

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: P475874

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475874
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-FGW080-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7402.8 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

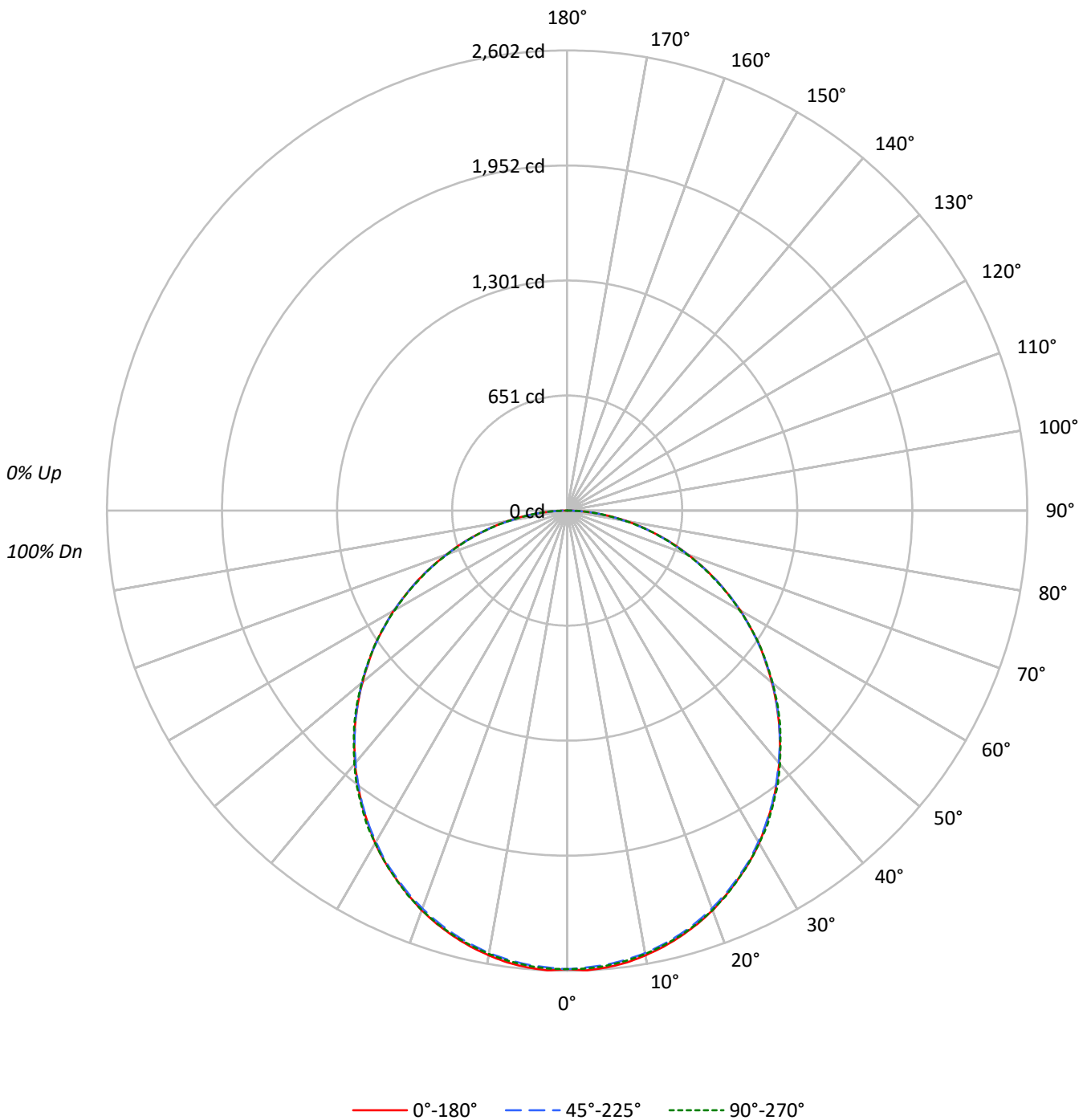
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	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	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	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	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	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°	3489	3489	3489
5°	3502	3481	3488
10°	3489	3471	3478
15°	3469	3453	3462
20°	3444	3428	3441
25°	3407	3397	3409
30°	3374	3361	3374
35°	3326	3320	3333
40°	3278	3270	3287
45°	3225	3225	3239
50°	3163	3172	3172
55°	3119	3107	3117
60°	3048	3046	3025
65°	2961	2958	2939
70°	2857	2851	2834
75°	2748	2740	2744
80°	2623	2571	2583
85°	2328	2328	2354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.2	3.3
10°-20°	700.4	9.5
20°-30°	1056.0	14.3
30°-40°	1265.5	17.1
40°-50°	1307.4	17.7
50°-60°	1184.0	16.0
60°-70°	917.2	12.4
70°-80°	556.3	7.5
80°-90°	170.8	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°	2001.6	27.0
0°-40°	3267.1	44.1
0°-60°	5758.5	77.8
0°-90°	7402.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7402.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2593	2593	2593	2593	2593	
5°	2593	2583	2577	2577	2583	246
15°	2491	2483	2479	2481	2486	703
25°	2295	2290	2288	2293	2296	1058
35°	2025	2017	2022	2025	2029	1266
45°	1695	1691	1695	1697	1702	1306
