

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: P293562

Luminaire Tested: **24GR-LD5-48-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293562  
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-L93050-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4582.0 lumens  
Efficiency: N/A  
Efficacy: 133.9 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

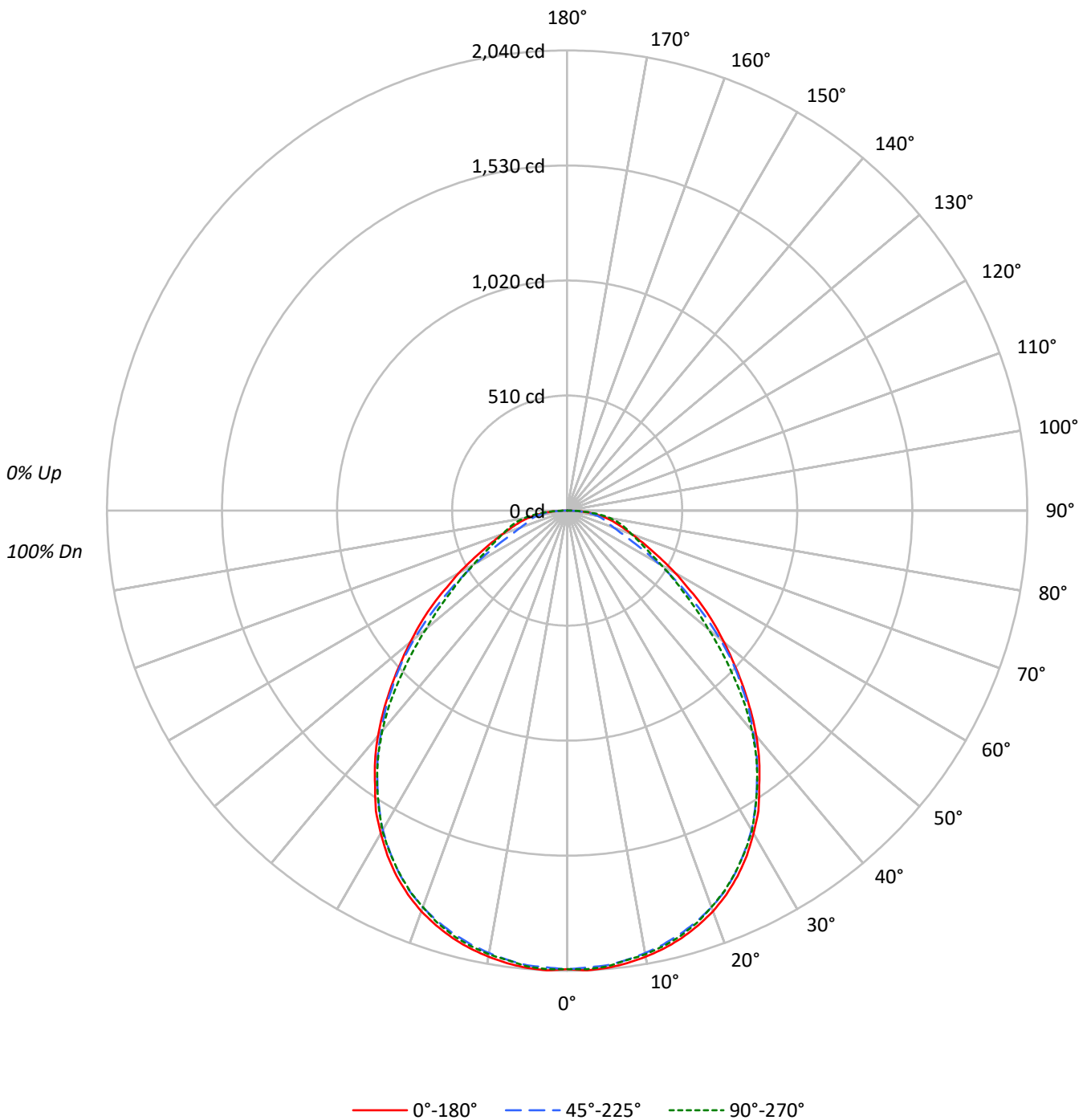
Input Watts (W): 34.207818  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2735	2735	2735
5°	2749	2733	2740
10°	2744	2721	2729
15°	2733	2706	2718
20°	2707	2680	2679
25°	2655	2626	2624
30°	2567	2541	2546
35°	2438	2410	2414
40°	2293	2253	2239
45°	2101	2073	1991
50°	1900	1848	1708
55°	1705	1553	1473
60°	1493	1250	1295
65°	1302	982	1192
70°	1192	858	1192
75°	1192	912	1314
80°	1295	1075	1497
85°	1420	1213	1607



