

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: P293450

Luminaire Tested: **24GR-LD5-72-A-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293450
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-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7681.0 lumens
Efficiency: N/A
Efficacy: 142.9 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

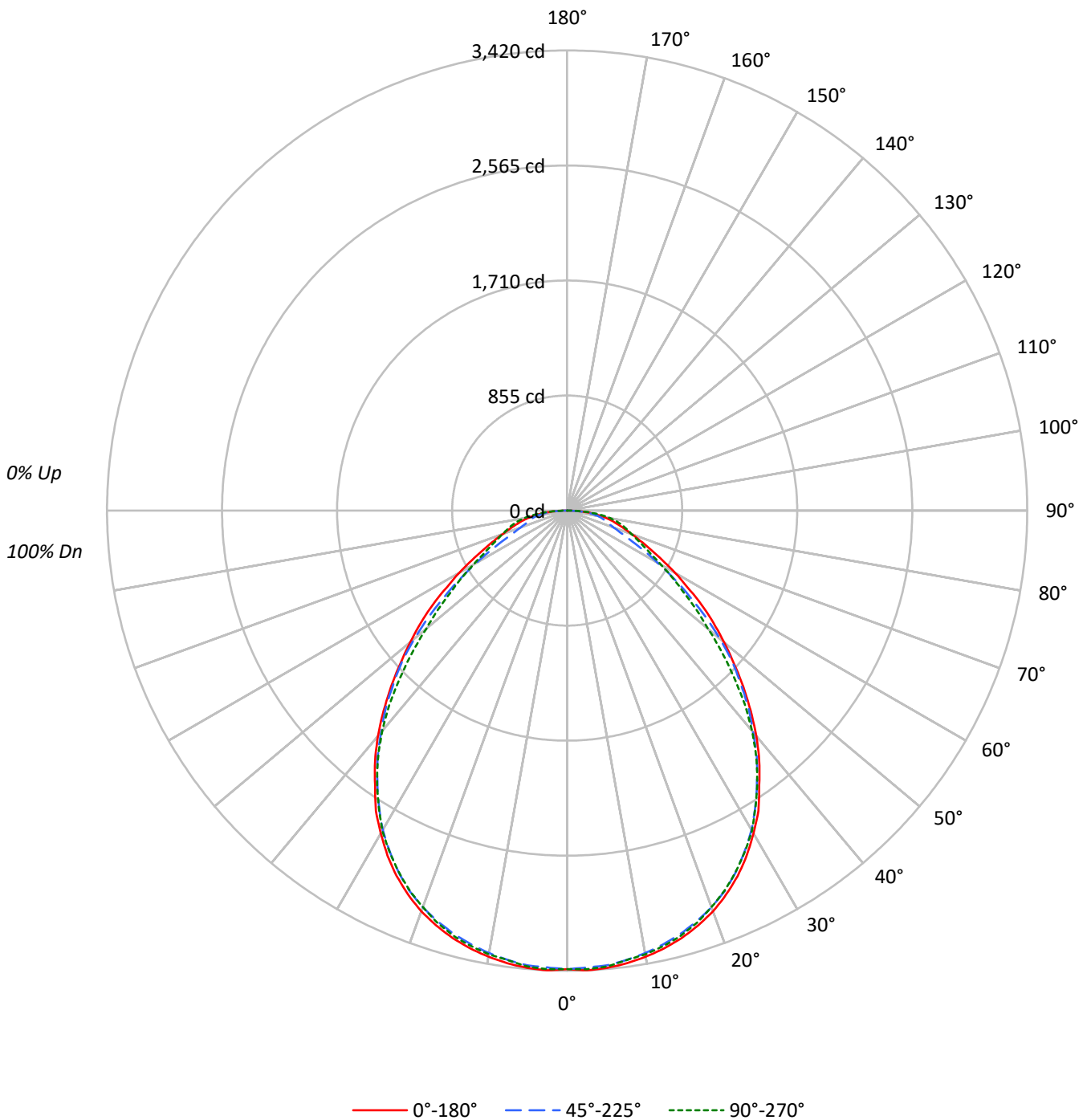
Input Watts (W): 53.754
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4585	4585	4585
5°	4608	4582	4593
10°	4599	4562	4575
15°	4582	4536	4555
20°	4538	4492	4491
25°	4450	4402	4399
30°	4303	4259	4268
35°	4087	4040	4046
40°	3843	3777	3754
45°	3522	3475	3337
50°	3184	3097	2864
55°	2859	2603	2469
60°	2503	2095	2171
65°	2184	1647	1998
70°	1998	1438	1998
75°	1999	1530	2202
80°	2170	1802	2510
85°	2382	2033	2692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.7	4.2
10°-20°	921.0	12.0
20°-30°	1365.6	17.8
30°-40°	1540.6	20.1
40°-50°	1395.3	18.2
50°-60°	1006.7	13.1
60°-70°	601.1	7.8
70°-80°	371.5	4.8
80°-90°	156.5	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°	2609.4	34.0
0°-40°	4150.0	54.0
0°-60°	6552.0	85.3
0°-90°	7681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3408	3408	3408	3408	3408	
5°	3412	3407	3392	3389	3401	324
15°	3289	3269	3256	3257	3270	927
25°	2997	2981	2965	2955	2963	1377
35°	2488	2485	2460	2461	2463	1557
45°	1851	1839	1826	1781	1754	1426
55°	1219	1181	1110	1055	1052	1088
65°	686	604	517	587	628	690
75°	384	333	294	367	424	411
