

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: P293070

Luminaire Tested: **24GR-LD5-72-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293070
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-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5625.0 lumens
Efficiency: N/A
Efficacy: 104.6 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

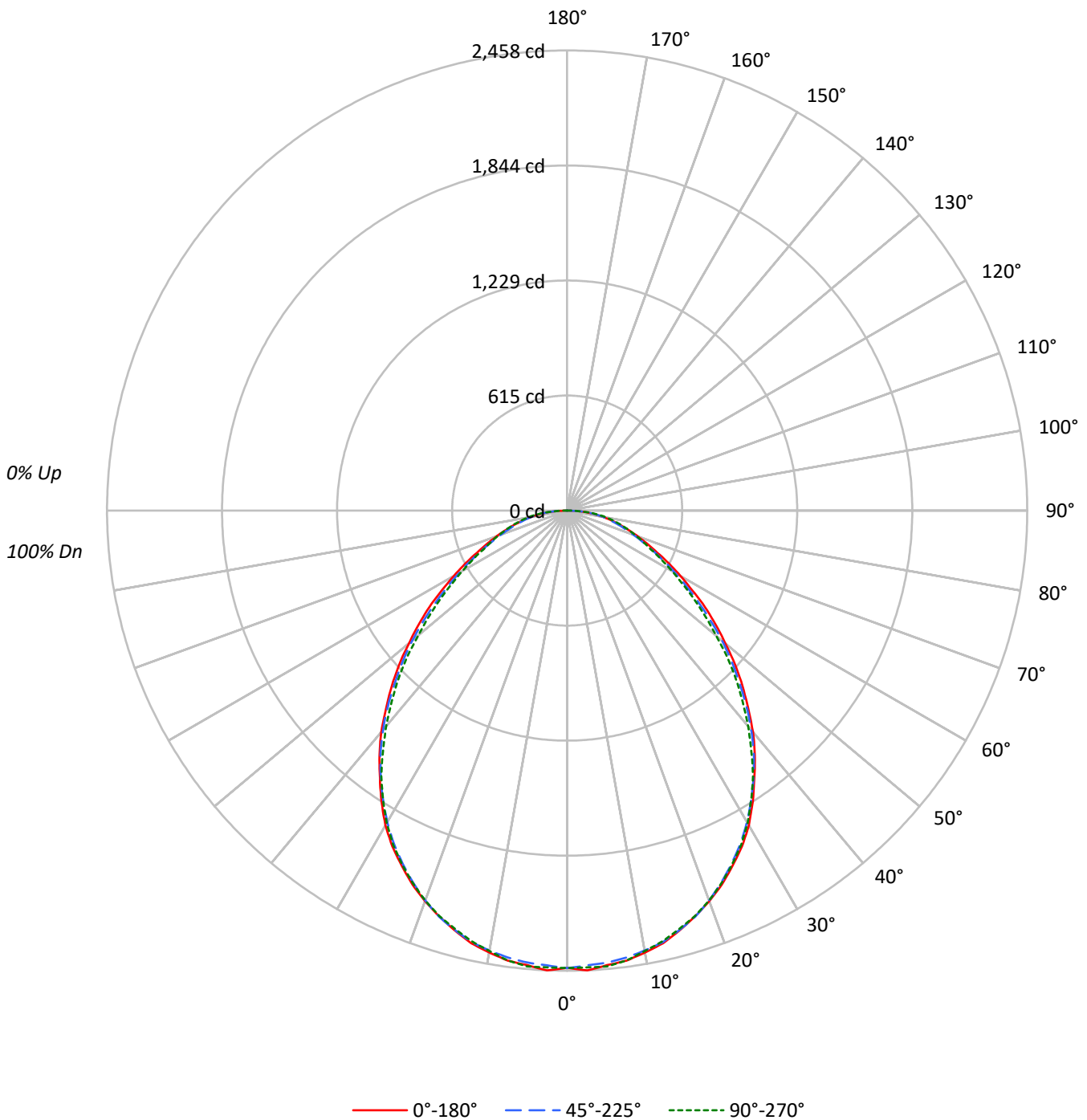
Input Watts (W): 53.753535
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3288	3288	3288
5°	3292	3273	3302
10°	3275	3261	3264
15°	3234	3231	3222
20°	3180	3173	3173
25°	3105	3088	3095
30°	3016	2985	2994
35°	2864	2851	2843
40°	2712	2688	2641
45°	2521	2477	2428
50°	2309	2259	2174
55°	2109	2014	1946
60°	1879	1789	1742
65°	1692	1603	1581
70°	1570	1474	1533
75°	1502	1435	1556
80°	1502	1502	1663
85°	1558	1576	1755



