

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: P475431

Luminaire Tested: **14CZ2-20-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475431  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-RDP-UNV-L840-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

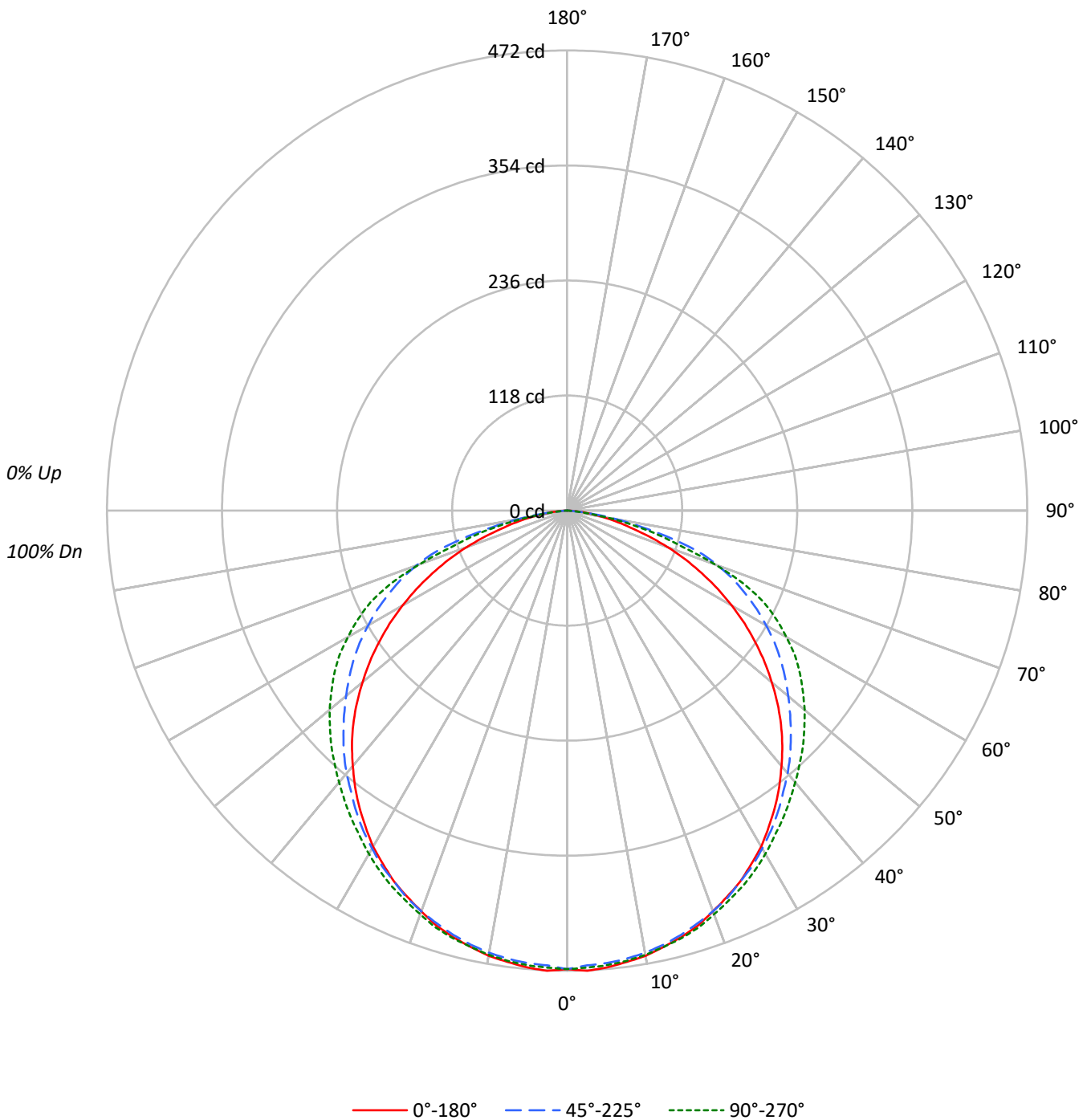
Lumens per Lamp: N/A  
Luminaire Lumens: 1404.3 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 15.6  
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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
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	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1266	1266	1266
5°	1270	1259	1264
10°	1267	1258	1264
15°	1261	1255	1265
20°	1253	1253	1262
25°	1247	1247	1263
30°	1237	1244	1264
35°	1221	1239	1268
40°	1201	1236	1279
45°	1181	1235	1302
50°	1147	1239	1331
55°	1106	1255	1368
60°	1050	1269	1398
65°	970	1284	1417
70°	862	1293	1268
75°	696	1162	1015
80°	544	815	663
85°	374	238	170



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.5	3.2
10°-20°	127.7	9.1
20°-30°	194.5	13.8
30°-40°	236.9	16.9
40°-50°	251.3	17.9
50°-60°	237.2	16.9
60°-70°	191.5	13.6
70°-80°	103.9	7.4
80°-90°	16.8	1.2
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°	366.7	26.1
0°-40°	603.6	43.0
0°-60°	1092.1	77.8
0°-90°	1404.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1404.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	470	469	466	469	468	45
15°	453	452	451	454	454	128
25°	420	419	420	424	425	193
35°	372	374	377	385	386	232
45°	310	315	324	337	342	239
55°	236	246	268	285	292	211
65°	152	171	202	218	223	151
75°	67	98	112	101	98	73
85°	12	13	8	7	6	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	470.3	470.3	470.3	470.3	470.3
2.5°	472.5	470.3	467.0	470.3	469.2
5°	470.3	469.2	465.9	469.2	468.1
7.5°	467.0	467.0	463.7	465.9	465.9
10°	463.7	462.6	460.5	463.7	462.6
12.5°	458.3	457.2	456.1	459.4	458.3
15°	452.8	451.7	450.6	453.9	453.9
17.5°	446.2	445.1	444.0	448.4	448.4
20°	437.4	437.4	437.4	441.8	440.7
22.5°	428.7	428.7	429.8	434.1	433.0
25°	419.9	418.8	419.9	424.3	425.4
27.5°	408.9	410.0	411.1	415.5	416.6
30°	398.0	399.1	400.2	405.6	406.7
32.5°	384.8	387.0	389.2	395.8	395.8
35°	371.6	373.8	377.1	384.8	385.9
37.5°	357.4	359.6	364.0	372.7	374.9
40°	342.0	345.3	351.9	360.7	364.0
42.5°	326.7	331.1	338.8	348.6	353.0
45°	310.3	314.6	324.5	336.6	342.0
47.5°	292.7	298.2	310.3	325.6	330.0
50°	274.1	281.8	296.0	312.4	317.9
52.5°	255.4	264.2	281.8	299.3	304.8
55°	235.7	245.6	267.5	285.0	291.6
57.5°	216.0	226.9	252.2	270.8	277.4
60°	195.1	208.3	235.7	254.3	259.8
62.5°	174.3	189.7	219.3	237.9	242.3
65°	152.4	171.0	201.7	218.2	222.6
67.5°	131.6	153.5	184.2	196.2	196.2
70°	109.6	133.8	164.4	167.7	161.2
72.5°	87.7	115.1	142.5	130.5	125.0
75°	66.9	97.6	111.8	100.9	97.6
77.5°	50.4	78.9	78.9	72.4	70.2
80°	35.1	60.3	52.6	46.0	42.8
82.5°	23.0	34.0	27.4	21.9	18.6
85°	12.1	13.2	7.7	6.6	5.5
87.5°	4.4	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)