

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: P476246

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476246  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-40-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: 3642.1 lumens  
Efficiency: N/A  
Efficacy: 116.4 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

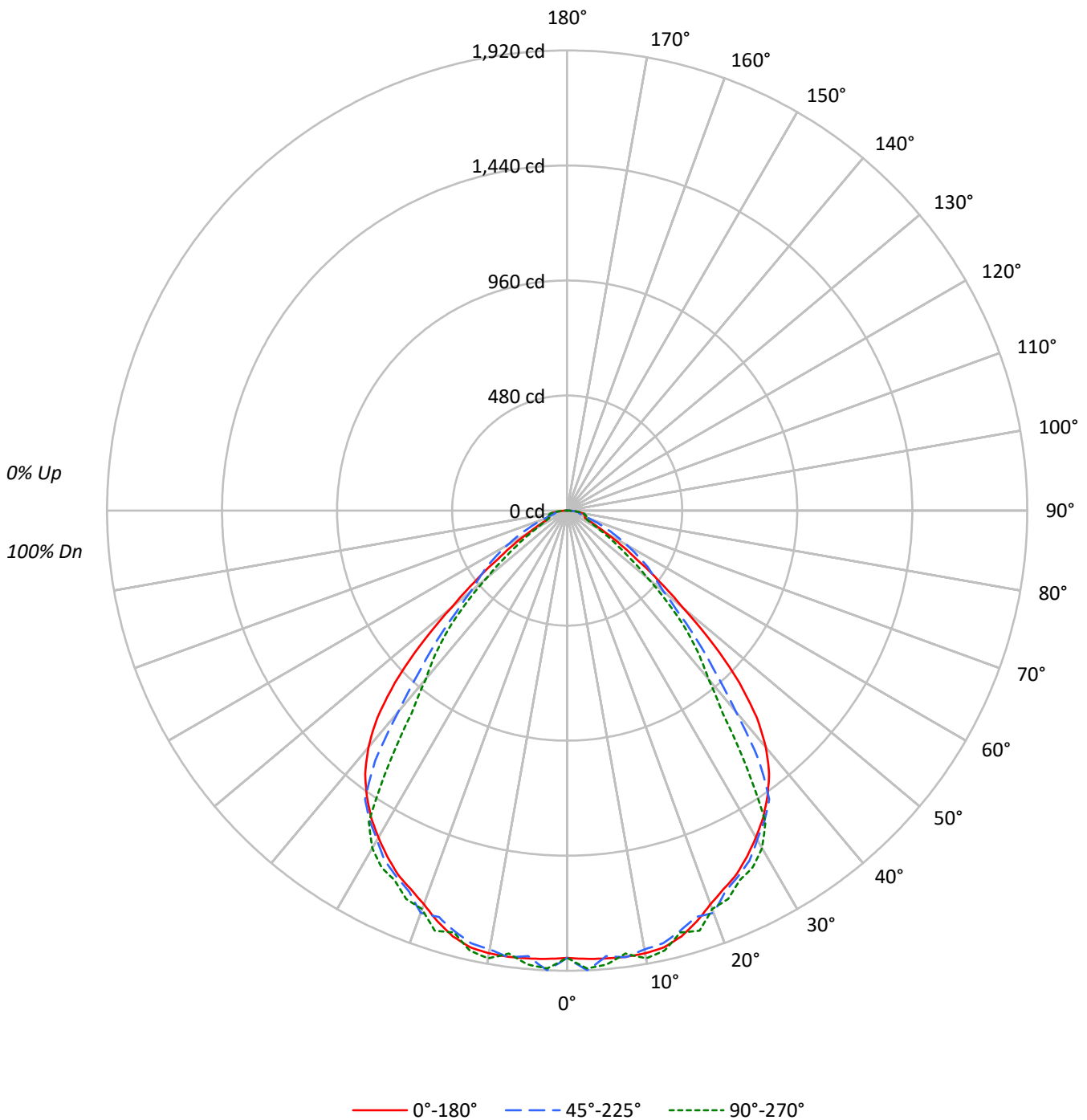
Input Watts (W): 31.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P476246