55°	1330	1322	1324	1326	1329	1184
65°	930	925	929	927	923	919
75°	529	529	527	522	528	560
85°	151	153	151	148	152	173
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2592.9	2592.9	2592.9	2592.9	2592.9
2.5°	2602.1	2592.9	2586.2	2586.2	2592.0
5°	2592.9	2582.8	2577.0	2577.0	2582.8
7.5°	2577.8	2566.9	2561.9	2561.9	2566.9
10°	2553.5	2545.1	2540.9	2540.9	2546.0
12.5°	2525.0	2517.5	2512.5	2513.3	2518.3
15°	2490.7	2483.1	2478.9	2480.6	2485.6
17.5°	2450.5	2442.9	2439.6	2442.1	2447.9
20°	2405.2	2396.0	2394.3	2396.8	2403.5
22.5°	2350.8	2344.9	2344.1	2348.3	2354.1
25°	2294.6	2289.6	2287.9	2293.0	2296.3
27.5°	2236.8	2227.6	2231.0	2231.8	2236.8
30°	2171.5	2163.1	2163.1	2166.5	2171.5
32.5°	2096.1	2091.1	2095.2	2099.4	2107.0
35°	2024.9	2017.3	2021.5	2024.9	2029.1
37.5°	1944.4	1942.8	1943.6	1948.6	1955.3
40°	1866.5	1861.5	1861.5	1868.2	1871.6
42.5°	1781.1	1776.9	1780.2	1783.6	1785.3
45°	1694.8	1691.4	1694.8	1697.3	1702.3
47.5°	1602.6	1603.5	1604.3	1606.0	1611.0
50°	1511.3	1514.7	1515.5	1518.9	1515.5
52.5°	1416.7	1417.5	1420.8	1421.7	1422.5
55°	1329.5	1322.0	1324.5	1326.2	1328.7
57.5°	1227.3	1224.8	1224.8	1227.3	1229.0
60°	1132.7	1127.6	1131.8	1126.8	1124.3
62.5°	1027.1	1028.8	1030.4	1029.6	1025.4
65°	929.9	924.9	929.1	926.6	923.2
67.5°	827.7	823.5	825.2	824.4	823.5
70°	726.3	726.3	724.7	720.5	720.5
72.5°	630.8	625.8	627.5	622.5	622.5
75°	528.6	528.6	527.0	521.9	527.8
77.5°	433.1	430.6	428.9	425.6	425.6
80°	338.5	332.6	331.8	331.8	333.4
82.5°	245.5	241.3	239.6	239.6	240.4
85°	150.8	153.3	150.8	148.3	152.5
87.5°	71.2	67.9	67.9	70.4	72.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)