

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: P476358

Luminaire Tested: **14GR-LD5-20-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476358
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-L835-CD1-U
Description: GR 1'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

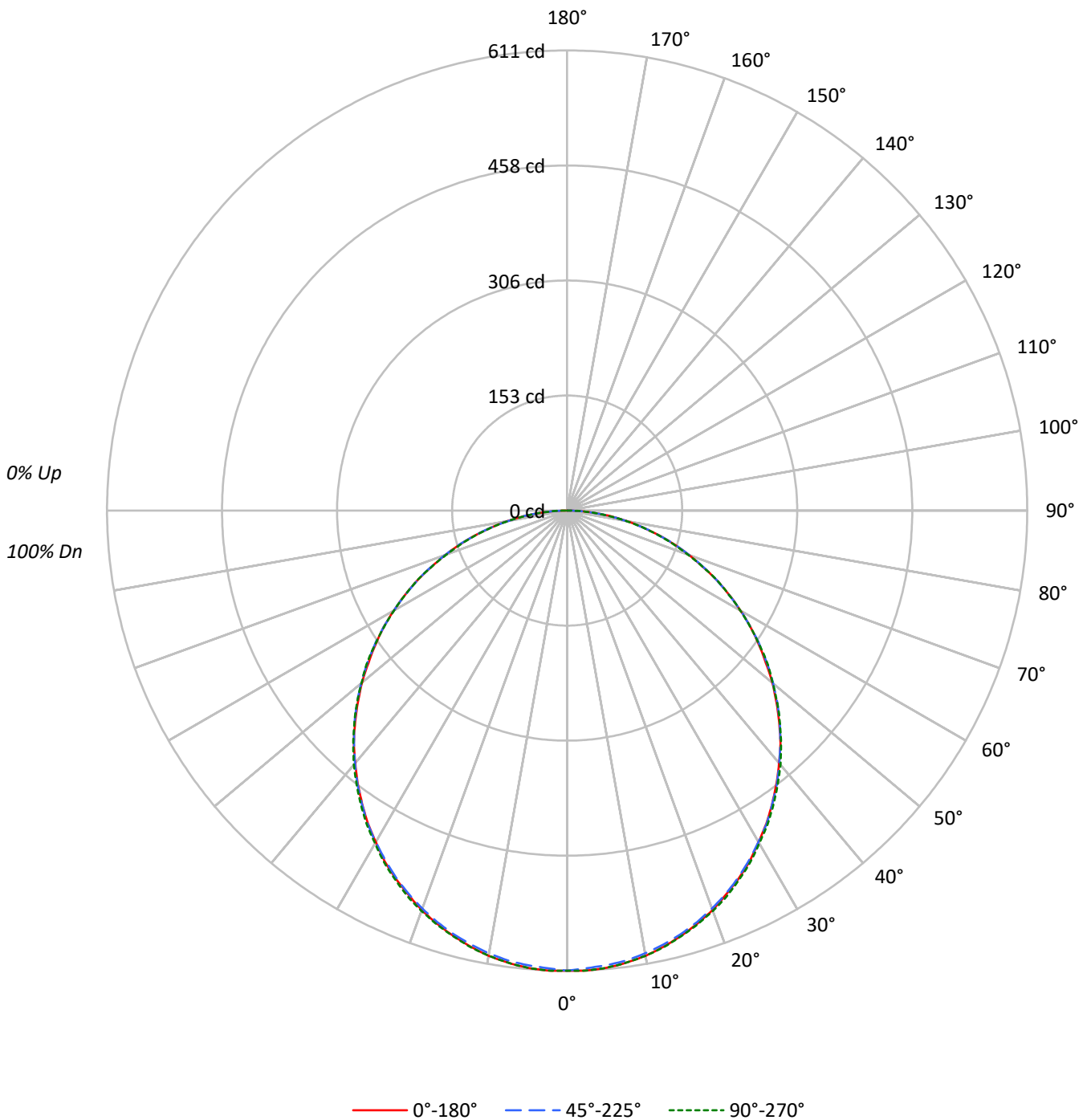
Lumens per Lamp: N/A
Luminaire Lumens: 1746.8 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	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	93	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	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	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	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°	1644	1644	1644
5°	1646	1637	1646
10°	1640	1631	1640
15°	1629	1623	1630
20°	1617	1611	1620
25°	1600	1597	1605
30°	1579	1579	1586
35°	1559	1561	1568
40°	1538	1540	1548
45°	1515	1520	1521
50°	1489	1494	1492
55°	1459	1467	1465
60°	1431	1431	1431
65°	1398	1398	1404
70°	1353	1353	1340
75°	1306	1300	1294
80°	1247	1238	1229
85°	1170	1158	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.3
10°-20°	164.9	9.4
20°-30°	248.4	14.2
30°-40°	297.7	17.0
40°-50°	307.9	17.6
50°-60°	279.2	16.0
60°-70°	216.9	12.4
70°-80°	132.5	7.6
80°-90°	41.5	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°	471.1	27.0
0°-40°	768.8	44.0
0°-60°	1355.9	77.6
0°-90°	1746.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1746.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	609	609	606	609	609	58
15°	585	585	582	585	585	165
25°	539	539	538	541	541	248
35°	475	475	475	477	477	297
45°	398	399	399	400	400	307
55°	311	312	313	313	312	278
65°	220	220	220	218	220	217
75°	126	126	125	124	124	133
85°	38	37	38	36	36	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	610.9	610.9	610.9	610.9	610.9
2.5°	611.4	610.9	608.0	610.9	611.4
5°	609.2	608.6	605.9	608.6	609.2
7.5°	605.4	605.4	602.5	605.4	605.4
10°	600.3	599.7	596.9	599.7	600.3
12.5°	593.0	593.0	590.2	593.0	593.6
15°	584.6	584.6	582.4	585.1	585.1
17.5°	575.1	575.6	573.0	576.2	576.2
20°	564.5	563.9	562.4	565.0	565.6
22.5°	551.7	552.3	550.6	553.9	554.4
25°	538.9	538.9	537.7	541.1	540.6
27.5°	524.9	524.9	523.2	526.0	526.6
30°	508.2	508.7	508.2	510.9	510.3
32.5°	492.5	493.1	493.1	494.2	494.7
35°	474.7	475.2	475.2	477.4	477.4
37.5°	456.7	456.7	457.3	459.0	459.0
40°	437.7	438.3	438.3	440.0	440.6
42.5°	419.4	418.2	418.8	420.5	420.5
45°	398.1	398.7	399.3	399.8	399.8
47.5°	376.9	378.1	378.6	379.2	378.6
50°	355.7	356.8	356.8	356.3	356.3
52.5°	332.8	335.6	335.1	335.1	336.2
55°	311.0	312.2	312.7	312.7	312.2
57.5°	289.2	290.4	289.2	289.8	288.7
60°	265.8	266.3	265.8	265.8	265.8
62.5°	242.8	243.4	242.3	242.3	242.3
65°	219.5	219.5	219.5	218.4	220.5
67.5°	194.9	196.0	196.0	196.6	194.3
70°	172.0	172.6	172.0	171.4	170.3
72.5°	149.1	149.6	150.2	147.9	147.4
75°	125.6	125.6	125.0	124.5	124.5
77.5°	102.7	102.7	102.7	101.7	101.7
80°	80.5	80.9	79.9	79.9	79.3
82.5°	58.7	58.7	58.7	58.1	57.0
85°	37.9	36.9	37.5	36.3	36.3
87.5°	17.3	17.3	17.3	16.1	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)