85°	154	135	132	172	174	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3408.0	3408.0	3408.0	3408.0	3408.0
2.5°	3419.8	3410.3	3398.5	3405.6	3411.5
5°	3411.5	3406.8	3392.5	3389.0	3400.9
7.5°	3393.7	3381.9	3368.8	3374.7	3370.0
10°	3366.4	3355.8	3339.1	3340.3	3348.6
12.5°	3333.2	3320.2	3302.4	3307.1	3314.2
15°	3289.3	3269.1	3256.1	3257.3	3270.3
17.5°	3233.5	3218.1	3201.5	3205.1	3211.0
20°	3169.5	3161.2	3137.4	3130.3	3136.2
22.5°	3088.8	3073.3	3060.3	3056.7	3057.9
25°	2997.4	2980.8	2965.4	2954.7	2963.0
27.5°	2890.6	2876.4	2856.2	2852.6	2859.8
30°	2769.6	2758.9	2741.1	2736.3	2747.0
32.5°	2646.2	2628.4	2603.4	2603.4	2605.8
35°	2488.3	2484.8	2459.9	2461.0	2463.4
37.5°	2345.9	2329.3	2315.1	2300.9	2308.0
40°	2188.1	2169.1	2150.2	2140.7	2137.1
42.5°	2018.4	2004.2	1995.9	1961.5	1953.2
45°	1851.1	1839.3	1826.2	1781.1	1753.8
47.5°	1680.3	1677.9	1667.2	1587.7	1560.4
50°	1521.2	1517.7	1479.7	1395.5	1368.2
52.5°	1370.5	1346.8	1297.0	1213.9	1209.2
55°	1218.7	1180.7	1109.5	1054.9	1052.5
57.5°	1058.5	1013.4	941.0	911.3	926.7
60°	930.3	861.5	778.4	782.0	806.9
62.5°	797.4	720.3	638.4	674.0	703.7
65°	685.9	604.0	517.4	587.4	627.7
67.5°	588.6	512.6	429.6	523.3	562.5
70°	507.9	446.2	365.5	464.0	507.9
72.5°	443.8	386.8	323.9	416.5	467.5
75°	384.5	333.4	294.3	366.7	423.6
77.5°	333.4	283.6	265.8	323.9	379.7
80°	280.0	235.0	232.6	282.4	323.9
82.5°	218.3	187.5	187.5	236.1	261.1
85°	154.3	135.3	131.7	172.1	174.4
87.5°	79.5	75.9	68.8	90.2	90.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)