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.8	4.1
10°-20°	653.0	11.6
20°-30°	958.4	17.0
30°-40°	1083.5	19.3
40°-50°	1001.4	17.8
50°-60°	771.5	13.7
60°-70°	510.9	9.1
70°-80°	304.1	5.4
80°-90°	111.4	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°	1842.1	32.7
0°-40°	2925.6	52.0
0°-60°	4698.6	83.5
0°-90°	5625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2443	2443	2443	2443	2443	
5°	2438	2438	2424	2425	2444	232
15°	2322	2317	2319	2318	2313	654
25°	2092	2086	2080	2078	2085	963
35°	1744	1741	1736	1728	1731	1091
45°	1325	1316	1302	1278	1276	1021
55°	899	881	858	835	830	802
65°	531	523	504	499	497	533
75°	289	282	276	289	299	308
85°	101	95	102	112	114	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2443.4	2443.4	2443.4	2443.4	2443.4
2.5°	2458.4	2445.7	2431.8	2431.8	2442.2
5°	2437.6	2437.6	2423.6	2424.8	2444.5
7.5°	2424.8	2417.8	2408.6	2408.6	2423.6
10°	2397.0	2391.2	2386.5	2384.2	2388.8
12.5°	2366.8	2357.5	2361.0	2357.5	2356.4
15°	2321.5	2316.9	2319.2	2318.1	2313.4
17.5°	2272.8	2270.5	2275.1	2267.0	2270.5
20°	2220.6	2213.6	2216.0	2211.3	2216.0
22.5°	2161.4	2156.8	2151.0	2145.2	2154.5
25°	2091.8	2086.0	2080.2	2077.9	2084.9
27.5°	2022.2	2012.9	2004.8	2002.5	2012.9
30°	1941.0	1930.6	1921.3	1919.0	1927.1
32.5°	1844.7	1842.4	1830.8	1826.1	1829.6
35°	1743.8	1741.4	1735.6	1727.5	1731.0
37.5°	1647.5	1646.3	1638.2	1624.3	1615.0
40°	1544.2	1536.1	1530.3	1510.6	1503.6
42.5°	1430.5	1428.2	1417.8	1395.7	1387.6
45°	1324.9	1315.7	1301.7	1278.5	1276.2
47.5°	1215.9	1203.1	1190.4	1161.4	1160.2
50°	1103.3	1094.1	1079.0	1050.0	1038.4
52.5°	998.9	986.2	965.3	937.4	931.6
55°	899.1	880.6	858.5	835.3	829.5
57.5°	792.4	784.3	757.6	739.0	732.1
60°	698.4	691.5	664.8	647.4	647.4
62.5°	613.7	603.3	580.1	568.5	568.5
65°	531.4	523.2	503.5	498.9	496.6
67.5°	460.6	450.2	436.2	435.1	440.9
70°	399.1	386.3	374.7	386.3	389.8
72.5°	341.1	333.0	322.5	337.6	344.6
75°	288.9	281.9	276.1	288.9	299.3
77.5°	241.3	234.4	234.4	248.3	257.6
80°	193.8	189.1	193.8	205.4	214.6
82.5°	148.5	145.0	150.8	162.4	168.2
85°	100.9	95.1	102.1	112.5	113.7
87.5°	47.6	46.4	51.0	58.0	56.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)