

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: P476247

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476247  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-43-A19/156-UNV-L830-CD1-U  
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3971.2 lumens  
Efficiency: N/A  
Efficacy: 120.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

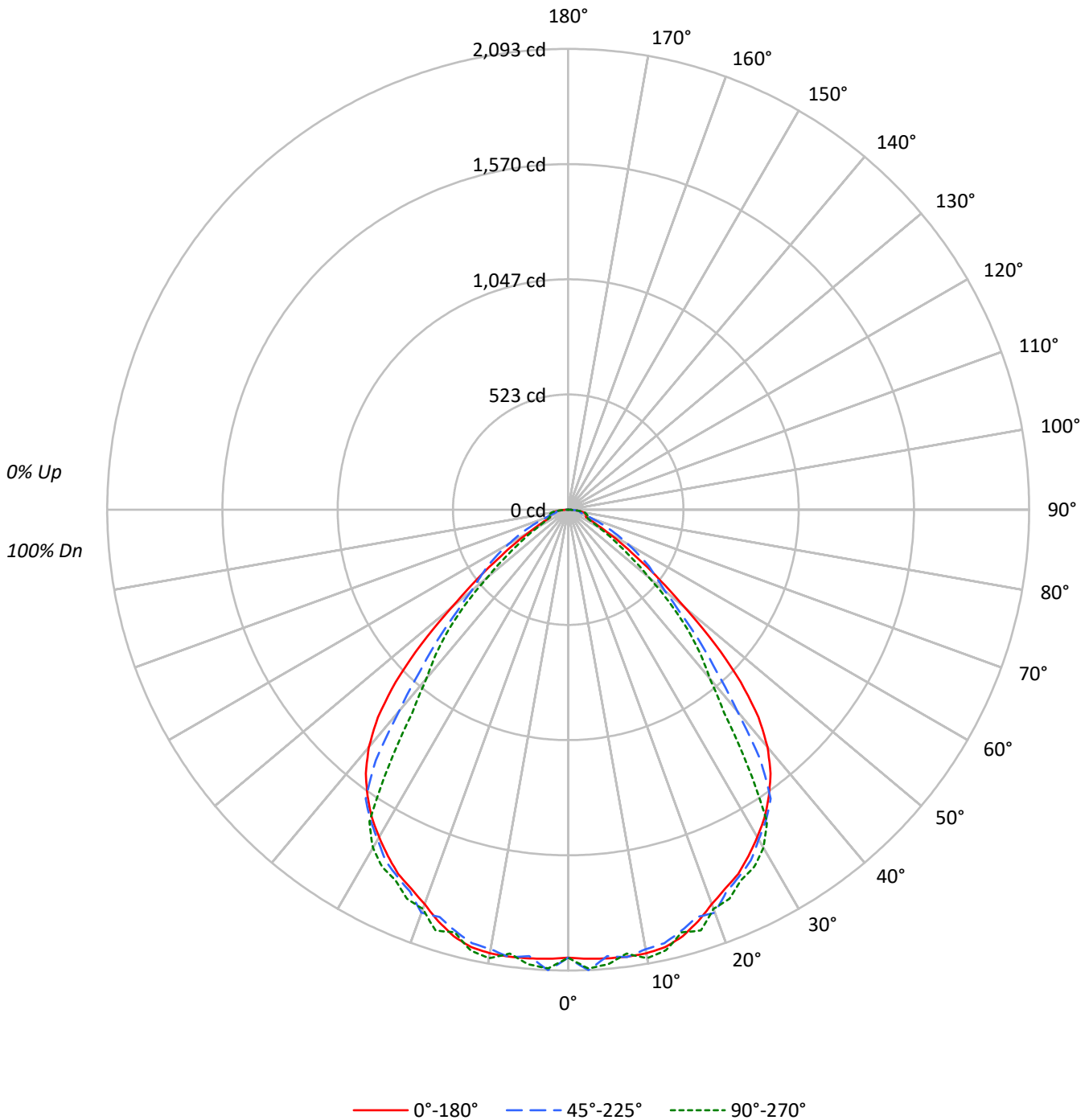
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	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	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	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	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	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°	5476	5476	5476
5°	5525	5497	5598
10°	5589	5538	5652
15°	5589	5519	5536
20°	5459	5578	5524
25°	5419	5456	5512
30°	5336	5374	5510
35°	5217	5265	4671
40°	4944	4192	3512
45°	4217	3196	2911
50°	2881	2393	2010
55°	1814	2097	1336
60°	1096	1678	862
65°	688	1297	662
70°	687	867	703
75°	865	691	908
80°	1128	837	1192
85°	1090	1155	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.4	4.9
10°-20°	562.8	14.2
20°-30°	849.4	21.4
30°-40°	947.3	23.9
40°-50°	688.9	17.3
50°-60°	377.8	9.5
60°-70°	192.1	4.8
70°-80°	112.9	2.8
80°-90°	43.6	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°	1608.5	40.5
0°-40°	2555.8	64.4
0°-60°	3622.6	91.2
0°-90°	3971.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3971.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2035	2035	2035	2035	2035	
5°	2046	2089	2035	2072	2072	195
15°	2006	1998	1981	2023	1987	563
