

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: P475862

Luminaire Tested: **24GR-LD5-120-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475862  
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-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10411.3 lumens  
Efficiency: N/A  
Efficacy: 127.9 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

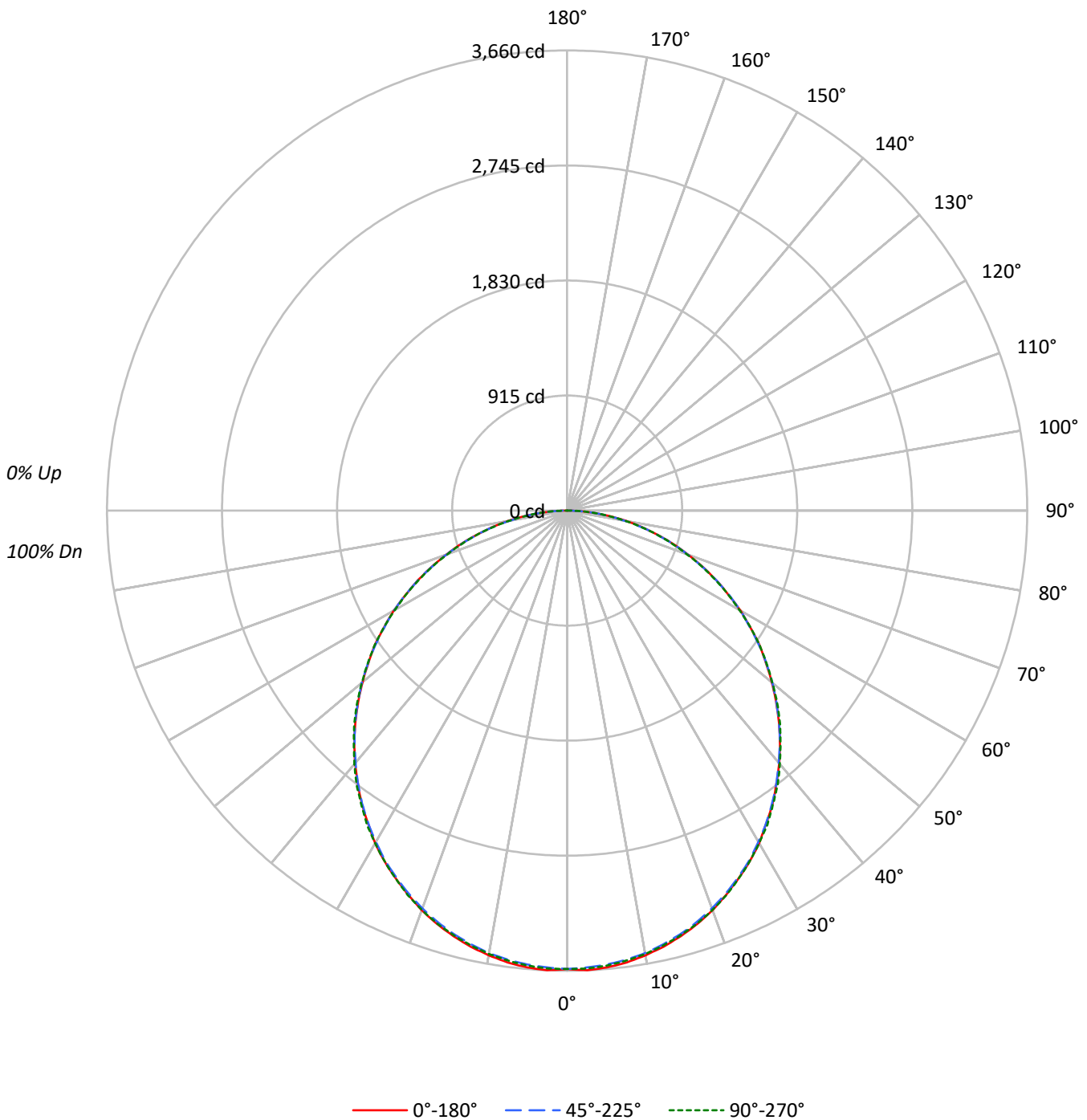
Input Watts (W): 81.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	4906	4906	4906
5°	4925	4895	4906
10°	4906	4882	4892
15°	4879	4856	4869
20°	4843	4822	4840
25°	4791	4777	4794
30°	4745	4726	4745
35°	4678	4670	4687
40°	4611	4598	4623
45°	4536	4536	4556
50°	4449	4461	4461
55°	4386	4370	4384
60°	4287	4283	4255
65°	4164	4160	4134
70°	4019	4009	3986
75°	3865	3853	3859
80°	3688	3615	3633
85°	3274	3274	3310



