

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: P475831

Luminaire Tested: **24GR-LD5-100-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475831
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-FGW080-UNV-L830-CD1-U
Description: GR 2'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: 8238.0 lumens
Efficiency: N/A
Efficacy: 122.8 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

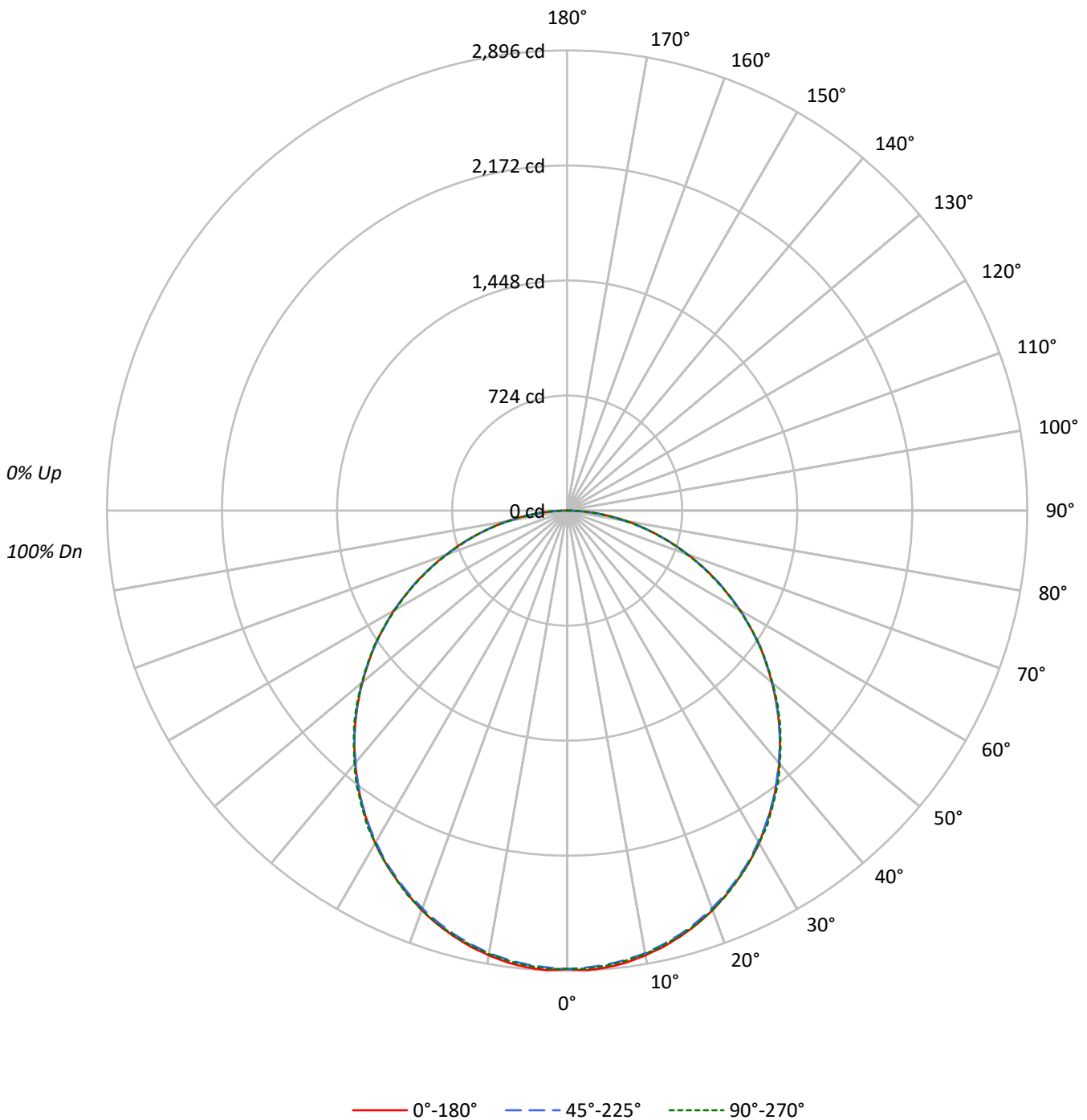
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3882	3882	3882
5°	3897	3873	3882
10°	3882	3863	3871
15°	3861	3843	3853
20°	3832	3815	3830
25°	3791	3780	3794
30°	3754	3740	3754
35°	3701	3695	3709
40°	3648	3638	3658
45°	3589	3589	3605
50°	3520	3530	3530
55°	3471	3457	3468
60°	3392	3389	3367
65°	3294	3292	3271
70°	3180	3172	3154
75°	3058	3048	3053
80°	2918	2861	2875
85°	2590	2590	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.9	3.3
10°-20°	779.4	9.5
20°-30°	1175.1	14.3
30°-40°	1408.3	17.1
40°-50°	1454.9	17.7
50°-60°	1317.6	16.0
60°-70°	1020.7	12.4
70°-80°	619.0	7.5
80°-90°	190.1	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°	2227.4	27.0
0°-40°	3635.7	44.1
0°-60°	6408.3	77.8
0°-90°	8238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2885	2885	2885	2885	2885	
5°	2885	2874	2868	2868	2874	274
15°	2772	2763	2759	2760	2766	782
25°	2554	2548	2546	2552	2555	1177
35°	2253	2245	2250	2253	2258	1409
45°	1886	1882	1886	1889	1894	1454
55°	1480	1471	1474	1476	1479	1318
65°	1035	1029	1034	1031	1027	1023
75°	588	588	586	581	587	624
