

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: P475555

Luminaire Tested: **24GR-LD5-48-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475555
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-F1-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4948.1 lumens
Efficiency: N/A
Efficacy: 149.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

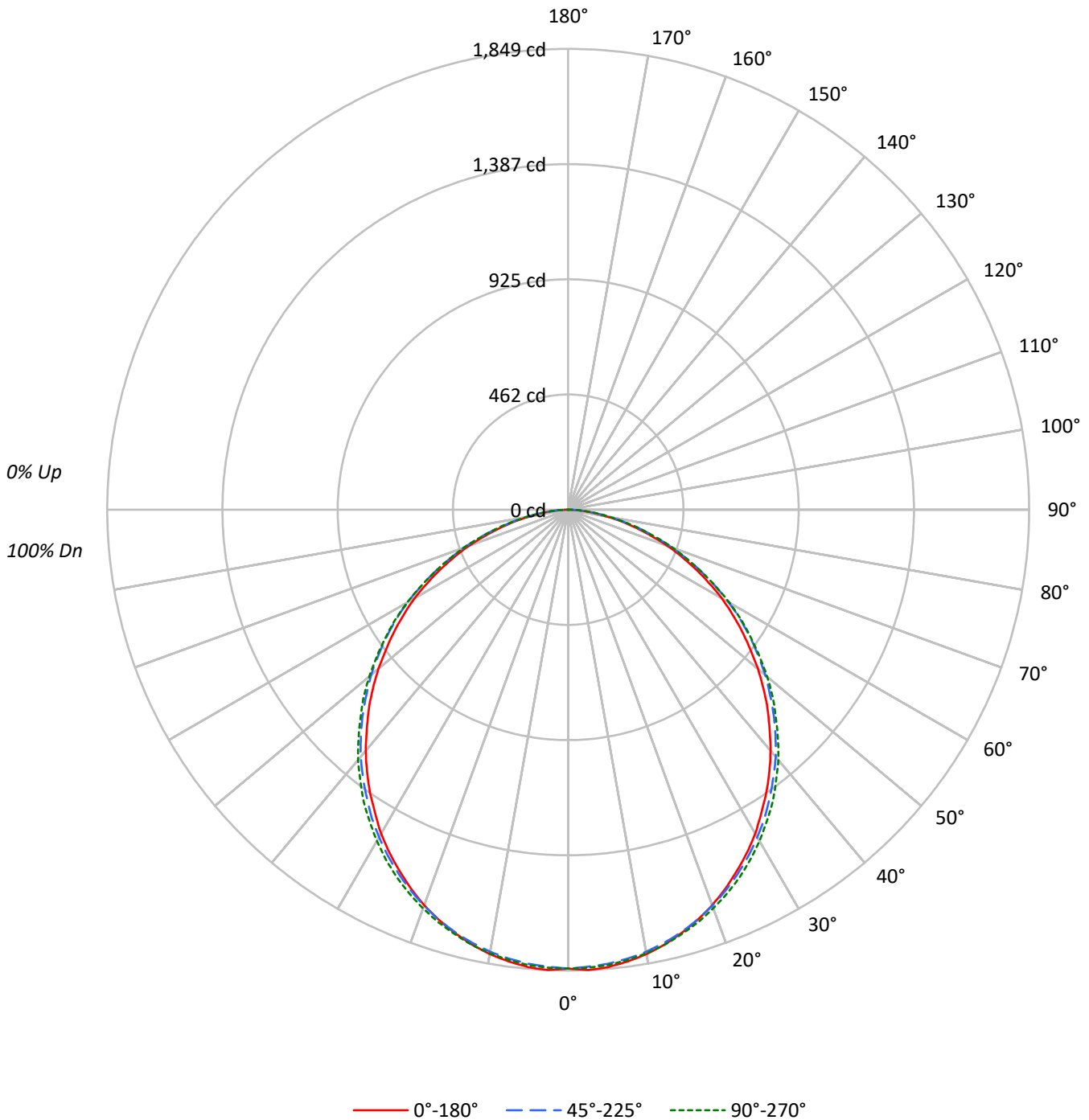
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2477	2477	2477
5°	2488	2470	2477
10°	2474	2460	2469
15°	2449	2444	2455
20°	2418	2421	2437
25°	2375	2391	2416
30°	2332	2357	2384
35°	2276	2315	2350
40°	2219	2274	2303
45°	2152	2218	2241
50°	2079	2160	2179
55°	1998	2087	2098
60°	1916	2000	2008
65°	1795	1880	1876
70°	1663	1739	1756
75°	1473	1559	1569
80°	1226	1316	1346
85°	929	1019	1145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.0	3.5
10°-20°	495.4	10.0
20°-30°	742.3	15.0
30°-40°	880.7	17.8
40°-50°	894.4	18.1
50°-60°	787.6	15.9
60°-70°	578.8	11.7
70°-80°	314.8	6.4
80°-90°	80.2	1.6
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°	1411.7	28.5
0°-40°	2292.3	46.3
0°-60°	3974.4	80.3
0°-90°	4948.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4948.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1842	1834	1829	1829	1834	175
15°	1758	1755	1755	1757	1762	496
25°	1600	1602	1611	1620	1627	737
35°	1386	1394	1409	1423	1431	866
45°	1131	1140	1166	1179	1178	872
55°	852	864	890	898	894	761
65°	564	573	591	595	589	559
75°	283	289	300	301	302	301
