

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: P475736

Luminaire Tested: **24GR-LD5-56-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475736  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-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: 5628.2 lumens  
Efficiency: N/A  
Efficacy: 142.8 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

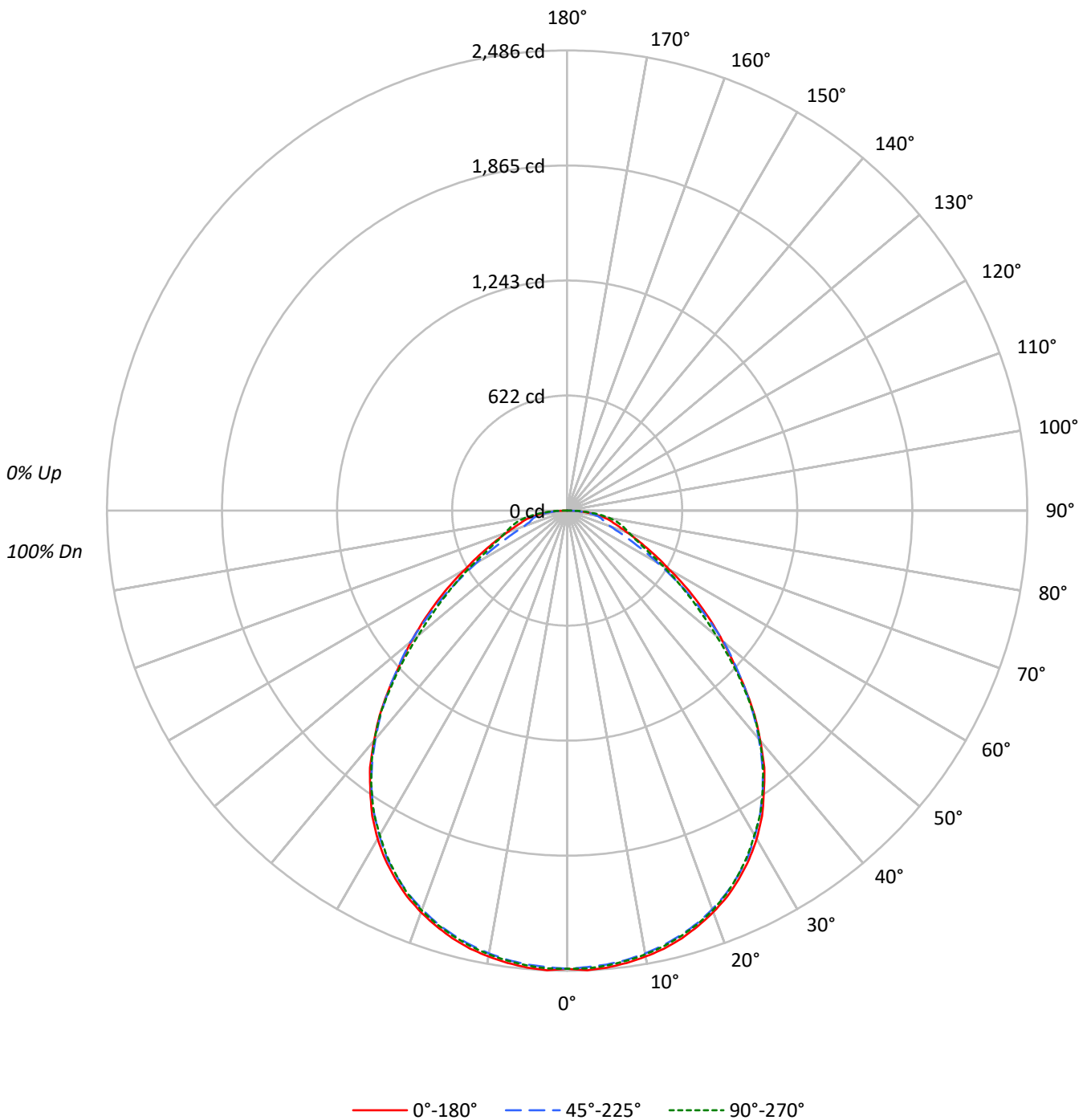
Input Watts (W): 39.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3331	3331	3331
5°	3347	3325	3332
10°	3342	3319	3326
15°	3332	3306	3314
20°	3306	3283	3291
25°	3260	3237	3234
30°	3181	3152	3144
35°	3045	3026	3026
40°	2849	2832	2844
45°	2587	2582	2561
50°	2294	2312	2198
55°	2016	1928	1882
60°	1716	1523	1602
65°	1500	1184	1413
70°	1356	974	1410
75°	1357	1040	1576
80°	1495	1279	1804
85°	1541	1437	1968



