

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: P293146

Luminaire Tested: **24GR-LD5-72-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293146
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-L92765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6386.0 lumens
Efficiency: N/A
Efficacy: 120.0 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

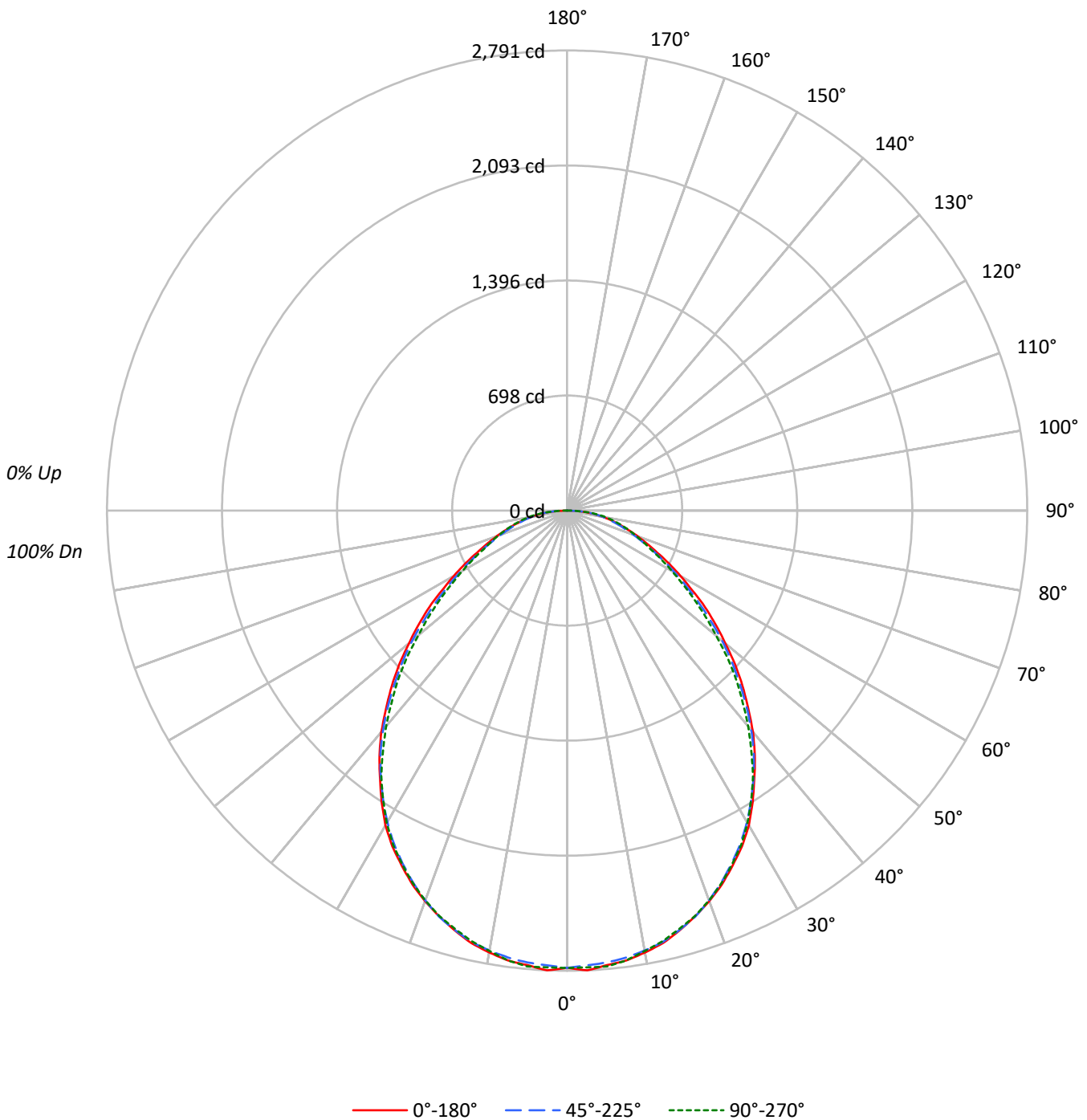
Input Watts (W): 53.196
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3732	3732	3732
5°	3738	3716	3748
10°	3718	3702	3705
15°	3671	3668	3658
20°	3610	3602	3602
25°	3526	3506	3514
30°	3424	3389	3399
35°	3252	3237	3228
40°	3079	3051	2998
45°	2862	2812	2757
50°	2622	2564	2468
55°	2395	2286	2209
60°	2134	2031	1978
65°	1921	1820	1795
70°	1782	1674	1741
75°	1705	1630	1766
80°	1705	1705	1888
85°	1769	1789	1993