85°	60	62	66	72	74	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1841.1	1841.1	1841.1	1841.1	1841.1
2.5°	1848.9	1841.6	1835.3	1835.3	1839.6
5°	1842.1	1834.3	1829.0	1829.0	1833.8
7.5°	1828.0	1821.7	1817.3	1817.3	1822.7
10°	1810.5	1804.2	1800.8	1801.3	1807.1
12.5°	1787.2	1781.4	1780.0	1780.9	1788.2
15°	1758.1	1754.7	1754.7	1757.2	1762.5
17.5°	1725.6	1722.2	1724.6	1728.0	1734.8
20°	1688.7	1686.3	1690.7	1696.0	1702.3
22.5°	1646.5	1645.5	1652.8	1660.1	1666.4
25°	1599.9	1601.9	1610.6	1619.8	1627.1
27.5°	1551.9	1553.8	1566.0	1575.7	1582.9
30°	1500.9	1501.9	1517.4	1529.1	1534.4
32.5°	1441.7	1449.5	1466.0	1477.2	1482.0
35°	1385.9	1393.7	1409.2	1423.3	1430.6
37.5°	1325.3	1332.1	1352.4	1367.5	1369.9
40°	1263.1	1269.5	1294.7	1307.3	1311.2
42.5°	1195.2	1207.3	1230.2	1242.8	1245.2
45°	1131.2	1140.4	1165.6	1179.2	1177.7
47.5°	1062.7	1072.9	1097.7	1110.8	1113.2
50°	993.3	1005.0	1031.7	1040.4	1040.9
52.5°	920.6	935.6	959.9	971.5	967.6
55°	851.6	863.8	889.5	897.7	894.3
57.5°	780.8	794.4	818.2	822.5	823.0
60°	711.9	723.0	743.4	747.8	746.3
62.5°	636.2	647.3	665.8	670.2	666.8
65°	563.9	573.1	590.6	594.9	589.1
67.5°	492.1	501.3	514.9	521.7	515.4
70°	422.7	429.9	442.1	446.0	446.4
72.5°	348.9	362.0	370.7	370.3	368.8
75°	283.4	289.2	299.9	300.9	301.8
77.5°	220.8	222.3	233.4	236.3	234.4
80°	158.2	163.5	169.8	173.2	173.7
82.5°	104.3	108.2	113.6	119.4	119.4
85°	60.2	61.6	66.0	71.8	74.2
87.5°	24.3	26.7	31.1	35.4	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)