

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: P476193

Luminaire Tested: **14GR-LD5-43-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476193  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-43-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: 4414.0 lumens  
Efficiency: N/A  
Efficacy: 133.8 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

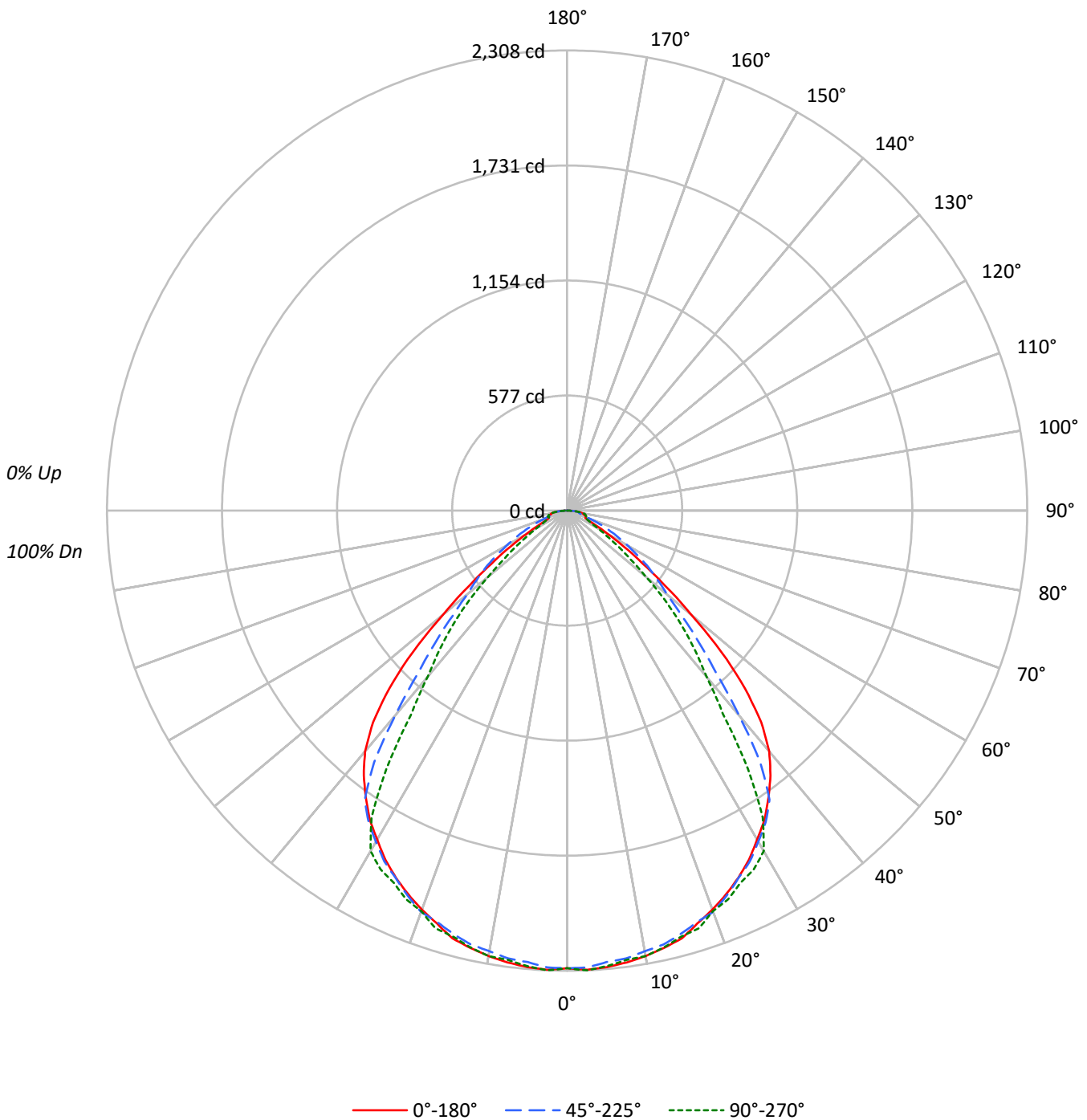
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	6177	6177	6177
5°	6208	6141	6194
10°	6198	6131	6198
15°	6189	6127	6161
20°	6100	6135	6121
25°	6031	6038	6112
30°	5920	5958	6127
35°	5780	5812	5195
40°	5538	4714	3819
45°	4805	3555	3084
50°	3414	2731	2162
55°	2168	2342	1449
60°	1277	1875	957
65°	755	1463	739
70°	777	991	758
75°	950	770	1002
80°	1226	958	1340
85°	1297	1297	1297



