

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: P476357

Luminaire Tested: **14GR-LD5-60-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476357
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-60-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: 5041.3 lumens
Efficiency: N/A
Efficacy: 96.8 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

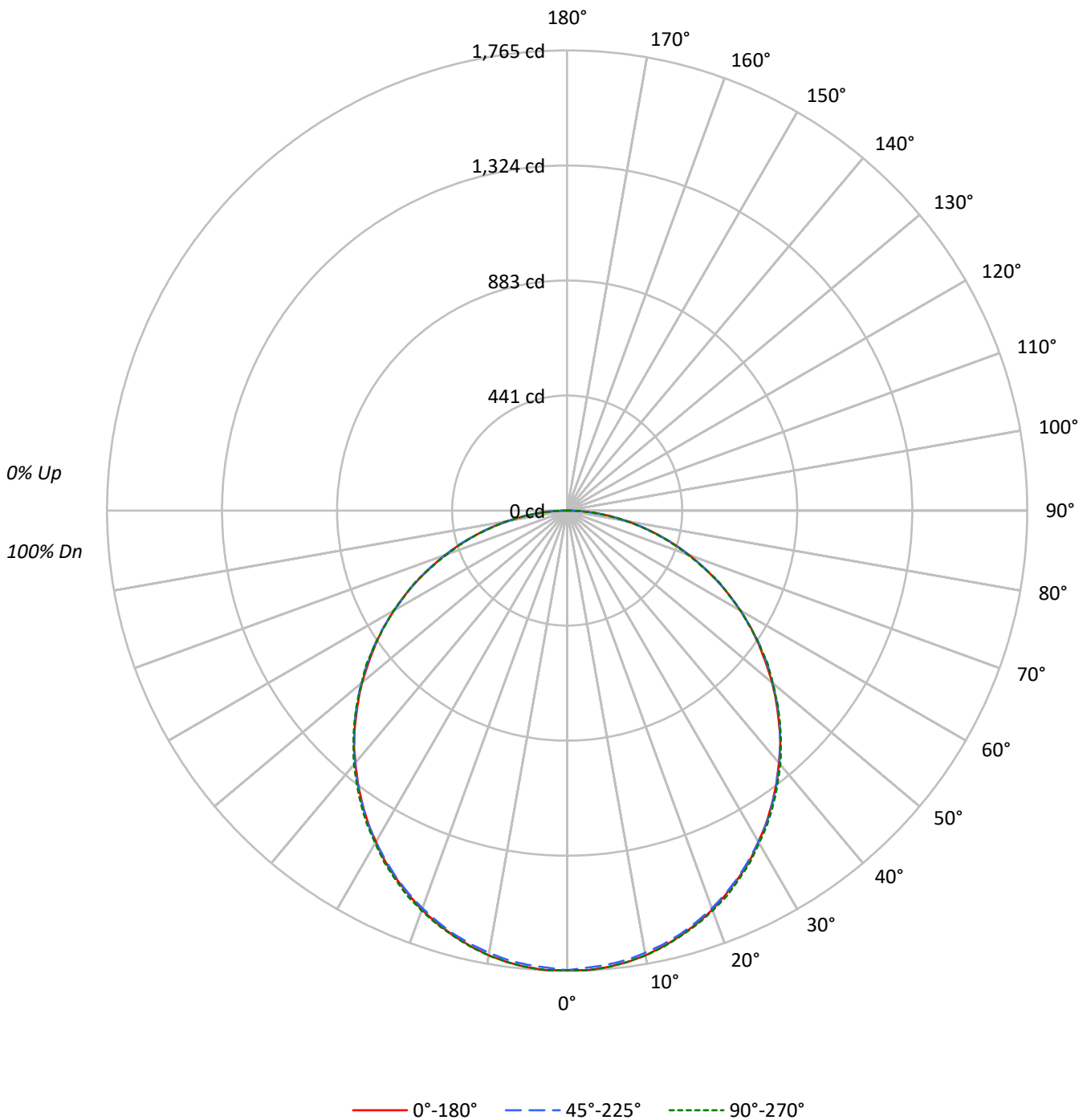
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4744	4744	4744
5°	4749	4724	4749
10°	4734	4707	4734
15°	4700	4683	4705
20°	4665	4648	4675
25°	4618	4608	4632
30°	4557	4557	4576
35°	4500	4505	4526
40°	4438	4444	4467
45°	4373	4385	4392
50°	4298	4312	4305
55°	4211	4234	4227
60°	4128	4128	4128
65°	4034	4034	4052
70°	3906	3906	3867
75°	3769	3751	3735
80°	3600	3574	3549
85°	3378	3341	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	3.3
10°-20°	475.8	9.4
20°-30°	717.0	14.2
30°-40°	859.2	17.0
40°-50°	888.6	17.6
50°-60°	805.7	16.0
60°-70°	626.1	12.4
70°-80°	382.4	7.6
80°-90°	119.7	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°	1359.6	27.0
0°-40°	2218.8	44.0
0°-60°	3913.1	77.6
0°-90°	5041.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5041.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1763	1763	1763	1763	1763	
5°	1758	1756	1749	1756	1758	167
15°	1687	1687	1681	1689	1689	476
25°	1555	1555	1552	1562	1560	716
35°	1370	1372	1372	1378	1378	857
45°	1149	1151	1152	1154	1154	887
55°	898	901	902	902	901	803
65°	634	634	634	630	636	626
75°	362	362	361	359	359	383
