

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: P214456

Luminaire Tested: **24GRLD4835R**

Issue Date: 3/3/2020



**Test Information**

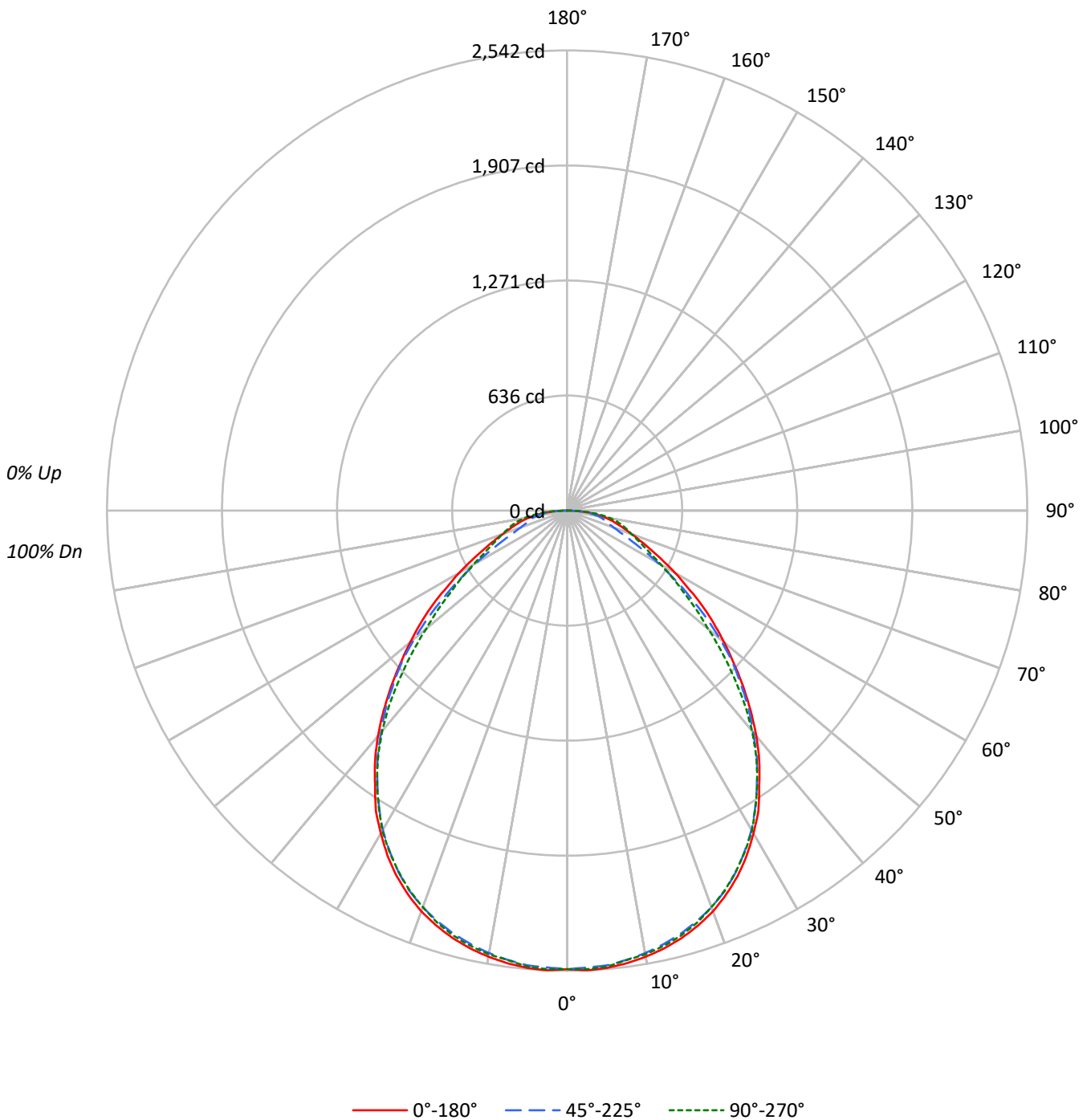
Test Method: LM-79-08  
Report Number: P214456  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GRLD4835R  
Description: METALUX GR 2X4 LED TROFFER WITH A LENS  
Light Source: (168) 3500K CCT, 85 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5709.0 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45  
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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3880	3880	3880
5°	3899	3877	3886
10°	3891	3860	3871
15°	3877	3837	3854
20°	3840	3801	3799
25°	3765	3725	3722
30°	3641	3603	3611
35°	3458	3418	3424
40°	3252	3195	3176
45°	2980	2940	2824
50°	2694	2621	2423
55°	2419	2202	2089
60°	2118	1772	1837
65°	1848	1393	1691
70°	1691	1216	1691
75°	1691	1294	1863
80°	1835	1525	2124
85°	2016	1720	2278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.9	4.2
10°-20°	684.5	12.0
20°-30°	1015.0	17.8
30°-40°	1145.1	20.1
40°-50°	1037.1	18.2
50°-60°	748.2	13.1
60°-70°	446.7	7.8
70°-80°	276.1	4.8
80°-90°	116.3	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°	1939.4	34.0
0°-40°	3084.5	54.0
0°-60°	4869.8	85.3
0°-90°	5709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5709.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2533	2533	2533	2533	2533	
5°	2536	2532	2522	2519	2528	241
15°	2445	2430	2420	2421	2431	689
25°	2228	2216	2204	2196	2202	1023
35°	1850	1847	1828	1829	1831	1157
45°	1376	1367	1357	1324	1304	1060
