

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: P475847

Luminaire Tested: **24GR-LD5-120-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475847  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-120-FGW080-UNV-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10217.2 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

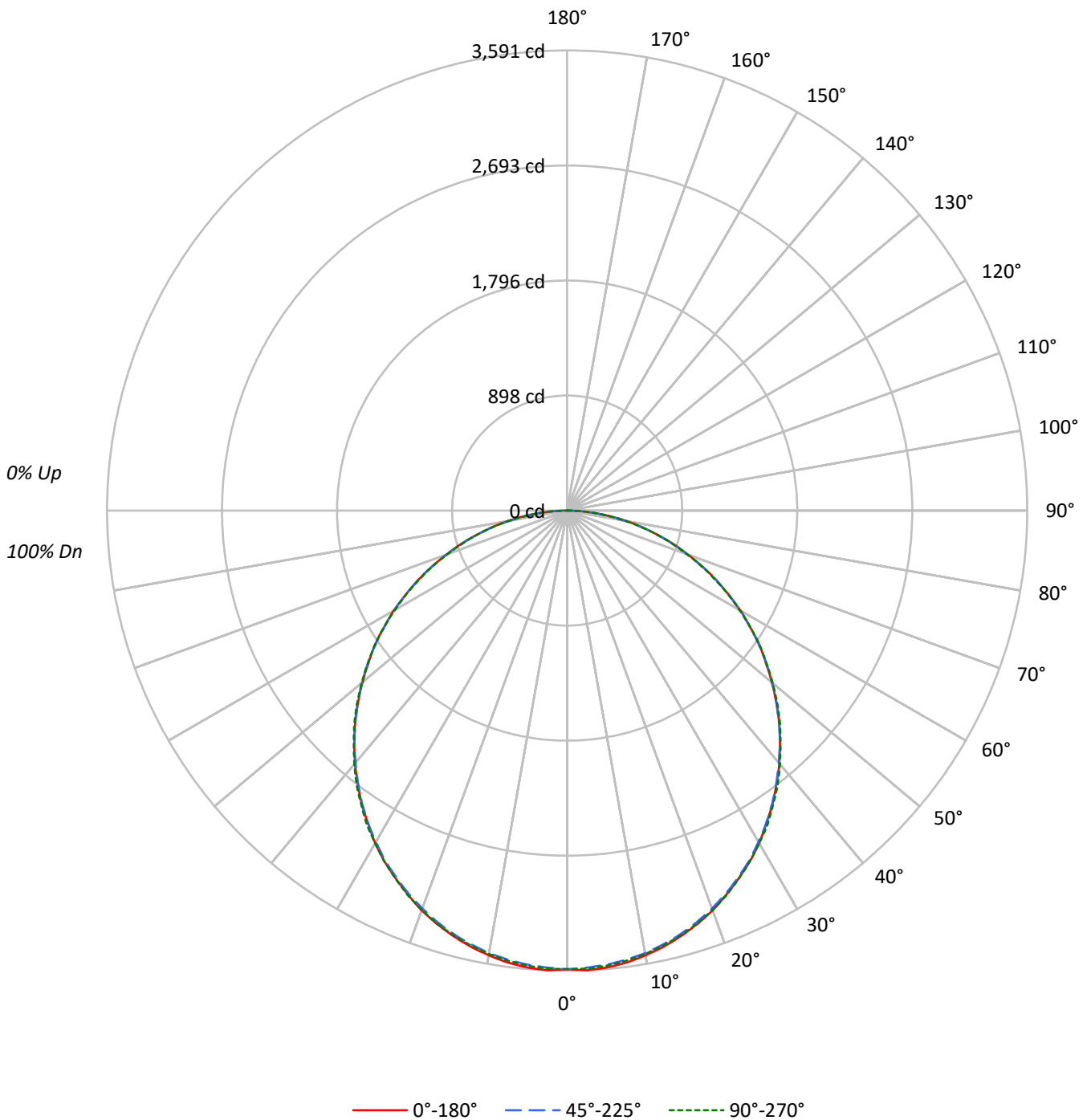
Input Watts (W): 81.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	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	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	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	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	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°	4815	4815	4815
5°	4833	4804	4815
10°	4815	4791	4801
15°	4788	4766	4779
20°	4753	4732	4750
25°	4702	4688	4705
30°	4656	4638	4656
35°	4590	4583	4600
40°	4525	4513	4537
45°	4451	4451	4471
50°	4366	4378	4378
55°	4305	4288	4302
60°	4207	4204	4176
65°	4086	4082	4057
70°	3944	3935	3912
75°	3793	3781	3787
80°	3619	3548	3566
85°	3213	3213	3248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	338.4	3.3
10°-20°	966.7	9.5
20°-30°	1457.4	14.3
30°-40°	1746.6	17.1
40°-50°	1804.5	17.7
50°-60°	1634.2	16.0
60°-70°	1265.9	12.4
70°-80°	767.7	7.5
80°-90°	235.7	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°	2762.6	27.0
0°-40°	4509.2	44.1
0°-60°	7947.8	77.8
0°-90°	10217.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10217.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3579	3579	3579	3579	3579	
5°	3579	3565	3557	3557	3565	340
15°	3438	3427	3421	3424	3431	970
25°	3167	3160	3158	3165	3169	1460
35°	2795	2784	2790	2795	2800	1747
