

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: P476122

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476122
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-FGW080-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1995.7 lumens
Efficiency: N/A
Efficacy: 111.5 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

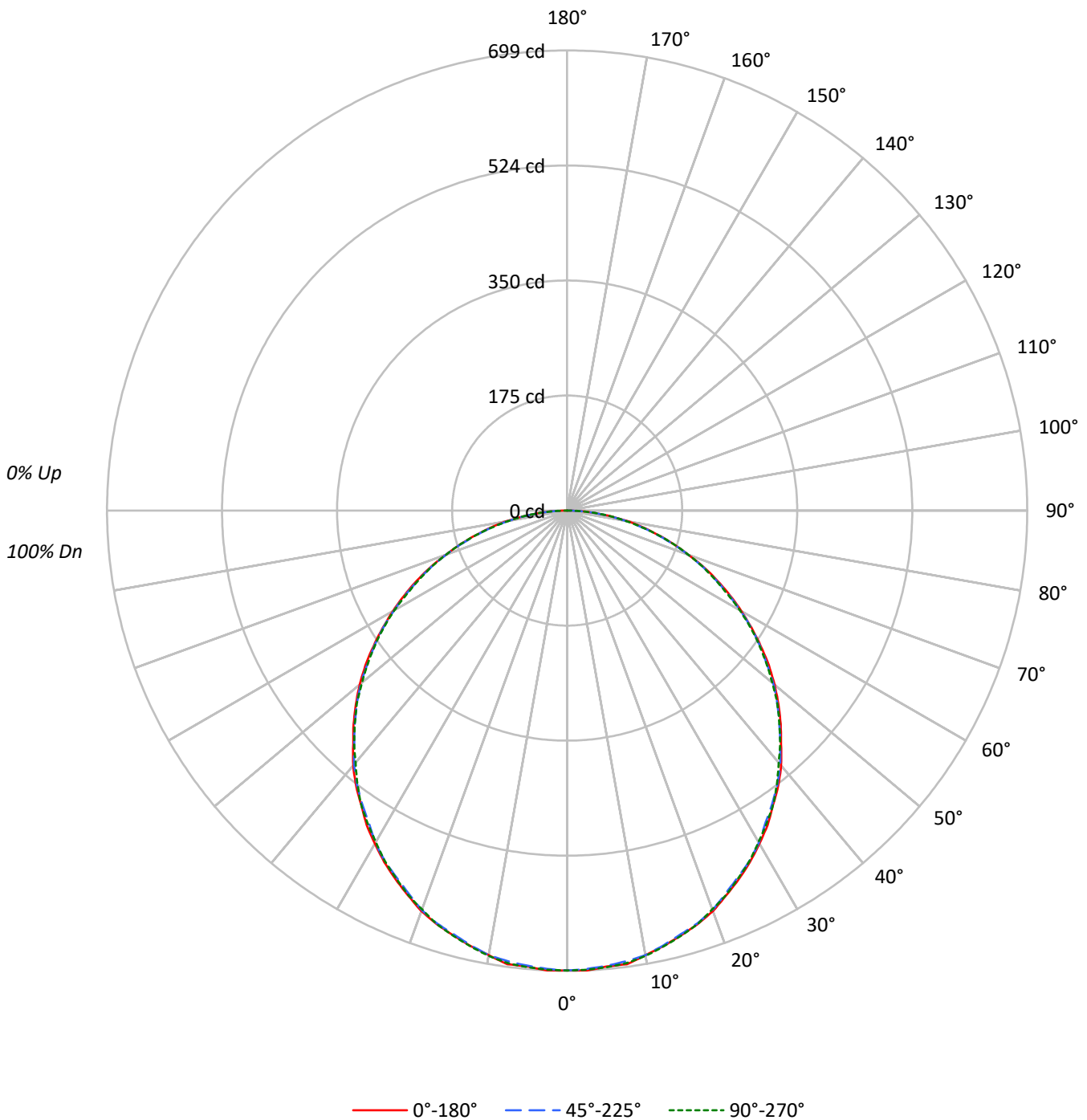
Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1880	1880	1880
5°	1877	1874	1881
10°	1874	1874	1877
15°	1861	1856	1863
20°	1854	1849	1846
25°	1834	1823	1829
30°	1815	1810	1806
35°	1792	1785	1792
40°	1776	1768	1756
45°	1746	1735	1735
50°	1722	1712	1702
55°	1685	1674	1672
60°	1646	1637	1630
65°	1604	1585	1578
70°	1541	1536	1541
75°	1487	1468	1481
80°	1471	1398	1389
85°	1303	1269	1284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	3.3
10°-20°	188.5	9.4
20°-30°	283.9	14.2
30°-40°	340.7	17.1
40°-50°	352.5	17.7
50°-60°	319.5	16.0
60°-70°	247.6	12.4
70°-80°	150.3	7.5
80°-90°	46.6	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°	538.5	27.0
0°-40°	879.2	44.1
0°-60°	1551.2	77.7
0°-90°	1995.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1995.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	695	695	694	696	696	66
15°	668	668	666	669	669	189
25°	618	616	614	616	616	285
35°	546	546	543	544	546	342
45°	459	458	456	456	456	354
55°	359	359	357	356	356	321
65°	252	252	249	250	248	249
75°	143	142	141	141	142	152
85°	42	42	41	41	42	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	698.6	698.6	698.6	698.6	698.6
2.5°	699.1	696.2	696.8	698.0	698.0
5°	695.0	695.0	693.9	695.6	696.2
7.5°	695.0	692.1	690.3	692.1	693.3
10°	685.7	684.5	685.7	685.1	686.8
12.5°	677.4	676.3	676.3	678.0	678.0
15°	668.1	668.1	666.3	669.2	668.6
17.5°	658.7	658.7	657.5	657.5	658.7
20°	647.5	644.6	645.8	645.2	644.6
22.5°	632.3	630.5	629.3	631.1	631.7
25°	617.6	616.4	614.1	616.4	615.9
27.5°	601.8	600.6	600.0	598.8	600.0
30°	584.2	583.0	582.4	581.3	581.3
32.5°	566.6	564.2	561.3	564.2	563.7
35°	545.6	545.6	543.3	543.9	545.6
37.5°	526.9	525.7	524.5	522.7	523.3
40°	505.7	504.0	503.4	502.2	499.9
42.5°	481.1	481.1	478.8	479.3	478.8
45°	458.8	458.2	455.9	455.9	455.9
47.5°	435.4	434.8	433.0	431.8	433.0
50°	411.3	409.0	409.0	407.2	406.6
52.5°	386.2	384.5	382.1	382.7	381.5
55°	359.2	358.7	356.9	356.3	356.3
57.5°	332.3	332.9	331.7	329.3	329.9
60°	305.9	305.3	304.1	302.9	302.9
62.5°	278.9	278.9	276.5	276.5	274.2
65°	251.9	251.9	249.0	250.2	247.8
67.5°	225.1	224.5	222.7	222.1	222.7
70°	195.8	196.3	195.2	195.2	195.8
72.5°	169.4	168.8	168.2	168.2	169.4
75°	143.0	142.4	141.2	141.2	142.4
77.5°	118.9	116.0	115.4	116.6	114.8
80°	94.9	90.8	90.2	89.6	89.6
82.5°	66.9	65.1	65.7	65.1	66.3
85°	42.2	41.6	41.1	41.1	41.6
87.5°	19.9	18.8	18.8	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)