

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: FAIL-SAFE

Report Number: P202462

Luminaire Tested: **GRW-24-4-LD4-90-35-A12125**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P202462
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: GRW-24-4-LD4-90-35-A12125
Description: FAILSAFE GRW 2X4 LED TROFFER WITH A12 LENS
Light Source: (6) COOPER LIGHTING 3500K BOARDS
2UT217042T8352A
Ballast/Driver: (1) PHILIPS ADVANCE ELECTRONIC DRIVER
XI075C200V054XPT1

Summary

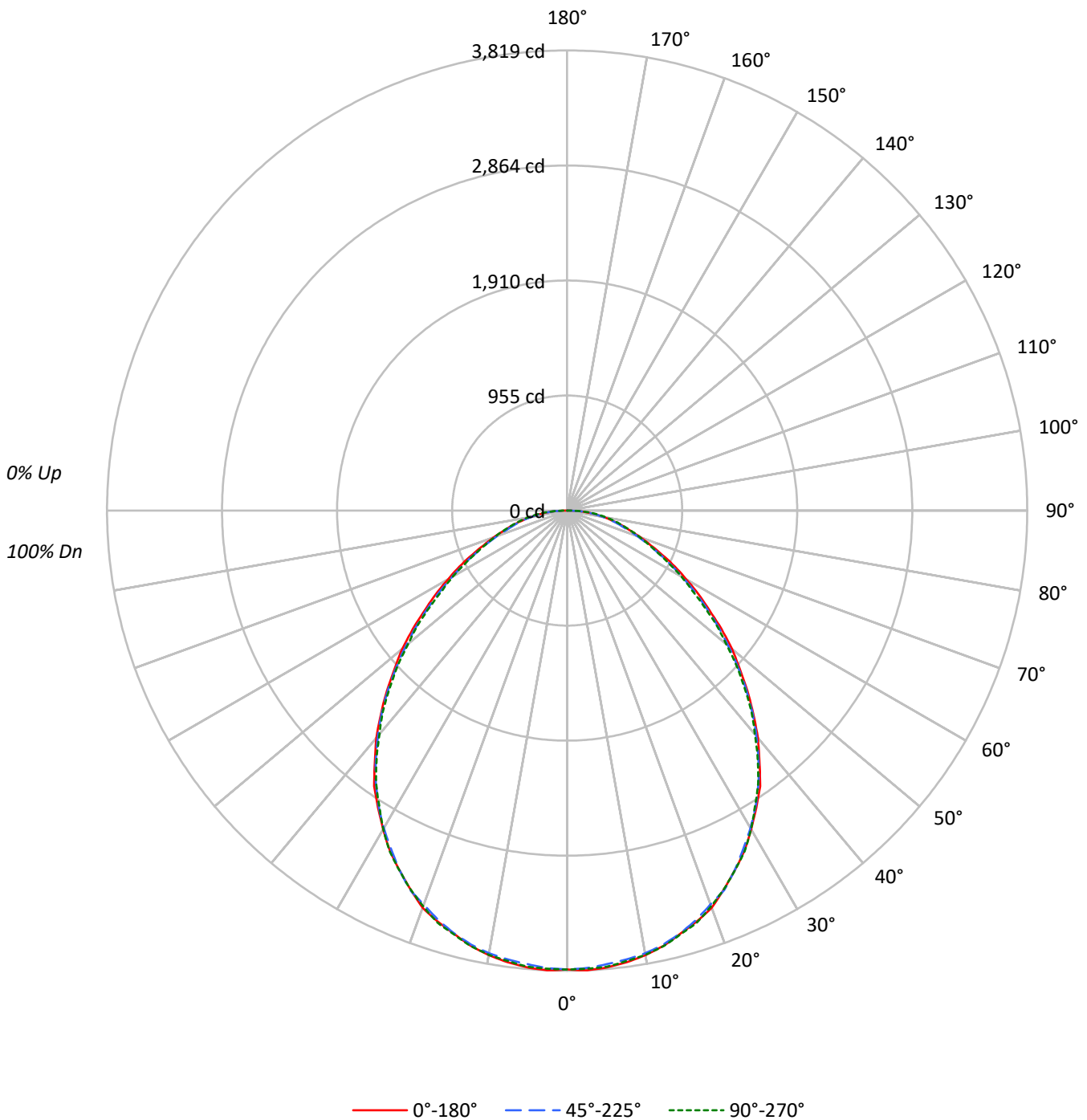
Lumens per Lamp: N/A
Luminaire Lumens: 9020.1 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.27
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 85.1
Input Voltage (V): NR
Input Current (Ain): 0.7129
Voltage Rise (V): NR
Power Factor: 0.9997
Total Harmonic Distortion (THDi): 8.76%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 4 HR
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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	54	50	59	53	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5834	5834	5834
5°	5852	5810	5842
10°	5826	5803	5821
15°	5762	5758	5773
20°	5719	5670	5697
25°	5565	5563	5568
30°	5401	5382	5399
35°	5220	5176	5170
40°	4923	4887	4847
45°	4579	4549	4510
50°	4256	4163	4103
55°	3845	3770	3704
60°	3495	3379	3351
65°	3157	3026	3012
70°	2897	2772	2857
75°	2752	2639	2817
80°	2734	2664	2937
85°	2829	2777	3216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.3	4.0
10°-20°	1024.9	11.4
20°-30°	1514.4	16.8
30°-40°	1725.4	19.1
40°-50°	1617.7	17.9
50°-60°	1266.8	14.0
60°-70°	844.0	9.4
70°-80°	488.0	5.4
80°-90°	178.6	2.0