85°	109	106	108	105	105	121
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1763.0	1763.0	1763.0	1763.0	1763.0
2.5°	1764.6	1763.0	1754.8	1763.0	1764.6
5°	1758.1	1756.5	1748.7	1756.5	1758.1
7.5°	1747.1	1747.1	1738.9	1747.1	1747.1
10°	1732.4	1730.8	1722.6	1730.8	1732.4
12.5°	1711.6	1711.6	1703.4	1711.6	1713.2
15°	1687.1	1687.1	1681.0	1688.7	1688.7
17.5°	1659.7	1661.4	1653.6	1663.0	1663.0
20°	1629.1	1627.5	1623.0	1630.8	1632.4
22.5°	1592.4	1594.0	1589.1	1598.5	1600.1
25°	1555.2	1555.2	1552.0	1561.8	1560.1
27.5°	1514.8	1514.8	1509.9	1518.1	1519.7
30°	1466.7	1468.3	1466.7	1474.4	1472.8
32.5°	1421.3	1423.0	1423.0	1426.2	1427.9
35°	1369.9	1371.5	1371.5	1377.7	1377.7
37.5°	1318.1	1318.1	1319.7	1324.6	1324.6
40°	1263.4	1265.0	1265.0	1269.9	1271.5
42.5°	1210.3	1207.0	1208.7	1213.6	1213.6
45°	1149.1	1150.7	1152.3	1154.0	1154.0
47.5°	1087.9	1091.1	1092.7	1094.4	1092.7
50°	1026.6	1029.9	1029.9	1028.3	1028.3
52.5°	960.5	968.7	967.0	967.0	970.3
55°	897.6	900.9	902.5	902.5	900.9
57.5°	834.8	838.0	834.8	836.4	833.1
60°	767.0	768.6	767.0	767.0	767.0
62.5°	700.9	702.5	699.2	699.2	699.2
65°	633.5	633.5	633.5	630.3	636.4
67.5°	562.5	565.8	565.8	567.4	560.9
70°	496.4	498.0	496.4	494.7	491.5
72.5°	430.2	431.9	433.5	427.0	425.3
75°	362.5	362.5	360.8	359.2	359.2
77.5°	296.4	296.4	296.4	293.5	293.5
80°	232.3	233.5	230.6	230.6	229.0
82.5°	169.4	169.4	169.4	167.8	164.5
85°	109.4	106.5	108.2	104.9	104.9
87.5°	49.8	49.8	49.8	46.5	53.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)