

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: P476190

Luminaire Tested: **14GR-LD5-32-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476190  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-32-F1-UNV-L840-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3314.3 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

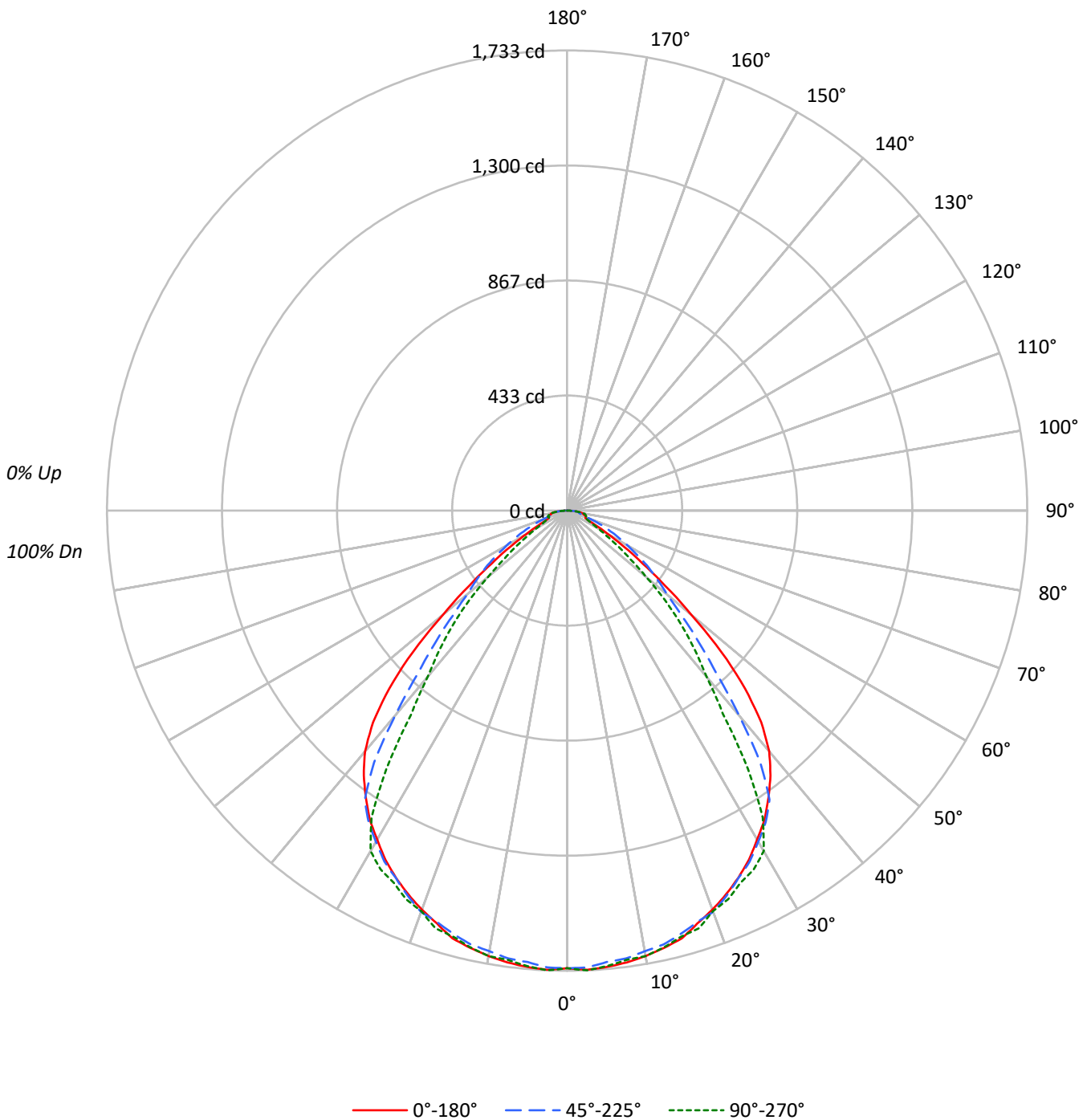
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54				54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49				49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44				44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36				36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				33

