

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: P293452

Luminaire Tested: **24GR-LD5-72-A-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293452  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-A-UNV-L83050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7754.0 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

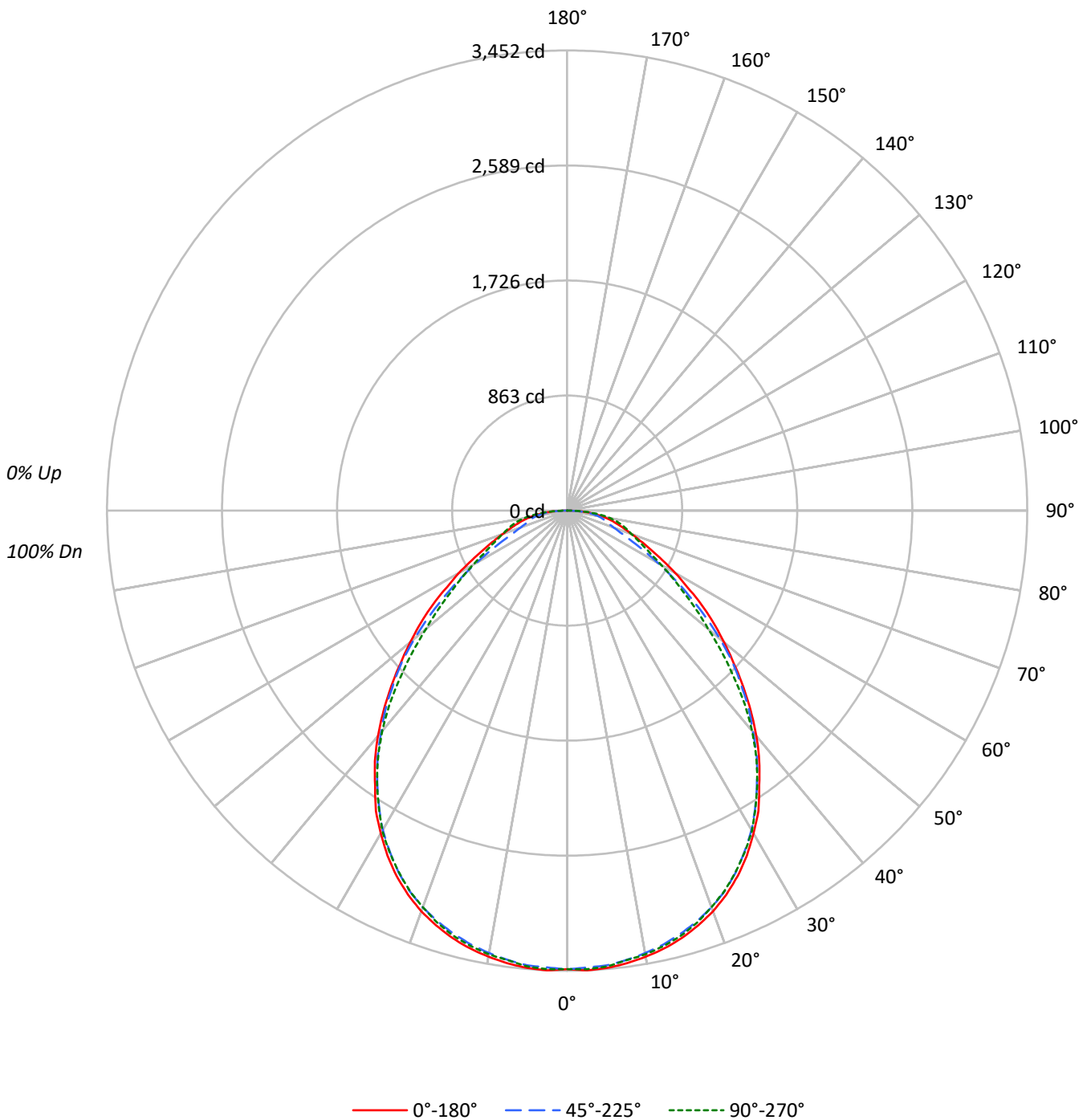
Input Watts (W): 55.149  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10																
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100																	
	1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86																
	2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73															
	3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63														
	4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55														
	5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49														
	6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43														
	7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39														
	8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35														
	9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32														
	10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29															

