

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: P475888

Luminaire Tested: **22GR-LD5-50-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475888
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-50-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: 4880.4 lumens
Efficiency: N/A
Efficacy: 132.3 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

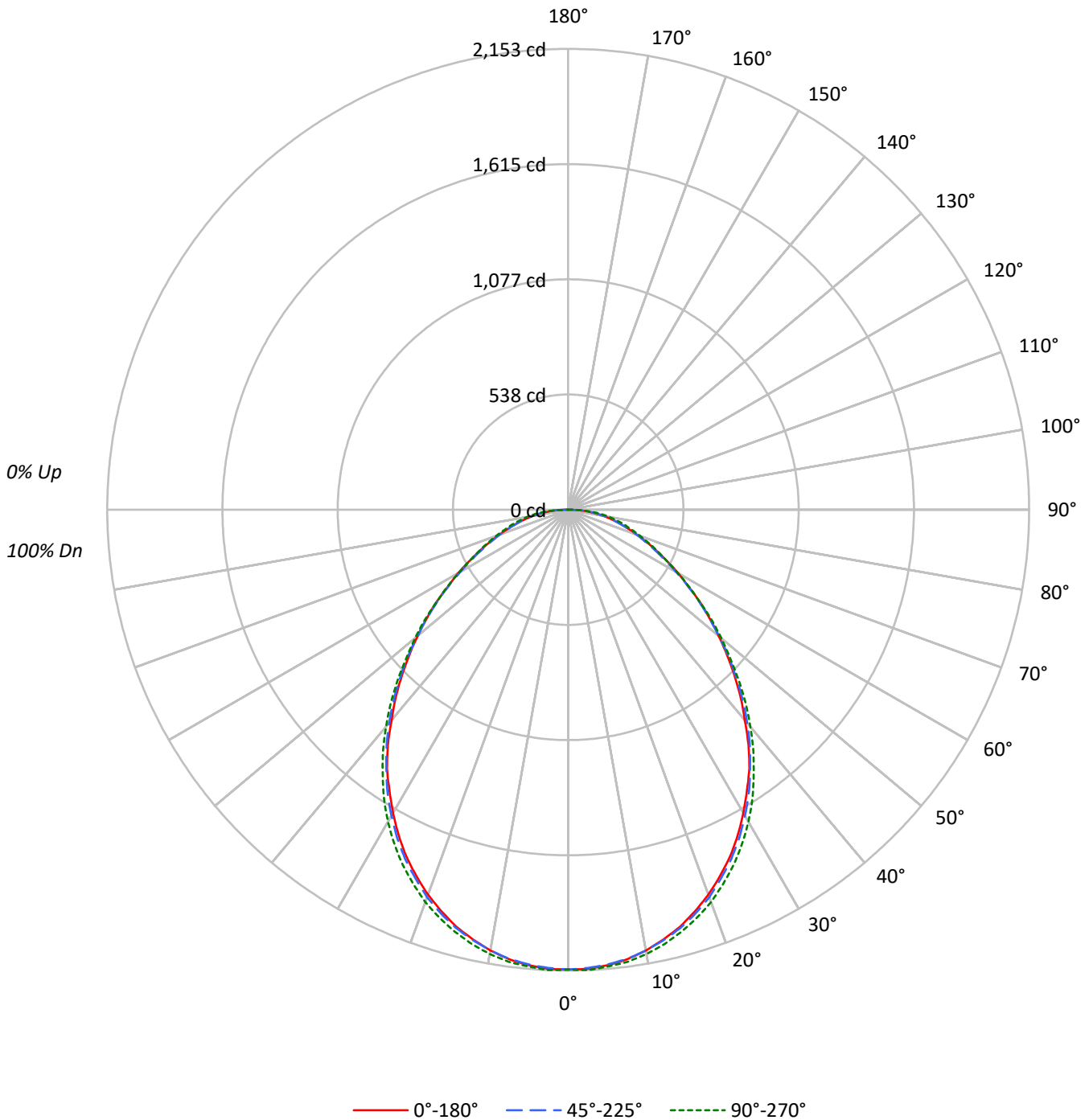
Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5782	5782	5782
5°	5771	5760	5787
10°	5714	5714	5759
15°	5619	5636	5688
20°	5481	5517	5587
25°	5310	5347	5433
30°	5084	5129	5231
35°	4848	4861	4963
40°	4504	4569	4649
45°	4183	4222	4284
50°	3843	3843	3903
55°	3524	3486	3505
60°	3190	3135	3179
65°	2909	2844	2935
70°	2688	2672	2802
75°	2589	2568	2825
80°	2616	2616	2999
85°	2732	2859	3430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	4.2
10°-20°	570.4	11.7
20°-30°	829.3	17.0
30°-40°	928.3	19.0
40°-50°	856.8	17.6
50°-60°	668.6	13.7
60°-70°	452.6	9.3
70°-80°	270.3	5.5
80°-90°	101.5	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°	1602.3	32.8
0°-40°	2530.6	51.9
0°-60°	4056.0	83.1
0°-90°	4880.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4880.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2136	2132	2132	2140	2142	202
15°	2017	2017	2023	2036	2042	567
25°	1788	1788	1801	1819	1830	821
35°	1476	1474	1480	1502	1511	918
45°	1099	1105	1109	1118	1126	848
55°	751	745	743	747	747	670
65°	457	453	447	455	461	455
75°	249	247	247	261	272	264
