

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: P214459

Luminaire Tested: **24GR4840D**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P214459
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: 24GR4840D
Description: METALUX GR 2X4 LED TROFFER WITH A LENS
Light Source: (168) 4000K CCT, 85 CRI LEDs
Ballast/Driver: -

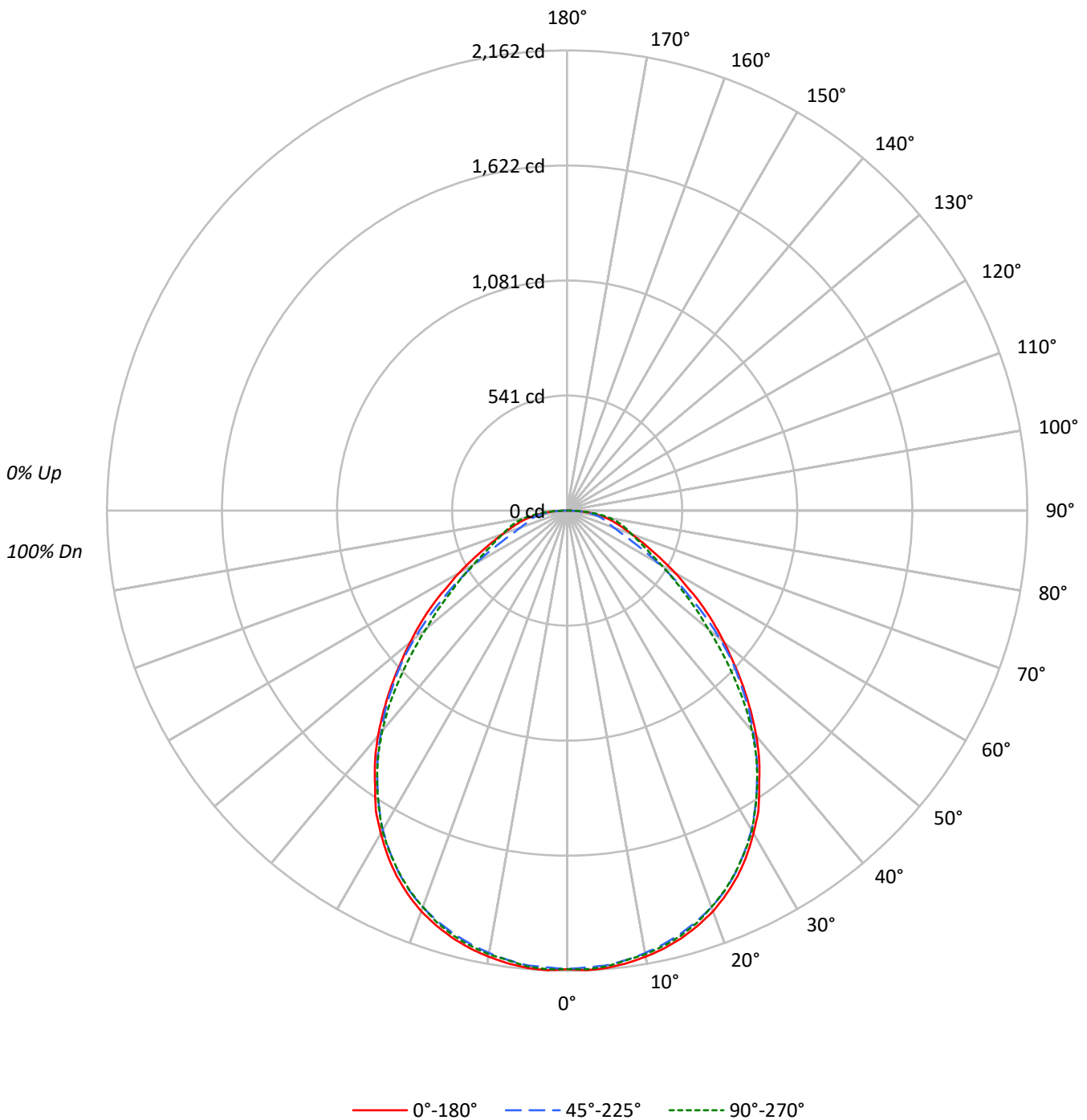
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4855.3 lumens
Efficiency: N/A
Efficacy: 139.1 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): 34.9
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°	3299	3299	3299
5°	3316	3297	3305
10°	3310	3283	3292
15°	3297	3264	3278
20°	3266	3232	3231
25°	3202	3168	3165
30°	3096	3064	3071
35°	2941	2907	2912
40°	2765	2717	2701
45°	2534	2500	2401
50°	2291	2229	2061
55°	2057	1873	1777
60°	1801	1507	1563
65°	1571	1185	1438
70°	1437	1034	1437
75°	1438	1101	1585
80°	1561	1297	1806
85°	1713	1464	1938