45°	2339	2334	2339	2343	2350	1803
55°	1835	1825	1828	1830	1834	1635
65°	1283	1276	1282	1279	1274	1269
75°	730	730	727	720	728	774
85°	208	212	208	205	210	239
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3578.6	3578.6	3578.6	3578.6	3578.6
2.5°	3591.3	3578.6	3569.4	3569.4	3577.5
5°	3578.6	3564.7	3556.6	3556.6	3564.7
7.5°	3557.8	3542.8	3535.8	3535.8	3542.8
10°	3524.3	3512.7	3506.9	3506.9	3513.9
12.5°	3485.0	3474.6	3467.6	3468.8	3475.7
15°	3437.6	3427.1	3421.4	3423.7	3430.6
17.5°	3382.1	3371.6	3367.0	3370.5	3378.6
20°	3319.6	3306.9	3304.6	3308.1	3317.3
22.5°	3244.5	3236.4	3235.2	3241.0	3249.1
25°	3167.0	3160.1	3157.7	3164.7	3169.3
27.5°	3087.2	3074.5	3079.1	3080.3	3087.2
30°	2997.0	2985.5	2985.5	2990.1	2997.0
32.5°	2893.0	2886.0	2891.8	2897.6	2908.0
35°	2794.7	2784.3	2790.1	2794.7	2800.5
37.5°	2683.7	2681.4	2682.5	2689.5	2698.7
40°	2576.1	2569.2	2569.2	2578.5	2583.1
42.5°	2458.2	2452.4	2457.0	2461.7	2464.0
45°	2339.1	2334.5	2339.1	2342.6	2349.5
47.5°	2211.9	2213.1	2214.2	2216.5	2223.5
50°	2085.9	2090.5	2091.7	2096.3	2091.7
52.5°	1955.2	1956.4	1961.0	1962.2	1963.3
55°	1835.0	1824.6	1828.0	1830.4	1833.8
57.5°	1693.9	1690.4	1690.4	1693.9	1696.2
60°	1563.3	1556.3	1562.1	1555.2	1551.7
62.5°	1417.6	1419.9	1422.2	1421.0	1415.3
65°	1283.4	1276.5	1282.3	1278.8	1274.2
67.5°	1142.4	1136.6	1138.9	1137.8	1136.6
70°	1002.5	1002.5	1000.2	994.4	994.4
72.5°	870.7	863.7	866.0	859.1	859.1
75°	729.6	729.6	727.3	720.3	728.4
77.5°	597.8	594.3	592.0	587.4	587.4
80°	467.1	459.0	457.9	457.9	460.2
82.5°	338.8	333.0	330.7	330.7	331.8
85°	208.1	211.6	208.1	204.7	210.4
87.5°	98.3	93.7	93.7	97.1	99.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)