

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: P293434

Luminaire Tested: **24GR-LD5-48-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293434  
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-LD5-48-A-UNV-L83050-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4906.0 lumens  
Efficiency: N/A  
Efficacy: 149.4 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

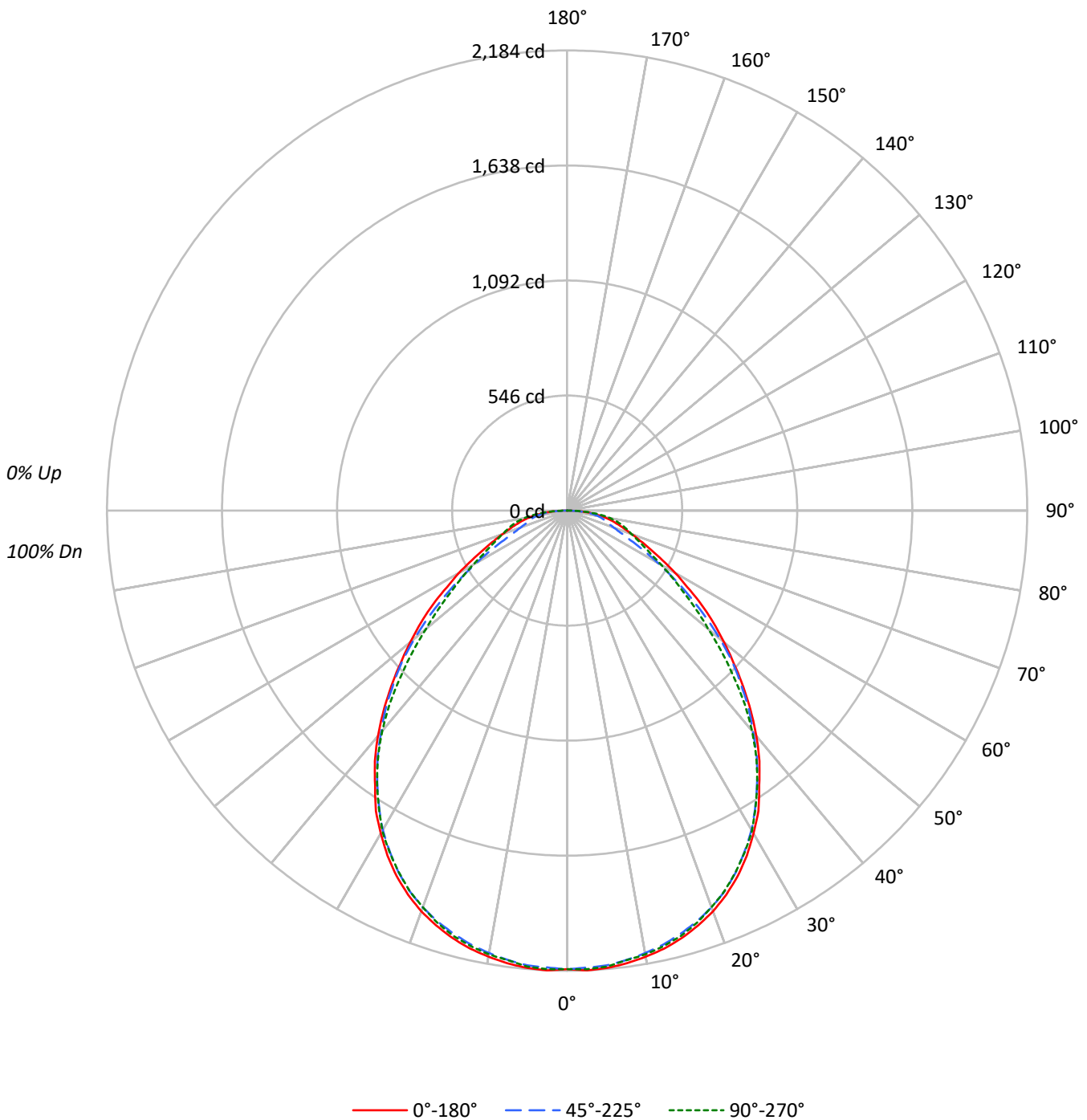
Input Watts (W): 32.829  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2929	2929	2929
5°	2943	2927	2934
10°	2938	2914	2922
15°	2926	2897	2910
20°	2899	2869	2868
25°	2842	2812	2810
30°	2748	2720	2726
35°	2611	2581	2584
40°	2455	2412	2398
45°	2250	2219	2132
50°	2034	1978	1829
55°	1826	1662	1577
60°	1599	1338	1387
65°	1395	1052	1276
70°	1276	918	1276
75°	1277	977	1407
80°	1386	1151	1603
85°	1521	1298	1720



