

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: P293451

Luminaire Tested: **24GR-LD5-72-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293451
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-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K 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

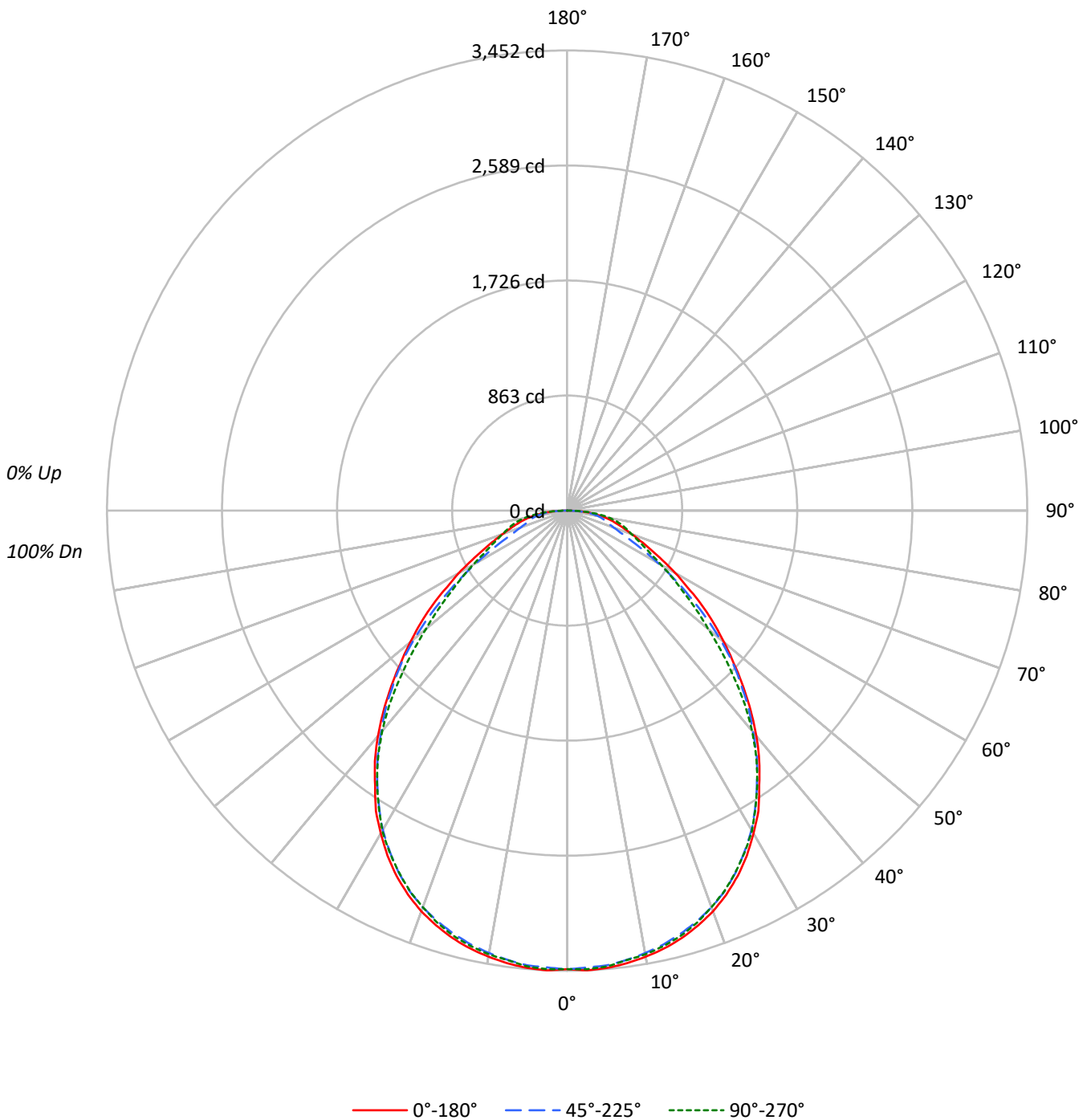
Input Watts (W): 55.149
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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