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P476246

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L830-CD1-U

**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	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	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	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	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	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	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°	5022	5022	5022
5°	5068	5042	5134
10°	5126	5079	5183
15°	5125	5062	5078
20°	5006	5115	5066
25°	4970	5004	5055
30°	4893	4929	5053
35°	4785	4829	4284
40°	4534	3844	3221
45°	3867	2931	2670
50°	2642	2195	1844
55°	1664	1923	1225
60°	1005	1539	790
65°	631	1189	607
70°	630	795	645
75°	793	634	833
80°	1034	769	1093
85°	1000	1059	1059



TEST NUMBER: P476246

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.1	4.9
10°-20°	516.1	14.2
20°-30°	779.0	21.4
30°-40°	868.8	23.9
40°-50°	631.8	17.3
50°-60°	346.5	9.5
60°-70°	176.2	4.8
70°-80°	103.6	2.8
80°-90°	40.0	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°	1475.2	40.5
0°-40°	2344.0	64.4
0°-60°	3322.3	91.2
0°-90°	3642.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3642.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1866	1866	1866	1866	1866	
5°	1876	1916	1866	1901	1901	179
15°	1840	1832	1817	1855	1823	517
25°	1674	1674	1685	1718	1702	770
35°	1456	1455	1470	1371	1304	907
45°	1016	938	770	715	702	764
55°	355	438	410	366	261	335
65°	99	212	187	193	95	110
75°	76	135	61	122	80	79
85°	32	42	34	44	34	36
90°	0	0	0	0	0	



TEST NUMBER: P476246

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1866.4	1866.4	1866.4	1866.4	1866.4
2.5°	1872.1	1910.3	1919.8	1919.8	1912.2
5°	1876.0	1916.0	1866.4	1900.7	1900.7
7.5°	1877.9	1883.6	1879.8	1887.4	1864.5
10°	1876.0	1862.6	1858.8	1906.5	1896.9
12.5°	1866.4	1814.9	1849.3	1834.0	1879.8
15°	1839.7	1832.1	1816.9	1855.0	1822.6
17.5°	1797.8	1801.6	1778.7	1797.8	1837.8
20°	1748.2	1765.4	1786.3	1792.1	1769.2
22.5°	1708.2	1713.9	1721.5	1740.6	1753.9
25°	1673.9	1673.9	1685.3	1717.7	1702.5
27.5°	1626.2	1630.0	1647.2	1656.7	1677.7
30°	1574.7	1578.5	1586.2	1630.0	1626.2
32.5°	1521.4	1525.2	1532.8	1561.4	1540.4
35°	1456.5	1454.6	1469.9	1370.7	1304.0
37.5°	1384.1	1382.2	1315.5	1128.6	1065.7
40°	1290.7	1283.0	1094.3	947.5	917.0
42.5°	1172.5	1140.1	915.1	829.3	814.1
45°	1016.1	938.0	770.2	714.9	701.6
47.5°	831.2	772.1	627.2	602.4	570.0
50°	631.0	634.8	524.3	507.1	440.4
52.5°	482.3	528.1	461.4	429.0	341.3
55°	354.6	438.5	409.9	366.0	261.2
57.5°	263.1	364.1	347.0	314.6	200.2
60°	186.8	303.1	286.0	270.7	146.8
62.5°	135.4	253.6	234.5	228.8	112.5
65°	99.1	211.6	186.8	192.6	95.3
67.5°	80.1	177.3	141.1	167.8	82.0
70°	80.1	158.2	101.0	148.7	82.0
72.5°	80.1	148.7	80.1	135.4	85.8
75°	76.3	135.4	61.0	122.0	80.1
77.5°	70.5	110.6	51.5	104.9	76.3
80°	66.7	82.0	49.6	82.0	70.5
82.5°	51.5	57.2	45.8	61.0	55.3
85°	32.4	41.9	34.3	43.8	34.3
87.5°	15.3	22.9	15.3	22.9	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)