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.1	4.2
10°-20°	588.3	12.0
20°-30°	872.3	17.8
30°-40°	984.0	20.1
40°-50°	891.2	18.2
50°-60°	643.0	13.1
60°-70°	383.9	7.8
70°-80°	237.3	4.8
80°-90°	100.0	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°	1666.7	34.0
0°-40°	2650.7	54.0
0°-60°	4184.9	85.3
0°-90°	4906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2177	2177	2177	2177	2177	
5°	2179	2176	2167	2165	2172	207
15°	2101	2088	2080	2080	2089	592
25°	1914	1904	1894	1887	1892	880
35°	1589	1587	1571	1572	1573	994
45°	1182	1175	1166	1138	1120	911
55°	778	754	709	674	672	695
65°	438	386	330	375	401	441
75°	246	213	188	234	271	262
85°	98	86	84	110	111	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2176.7	2176.7	2176.7	2176.7	2176.7
2.5°	2184.3	2178.3	2170.7	2175.2	2179.0
5°	2179.0	2176.0	2166.9	2164.6	2172.2
7.5°	2167.6	2160.1	2151.7	2155.5	2152.5
10°	2150.2	2143.4	2132.8	2133.5	2138.8
12.5°	2129.0	2120.6	2109.3	2112.3	2116.9
15°	2100.9	2088.1	2079.7	2080.5	2088.8
17.5°	2065.3	2055.5	2044.9	2047.1	2050.9
20°	2024.4	2019.1	2003.9	1999.4	2003.2
22.5°	1972.9	1963.0	1954.7	1952.4	1953.2
25°	1914.5	1903.9	1894.0	1887.2	1892.5
27.5°	1846.3	1837.2	1824.3	1822.0	1826.6
30°	1769.0	1762.2	1750.8	1747.8	1754.6
32.5°	1690.2	1678.8	1662.9	1662.9	1664.4
35°	1589.4	1587.1	1571.2	1571.9	1573.4
37.5°	1498.4	1487.8	1478.7	1469.6	1474.1
40°	1397.6	1385.5	1373.3	1367.3	1365.0
42.5°	1289.2	1280.1	1274.8	1252.8	1247.5
45°	1182.3	1174.8	1166.4	1137.6	1120.2
47.5°	1073.2	1071.7	1064.9	1014.1	996.7
50°	971.6	969.4	945.1	891.3	873.9
52.5°	875.4	860.2	828.4	775.3	772.3
55°	778.4	754.1	708.7	673.8	672.3
57.5°	676.1	647.3	601.0	582.1	591.9
60°	594.2	550.2	497.2	499.5	515.4
62.5°	509.3	460.1	407.8	430.5	449.4
65°	438.1	385.8	330.5	375.2	400.9
67.5°	375.9	327.4	274.4	334.2	359.3
70°	324.4	285.0	233.4	296.3	324.4
72.5°	283.5	247.1	206.9	266.0	298.6
75°	245.6	213.0	188.0	234.2	270.6
77.5°	213.0	181.1	169.8	206.9	242.5
80°	178.9	150.1	148.6	180.4	206.9
82.5°	139.5	119.8	119.8	150.8	166.7
85°	98.5	86.4	84.1	109.9	111.4
87.5°	50.8	48.5	44.0	57.6	57.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)