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.0	4.1
10°-20°	741.3	11.6
20°-30°	1088.0	17.0
30°-40°	1230.1	19.3
40°-50°	1136.9	17.8
50°-60°	875.9	13.7
60°-70°	580.0	9.1
70°-80°	345.3	5.4
80°-90°	126.5	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°	2091.4	32.7
0°-40°	3321.5	52.0
0°-60°	5334.2	83.5
0°-90°	6386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2774	2774	2774	2774	2774	
5°	2767	2767	2752	2753	2775	263
15°	2636	2630	2633	2632	2626	743
25°	2375	2368	2362	2359	2367	1093
35°	1980	1977	1970	1961	1965	1239
45°	1504	1494	1478	1452	1449	1159
55°	1021	1000	975	948	942	911
65°	603	594	572	566	564	605
75°	328	320	314	328	340	350
85°	115	108	116	128	129	122
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2773.9	2773.9	2773.9	2773.9	2773.9
2.5°	2791.1	2776.6	2760.8	2760.8	2772.6
5°	2767.3	2767.3	2751.5	2752.9	2775.2
7.5°	2752.9	2744.9	2734.4	2734.4	2751.5
10°	2721.2	2714.7	2709.4	2706.8	2712.0
12.5°	2687.0	2676.5	2680.4	2676.5	2675.1
15°	2635.6	2630.4	2633.0	2631.7	2626.4
17.5°	2580.3	2577.7	2582.9	2573.7	2577.7
20°	2521.0	2513.1	2515.8	2510.5	2515.8
22.5°	2453.9	2448.6	2442.0	2435.4	2446.0
25°	2374.8	2368.2	2361.7	2359.0	2366.9
27.5°	2295.8	2285.3	2276.0	2273.4	2285.3
30°	2203.6	2191.7	2181.2	2178.6	2187.8
32.5°	2094.3	2091.6	2078.5	2073.2	2077.2
35°	1979.7	1977.0	1970.5	1961.2	1965.2
37.5°	1870.4	1869.0	1859.8	1844.0	1833.5
40°	1753.1	1743.9	1737.3	1714.9	1707.0
42.5°	1624.1	1621.4	1609.6	1584.5	1575.3
45°	1504.2	1493.7	1477.8	1451.5	1448.9
47.5°	1380.4	1365.9	1351.4	1318.5	1317.2
50°	1252.6	1242.1	1225.0	1192.0	1178.9
52.5°	1134.1	1119.6	1095.9	1064.3	1057.7
55°	1020.8	999.7	974.7	948.4	941.8
57.5°	899.6	890.4	860.1	839.0	831.1
60°	792.9	785.0	754.7	735.0	735.0
62.5°	696.8	684.9	658.6	645.4	645.4
65°	603.3	594.0	571.6	566.4	563.7
67.5°	522.9	511.1	495.3	493.9	500.5
70°	453.1	438.6	425.4	438.6	442.6
72.5°	387.2	378.0	366.2	383.3	391.2
75°	328.0	320.1	313.5	328.0	339.8
77.5°	274.0	266.1	266.1	281.9	292.4
80°	220.0	214.7	220.0	233.1	243.7
82.5°	168.6	164.6	171.2	184.4	191.0
85°	114.6	108.0	115.9	127.8	129.1
87.5°	54.0	52.7	58.0	65.9	64.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)