

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: P476146

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476146  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-24-FGW080-UNV-L840-CD1-U  
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2107.3 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

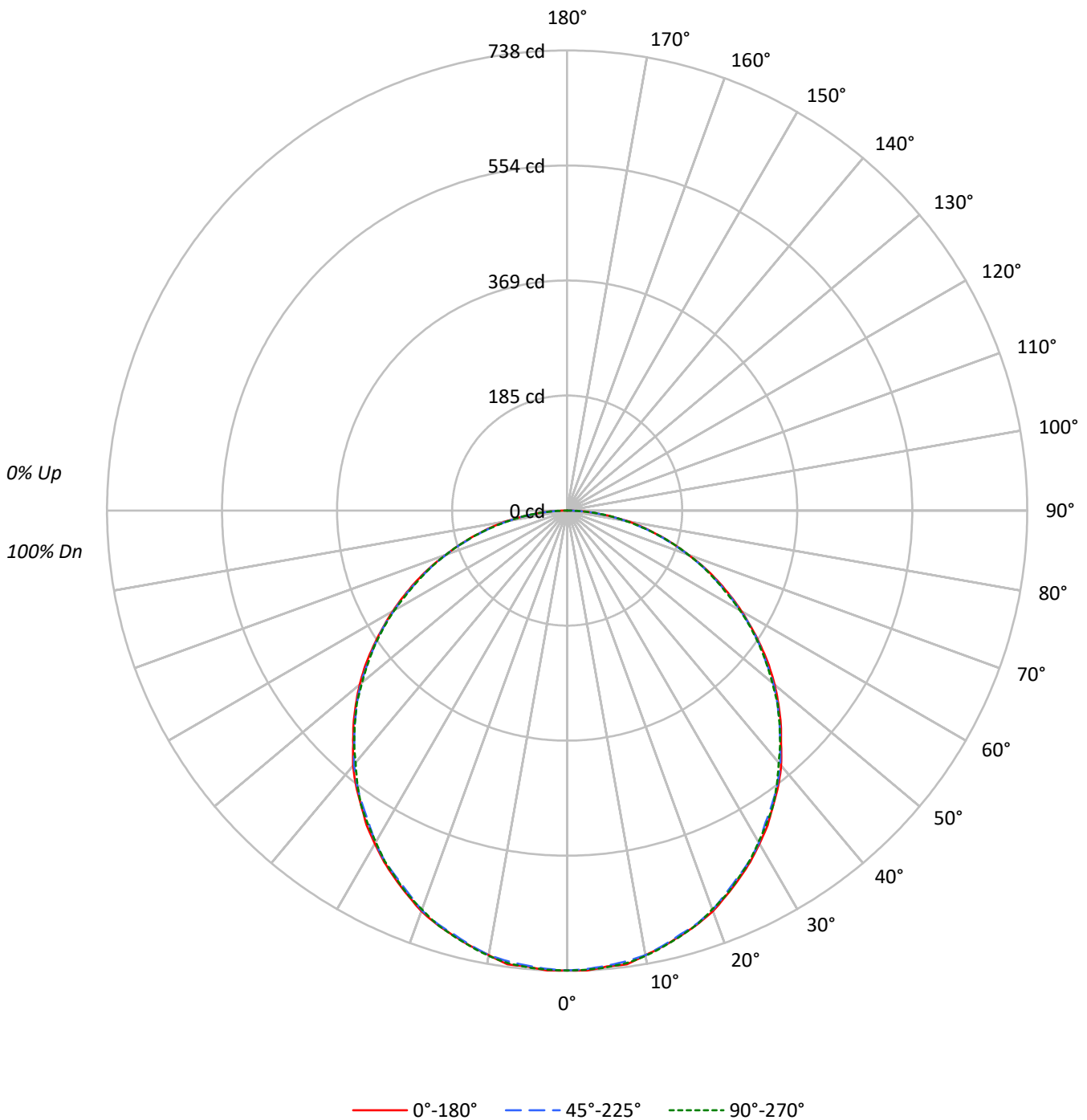
Input Watts (W): 17.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	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	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	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°	1985	1985	1985
5°	1982	1979	1986
10°	1978	1978	1982
15°	1965	1960	1967
20°	1958	1953	1949
25°	1936	1926	1931
30°	1917	1911	1907
35°	1893	1885	1893
40°	1876	1867	1854
45°	1844	1832	1832
50°	1818	1808	1798
55°	1780	1768	1765
60°	1738	1728	1722
65°	1694	1674	1666
70°	1626	1622	1626
75°	1570	1550	1563
80°	1553	1475	1466
85°	1377	1340	1359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.8	3.3
10°-20°	199.1	9.4
20°-30°	299.8	14.2
30°-40°	359.8	17.1
40°-50°	372.2	17.7
50°-60°	337.3	16.0
60°-70°	261.5	12.4
70°-80°	158.7	7.5
80°-90°	49.2	2.3
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°	568.7	27.0
0°-40°	928.4	44.1
0°-60°	1638.0	77.7
0°-90°	2107.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	734	734	733	735	735	70
15°	705	705	704	707	706	199
25°	652	651	648	651	650	301
35°	576	576	574	574	576	361
45°	484	484	481	481	481	374
55°	379	379	377	376	376	339
65°	266	266	263	264	262	263
75°	151	150	149	149	150	161
85°	45	44	43	43	44	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	737.6	737.6	737.6	737.6	737.6
2.5°	738.3	735.2	735.8	737.0	737.0
5°	733.9	733.9	732.7	734.6	735.2
7.5°	733.9	730.8	729.0	730.8	732.1
10°	724.0	722.8	724.0	723.4	725.3
12.5°	715.4	714.1	714.1	716.0	716.0
15°	705.4	705.4	703.6	706.7	706.1
17.5°	695.5	695.5	694.3	694.3	695.5
20°	683.8	680.7	681.9	681.3	680.7
22.5°	667.7	665.8	664.6	666.4	667.0
25°	652.2	650.9	648.5	650.9	650.3
27.5°	635.5	634.2	633.6	632.4	633.6
30°	616.9	615.6	615.0	613.8	613.8
32.5°	598.3	595.8	592.7	595.8	595.2
35°	576.2	576.2	573.7	574.3	576.2
37.5°	556.3	555.1	553.9	552.0	552.6
40°	534.0	532.2	531.6	530.3	527.8
42.5°	508.0	508.0	505.5	506.2	505.5
45°	484.5	483.9	481.4	481.4	481.4
47.5°	459.7	459.1	457.2	456.0	457.2
50°	434.3	431.8	431.8	430.0	429.4
52.5°	407.8	406.0	403.5	404.1	402.9
55°	379.4	378.7	376.9	376.3	376.3
57.5°	350.9	351.5	350.2	347.8	348.4
60°	323.0	322.4	321.1	319.9	319.9
62.5°	294.5	294.5	292.0	292.0	289.5
65°	266.0	266.0	262.9	264.2	261.7
67.5°	237.7	237.1	235.2	234.6	235.2
70°	206.7	207.3	206.1	206.1	206.7
72.5°	178.8	178.2	177.6	177.6	178.8
75°	151.0	150.3	149.1	149.1	150.3
77.5°	125.6	122.5	121.9	123.1	121.2
80°	100.2	95.8	95.2	94.6	94.6
82.5°	70.6	68.7	69.4	68.7	70.0
85°	44.6	44.0	43.4	43.4	44.0
87.5°	21.1	19.8	19.8	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)