

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: P476159

Luminaire Tested: **22GR-LD5-28-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476159
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-FGW080-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2462.3 lumens
Efficiency: N/A
Efficacy: 117.3 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

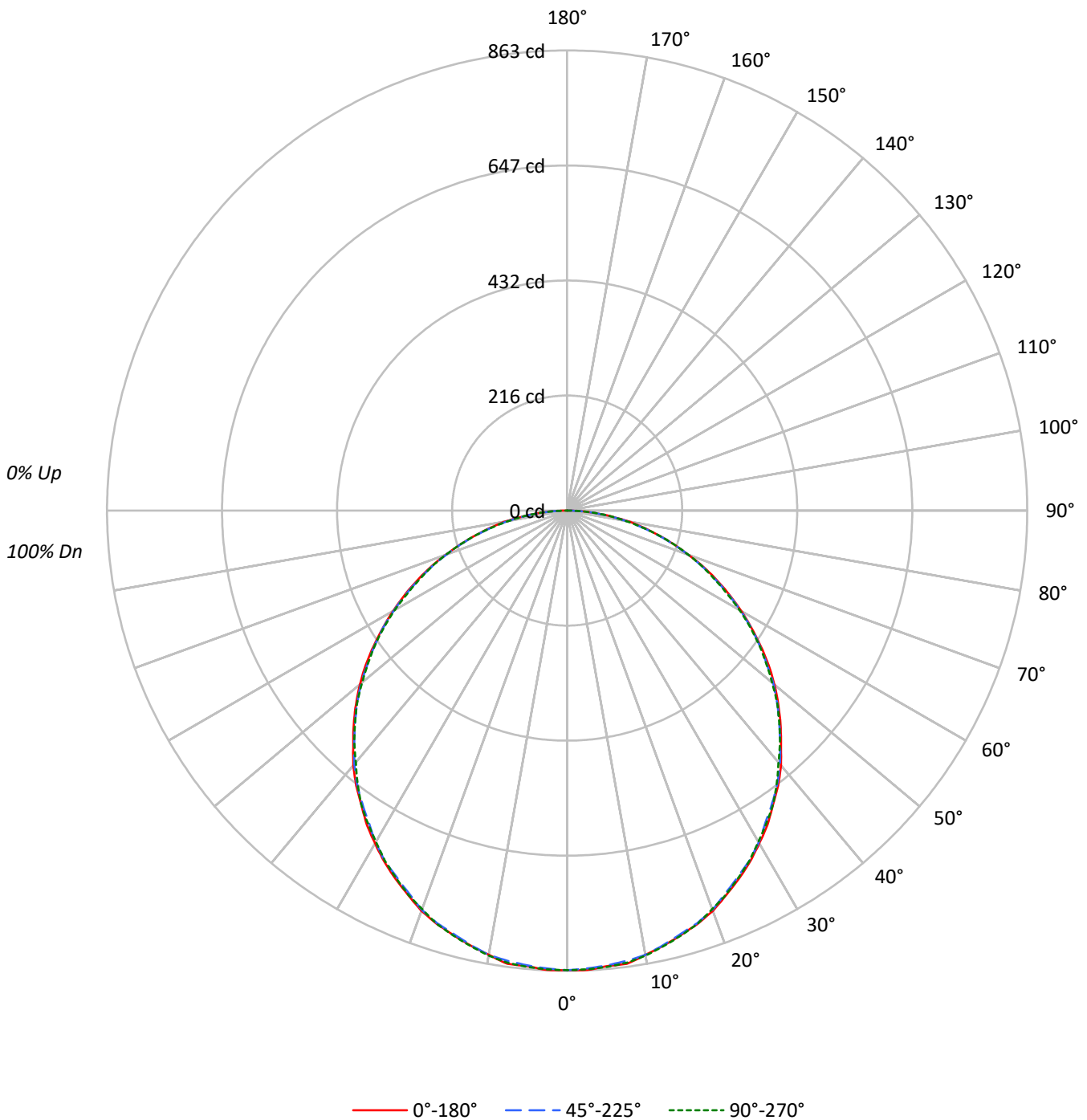
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P476159

