

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: P475887

Luminaire Tested: **22GR-LD5-43-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475887  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-F1-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4203.1 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

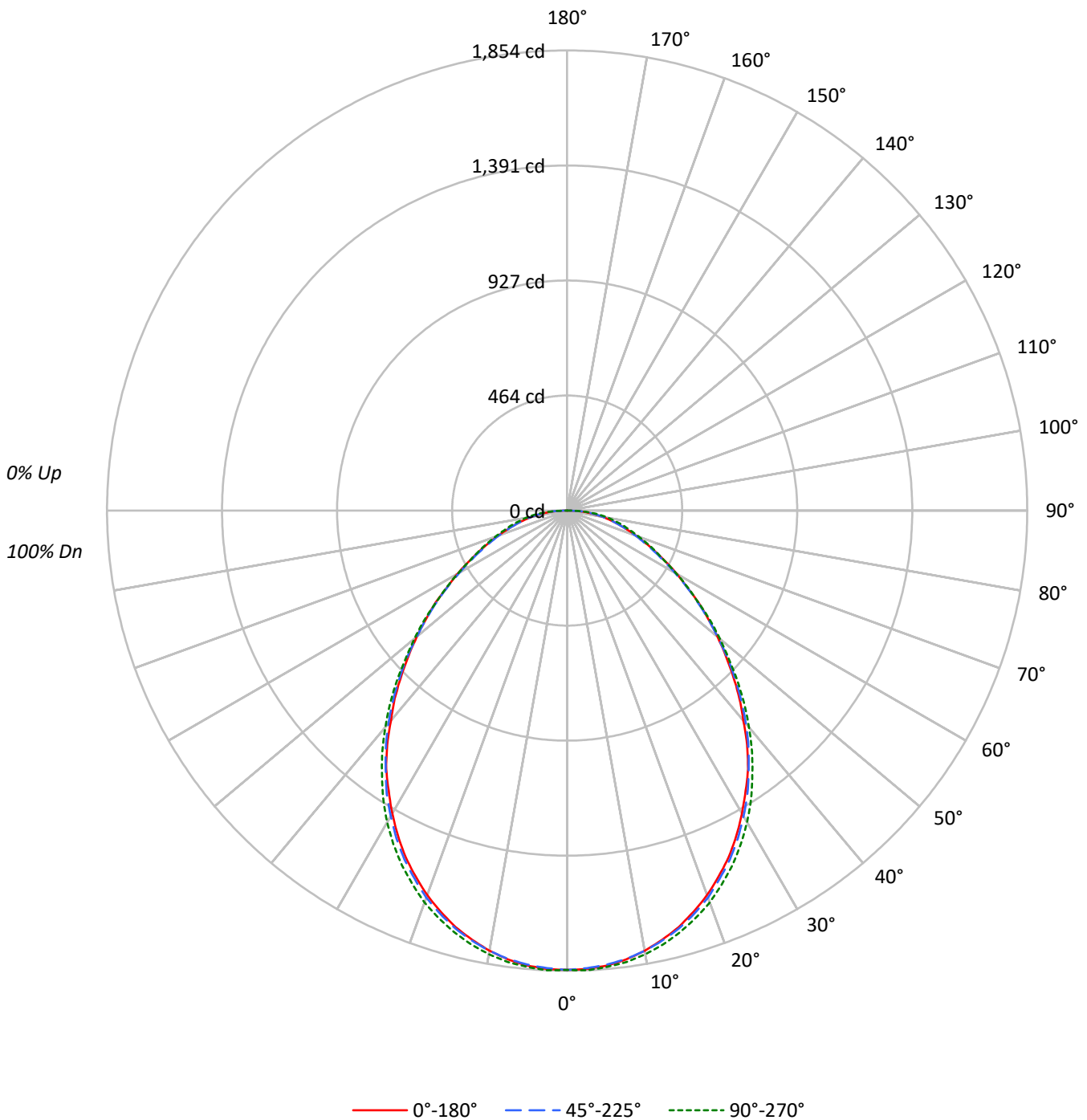
Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	94	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	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	37	33	43	37	32	42	37	32	31					31			
10	55	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°	4980	4980	4980
5°	4970	4961	4984
10°	4921	4921	4960
15°	4839	4854	4899
20°	4721	4751	4812
25°	4574	4605	4679
30°	4379	4417	4506
35°	4175	4187	4274
40°	3879	3935	4004
45°	3602	3636	3690
50°	3310	3310	3362
55°	3035	3002	3019
60°	2747	2700	2738
65°	2506	2449	2528
70°	2315	2301	2413
75°	2230	2211	2433
80°	2252	2252	2582
85°	2353	2464	2955



