

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: P476351

Luminaire Tested: **14GR-LD5-28-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476351  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-28-FGW080-UNV-L830-CD1-U  
Description: GR 1'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2315.6 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

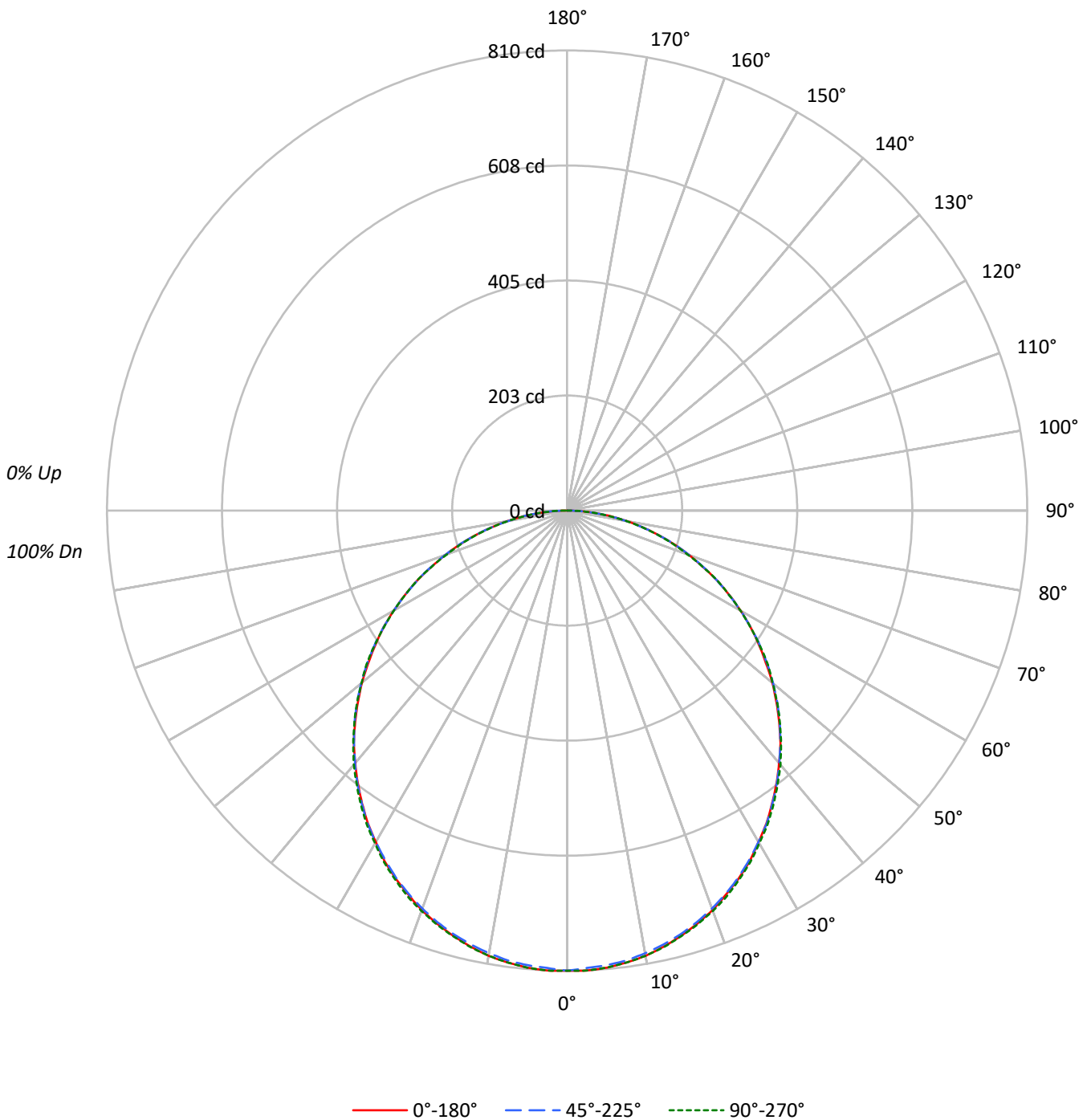
Input Watts (W): 23.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	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	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2179	2179	2179
5°	2181	2170	2181
10°	2174	2162	2174
15°	2159	2151	2161
20°	2143	2135	2147
25°	2121	2117	2128
30°	2093	2093	2102
35°	2067	2070	2079
40°	2038	2041	2051
45°	2009	2014	2017
50°	1974	1981	1977
55°	1934	1945	1941
60°	1896	1896	1896
65°	1853	1853	1861
70°	1794	1794	1776
75°	1731	1723	1716
80°	1654	1641	1630
85°	1550	1535	1488



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.6	3.3
10°-20°	218.5	9.4
20°-30°	329.4	14.2
30°-40°	394.7	17.0
40°-50°	408.1	17.6
50°-60°	370.1	16.0
60°-70°	287.6	12.4
70°-80°	175.6	7.6
80°-90°	55.0	2.4
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°	624.5	27.0
0°-40°	1019.1	44.0
0°-60°	1797.4	77.6
0°-90°	2315.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2315.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	808	807	803	807	808	77
15°	775	775	772	776	776	219
25°	714	714	713	717	717	329
35°	629	630	630	633	633	394
45°	528	528	529	530	530	407
55°	412	414	415	415	414	369
65°	291	291	291	290	292	287
75°	166	166	166	165	165	176
85°	50	49	50	48	48	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	809.8	809.8	809.8	809.8	809.8
2.5°	810.5	809.8	806.0	809.8	810.5
5°	807.5	806.8	803.2	806.8	807.5
7.5°	802.5	802.5	798.7	802.5	802.5
10°	795.7	795.0	791.2	795.0	795.7
12.5°	786.2	786.2	782.4	786.2	786.9
15°	774.9	774.9	772.1	775.7	775.7
17.5°	762.4	763.1	759.5	763.9	763.9
20°	748.3	747.5	745.5	749.0	749.8
22.5°	731.4	732.2	729.9	734.2	735.0
25°	714.4	714.4	712.9	717.4	716.6
27.5°	695.8	695.8	693.5	697.3	698.0
30°	673.7	674.4	673.7	677.2	676.5
32.5°	652.9	653.6	653.6	655.1	655.9
35°	629.2	630.0	630.0	632.8	632.8
37.5°	605.4	605.4	606.2	608.4	608.4
40°	580.3	581.0	581.0	583.3	584.0
42.5°	555.9	554.4	555.2	557.4	557.4
45°	527.8	528.5	529.3	530.0	530.0
47.5°	499.7	501.2	501.9	502.7	501.9
50°	471.6	473.1	473.1	472.3	472.3
52.5°	441.2	444.9	444.2	444.2	445.7
55°	412.3	413.8	414.6	414.6	413.8
57.5°	383.4	384.9	383.4	384.2	382.7
60°	352.3	353.1	352.3	352.3	352.3
62.5°	321.9	322.7	321.2	321.2	321.2
65°	291.0	291.0	291.0	289.5	292.3
67.5°	258.4	259.9	259.9	260.6	257.6
70°	228.0	228.7	228.0	227.2	225.7
72.5°	197.6	198.4	199.1	196.1	195.4
75°	166.5	166.5	165.7	165.0	165.0
77.5°	136.1	136.1	136.1	134.8	134.8
80°	106.7	107.2	105.9	105.9	105.2
82.5°	77.8	77.8	77.8	77.1	75.6
85°	50.2	48.9	49.7	48.2	48.2
87.5°	22.9	22.9	22.9	21.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)