85°	88	86	93	107	111	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2148.7	2148.7	2148.7	2148.7	2148.7
2.5°	2146.7	2142.5	2142.5	2148.7	2152.8
5°	2136.4	2132.2	2132.2	2140.5	2142.5
7.5°	2117.8	2115.8	2115.8	2124.0	2130.2
10°	2091.1	2089.0	2091.1	2099.3	2107.5
12.5°	2056.1	2056.1	2060.2	2070.5	2078.7
15°	2017.0	2017.0	2023.2	2035.5	2041.7
17.5°	1967.6	1969.7	1977.9	1992.3	1998.5
20°	1914.1	1918.2	1926.4	1938.8	1951.1
22.5°	1852.3	1856.5	1864.7	1883.2	1891.4
25°	1788.5	1788.5	1800.9	1819.4	1829.7
27.5°	1714.4	1716.5	1728.8	1749.4	1759.7
30°	1636.2	1642.4	1650.6	1669.2	1683.6
32.5°	1553.9	1560.1	1570.4	1591.0	1601.2
35°	1475.7	1473.6	1479.8	1502.5	1510.7
37.5°	1383.1	1385.1	1393.4	1409.8	1420.1
40°	1282.2	1292.5	1300.8	1313.1	1323.4
42.5°	1193.7	1199.9	1206.1	1218.4	1226.7
45°	1099.1	1105.2	1109.3	1117.6	1125.8
47.5°	1006.4	1008.5	1014.7	1018.8	1025.0
50°	917.9	920.0	917.9	924.1	932.3
52.5°	831.5	829.4	829.4	831.5	843.8
55°	751.2	745.1	743.0	747.1	747.1
57.5°	662.7	660.7	660.7	658.6	668.9
60°	592.7	586.6	582.5	586.6	590.7
62.5°	520.7	514.5	510.4	518.7	518.7
65°	456.9	452.8	446.6	454.9	461.0
67.5°	395.2	391.0	389.0	399.3	407.5
70°	341.7	339.6	339.6	349.9	356.1
72.5°	292.3	290.2	290.2	304.6	310.8
75°	249.0	247.0	247.0	261.4	271.7
77.5°	205.8	203.8	209.9	222.3	232.6
80°	168.8	166.7	168.8	185.2	193.5
82.5°	127.6	127.6	131.7	148.2	156.4
85°	88.5	86.4	92.6	107.0	111.1
87.5°	45.3	47.3	49.4	57.6	57.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)