85°	168	171	168	165	170	193
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2885.4	2885.4	2885.4	2885.4	2885.4
2.5°	2895.7	2885.4	2878.0	2878.0	2884.5
5°	2885.4	2874.2	2867.7	2867.7	2874.2
7.5°	2868.6	2856.5	2850.9	2850.9	2856.5
10°	2841.6	2832.3	2827.6	2827.6	2833.2
12.5°	2809.9	2801.5	2795.9	2796.9	2802.4
15°	2771.7	2763.3	2758.6	2760.5	2766.1
17.5°	2726.9	2718.5	2714.8	2717.6	2724.1
20°	2676.6	2666.3	2664.5	2667.3	2674.7
22.5°	2616.0	2609.5	2608.5	2613.2	2619.7
25°	2553.5	2547.9	2546.1	2551.7	2555.4
27.5°	2489.2	2478.9	2482.7	2483.6	2489.2
30°	2416.5	2407.2	2407.2	2410.9	2416.5
32.5°	2332.6	2327.0	2331.6	2336.3	2344.7
35°	2253.3	2244.9	2249.6	2253.3	2258.0
37.5°	2163.8	2162.0	2162.9	2168.5	2176.0
40°	2077.1	2071.5	2071.5	2079.0	2082.7
42.5°	1982.0	1977.4	1981.1	1984.8	1986.7
45°	1886.0	1882.3	1886.0	1888.8	1894.4
47.5°	1783.5	1784.4	1785.3	1787.2	1792.8
50°	1681.8	1685.6	1686.5	1690.2	1686.5
52.5°	1576.5	1577.4	1581.2	1582.1	1583.0
55°	1479.5	1471.1	1473.9	1475.8	1478.6
57.5°	1365.8	1363.0	1363.0	1365.8	1367.7
60°	1260.4	1254.9	1259.5	1253.9	1251.1
62.5°	1143.0	1144.8	1146.7	1145.8	1141.1
65°	1034.8	1029.2	1033.9	1031.1	1027.4
67.5°	921.1	916.4	918.3	917.4	916.4
70°	808.3	808.3	806.4	801.8	801.8
72.5°	702.0	696.4	698.3	692.7	692.7
75°	588.3	588.3	586.4	580.8	587.3
77.5°	482.0	479.2	477.3	473.6	473.6
80°	376.6	370.1	369.2	369.2	371.0
82.5°	273.2	268.5	266.6	266.6	267.6
85°	167.8	170.6	167.8	165.0	169.7
87.5°	79.2	75.5	75.5	78.3	80.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)