

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: P475735

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475735  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-A-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4799.9 lumens  
Efficiency: N/A  
Efficacy: 145.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

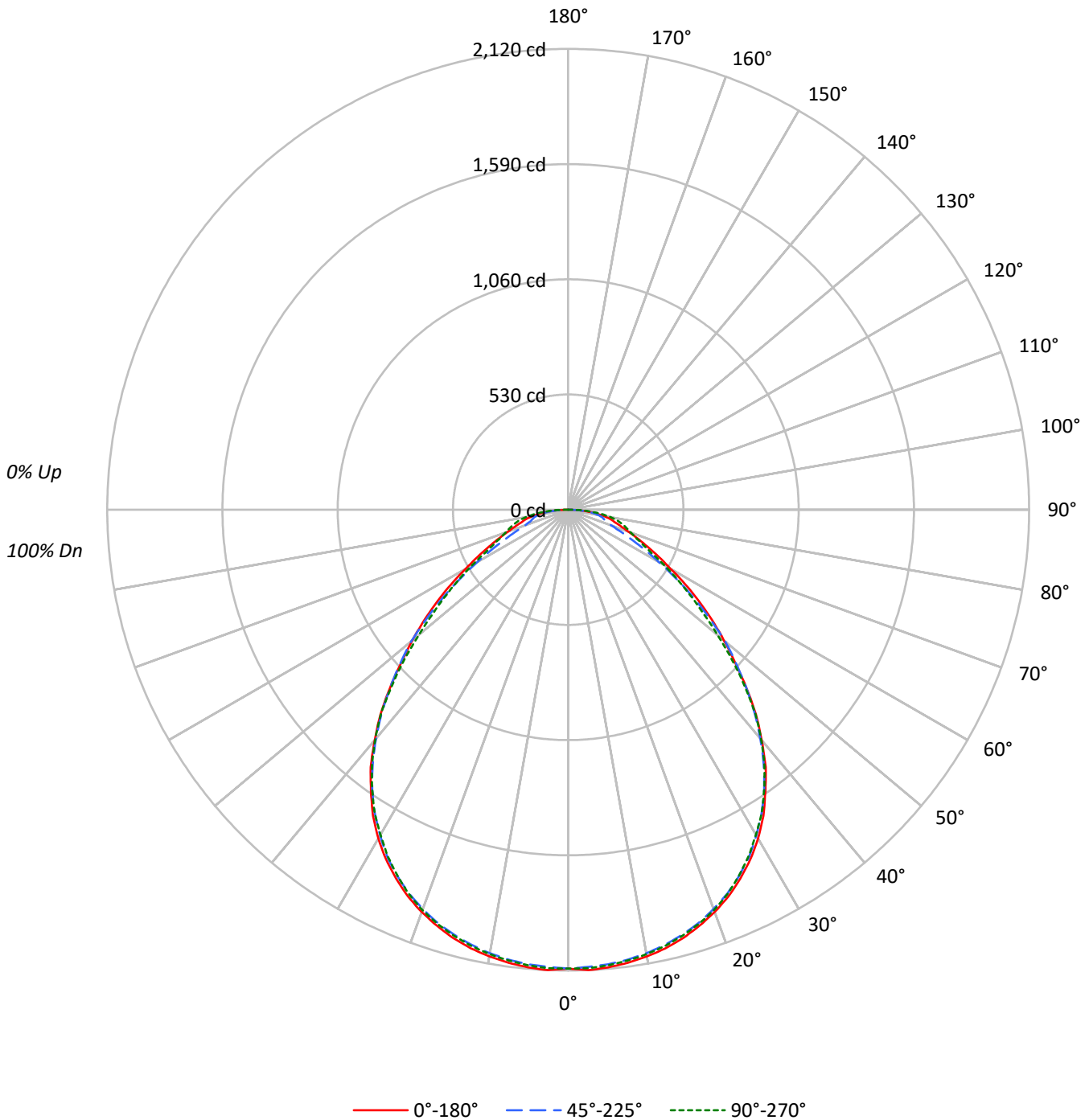
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2840	2840	2840
5°	2855	2835	2842
10°	2850	2831	2837
15°	2842	2820	2826
20°	2820	2800	2807
25°	2780	2760	2758
30°	2713	2688	2682
35°	2597	2580	2580
40°	2430	2416	2426
45°	2206	2202	2184
50°	1957	1972	1875
55°	1719	1644	1605
60°	1464	1298	1366
65°	1279	1010	1205
70°	1157	831	1203
75°	1157	887	1344
80°	1275	1091	1538
85°	1314	1226	1678



