 4607.7 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.6
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°	4302	4302	4302
5°	4314	4276	4301
10°	4288	4267	4300
15°	4238	4245	4298
20°	4173	4213	4301
25°	4093	4173	4297
30°	4000	4132	4295
35°	3895	4090	4295
40°	3790	4051	4306
45°	3666	4012	4315
50°	3541	3994	4356
55°	3407	3976	4392
60°	3257	3971	4424
65°	3091	3961	4433
70°	2879	3984	4348
75°	2551	3932	3900
80°	2142	3290	2655
85°	1501	1288	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.3
10°-20°	431.7	9.4
20°-30°	650.4	14.1
30°-40°	780.7	16.9
40°-50°	812.7	17.6
50°-60°	751.0	16.3
60°-70°	601.5	13.1
70°-80°	359.9	7.8
80°-90°	68.6	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°	1233.3	26.8
0°-40°	2014.0	43.7
0°-60°	3577.7	77.6
0°-90°	4607.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4607.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1598	1598	1598	1598	1598	
5°	1597	1593	1583	1595	1592	152
15°	1521	1521	1524	1543	1543	429
25°	1378	1386	1406	1441	1447	635
35°	1186	1203	1245	1294	1308	742
45°	963	992	1054	1117	1134	744
55°	726	766	848	913	936	650
65°	486	536	622	683	696	481
75°	245	307	378	384	375	262
85°	49	71	42	17	10	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1598.5	1598.5	1598.5	1598.5	1598.5
2.5°	1603.9	1599.3	1589.2	1599.3	1596.9
5°	1596.9	1593.1	1583.1	1594.6	1592.3
7.5°	1585.4	1582.3	1574.6	1586.9	1584.6
10°	1569.2	1566.8	1561.4	1575.3	1573.8
12.5°	1546.8	1547.6	1544.5	1561.4	1559.9
15°	1521.3	1521.3	1523.6	1542.9	1542.9
17.5°	1491.2	1492.7	1497.4	1522.9	1523.6
20°	1457.2	1461.1	1471.1	1497.4	1502.0
22.5°	1421.0	1425.6	1439.5	1470.4	1477.3
25°	1378.5	1386.2	1405.5	1441.0	1447.2
27.5°	1333.7	1345.3	1369.3	1407.8	1415.6
30°	1287.4	1299.8	1329.9	1371.6	1382.4
32.5°	1237.3	1253.5	1289.8	1333.7	1346.1
35°	1185.6	1203.3	1245.0	1294.4	1307.5
37.5°	1133.8	1153.1	1200.2	1253.5	1266.6
40°	1079.0	1101.4	1153.1	1207.9	1225.7
42.5°	1021.2	1045.9	1103.0	1163.2	1180.2
45°	963.3	991.8	1054.3	1116.9	1133.8
47.5°	906.9	936.2	1004.2	1069.0	1086.8
50°	845.9	879.9	954.0	1018.1	1040.4
52.5°	786.5	824.3	902.3	967.1	989.5
55°	726.3	765.7	847.5	913.1	936.2
57.5°	667.6	709.3	795.8	860.6	876.8
60°	605.1	650.7	737.9	803.5	822.0
62.5°	546.5	593.5	681.5	744.8	762.6
65°	485.5	535.7	622.1	683.1	696.2
67.5°	428.4	478.5	565.8	618.2	631.4
70°	365.9	421.4	506.3	551.1	552.6
72.5°	306.4	362.8	445.4	473.9	470.1
75°	245.4	307.2	378.2	383.6	375.1
77.5°	190.6	252.4	301.0	284.0	267.1
80°	138.2	198.4	212.3	186.0	171.3
82.5°	91.1	138.9	128.1	91.8	78.7
85°	48.6	71.0	41.7	17.0	10.0
87.5°	18.5	12.3	4.6	3.9	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)