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	344.9	3.3
10°-20°	985.1	9.5
20°-30°	1485.1	14.3
30°-40°	1779.8	17.1
40°-50°	1838.8	17.7
50°-60°	1665.2	16.0
60°-70°	1290.0	12.4
70°-80°	782.3	7.5
80°-90°	240.2	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°	2815.1	27.0
0°-40°	4594.8	44.1
0°-60°	8098.8	77.8
0°-90°	10411.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10411.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3647	3647	3647	3647	3647	
5°	3647	3632	3624	3624	3632	346
15°	3503	3492	3486	3489	3496	988
25°	3227	3220	3218	3225	3230	1488
35°	2848	2837	2843	2848	2854	1780
45°	2384	2379	2384	2387	2394	1837
55°	1870	1859	1863	1865	1869	1666
65°	1308	1301	1307	1303	1298	1293
75°	744	744	741	734	742	788
85°	212	216	212	208	214	244
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3646.6	3646.6	3646.6	3646.6	3646.6
2.5°	3659.6	3646.6	3637.2	3637.2	3645.4
5°	3646.6	3632.5	3624.2	3624.2	3632.5
7.5°	3625.4	3610.1	3603.0	3603.0	3610.1
10°	3591.2	3579.5	3573.6	3573.6	3580.6
12.5°	3551.2	3540.6	3533.5	3534.7	3541.7
15°	3502.9	3492.3	3486.4	3488.7	3495.8
17.5°	3446.3	3435.7	3431.0	3434.5	3442.8
20°	3382.7	3369.7	3367.4	3370.9	3380.3
22.5°	3306.1	3297.9	3296.7	3302.6	3310.8
25°	3227.2	3220.1	3217.7	3224.8	3229.5
27.5°	3145.9	3132.9	3137.6	3138.8	3145.9
30°	3054.0	3042.2	3042.2	3046.9	3054.0
32.5°	2947.9	2940.9	2946.7	2952.6	2963.2
35°	2847.8	2837.2	2843.1	2847.8	2853.7
37.5°	2734.7	2732.3	2733.5	2740.6	2750.0
40°	2625.1	2618.0	2618.0	2627.4	2632.2
42.5°	2504.9	2499.0	2503.7	2508.4	2510.8
45°	2383.6	2378.8	2383.6	2387.1	2394.2
47.5°	2253.9	2255.1	2256.3	2258.7	2265.7
50°	2125.5	2130.2	2131.4	2136.1	2131.4
52.5°	1992.4	1993.6	1998.3	1999.5	2000.6
55°	1869.8	1859.2	1862.8	1865.1	1868.7
57.5°	1726.1	1722.6	1722.6	1726.1	1728.5
60°	1593.0	1585.9	1591.8	1584.7	1581.2
62.5°	1444.5	1446.9	1449.2	1448.0	1442.1
65°	1307.8	1300.8	1306.7	1303.1	1298.4
67.5°	1164.1	1158.2	1160.6	1159.4	1158.2
70°	1021.5	1021.5	1019.2	1013.3	1013.3
72.5°	887.2	880.1	882.5	875.4	875.4
75°	743.5	743.5	741.1	734.0	742.3
77.5°	609.1	605.6	603.3	598.5	598.5
80°	476.0	467.8	466.6	466.6	468.9
82.5°	345.2	339.3	337.0	337.0	338.2
85°	212.1	215.6	212.1	208.5	214.4
87.5°	100.1	95.4	95.4	99.0	101.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)