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.7	4.9
10°-20°	623.3	14.1
20°-30°	942.6	21.4
30°-40°	1049.7	23.8
40°-50°	768.3	17.4
50°-60°	423.5	9.6
60°-70°	216.5	4.9
70°-80°	123.2	2.8
80°-90°	49.0	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°	1783.7	40.4
0°-40°	2833.4	64.2
0°-60°	4025.2	91.2
0°-90°	4414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4414.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2296	2296	2296	2296	2296	
5°	2298	2298	2273	2288	2293	218
15°	2222	2197	2199	2226	2212	624
25°	2031	2026	2034	2068	2058	935
35°	1759	1762	1769	1648	1582	1098
45°	1263	1164	934	850	810	950
55°	462	544	499	428	309	432
65°	119	282	230	220	116	136
75°	91	158	74	141	96	96
85°	42	52	42	57	42	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2295.6	2295.6	2295.6	2295.6	2295.6
2.5°	2305.5	2305.5	2293.1	2308.0	2308.0
5°	2298.1	2298.1	2273.4	2288.2	2293.1
7.5°	2285.7	2285.7	2265.9	2278.3	2273.4
10°	2268.4	2256.1	2243.7	2278.3	2268.4
12.5°	2246.2	2221.5	2228.9	2226.4	2243.7
15°	2221.5	2196.8	2199.2	2226.4	2211.6
17.5°	2172.0	2174.5	2164.6	2184.4	2196.8
20°	2130.0	2137.5	2142.4	2154.8	2137.5
22.5°	2083.1	2085.6	2090.5	2107.8	2110.3
25°	2031.2	2026.3	2033.7	2068.3	2058.4
27.5°	1974.4	1971.9	1984.3	2013.9	2028.7
30°	1905.2	1915.1	1917.5	1971.9	1971.9
32.5°	1840.9	1840.9	1853.3	1880.5	1826.1
35°	1759.4	1761.9	1769.3	1648.2	1581.5
37.5°	1675.4	1668.0	1591.4	1371.4	1282.5
40°	1576.5	1559.2	1341.8	1144.1	1087.3
42.5°	1440.6	1388.7	1107.0	988.4	946.4
45°	1262.7	1163.9	934.1	850.0	810.5
47.5°	1050.2	958.8	775.9	719.1	664.7
50°	815.4	795.7	652.4	602.9	516.4
52.5°	620.2	659.8	573.3	509.0	397.8
55°	462.1	543.6	499.2	427.5	308.9
57.5°	338.5	452.2	420.1	363.2	232.3
60°	237.2	383.0	348.4	306.4	177.9
62.5°	168.0	331.1	286.6	261.9	135.9
65°	118.6	281.7	229.8	219.9	116.1
67.5°	98.8	237.2	175.4	195.2	98.8
70°	98.8	197.7	126.0	173.0	96.4
72.5°	98.8	173.0	93.9	158.1	101.3
75°	91.4	158.1	74.1	140.8	96.4
77.5°	84.0	133.4	64.2	121.1	93.9
80°	79.1	96.4	61.8	98.8	86.5
82.5°	64.2	69.2	56.8	76.6	66.7
85°	42.0	51.9	42.0	56.8	42.0
87.5°	19.8	27.2	19.8	24.7	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)