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

	0°	45°	90°
0°	4629	4629	4629
5°	4652	4626	4637
10°	4643	4605	4619
15°	4625	4579	4599
20°	4581	4535	4533
25°	4492	4444	4441
30°	4344	4299	4308
35°	4126	4079	4085
40°	3880	3812	3789
45°	3556	3508	3369
50°	3215	3127	2891
55°	2886	2627	2492
60°	2527	2115	2192
65°	2204	1663	2018
70°	2017	1452	2017
75°	2018	1544	2223
80°	2190	1819	2534
85°	2404	2053	2719



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	325.8	4.2
10°-20°	929.7	12.0
20°-30°	1378.6	17.8
30°-40°	1555.2	20.1
40°-50°	1408.6	18.2
50°-60°	1016.2	13.1
60°-70°	606.8	7.8
70°-80°	375.0	4.8
80°-90°	158.0	2.0
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°	2634.2	34.0
0°-40°	4189.4	54.0
0°-60°	6614.2	85.3
0°-90°	7754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7754.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3440	3440	3440	3440	3440	
5°	3444	3439	3425	3421	3433	327
15°	3321	3300	3287	3288	3301	936
25°	3026	3009	2994	2983	2991	1390
35°	2512	2508	2483	2484	2487	1572
45°	1869	1857	1844	1798	1770	1440
55°	1230	1192	1120	1065	1062	1098
65°	692	610	522	593	634	696
75°	388	337	297	370	428	414
85°	156	137	133	174	176	163
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3440.4	3440.4	3440.4	3440.4	3440.4
2.5°	3452.3	3442.8	3430.8	3438.0	3444.0
5°	3444.0	3439.2	3424.8	3421.2	3433.2
7.5°	3426.0	3414.0	3400.8	3406.8	3402.0
10°	3398.4	3387.7	3370.9	3372.1	3380.5
12.5°	3364.9	3351.7	3333.7	3338.5	3345.7
15°	3320.6	3300.2	3287.0	3288.2	3301.4
17.5°	3264.3	3248.7	3231.9	3235.5	3241.5
20°	3199.6	3191.2	3167.2	3160.1	3166.0
22.5°	3118.1	3102.6	3089.4	3085.8	3087.0
25°	3025.9	3009.1	2993.5	2982.8	2991.1
27.5°	2918.1	2903.7	2883.3	2879.7	2886.9
30°	2795.9	2785.1	2767.1	2762.4	2773.1
32.5°	2671.3	2653.3	2628.2	2628.2	2630.6
35°	2512.0	2508.4	2483.2	2484.4	2486.8
37.5°	2368.2	2351.5	2337.1	2322.7	2329.9
40°	2208.9	2189.8	2170.6	2161.0	2157.4
42.5°	2037.6	2023.2	2014.9	1980.1	1971.7
45°	1868.7	1856.7	1843.6	1798.0	1770.5
47.5°	1696.2	1693.8	1683.0	1602.8	1575.2
50°	1535.7	1532.1	1493.8	1408.7	1381.2
52.5°	1383.6	1359.6	1309.3	1225.4	1220.7
55°	1230.2	1191.9	1120.0	1064.9	1062.5
57.5°	1068.5	1023.0	949.9	920.0	935.6
60°	939.2	869.7	785.8	789.4	814.6
62.5°	805.0	727.1	644.5	680.4	710.4
65°	692.4	609.7	522.3	593.0	633.7
67.5°	594.2	517.5	433.6	528.3	567.8
70°	512.7	450.4	369.0	468.4	512.7
72.5°	448.0	390.5	327.0	420.5	472.0
75°	388.1	336.6	297.1	370.2	427.6
77.5°	336.6	286.3	268.3	327.0	383.3
80°	282.7	237.2	234.8	285.1	327.0
82.5°	220.4	189.3	189.3	238.4	263.5
85°	155.7	136.6	133.0	173.7	176.1
87.5°	80.3	76.7	69.5	91.0	91.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)