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.9	4.2
10°-20°	572.3	11.9
20°-30°	856.1	17.8
30°-40°	979.7	20.4
40°-50°	887.6	18.5
50°-60°	628.4	13.1
60°-70°	363.0	7.6
70°-80°	220.1	4.6
80°-90°	92.6	1.9
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°	1628.3	33.9
0°-40°	2608.1	54.3
0°-60°	4124.1	85.9
0°-90°	4799.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4799.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2111	2111	2111	2111	2111	
5°	2114	2106	2099	2099	2104	201
15°	2040	2032	2024	2024	2029	575
25°	1873	1865	1859	1858	1858	861
35°	1581	1574	1571	1569	1571	986
45°	1159	1157	1157	1149	1148	893
55°	733	708	701	680	684	657
65°	402	360	317	363	379	404
75°	223	199	171	219	258	239
85°	85	77	79	102	109	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2120.1	2112.1	2105.0	2105.9	2111.1
5°	2113.5	2105.9	2099.3	2098.9	2104.1
7.5°	2102.2	2095.5	2088.0	2088.0	2092.2
10°	2086.1	2079.5	2071.9	2071.4	2076.2
12.5°	2067.2	2058.7	2050.7	2050.7	2055.8
15°	2040.3	2032.2	2024.2	2024.2	2028.9
17.5°	2007.2	2000.1	1993.5	1993.9	1997.7
20°	1969.4	1962.3	1955.2	1956.1	1960.4
22.5°	1925.9	1917.4	1911.7	1911.2	1914.1
25°	1872.9	1865.4	1859.2	1857.8	1857.8
27.5°	1813.9	1805.8	1801.6	1795.0	1796.9
30°	1746.3	1737.8	1730.2	1726.4	1726.0
32.5°	1670.2	1661.7	1655.1	1654.6	1656.5
35°	1580.9	1573.8	1571.0	1568.6	1571.0
37.5°	1492.5	1479.3	1476.9	1476.4	1482.6
40°	1383.3	1378.6	1375.3	1372.9	1381.0
42.5°	1278.4	1269.0	1269.9	1260.9	1275.1
45°	1159.3	1156.9	1157.4	1148.9	1148.0
47.5°	1041.2	1040.7	1047.8	1024.1	1022.7
50°	934.8	930.1	941.9	905.5	895.6
52.5°	833.2	820.0	816.2	783.1	783.1
55°	733.0	708.4	700.9	680.1	684.3
57.5°	638.0	603.0	587.5	587.0	594.1
60°	544.0	504.3	482.5	499.5	507.6
62.5°	469.3	425.8	392.7	424.9	432.4
65°	401.7	360.1	317.1	363.0	378.6
67.5°	343.6	309.1	255.2	315.2	336.0
70°	294.0	263.2	211.3	277.9	305.8
72.5°	254.7	229.2	183.8	248.1	281.7
75°	222.6	199.4	170.6	219.3	258.5
77.5°	197.1	169.7	159.7	191.9	232.1
80°	164.5	139.4	140.8	164.9	198.5
82.5°	126.7	107.8	113.4	136.6	156.0
85°	85.1	76.6	79.4	101.6	108.7
87.5°	42.1	40.6	43.5	59.5	59.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)