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	234.4	4.2
10°-20°	671.1	11.9
20°-30°	1003.9	17.8
30°-40°	1148.8	20.4
40°-50°	1040.8	18.5
50°-60°	736.9	13.1
60°-70°	425.7	7.6
70°-80°	258.1	4.6
80°-90°	108.6	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°	1909.3	33.9
0°-40°	3058.1	54.3
0°-60°	4835.8	85.9
0°-90°	5628.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5628.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2476	2476	2476	2476	2476	
5°	2478	2469	2462	2461	2467	235
15°	2392	2383	2374	2374	2379	675
25°	2196	2187	2180	2178	2178	1010
35°	1854	1845	1842	1839	1842	1157
45°	1359	1357	1357	1347	1346	1047
55°	860	831	822	797	802	770
65°	471	422	372	426	444	473
75°	261	234	200	257	303	280
85°	100	90	93	119	128	107
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2475.5	2475.5	2475.5	2475.5	2475.5
2.5°	2486.0	2476.6	2468.3	2469.4	2475.5
5°	2478.2	2469.4	2461.6	2461.1	2467.2
7.5°	2464.9	2457.2	2448.3	2448.3	2453.3
10°	2446.1	2438.3	2429.5	2428.9	2434.5
12.5°	2423.9	2414.0	2404.5	2404.5	2410.6
15°	2392.3	2382.9	2373.5	2373.5	2379.0
17.5°	2353.5	2345.2	2337.5	2338.0	2342.5
20°	2309.2	2300.9	2292.6	2293.7	2298.7
22.5°	2258.2	2248.3	2241.6	2241.1	2244.4
25°	2196.2	2187.3	2180.1	2178.4	2178.4
27.5°	2126.9	2117.5	2112.5	2104.7	2106.9
30°	2047.6	2037.7	2028.8	2024.4	2023.8
32.5°	1958.4	1948.5	1940.7	1940.1	1942.4
35°	1853.7	1845.4	1842.1	1839.3	1842.1
37.5°	1750.1	1734.5	1731.8	1731.2	1738.4
40°	1622.0	1616.5	1612.6	1609.9	1619.3
42.5°	1499.0	1487.9	1489.0	1478.5	1495.1
45°	1359.4	1356.6	1357.2	1347.2	1346.1
47.5°	1220.8	1220.3	1228.6	1200.9	1199.2
50°	1096.1	1090.6	1104.5	1061.8	1050.1
52.5°	977.0	961.5	957.0	918.3	918.3
55°	859.5	830.7	821.8	797.4	802.4
57.5°	748.1	707.1	688.8	688.3	696.6
60°	637.8	591.3	565.8	585.8	595.2
62.5°	550.3	499.3	460.5	498.2	507.1
65°	471.0	422.3	371.8	425.6	443.9
67.5°	402.9	362.4	299.3	369.6	394.0
70°	344.7	308.7	247.7	325.9	358.5
72.5°	298.7	268.8	215.6	290.9	330.3
75°	261.0	233.9	200.1	257.1	303.1
77.5°	231.1	198.9	187.3	225.0	272.1
80°	192.9	163.5	165.1	193.4	232.8
82.5°	148.5	126.4	133.0	160.2	182.9
85°	99.8	89.8	93.1	119.1	127.5
87.5°	49.3	47.7	51.0	69.8	69.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)