

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: P475875

Luminaire Tested: **24GR-LD5-90-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475875
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-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: 7811.1 lumens
Efficiency: N/A
Efficacy: 127.6 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

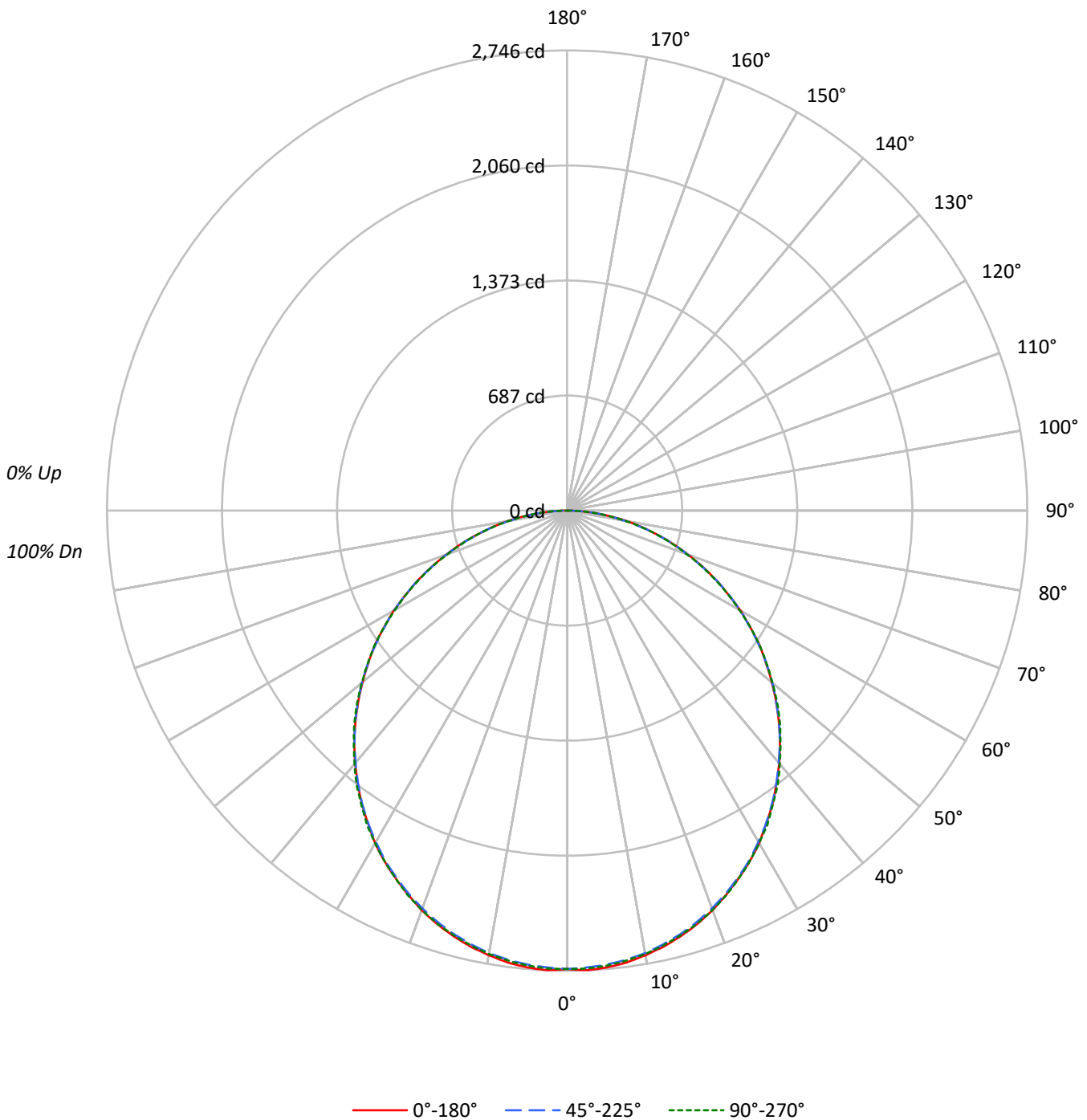
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3681	3681	3681
5°	3695	3672	3681
10°	3681	3663	3670
15°	3661	3644	3653
20°	3634	3617	3631
25°	3594	3584	3597
30°	3560	3546	3560
35°	3509	3504	3517
40°	3459	3450	3469
45°	3403	3403	3418
50°	3338	3347	3347
55°	3291	3278	3289
60°	3216	3214	3192
65°	3124	3121	3101
70°	3015	3008	2991
75°	2900	2890	2895
80°	2767	2713	2726
85°	2456	2456	2484