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.0	4.2
10°-20°	582.2	12.0
20°-30°	863.2	17.8
30°-40°	973.8	20.1
40°-50°	882.0	18.2
50°-60°	636.3	13.1
60°-70°	379.9	7.8
70°-80°	234.8	4.8
80°-90°	98.9	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°	1649.4	34.0
0°-40°	2623.3	54.0
0°-60°	4141.6	85.3
0°-90°	4855.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4855.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2154	2154	2154	2154	2154	
5°	2156	2154	2144	2142	2150	205
15°	2079	2066	2058	2059	2067	586
25°	1895	1884	1874	1868	1873	870
35°	1573	1571	1555	1556	1557	984
45°	1170	1163	1154	1126	1109	902
55°	770	746	701	667	665	688
65°	434	382	327	371	397	436
75°	243	211	186	232	268	260
85°	98	86	83	109	110	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2154.2	2154.2	2154.2	2154.2	2154.2
2.5°	2161.7	2155.7	2148.2	2152.7	2156.5
5°	2156.5	2153.5	2144.5	2142.2	2149.7
7.5°	2145.2	2137.7	2129.5	2133.2	2130.2
10°	2128.0	2121.2	2110.7	2111.5	2116.7
12.5°	2107.0	2098.7	2087.5	2090.5	2095.0
15°	2079.2	2066.5	2058.2	2059.0	2067.2
17.5°	2044.0	2034.2	2023.7	2026.0	2029.7
20°	2003.5	1998.2	1983.2	1978.7	1982.5
22.5°	1952.5	1942.7	1934.4	1932.2	1932.9
25°	1894.7	1884.2	1874.4	1867.7	1872.9
27.5°	1827.2	1818.2	1805.4	1803.2	1807.7
30°	1750.7	1743.9	1732.7	1729.7	1736.4
32.5°	1672.7	1661.4	1645.7	1645.7	1647.2
35°	1572.9	1570.7	1554.9	1555.7	1557.2
37.5°	1482.9	1472.4	1463.4	1454.4	1458.9
40°	1383.1	1371.1	1359.1	1353.1	1350.9
42.5°	1275.9	1266.9	1261.6	1239.9	1234.6
45°	1170.1	1162.6	1154.4	1125.9	1108.6
47.5°	1062.1	1060.6	1053.9	1003.6	986.4
50°	961.6	959.3	935.3	882.1	864.8
52.5°	866.3	851.3	819.8	767.3	764.3
55°	770.3	746.3	701.3	666.8	665.3
57.5°	669.1	640.6	594.8	576.1	585.8
60°	588.1	544.6	492.1	494.3	510.1
62.5°	504.1	455.3	403.5	426.0	444.8
65°	433.5	381.8	327.0	371.3	396.8
67.5°	372.0	324.0	271.5	330.8	355.5
70°	321.0	282.0	231.0	293.3	321.0
72.5°	280.5	244.5	204.8	263.3	295.5
75°	243.0	210.8	186.0	231.8	267.8
77.5°	210.8	179.3	168.0	204.8	240.0
80°	177.0	148.5	147.0	178.5	204.8
82.5°	138.0	118.5	118.5	149.3	165.0
85°	97.5	85.5	83.3	108.8	110.3
87.5°	50.3	48.0	43.5	57.0	57.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)