

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: P476131

Luminaire Tested: **22GR-LD5-85-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476131  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-85-FGW080-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7009.9 lumens  
Efficiency: N/A  
Efficacy: 108.2 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

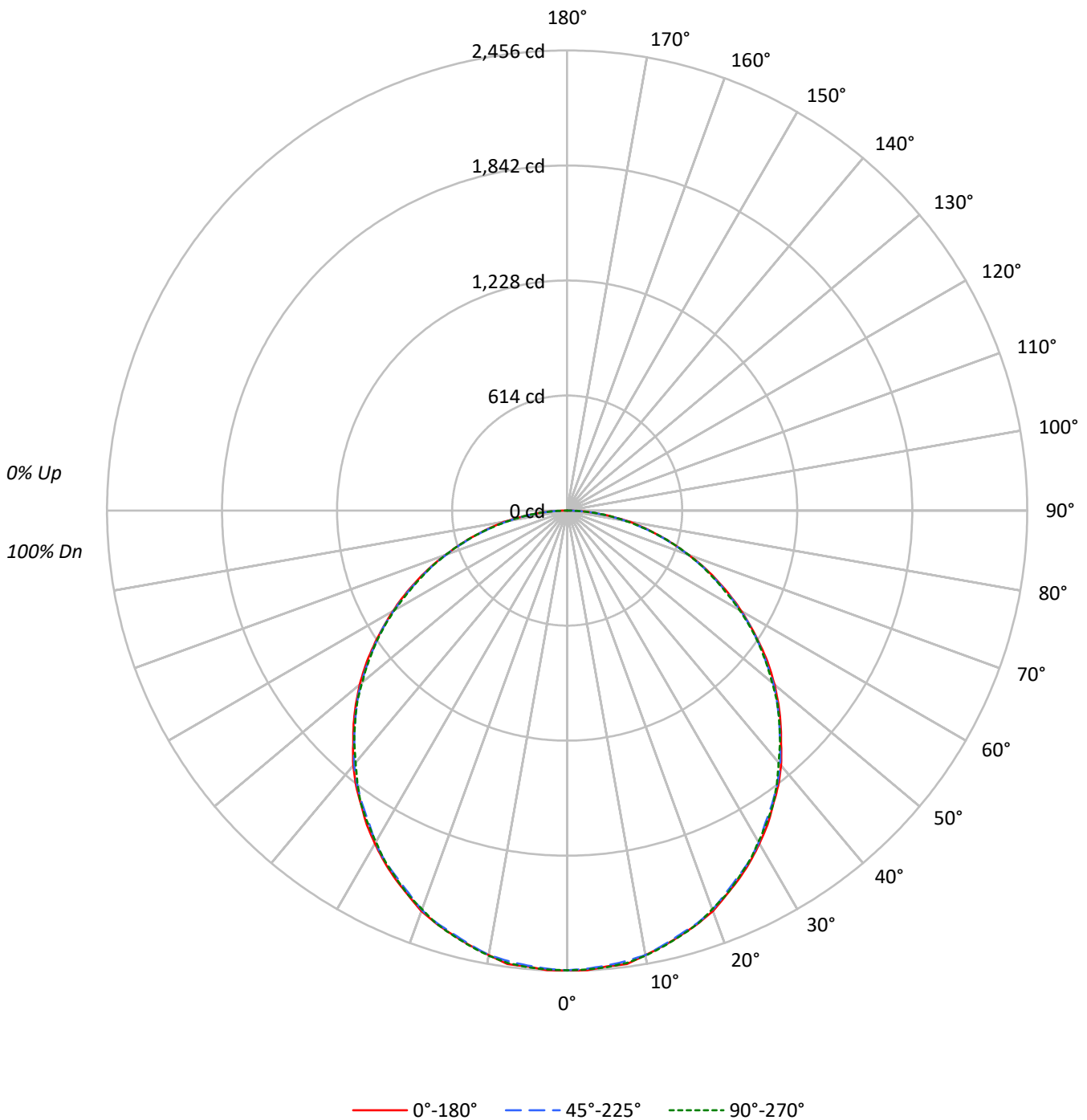
Input Watts (W): 64.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6603	6603	6603
5°	6595	6584	6606
10°	6581	6581	6592
15°	6537	6520	6543
20°	6513	6496	6484
25°	6441	6404	6423
30°	6376	6357	6344
35°	6296	6269	6296
40°	6240	6211	6168
45°	6133	6094	6094
50°	6048	6014	5979
55°	5920	5881	5872
60°	5782	5749	5727
65°	5635	5569	5542
70°	5410	5393	5410
75°	5221	5157	5200
80°	5164	4909	4877
85°	4579	4452	4517