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P476159

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L850-CD1-U

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°	2319	2319	2319
5°	2316	2313	2320
10°	2312	2312	2316
15°	2296	2290	2298
20°	2288	2282	2277
25°	2263	2250	2256
30°	2240	2233	2229
35°	2212	2202	2212
40°	2192	2182	2166
45°	2154	2141	2141
50°	2125	2112	2100
55°	2079	2066	2062
60°	2031	2019	2012
65°	1979	1956	1947
70°	1900	1895	1900
75°	1834	1811	1827
80°	1815	1725	1712
85°	1609	1565	1587



TEST NUMBER: P476159

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	3.3
10°-20°	232.6	9.4
20°-30°	350.3	14.2
30°-40°	420.4	17.1
40°-50°	434.9	17.7
50°-60°	394.2	16.0
60°-70°	305.5	12.4
70°-80°	185.4	7.5
80°-90°	57.4	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°	664.4	27.0
0°-40°	1084.8	44.1
0°-60°	1913.9	77.7
0°-90°	2462.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2462.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	858	858	856	858	859	82
15°	824	824	822	826	825	233
25°	762	761	758	761	760	351
35°	673	673	670	671	673	422
45°	566	565	562	562	562	437
55°	443	442	440	440	440	396
65°	311	311	307	309	306	307
75°	176	176	174	174	176	188
85°	52	51	51	51	51	59
90°	0	0	0	0	0	



TEST NUMBER: P476159

CATALOG NUMBER: 22GR-LD5-28-FGW080-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	861.9	861.9	861.9	861.9	861.9
2.5°	862.6	859.0	859.7	861.2	861.2
5°	857.5	857.5	856.1	858.3	859.0
7.5°	857.5	853.9	851.8	853.9	855.4
10°	846.0	844.5	846.0	845.2	847.4
12.5°	835.8	834.4	834.4	836.6	836.6
15°	824.3	824.3	822.1	825.7	825.0
17.5°	812.7	812.7	811.2	811.2	812.7
20°	798.9	795.3	796.8	796.0	795.3
22.5°	780.1	777.9	776.5	778.7	779.4
25°	762.0	760.6	757.7	760.6	759.9
27.5°	742.5	741.0	740.3	738.9	740.3
30°	720.8	719.3	718.6	717.2	717.2
32.5°	699.1	696.2	692.6	696.2	695.4
35°	673.2	673.2	670.3	671.0	673.2
37.5°	650.0	648.6	647.1	645.0	645.7
40°	624.0	621.8	621.1	619.6	616.7
42.5°	593.6	593.6	590.7	591.4	590.7
45°	566.1	565.4	562.5	562.5	562.5
47.5°	537.1	536.4	534.2	532.8	534.2
50°	507.5	504.6	504.6	502.4	501.7
52.5°	476.5	474.4	471.5	472.2	470.7
55°	443.2	442.5	440.4	439.6	439.6
57.5°	410.0	410.7	409.2	406.3	407.1
60°	377.4	376.7	375.2	373.8	373.8
62.5°	344.1	344.1	341.2	341.2	338.3
65°	310.8	310.8	307.2	308.6	305.7
67.5°	277.7	277.0	274.8	274.1	274.8
70°	241.5	242.2	240.8	240.8	241.5
72.5°	209.0	208.2	207.5	207.5	209.0
75°	176.4	175.7	174.2	174.2	175.7
77.5°	146.7	143.1	142.4	143.8	141.7
80°	117.1	112.0	111.3	110.5	110.5
82.5°	82.5	80.3	81.1	80.3	81.8
85°	52.1	51.4	50.7	50.7	51.4
87.5°	24.6	23.2	23.2	22.4	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)