

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: P476350

Luminaire Tested: **14GR-LD5-24-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476350
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-FGW080-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

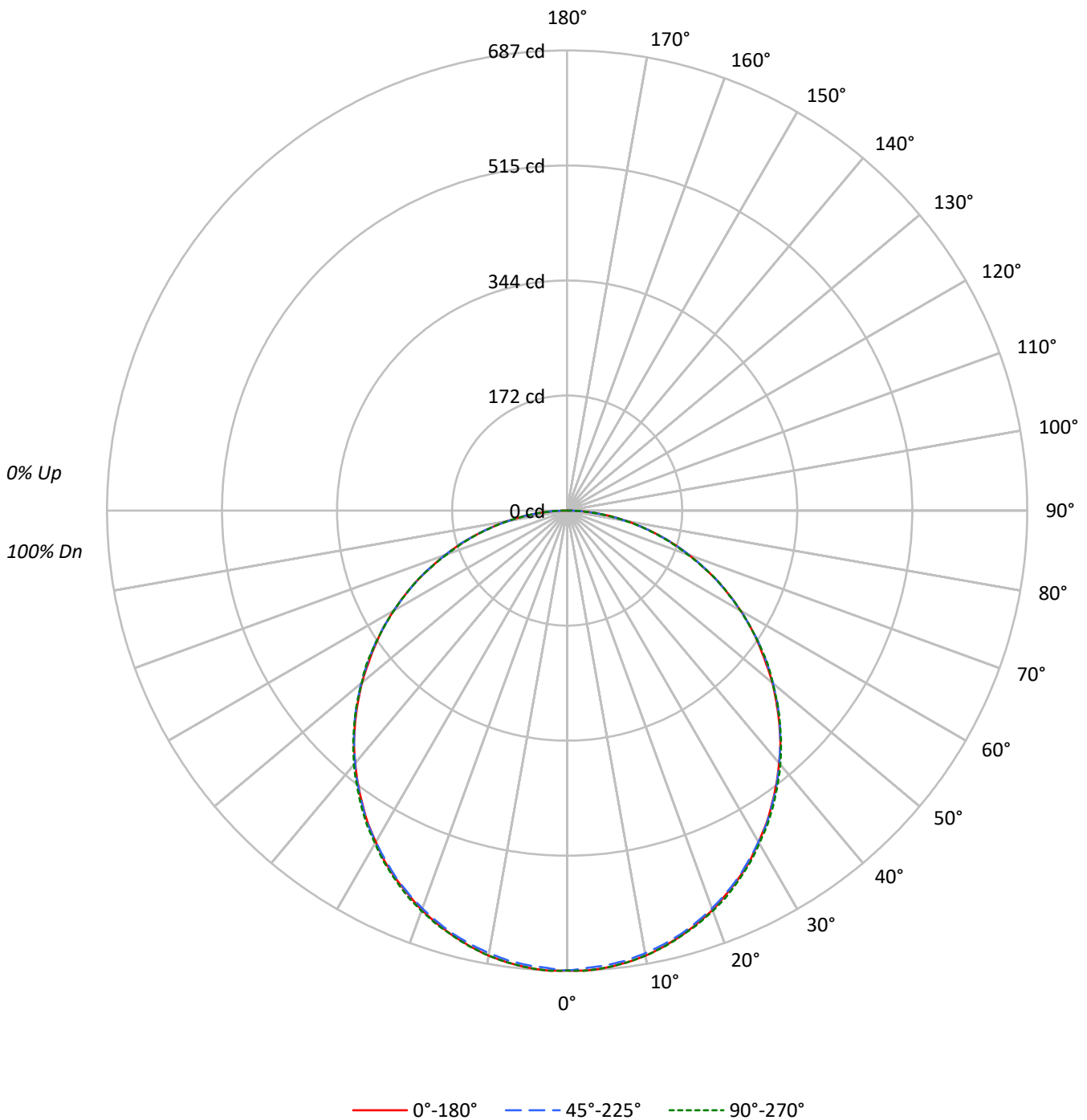
Lumens per Lamp: N/A
Luminaire Lumens: 1963.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
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°	1848	1848	1848
5°	1850	1840	1850
10°	1844	1834	1844
15°	1831	1824	1833
20°	1817	1810	1821
25°	1799	1795	1804
30°	1775	1775	1783
35°	1753	1755	1763
40°	1729	1731	1740
45°	1703	1708	1711
50°	1674	1680	1677
55°	1640	1650	1646
60°	1608	1608	1608
65°	1571	1571	1578
70°	1521	1521	1506
75°	1468	1462	1455
80°	1402	1392	1382
85°	1315	1300	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	3.3
10°-20°	185.3	9.4
20°-30°	279.3	14.2
30°-40°	334.7	17.0
40°-50°	346.1	17.6
50°-60°	313.8	16.0
60°-70°	243.9	12.4
70°-80°	148.9	7.6
80°-90°	46.6	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°	529.6	27.0
0°-40°	864.3	44.0
0°-60°	1524.2	77.6
0°-90°	1963.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1963.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	685	684	681	684	685	65
15°	657	657	655	658	658	185
25°	606	606	604	608	608	279
35°	534	534	534	537	537	334
45°	448	448	449	450	450	345
55°	350	351	352	352	351	313
65°	247	247	247	246	248	244
75°	141	141	141	140	140	149
85°	43	42	42	41	41	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.7	686.7	686.7	686.7	686.7
2.5°	687.4	686.7	683.6	686.7	687.4
5°	684.8	684.2	681.2	684.2	684.8
7.5°	680.5	680.5	677.3	680.5	680.5
10°	674.8	674.2	671.0	674.2	674.8
12.5°	666.7	666.7	663.5	666.7	667.3
15°	657.2	657.2	654.8	657.8	657.8
17.5°	646.5	647.1	644.1	647.8	647.8
20°	634.6	633.9	632.2	635.2	635.9
22.5°	620.3	620.9	619.0	622.7	623.3
25°	605.8	605.8	604.5	608.3	607.7
27.5°	590.1	590.1	588.1	591.3	592.0
30°	571.3	571.9	571.3	574.3	573.7
32.5°	553.6	554.3	554.3	555.6	556.2
35°	533.6	534.2	534.2	536.6	536.6
37.5°	513.4	513.4	514.1	516.0	516.0
40°	492.1	492.7	492.7	494.7	495.3
42.5°	471.4	470.2	470.8	472.7	472.7
45°	447.6	448.2	448.9	449.5	449.5
47.5°	423.7	425.0	425.6	426.3	425.6
50°	399.9	401.2	401.2	400.5	400.5
52.5°	374.1	377.3	376.7	376.7	377.9
55°	349.6	350.9	351.6	351.6	350.9
57.5°	325.2	326.4	325.2	325.8	324.5
60°	298.8	299.4	298.8	298.8	298.8
62.5°	273.0	273.6	272.4	272.4	272.4
65°	246.8	246.8	246.8	245.5	247.9
67.5°	219.1	220.4	220.4	221.0	218.5
70°	193.3	194.0	193.3	192.7	191.4
72.5°	167.6	168.2	168.9	166.3	165.7
75°	141.2	141.2	140.6	139.9	139.9
77.5°	115.4	115.4	115.4	114.3	114.3
80°	90.5	90.9	89.8	89.8	89.2
82.5°	66.0	66.0	66.0	65.3	64.1
85°	42.6	41.5	42.1	40.9	40.9
87.5°	19.4	19.4	19.4	18.1	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)