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.1	3.3
10°-20°	662.3	9.4
20°-30°	997.2	14.2
30°-40°	1196.7	17.1
40°-50°	1238.2	17.7
50°-60°	1122.1	16.0
60°-70°	869.8	12.4
70°-80°	528.0	7.5
80°-90°	163.5	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°	1891.6	27.0
0°-40°	3088.3	44.1
0°-60°	5448.6	77.7
0°-90°	7009.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7009.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2454	2454	2454	2454	2454	
5°	2441	2441	2437	2443	2446	233
15°	2347	2347	2340	2351	2349	663
25°	2169	2165	2157	2165	2163	1000
35°	1916	1916	1908	1910	1916	1201
45°	1612	1610	1601	1601	1601	1244
55°	1262	1260	1254	1252	1252	1128
65°	885	885	875	879	870	875
75°	502	500	496	496	500	534
85°	148	146	144	144	146	169
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2453.7	2453.7	2453.7	2453.7	2453.7
2.5°	2455.8	2445.5	2447.5	2451.6	2451.6
5°	2441.3	2441.3	2437.2	2443.4	2445.5
7.5°	2441.3	2431.0	2424.9	2431.0	2435.2
10°	2408.4	2404.3	2408.4	2406.3	2412.5
12.5°	2379.5	2375.4	2375.4	2381.6	2381.6
15°	2346.6	2346.6	2340.4	2350.7	2348.6
17.5°	2313.6	2313.6	2309.5	2309.5	2313.6
20°	2274.5	2264.2	2268.3	2266.2	2264.2
22.5°	2220.9	2214.7	2210.6	2216.8	2218.8
25°	2169.4	2165.3	2157.0	2165.3	2163.2
27.5°	2113.8	2109.7	2107.6	2103.5	2107.6
30°	2052.0	2047.8	2045.8	2041.7	2041.7
32.5°	1990.2	1981.9	1971.6	1981.9	1979.9
35°	1916.5	1916.5	1908.3	1910.3	1916.5
37.5°	1850.6	1846.5	1842.3	1836.2	1838.2
40°	1776.4	1770.2	1768.2	1764.1	1755.8
42.5°	1689.9	1689.9	1681.6	1683.7	1681.6
45°	1611.6	1609.5	1601.3	1601.3	1601.3
47.5°	1529.2	1527.1	1520.9	1516.8	1520.9
50°	1444.7	1436.5	1436.5	1430.3	1428.2
52.5°	1356.6	1350.5	1342.2	1344.3	1340.2
55°	1261.9	1259.8	1253.6	1251.6	1251.6
57.5°	1167.1	1169.2	1165.0	1156.8	1158.9
60°	1074.4	1072.3	1068.2	1064.1	1064.1
62.5°	979.6	979.6	971.4	971.4	963.1
65°	884.9	884.9	874.6	878.7	870.4
67.5°	790.6	788.5	782.4	780.3	782.4
70°	687.6	689.7	685.5	685.5	687.6
72.5°	594.9	592.8	590.8	590.8	594.9
75°	502.2	500.1	496.0	496.0	500.1
77.5°	417.7	407.4	405.3	409.5	403.3
80°	333.2	318.8	316.8	314.7	314.7
82.5°	234.9	228.7	230.7	228.7	232.8
85°	148.3	146.3	144.2	144.2	146.3
87.5°	70.0	65.9	65.9	63.9	63.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)