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°	2899.6	32.1
0°-40°	4625.0	51.3
0°-60°	7509.5	83.3
0°-90°	9020.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9020.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3809	3809	3809	3809	3809	
5°	3806	3799	3779	3792	3800	361
15°	3634	3639	3631	3635	3641	1027
25°	3293	3281	3292	3288	3295	1517
35°	2792	2771	2768	2753	2765	1735
45°	2114	2114	2100	2087	2082	1632
55°	1440	1429	1412	1389	1387	1297
65°	871	855	835	830	831	871
75°	465	448	446	465	476	493
85°	161	156	158	185	183	173
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3809	3809	3809	3809	3809
2.5°	3819	3818	3800	3804	3805
5°	3806	3799	3779	3792	3800
7.5°	3781	3783	3758	3769	3771
10°	3746	3741	3731	3728	3743
12.5°	3700	3696	3688	3691	3701
15°	3634	3639	3631	3635	3641
17.5°	3576	3569	3561	3569	3585
20°	3509	3490	3479	3487	3495
22.5°	3400	3405	3408	3395	3400
25°	3293	3281	3292	3288	3295
27.5°	3186	3182	3165	3176	3189
30°	3054	3063	3043	3047	3053
32.5°	2922	2916	2911	2904	2903
35°	2792	2771	2768	2753	2765
37.5°	2622	2619	2609	2593	2598
40°	2462	2458	2444	2426	2424
42.5°	2287	2289	2276	2255	2265
45°	2114	2114	2100	2087	2082
47.5°	1941	1943	1921	1907	1908
50°	1786	1770	1747	1726	1722
52.5°	1613	1596	1577	1549	1563
55°	1440	1429	1412	1389	1387
57.5°	1293	1275	1256	1229	1226
60°	1141	1131	1103	1087	1094
62.5°	1008	989	966	951	956
65°	871	855	835	830	831
67.5°	750	734	721	723	725
70°	647	630	619	627	638
72.5°	546	535	523	543	554
75°	465	448	446	465	476
77.5°	381	374	375	396	403
80°	310	297	302	324	333
82.5°	235	226	232	257	261
85°	161	156	158	185	183
87.5°	83	85	87	103	103
90°	0	0	0	0	0

(END OF REPORT)