

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: P293071

Luminaire Tested: **24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6146.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

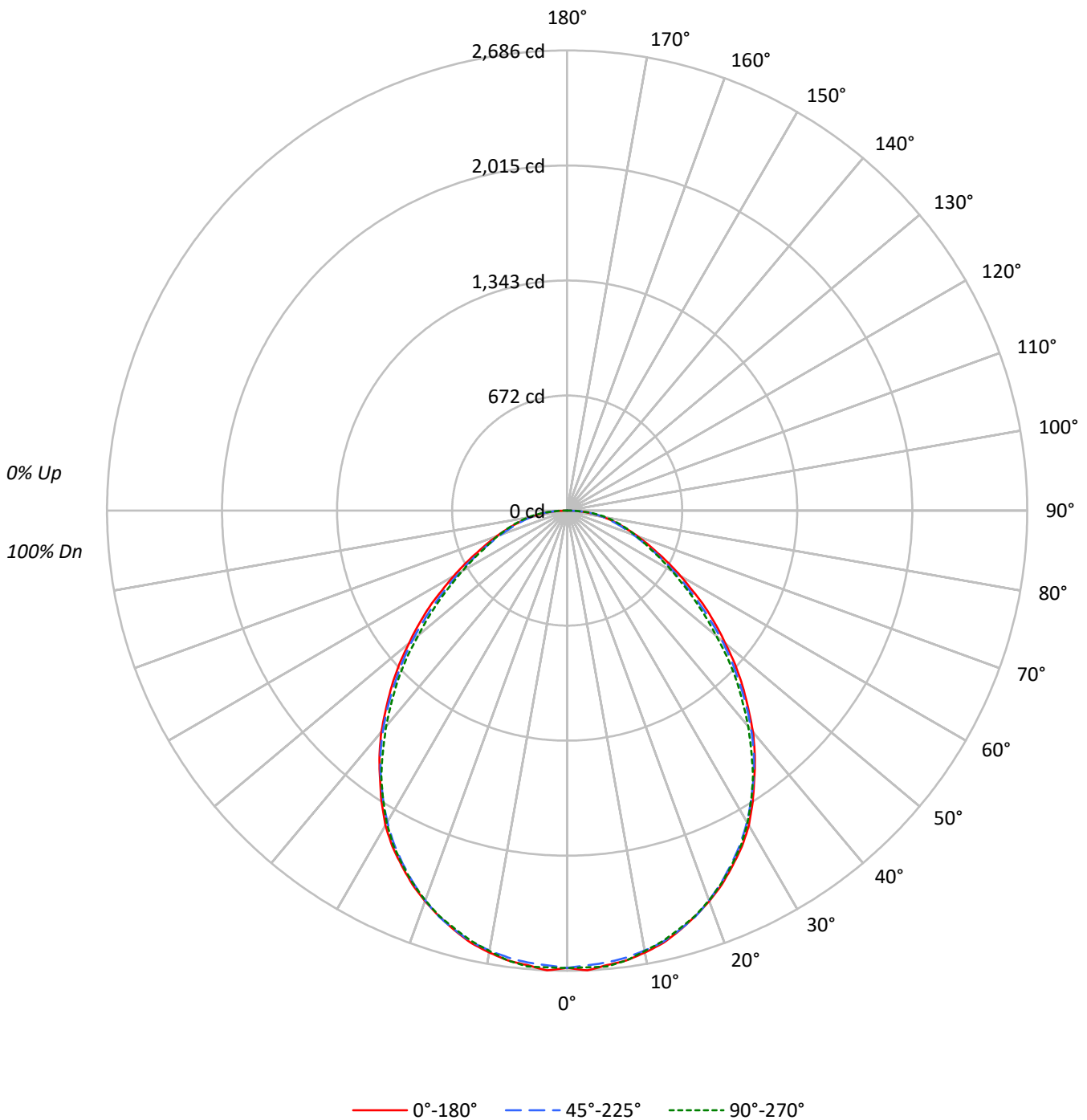
Input Watts (W): 53.543355
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293071