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.7	3.3
10°-20°	739.1	9.5
20°-30°	1114.2	14.3
30°-40°	1335.3	17.1
40°-50°	1379.5	17.7
50°-60°	1249.3	16.0
60°-70°	967.8	12.4
70°-80°	587.0	7.5
80°-90°	180.2	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°	2112.0	27.0
0°-40°	3447.3	44.1
0°-60°	6076.2	77.8
0°-90°	7811.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7811.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2736	2736	2736	2736	2736	
5°	2736	2725	2719	2719	2725	260
15°	2628	2620	2616	2617	2623	741
25°	2421	2416	2414	2419	2423	1116
35°	2137	2129	2133	2137	2141	1336
45°	1788	1785	1788	1791	1796	1379
55°	1403	1395	1398	1399	1402	1250
65°	981	976	980	978	974	970
75°	558	558	556	551	557	591
85°	159	162	159	156	161	183
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2735.9	2735.9	2735.9	2735.9	2735.9
2.5°	2745.6	2735.9	2728.8	2728.8	2735.0
5°	2735.9	2725.3	2719.1	2719.1	2725.3
7.5°	2720.0	2708.5	2703.2	2703.2	2708.5
10°	2694.3	2685.5	2681.1	2681.1	2686.4
12.5°	2664.3	2656.3	2651.0	2651.9	2657.2
15°	2628.1	2620.1	2615.7	2617.4	2622.7
17.5°	2585.6	2577.7	2574.1	2576.8	2583.0
20°	2537.9	2528.2	2526.4	2529.0	2536.1
22.5°	2480.4	2474.2	2473.4	2477.8	2484.0
25°	2421.2	2415.9	2414.1	2419.4	2423.0
27.5°	2360.2	2350.5	2354.0	2354.9	2360.2
30°	2291.3	2282.4	2282.4	2286.0	2291.3
32.5°	2211.7	2206.4	2210.8	2215.2	2223.2
35°	2136.6	2128.6	2133.0	2136.6	2141.0
37.5°	2051.7	2049.9	2050.8	2056.1	2063.2
40°	1969.5	1964.2	1964.2	1971.3	1974.8
42.5°	1879.3	1874.9	1878.4	1882.0	1883.7
45°	1788.3	1784.7	1788.3	1790.9	1796.2
47.5°	1691.0	1691.9	1692.8	1694.6	1699.9
50°	1594.7	1598.2	1599.1	1602.6	1599.1
52.5°	1494.8	1495.7	1499.2	1500.1	1501.0
55°	1402.9	1394.9	1397.6	1399.3	1402.0
57.5°	1295.0	1292.4	1292.4	1295.0	1296.8
60°	1195.1	1189.8	1194.2	1188.9	1186.3
62.5°	1083.8	1085.5	1087.3	1086.4	1082.0
65°	981.2	975.9	980.3	977.7	974.1
67.5°	873.4	868.9	870.7	869.8	868.9
70°	766.4	766.4	764.6	760.2	760.2
72.5°	665.6	660.3	662.1	656.8	656.8
75°	557.8	557.8	556.0	550.7	556.9
77.5°	457.0	454.4	452.6	449.1	449.1
80°	357.1	350.9	350.1	350.1	351.8
82.5°	259.0	254.6	252.8	252.8	253.7
85°	159.1	161.8	159.1	156.5	160.9
87.5°	75.1	71.6	71.6	74.3	76.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)