

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: P476157

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476157  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-FGW080-UNV-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1773.0 lumens  
Efficiency: N/A  
Efficacy: 117.4 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

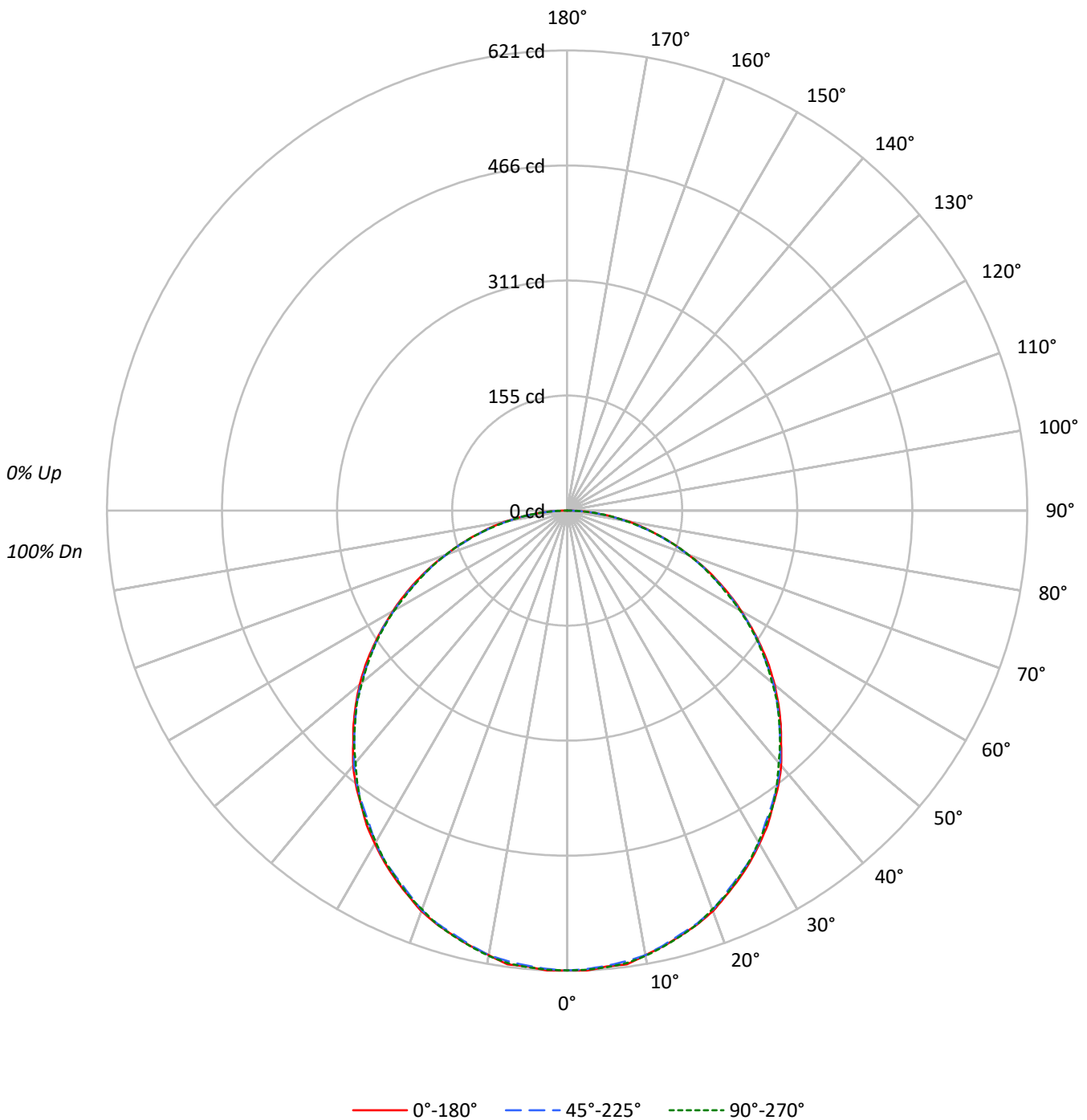
Input Watts (W): 15.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1670	1670	1670
5°	1668	1665	1671
10°	1665	1665	1667
15°	1653	1649	1655
20°	1647	1643	1640
25°	1629	1620	1624
30°	1613	1608	1605
35°	1592	1586	1592
40°	1578	1571	1560
45°	1551	1541	1541
50°	1530	1521	1512
55°	1498	1488	1485
60°	1462	1454	1448
65°	1425	1408	1402
70°	1368	1364	1368
75°	1320	1305	1315
80°	1306	1241	1234
85°	1158	1127	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	3.3
10°-20°	167.5	9.4
20°-30°	252.2	14.2
30°-40°	302.7	17.1
40°-50°	313.2	17.7
50°-60°	283.8	16.0
60°-70°	220.0	12.4
70°-80°	133.5	7.5
80°-90°	41.4	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°	478.4	27.0
0°-40°	781.1	44.1
0°-60°	1378.1	77.7
0°-90°	1773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1773.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	618	618	616	618	618	59
15°	594	594	592	595	594	168
25°	549	548	546	548	547	253
35°	485	485	483	483	485	304
45°	408	407	405	405	405	315
55°	319	319	317	317	317	285
65°	224	224	221	222	220	221
75°	127	126	126	126	126	135
85°	38	37	36	36	37	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	620.6	620.6	620.6	620.6	620.6
2.5°	621.1	618.5	619.1	620.1	620.1
5°	617.5	617.5	616.5	618.0	618.5
7.5°	617.5	614.9	613.3	614.9	615.9
10°	609.2	608.1	609.2	608.6	610.2
12.5°	601.9	600.8	600.8	602.4	602.4
15°	593.5	593.5	592.0	594.6	594.0
17.5°	585.2	585.2	584.1	584.1	585.2
20°	575.3	572.7	573.7	573.2	572.7
22.5°	561.7	560.2	559.1	560.7	561.2
25°	548.7	547.7	545.6	547.7	547.1
27.5°	534.6	533.6	533.1	532.0	533.1
30°	519.0	518.0	517.4	516.4	516.4
32.5°	503.4	501.3	498.7	501.3	500.8
35°	484.7	484.7	482.7	483.2	484.7
37.5°	468.1	467.0	466.0	464.4	464.9
40°	449.3	447.7	447.2	446.2	444.1
42.5°	427.4	427.4	425.3	425.9	425.3
45°	407.6	407.1	405.0	405.0	405.0
47.5°	386.8	386.3	384.7	383.7	384.7
50°	365.4	363.3	363.3	361.8	361.2
52.5°	343.1	341.6	339.5	340.0	339.0
55°	319.2	318.6	317.1	316.6	316.6
57.5°	295.2	295.7	294.7	292.6	293.1
60°	271.7	271.2	270.2	269.1	269.1
62.5°	247.8	247.8	245.7	245.7	243.6
65°	223.8	223.8	221.2	222.2	220.2
67.5°	200.0	199.4	197.9	197.4	197.9
70°	173.9	174.4	173.4	173.4	173.9
72.5°	150.5	149.9	149.4	149.4	150.5
75°	127.0	126.5	125.5	125.5	126.5
77.5°	105.7	103.0	102.5	103.6	102.0
80°	84.3	80.6	80.1	79.6	79.6
82.5°	59.4	57.8	58.4	57.8	58.9
85°	37.5	37.0	36.5	36.5	37.0
87.5°	17.7	16.7	16.7	16.2	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)