

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: P476175

Luminaire Tested: **14GR-LD5-43-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476175
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-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4180.1 lumens
Efficiency: N/A
Efficacy: 126.7 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

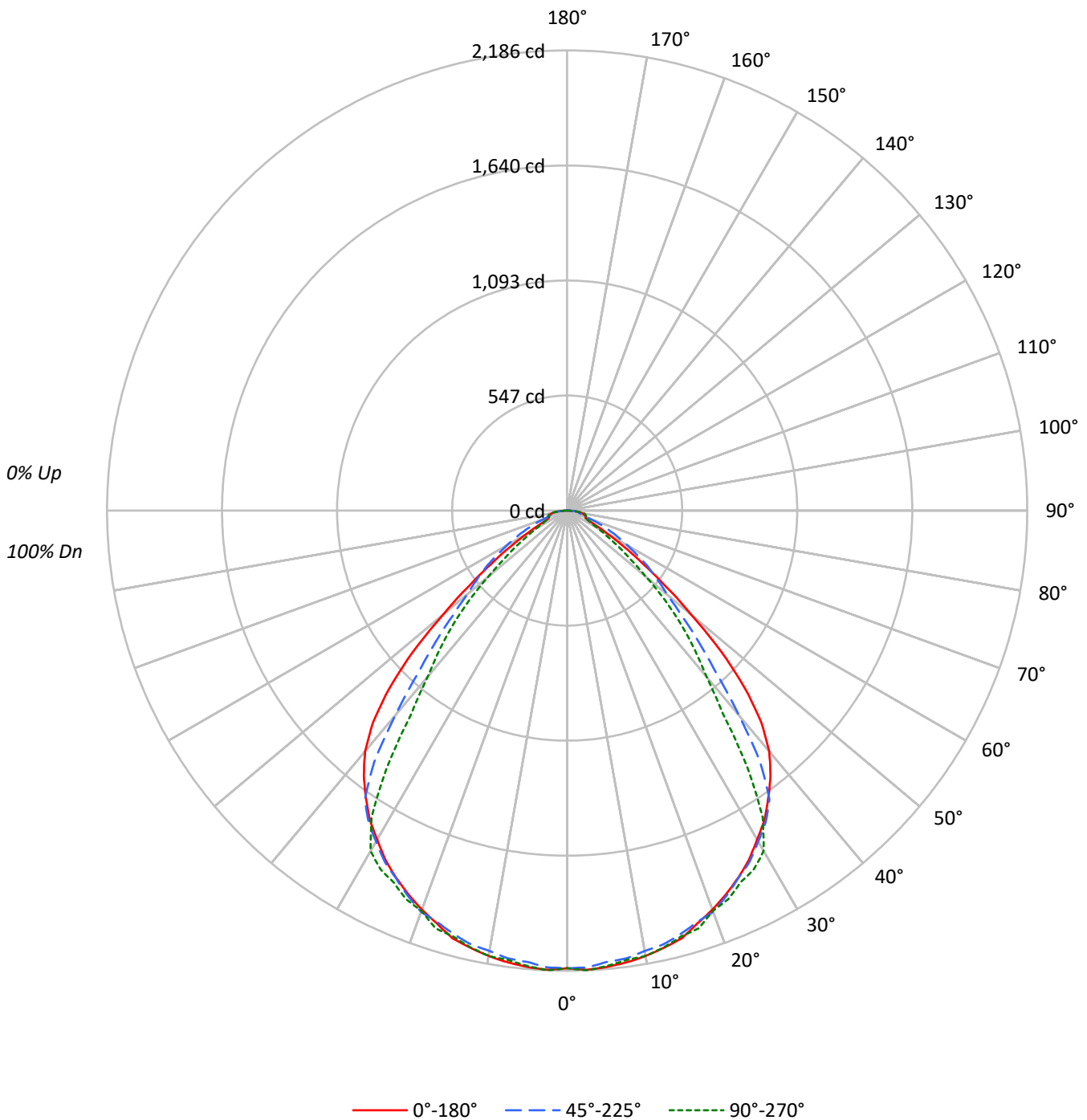
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5850	5850	5850
5°	5879	5816	5866
10°	5870	5806	5870
15°	5861	5802	5835
20°	5777	5810	5797
25°	5711	5718	5788
30°	5606	5642	5803
35°	5473	5504	4920
40°	5245	4464	3617
45°	4551	3366	2921
50°	3233	2586	2048
55°	2053	2218	1372
60°	1209	1776	907
65°	715	1386	700
70°	736	939	718
75°	900	730	949
80°	1161	907	1269
85°	1229	1229	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.2	4.9
10°-20°	590.3	14.1
20°-30°	892.7	21.4
30°-40°	994.1	23.8
40°-50°	727.6	17.4
50°-60°	401.1	9.6
60°-70°	205.1	4.9
70°-80°	116.7	2.8
80°-90°	46.4	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°	1689.1	40.4
0°-40°	2683.2	64.2
0°-60°	3811.9	91.2
0°-90°	4180.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4180.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2174	2174	2174	2174	2174	
5°	2176	2176	2153	2167	2172	207
15°	2104	2080	2083	2108	2094	591
25°	1924	1919	1926	1959	1949	885
35°	1666	1668	1676	1561	1498	1040
45°	1196	1102	885	805	768	900
55°	438	515	473	405	292	409
65°	112	267	218	208	110	129