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.5	4.2
10°-20°	491.2	11.7
20°-30°	714.2	17.0
30°-40°	799.5	19.0
40°-50°	737.9	17.6
50°-60°	575.8	13.7
60°-70°	389.8	9.3
70°-80°	232.7	5.5
80°-90°	87.4	2.1
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°	1380.0	32.8
0°-40°	2179.5	51.9
0°-60°	3493.2	83.1
0°-90°	4203.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1840	1836	1836	1844	1845	174
15°	1737	1737	1742	1753	1758	489
25°	1540	1540	1551	1567	1576	707
35°	1271	1269	1274	1294	1301	791
45°	946	952	955	962	970	730
55°	647	642	640	643	643	577
65°	394	390	385	392	397	392
75°	214	213	213	225	234	228
85°	76	74	80	92	96	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1850.5	1850.5	1850.5	1850.5	1850.5
2.5°	1848.8	1845.2	1845.2	1850.5	1854.1
5°	1839.9	1836.4	1836.4	1843.5	1845.2
7.5°	1824.0	1822.2	1822.2	1829.3	1834.6
10°	1800.9	1799.1	1800.9	1808.0	1815.1
12.5°	1770.8	1770.8	1774.3	1783.2	1790.3
15°	1737.1	1737.1	1742.4	1753.1	1758.4
17.5°	1694.6	1696.3	1703.4	1715.8	1721.2
20°	1648.5	1652.0	1659.1	1669.7	1680.4
22.5°	1595.3	1598.8	1605.9	1621.9	1629.0
25°	1540.4	1540.4	1551.0	1566.9	1575.8
27.5°	1476.5	1478.3	1488.9	1506.7	1515.5
30°	1409.2	1414.5	1421.6	1437.5	1450.0
32.5°	1338.3	1343.6	1352.5	1370.2	1379.0
35°	1270.9	1269.2	1274.5	1294.0	1301.1
37.5°	1191.2	1192.9	1200.0	1214.2	1223.1
40°	1104.3	1113.2	1120.3	1130.9	1139.8
42.5°	1028.1	1033.4	1038.7	1049.4	1056.4
45°	946.5	951.9	955.4	962.5	969.6
47.5°	866.8	868.6	873.9	877.4	882.7
50°	790.6	792.3	790.6	795.9	803.0
52.5°	716.1	714.3	714.3	716.1	726.7
55°	647.0	641.7	639.9	643.4	643.4
57.5°	570.8	569.0	569.0	567.2	576.1
60°	510.5	505.2	501.6	505.2	508.7
62.5°	448.5	443.1	439.6	446.7	446.7
65°	393.5	390.0	384.6	391.7	397.1
67.5°	340.3	336.8	335.0	343.9	351.0
70°	294.2	292.5	292.5	301.3	306.7
72.5°	251.7	249.9	249.9	262.3	267.7
75°	214.5	212.7	212.7	225.1	234.0
77.5°	177.3	175.5	180.8	191.4	200.3
80°	145.3	143.6	145.3	159.5	166.6
82.5°	109.9	109.9	113.4	127.6	134.7
85°	76.2	74.4	79.8	92.2	95.7
87.5°	39.0	40.8	42.5	49.6	49.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)