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

	0°	45°	90°
0°	4638	4638	4638
5°	4661	4611	4651
10°	4654	4603	4654
15°	4647	4600	4626
20°	4580	4607	4596
25°	4529	4534	4589
30°	4445	4474	4601
35°	4340	4364	3901
40°	4158	3539	2868
45°	3608	2669	2316
50°	2563	2051	1623
55°	1628	1758	1088
60°	959	1408	719
65°	567	1099	555
70°	584	744	570
75°	714	579	753
80°	921	719	1006
85°	973	973	973



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.5	4.9
10°-20°	468.0	14.1
20°-30°	707.8	21.4
30°-40°	788.2	23.8
40°-50°	576.9	17.4
50°-60°	318.0	9.6
60°-70°	162.6	4.9
70°-80°	92.5	2.8
80°-90°	36.8	1.1
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°	1339.3	40.4
0°-40°	2127.5	64.2
0°-60°	3022.4	91.2
0°-90°	3314.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3314.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1726	1726	1707	1718	1722	164
15°	1668	1650	1651	1672	1661	469
25°	1525	1521	1527	1553	1546	702
35°	1321	1323	1328	1238	1188	824
45°	948	874	701	638	609	713
55°	347	408	375	321	232	324
65°	89	212	173	165	87	102
75°	69	119	56	106	72	72
85°	32	39	32	43	32	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1723.7	1723.7	1723.7	1723.7	1723.7
2.5°	1731.1	1731.1	1721.8	1733.0	1733.0
5°	1725.5	1725.5	1707.0	1718.1	1721.8
7.5°	1716.3	1716.3	1701.4	1710.7	1707.0
10°	1703.3	1694.0	1684.7	1710.7	1703.3
12.5°	1686.6	1668.0	1673.6	1671.7	1684.7
15°	1668.0	1649.5	1651.3	1671.7	1660.6
17.5°	1630.9	1632.8	1625.4	1640.2	1649.5
20°	1599.4	1604.9	1608.7	1617.9	1604.9
22.5°	1564.1	1566.0	1569.7	1582.7	1584.5
25°	1525.2	1521.4	1527.0	1553.0	1545.6
27.5°	1482.5	1480.6	1489.9	1512.2	1523.3
30°	1430.5	1438.0	1439.8	1480.6	1480.6
32.5°	1382.3	1382.3	1391.6	1412.0	1371.2
35°	1321.1	1322.9	1328.5	1237.6	1187.5
37.5°	1258.0	1252.4	1194.9	1029.8	963.0
40°	1183.8	1170.8	1007.5	859.1	816.4
42.5°	1081.7	1042.7	831.2	742.2	710.6
45°	948.1	873.9	701.4	638.3	608.6
47.5°	788.6	719.9	582.6	539.9	499.1
50°	612.3	597.4	489.8	452.7	387.8
52.5°	465.7	495.4	430.5	382.2	298.7
55°	347.0	408.2	374.8	321.0	231.9
57.5°	254.2	339.5	315.4	272.7	174.4
60°	178.1	287.6	261.6	230.1	133.6
62.5°	126.2	248.6	215.2	196.7	102.0
65°	89.1	211.5	172.6	165.1	87.2
67.5°	74.2	178.1	131.7	146.6	74.2
70°	74.2	148.4	94.6	129.9	72.4
72.5°	74.2	129.9	70.5	118.7	76.1
75°	68.7	118.7	55.7	105.8	72.4
77.5°	63.1	100.2	48.2	90.9	70.5
80°	59.4	72.4	46.4	74.2	64.9
82.5°	48.2	52.0	42.7	57.5	50.1
85°	31.5	39.0	31.5	42.7	31.5
87.5°	14.8	20.4	14.8	18.6	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)