

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: P475873

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475873
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-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: 6168.3 lumens
Efficiency: N/A
Efficacy: 126.7 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

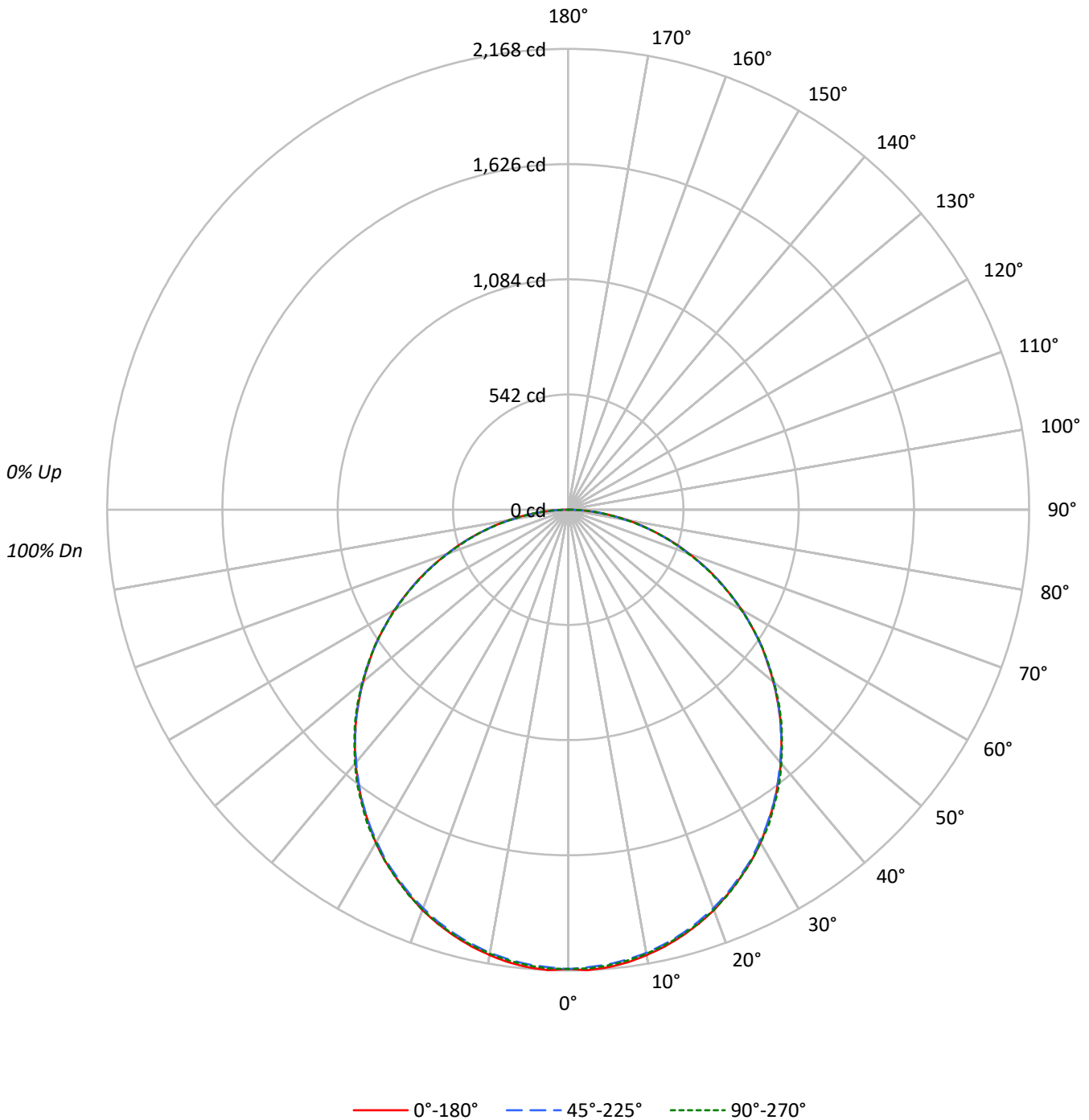
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	69	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°	2907	2907	2907
5°	2918	2900	2907
10°	2907	2893	2898
15°	2891	2877	2885
20°	2870	2857	2868
25°	2839	2830	2841
30°	2811	2800	2811
35°	2771	2767	2777
40°	2732	2724	2739
45°	2687	2687	2699
50°	2636	2643	2643
55°	2599	2589	2597
60°	2540	2538	2521
65°	2467	2465	2449
70°	2381	2375	2362
75°	2290	2283	2286
80°	2185	2142	2152
85°	1939	1939	1961