75°	87	150	70	133	91	91
85°	40	49	40	54	40	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2174.0	2174.0	2174.0	2174.0	2174.0
2.5°	2183.3	2183.3	2171.6	2185.7	2185.7
5°	2176.3	2176.3	2152.9	2166.9	2171.6
7.5°	2164.6	2164.6	2145.9	2157.6	2152.9
10°	2148.2	2136.5	2124.8	2157.6	2148.2
12.5°	2127.1	2103.7	2110.8	2108.4	2124.8
15°	2103.7	2080.3	2082.7	2108.4	2094.4
17.5°	2056.9	2059.3	2049.9	2068.6	2080.3
20°	2017.2	2024.2	2028.9	2040.6	2024.2
22.5°	1972.7	1975.0	1979.7	1996.1	1998.4
25°	1923.6	1918.9	1925.9	1958.7	1949.3
27.5°	1869.7	1867.4	1879.1	1907.2	1921.2
30°	1804.2	1813.6	1815.9	1867.4	1867.4
32.5°	1743.4	1743.4	1755.1	1780.8	1729.3
35°	1666.1	1668.5	1675.5	1560.8	1497.7
37.5°	1586.6	1579.6	1507.0	1298.8	1214.5
40°	1493.0	1476.6	1270.7	1083.5	1029.6
42.5°	1364.3	1315.1	1048.4	936.0	896.3
45°	1195.8	1102.2	884.6	805.0	767.6
47.5°	994.5	908.0	734.8	681.0	629.5
50°	772.2	753.5	617.8	571.0	489.1
52.5°	587.4	624.8	542.9	482.1	376.8
55°	437.6	514.8	472.7	404.8	292.5
57.5°	320.6	428.2	397.8	344.0	220.0
60°	224.6	362.7	330.0	290.2	168.5
62.5°	159.1	313.6	271.5	248.1	128.7
65°	112.3	266.8	217.6	208.3	110.0
67.5°	93.6	224.6	166.1	184.9	93.6
70°	93.6	187.2	119.3	163.8	91.3
72.5°	93.6	163.8	88.9	149.8	95.9
75°	86.6	149.8	70.2	133.4	91.3
77.5°	79.6	126.4	60.8	114.7	88.9
80°	74.9	91.3	58.5	93.6	81.9
82.5°	60.8	65.5	53.8	72.5	63.2
85°	39.8	49.1	39.8	53.8	39.8
87.5°	18.7	25.7	18.7	23.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)