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.5	4.2
10°-20°	549.4	12.0
20°-30°	814.7	17.8
30°-40°	919.0	20.1
40°-50°	832.4	18.2
50°-60°	600.5	13.1
60°-70°	358.6	7.8
70°-80°	221.6	4.8
80°-90°	93.4	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°	1556.6	34.0
0°-40°	2475.6	54.0
0°-60°	3908.5	85.3
0°-90°	4582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4582.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2033	2033	2033	2033	2033	
5°	2035	2032	2024	2022	2029	193
15°	1962	1950	1942	1943	1951	553
25°	1788	1778	1769	1763	1768	821
35°	1484	1482	1467	1468	1470	929
45°	1104	1097	1089	1062	1046	851
55°	727	704	662	629	628	649
65°	409	360	309	350	374	412
75°	229	199	176	219	253	245
85°	92	81	79	103	104	96
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2033.0	2033.0	2033.0	2033.0	2033.0
2.5°	2040.1	2034.4	2027.3	2031.6	2035.1
5°	2035.1	2032.3	2023.8	2021.7	2028.7
7.5°	2024.5	2017.4	2009.6	2013.2	2010.3
10°	2008.2	2001.8	1991.9	1992.6	1997.6
12.5°	1988.4	1980.6	1970.0	1972.8	1977.1
15°	1962.2	1950.2	1942.4	1943.1	1950.9
17.5°	1928.9	1919.7	1909.8	1911.9	1915.5
20°	1890.7	1885.7	1871.6	1867.3	1870.9
22.5°	1842.6	1833.4	1825.6	1823.5	1824.2
25°	1788.1	1778.1	1768.9	1762.6	1767.5
27.5°	1724.4	1715.9	1703.8	1701.7	1705.9
30°	1652.2	1645.8	1635.2	1632.3	1638.7
32.5°	1578.5	1567.9	1553.0	1553.0	1554.5
35°	1484.4	1482.3	1467.4	1468.1	1469.5
37.5°	1399.4	1389.5	1381.0	1372.5	1376.8
40°	1305.3	1294.0	1282.6	1277.0	1274.9
42.5°	1204.1	1195.6	1190.6	1170.1	1165.1
45°	1104.3	1097.2	1089.4	1062.5	1046.2
47.5°	1002.3	1000.9	994.5	947.1	930.8
50°	907.5	905.4	882.7	832.4	816.2
52.5°	817.6	803.4	773.7	724.1	721.3
55°	727.0	704.3	661.9	629.3	627.9
57.5°	631.4	604.5	561.3	543.6	552.8
60°	555.0	513.9	464.4	466.5	481.3
62.5°	475.7	429.7	380.8	402.1	419.8
65°	409.1	360.3	308.6	350.4	374.5
67.5°	351.1	305.8	256.2	312.2	335.5
70°	303.0	266.2	218.0	276.8	303.0
72.5°	264.7	230.8	193.2	248.5	278.9
75°	229.3	198.9	175.5	218.7	252.7
77.5°	198.9	169.2	158.6	193.2	226.5
80°	167.1	140.2	138.7	168.5	193.2
82.5°	130.2	111.8	111.8	140.9	155.7
85°	92.0	80.7	78.6	102.6	104.1
87.5°	47.4	45.3	41.1	53.8	53.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)