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.3	3.3
10°-20°	583.6	9.5
20°-30°	879.9	14.3
30°-40°	1054.4	17.1
40°-50°	1089.4	17.7
50°-60°	986.6	16.0
60°-70°	764.2	12.4
70°-80°	463.5	7.5
80°-90°	142.3	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°	1667.8	27.0
0°-40°	2722.3	44.1
0°-60°	4798.3	77.8
0°-90°	6168.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6168.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2160	2160	2160	2160	2160	
5°	2160	2152	2147	2147	2152	205
15°	2075	2069	2066	2067	2071	585
25°	1912	1908	1906	1911	1913	882
35°	1687	1681	1684	1687	1691	1055
45°	1412	1409	1412	1414	1418	1089
55°	1108	1102	1104	1105	1107	987
65°	775	771	774	772	769	766
75°	440	440	439	435	440	467
85°	126	128	126	124	127	144
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2160.5	2160.5	2160.5	2160.5	2160.5
2.5°	2168.2	2160.5	2154.9	2154.9	2159.8
5°	2160.5	2152.1	2147.2	2147.2	2152.1
7.5°	2147.9	2138.8	2134.6	2134.6	2138.8
10°	2127.7	2120.7	2117.2	2117.2	2121.4
12.5°	2103.9	2097.7	2093.5	2094.2	2098.4
15°	2075.3	2069.0	2065.5	2066.9	2071.1
17.5°	2041.8	2035.5	2032.7	2034.8	2039.7
20°	2004.1	1996.4	1995.0	1997.1	2002.7
22.5°	1958.7	1953.9	1953.2	1956.6	1961.5
25°	1912.0	1907.8	1906.4	1910.6	1913.4
27.5°	1863.8	1856.1	1858.9	1859.6	1863.8
30°	1809.4	1802.4	1802.4	1805.2	1809.4
32.5°	1746.5	1742.3	1745.8	1749.3	1755.6
35°	1687.2	1680.9	1684.4	1687.2	1690.7
37.5°	1620.2	1618.8	1619.5	1623.7	1629.3
40°	1555.3	1551.1	1551.1	1556.7	1559.5
42.5°	1484.1	1480.6	1483.4	1486.2	1487.6
45°	1412.2	1409.4	1412.2	1414.3	1418.4
47.5°	1335.4	1336.1	1336.8	1338.2	1342.4
50°	1259.3	1262.1	1262.8	1265.6	1262.8
52.5°	1180.4	1181.1	1183.9	1184.6	1185.3
55°	1107.8	1101.5	1103.6	1105.0	1107.1
57.5°	1022.6	1020.6	1020.6	1022.6	1024.0
60°	943.8	939.6	943.1	938.9	936.8
62.5°	855.8	857.2	858.6	857.9	854.4
65°	774.8	770.7	774.1	772.0	769.3
67.5°	689.7	686.2	687.6	686.9	686.2
70°	605.2	605.2	603.8	600.3	600.3
72.5°	525.6	521.4	522.8	518.7	518.7
75°	440.5	440.5	439.1	434.9	439.8
77.5°	360.9	358.8	357.4	354.6	354.6
80°	282.0	277.1	276.4	276.4	277.8
82.5°	204.5	201.0	199.6	199.6	200.3
85°	125.6	127.7	125.6	123.6	127.0
87.5°	59.3	56.5	56.5	58.6	60.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)