25°	1825	1825	1838	1873	1856	839
35°	1588	1586	1603	1495	1422	989
45°	1108	1023	840	780	765	833
55°	387	478	447	399	285	365
65°	108	231	204	210	104	120
75°	83	148	66	133	87	87
85°	35	46	37	48	37	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2035.1	2035.1	2035.1	2035.1	2035.1
2.5°	2041.3	2082.9	2093.3	2093.3	2085.0
5°	2045.5	2089.2	2035.1	2072.5	2072.5
7.5°	2047.6	2053.8	2049.7	2058.0	2033.0
10°	2045.5	2031.0	2026.8	2078.8	2068.4
12.5°	2035.1	1979.0	2016.4	1999.8	2049.7
15°	2006.0	1997.7	1981.1	2022.6	1987.3
17.5°	1960.3	1964.4	1939.5	1960.3	2003.9
20°	1906.2	1924.9	1947.8	1954.0	1929.1
22.5°	1862.6	1868.8	1877.1	1897.9	1912.5
25°	1825.2	1825.2	1837.6	1873.0	1856.3
27.5°	1773.2	1777.3	1796.1	1806.4	1829.3
30°	1717.1	1721.2	1729.5	1777.3	1773.2
32.5°	1658.9	1663.0	1671.3	1702.5	1679.6
35°	1588.2	1586.1	1602.7	1494.6	1421.9
37.5°	1509.2	1507.1	1434.3	1230.6	1162.0
40°	1407.3	1399.0	1193.2	1033.1	999.9
42.5°	1278.4	1243.1	997.8	904.3	887.6
45°	1108.0	1022.8	839.8	779.5	765.0
47.5°	906.3	841.9	683.9	656.9	621.6
50°	688.1	692.2	571.7	553.0	480.2
52.5°	525.9	575.8	503.1	467.7	372.1
55°	386.7	478.1	446.9	399.1	284.8
57.5°	286.9	397.0	378.3	343.0	218.3
60°	203.7	330.5	311.8	295.2	160.1
62.5°	147.6	276.5	255.7	249.5	122.6
65°	108.1	230.7	203.7	210.0	103.9
67.5°	87.3	193.3	153.8	182.9	89.4
70°	87.3	172.5	110.2	162.1	89.4
72.5°	87.3	162.1	87.3	147.6	93.5
75°	83.2	147.6	66.5	133.0	87.3
77.5°	76.9	120.6	56.1	114.3	83.2
80°	72.8	89.4	54.0	89.4	76.9
82.5°	56.1	62.4	49.9	66.5	60.3
85°	35.3	45.7	37.4	47.8	37.4
87.5°	16.6	24.9	16.6	24.9	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)