55°	906	878	825	784	782	809
65°	510	449	384	437	467	513
75°	286	248	219	272	315	305
85°	115	100	98	128	130	120
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2533.0	2533.0	2533.0	2533.0	2533.0
2.5°	2541.8	2534.8	2526.0	2531.3	2535.7
5°	2535.7	2532.1	2521.6	2518.9	2527.7
7.5°	2522.4	2513.6	2503.9	2508.3	2504.8
10°	2502.1	2494.2	2481.9	2482.7	2488.9
12.5°	2477.5	2467.8	2454.5	2458.0	2463.3
15°	2444.8	2429.8	2420.1	2421.0	2430.7
17.5°	2403.4	2391.9	2379.6	2382.2	2386.6
20°	2355.7	2349.6	2331.9	2326.6	2331.0
22.5°	2295.8	2284.3	2274.6	2272.0	2272.8
25°	2227.9	2215.5	2204.0	2196.1	2202.3
27.5°	2148.5	2137.9	2122.9	2120.3	2125.5
30°	2058.5	2050.6	2037.4	2033.8	2041.8
32.5°	1966.8	1953.6	1935.0	1935.0	1936.8
35°	1849.5	1846.8	1828.3	1829.2	1831.0
37.5°	1743.7	1731.3	1720.7	1710.1	1715.4
40°	1626.4	1612.2	1598.1	1591.1	1588.4
42.5°	1500.2	1489.6	1483.5	1457.9	1451.7
45°	1375.9	1367.1	1357.4	1323.8	1303.6
47.5°	1248.9	1247.1	1239.2	1180.1	1159.8
50°	1130.7	1128.0	1099.8	1037.2	1016.9
52.5°	1018.7	1001.0	964.0	902.3	898.7
55°	905.8	877.6	824.6	784.1	782.3
57.5°	786.7	753.2	699.4	677.4	688.8
60°	691.5	640.3	578.6	581.2	599.7
62.5°	592.7	535.4	474.5	501.0	523.0
65°	509.8	448.9	384.5	436.6	466.6
67.5°	437.5	381.0	319.3	388.9	418.1
70°	377.5	331.6	271.6	344.9	377.5
72.5°	329.9	287.5	240.8	309.6	347.5
75°	285.8	247.8	218.7	272.5	314.9
77.5°	247.8	210.8	197.6	240.8	282.2
80°	208.1	174.6	172.9	209.9	240.8
82.5°	162.3	139.4	139.4	175.5	194.0
85°	114.7	100.5	97.9	127.9	129.6
87.5°	59.1	56.4	51.2	67.0	67.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)