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P293071

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3592	3592	3592
5°	3597	3577	3607
10°	3578	3563	3566
15°	3533	3530	3521
20°	3474	3467	3467
25°	3393	3374	3382
30°	3295	3261	3271
35°	3130	3115	3107
40°	2963	2937	2886
45°	2755	2706	2653
50°	2523	2468	2375
55°	2305	2201	2126
60°	2053	1955	1904
65°	1848	1752	1727
70°	1716	1611	1675
75°	1641	1568	1700
80°	1640	1640	1817
85°	1703	1723	1917



TEST NUMBER: P293071

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.1	4.1
10°-20°	713.5	11.6
20°-30°	1047.1	17.0
30°-40°	1183.9	19.3
40°-50°	1094.1	17.8
50°-60°	843.0	13.7
60°-70°	558.2	9.1
70°-80°	332.3	5.4
80°-90°	121.7	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°	2012.8	32.7
0°-40°	3196.6	52.0
0°-60°	5133.8	83.5
0°-90°	6146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6146.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2670	2670	2670	2670	2670	
5°	2663	2663	2648	2649	2671	253
15°	2537	2532	2534	2533	2528	715
25°	2286	2279	2273	2270	2278	1052
35°	1905	1903	1896	1888	1891	1192
45°	1448	1438	1422	1397	1394	1115
55°	982	962	938	913	906	876
65°	581	572	550	545	543	582
75°	316	308	302	316	327	337
85°	110	104	112	123	124	117
90°	0	0	0	0	0	



TEST NUMBER: P293071

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.7	2669.7	2669.7	2669.7	2669.7
2.5°	2686.2	2672.2	2657.0	2657.0	2668.4
5°	2663.3	2663.3	2648.1	2649.4	2670.9
7.5°	2649.4	2641.8	2631.6	2631.6	2648.1
10°	2619.0	2612.6	2607.6	2605.0	2610.1
12.5°	2586.0	2575.9	2579.7	2575.9	2574.6
15°	2536.6	2531.5	2534.0	2532.8	2527.7
17.5°	2483.3	2480.8	2485.9	2477.0	2480.8
20°	2426.3	2418.7	2421.2	2416.1	2421.2
22.5°	2361.6	2356.6	2350.2	2343.9	2354.0
25°	2285.6	2279.2	2272.9	2270.4	2278.0
27.5°	2209.5	2199.4	2190.5	2188.0	2199.4
30°	2120.8	2109.4	2099.2	2096.7	2105.6
32.5°	2015.6	2013.0	2000.4	1995.3	1999.1
35°	1905.3	1902.7	1896.4	1887.5	1891.3
37.5°	1800.1	1798.8	1789.9	1774.7	1764.6
40°	1687.2	1678.4	1672.0	1650.5	1642.9
42.5°	1563.0	1560.5	1549.1	1525.0	1516.1
45°	1447.7	1437.5	1422.3	1397.0	1394.4
47.5°	1328.5	1314.6	1300.6	1268.9	1267.7
50°	1205.5	1195.4	1178.9	1147.2	1134.5
52.5°	1091.4	1077.5	1054.7	1024.3	1017.9
55°	982.4	962.1	938.1	912.7	906.4
57.5°	865.8	856.9	827.8	807.5	799.9
60°	763.1	755.5	726.4	707.4	707.4
62.5°	670.6	659.2	633.8	621.1	621.1
65°	580.6	571.7	550.2	545.1	542.6
67.5°	503.3	491.8	476.6	475.4	481.7
70°	436.1	422.1	409.5	422.1	425.9
72.5°	372.7	363.8	352.4	368.9	376.5
75°	315.6	308.0	301.7	315.6	327.1
77.5°	263.7	256.1	256.1	271.3	281.4
80°	211.7	206.6	211.7	224.4	234.5
82.5°	162.3	158.5	164.8	177.5	183.8
85°	110.3	103.9	111.6	123.0	124.2
87.5°	52.0	50.7	55.8	63.4	62.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)