

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: P476367

Luminaire Tested: **14GR-LD5-20-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P476367  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-20-FGW080-UNV-L840-CD1-U  
Description: GR 1'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

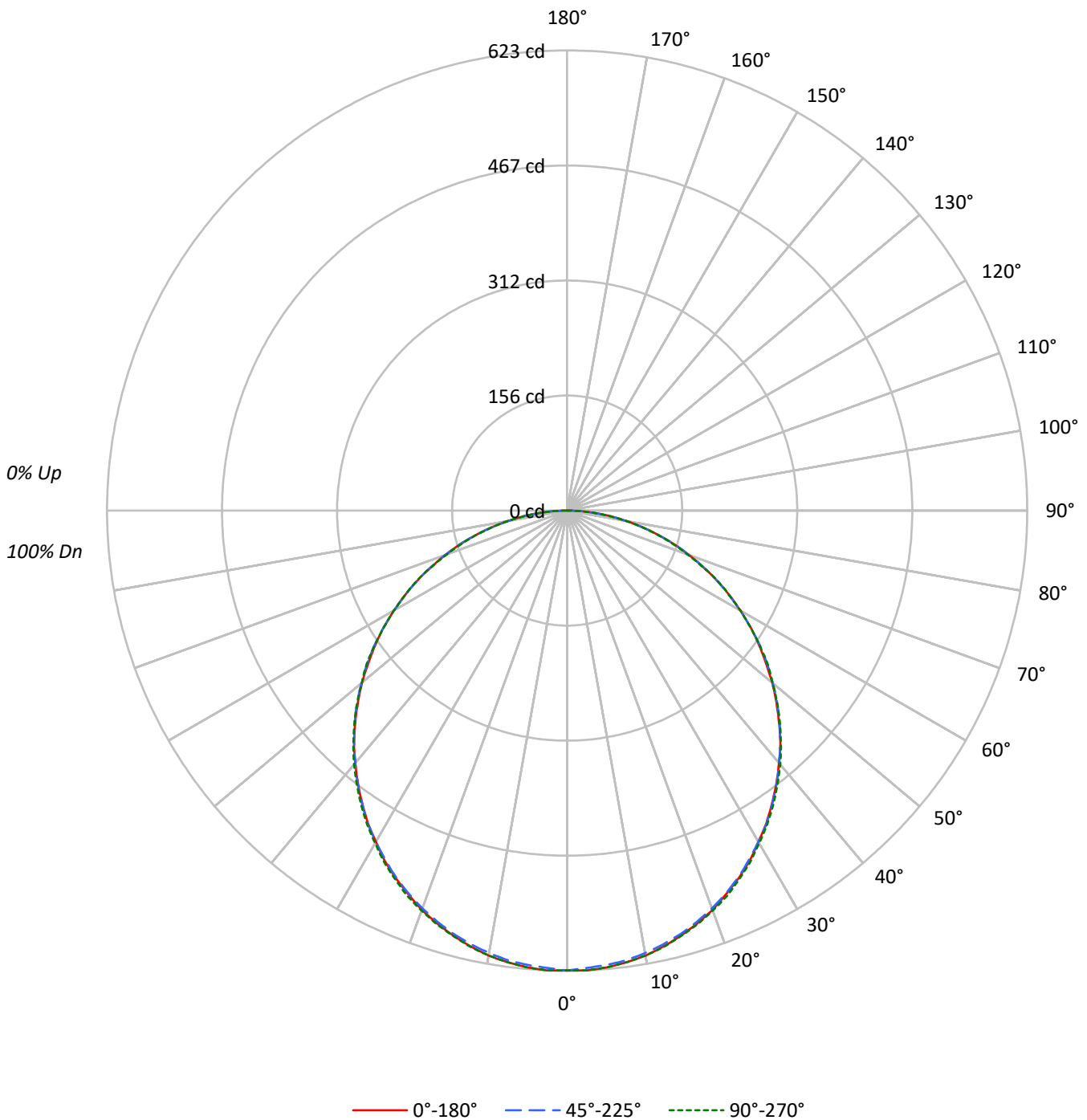
Lumens per Lamp: N/A  
Luminaire Lumens: 1780.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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	103	99	95	106	101	97	93	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	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°	1675	1675	1675
5°	1677	1668	1677
10°	1671	1662	1671
15°	1660	1653	1661
20°	1647	1641	1651
25°	1630	1627	1635
30°	1609	1609	1616
35°	1589	1591	1598
40°	1567	1569	1577
45°	1544	1549	1550
50°	1518	1522	1520
55°	1487	1495	1492
60°	1457	1457	1457
65°	1424	1424	1431
70°	1379	1379	1365
75°	1331	1325	1318
80°	1271	1261	1254
85°	1192	1179	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.9	3.3
10°-20°	168.0	9.4
20°-30°	253.2	14.2
30°-40°	303.4	17.0
40°-50°	313.7	17.6
50°-60°	284.5	16.0
60°-70°	221.1	12.4
70°-80°	135.0	7.6
80°-90°	42.3	2.4
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°	480.0	27.0
0°-40°	783.4	44.0
0°-60°	1381.6	77.6
0°-90°	1780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1780.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	621	620	617	620	621	59
15°	596	596	594	596	596	168
25°	549	549	548	551	551	253
35°	484	484	484	486	486	303
45°	406	406	407	407	407	313
55°	317	318	319	319	318	283
65°	224	224	224	222	225	221
75°	128	128	127	127	127	135
85°	39	38	38	37	37	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	622.5	622.5	622.5	622.5	622.5
2.5°	623.1	622.5	619.6	622.5	623.1
5°	620.7	620.2	617.4	620.2	620.7
7.5°	616.9	616.9	614.0	616.9	616.9
10°	611.7	611.1	608.2	611.1	611.7
12.5°	604.3	604.3	601.4	604.3	604.9
15°	595.7	595.7	593.5	596.2	596.2
17.5°	586.0	586.6	583.8	587.2	587.2
20°	575.2	574.6	573.0	575.8	576.4
22.5°	562.2	562.8	561.1	564.4	565.0
25°	549.1	549.1	548.0	551.4	550.8
27.5°	534.8	534.8	533.1	536.0	536.6
30°	517.8	518.4	517.8	520.6	520.0
32.5°	501.8	502.4	502.4	503.6	504.1
35°	483.7	484.3	484.3	486.4	486.4
37.5°	465.4	465.4	466.0	467.7	467.7
40°	446.1	446.6	446.6	448.4	448.9
42.5°	427.3	426.2	426.8	428.5	428.5
45°	405.7	406.3	406.9	407.4	407.4
47.5°	384.1	385.2	385.8	386.4	385.8
50°	362.5	363.6	363.6	363.0	363.0
52.5°	339.1	342.0	341.4	341.4	342.6
55°	316.9	318.1	318.7	318.7	318.1
57.5°	294.7	295.9	294.7	295.3	294.2
60°	270.8	271.4	270.8	270.8	270.8
62.5°	247.5	248.0	246.9	246.9	246.9
65°	223.7	223.7	223.7	222.5	224.7
67.5°	198.6	199.8	199.8	200.3	198.0
70°	175.3	175.8	175.3	174.7	173.5
72.5°	151.9	152.5	153.1	150.8	150.2
75°	128.0	128.0	127.4	126.8	126.8
77.5°	104.6	104.6	104.6	103.6	103.6
80°	82.0	82.4	81.4	81.4	80.9
82.5°	59.8	59.8	59.8	59.2	58.1
85°	38.6	37.6	38.2	37.0	37.0
87.5°	17.6	17.6	17.6	16.4	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)