

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: P234077

Luminaire Tested: **14GR-LD5-50-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234077  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-50-A19/156-UNV-L930-CD1-U  
Description: METALUX 1X4 GRLED TROFFER  
WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3843.3 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

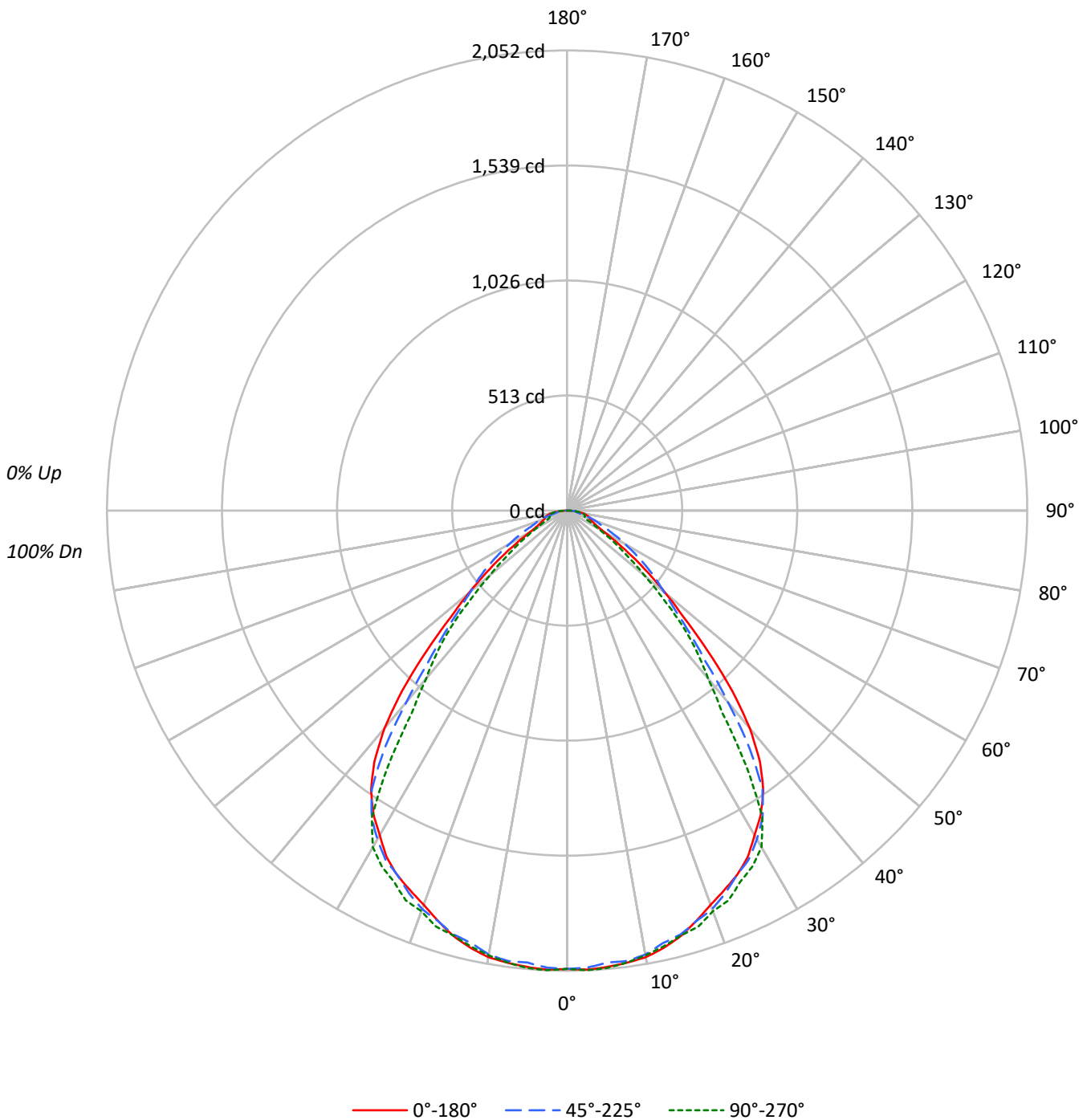
Input Watts (W): 45.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	108	105	102	99	101	98	96	97	95	93	93	92	90					88				
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79					77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	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	51	46	55	50	46					44				
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42					40				
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38					37				
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35					34				

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

	0°	45°	90°
0°	6886	6886	6886
5°	6910	6844	6925
10°	6920	6878	6890
15°	6850	6825	6841
20°	6707	6779	6817
25°	6666	6663	6790
30°	6504	6583	6743
35°	6271	6246	5740
40°	5569	4915	4303
45°	4226	3677	3480
50°	2998	2942	2361
55°	2052	2511	1623
60°	1268	2004	1085
65°	1045	1544	785
70°	1040	1344	806
75°	1249	962	1077
80°	1434	887	1349
85°	1361	1566	1531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.9	5.0
10°-20°	553.5	14.4
20°-30°	832.3	21.7
30°-40°	907.3	23.6
40°-50°	635.3	16.5
50°-60°	359.6	9.4
60°-70°	196.8	5.1
70°-80°	119.3	3.1
80°-90°	45.2	1.2
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°	1579.7	41.1
0°-40°	2487.0	64.7
0°-60°	3482.0	90.6
0°-90°	3843.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3843.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2043	2039	2024	2047	2047	194
15°	1964	1958	1957	1985	1961	552
25°	1793	1796	1792	1833	1826	823
35°	1525	1518	1518	1441	1395	939
45°	887	926	772	762	730	689
55°	349	418	428	424	276	319
65°	131	216	194	245	98	135
75°	96	138	74	145	83	99
85°	35	57	40	49	40	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2043.7	2043.7	2043.7	2043.7	2043.7
2.5°	2048.9	2046.3	2040.1	2052.5	2051.6
5°	2042.8	2039.3	2023.5	2047.2	2047.2
7.5°	2034.0	2025.2	2026.1	2039.3	2033.1
10°	2022.5	2007.6	2010.3	2013.7	2013.7
12.5°	1996.2	1982.1	1975.1	1986.5	1990.0
15°	1963.6	1958.3	1956.6	1984.7	1961.0
17.5°	1917.9	1929.3	1918.7	1941.6	1945.1
20°	1870.4	1892.3	1890.6	1906.4	1901.1
22.5°	1831.6	1845.8	1845.8	1865.1	1880.9
25°	1793.0	1796.5	1792.1	1833.4	1826.4
27.5°	1742.8	1740.2	1754.2	1775.4	1789.4
30°	1671.5	1672.4	1691.8	1719.9	1733.1
32.5°	1606.5	1598.5	1622.2	1634.6	1620.5
35°	1524.6	1517.6	1518.5	1441.0	1395.3
37.5°	1412.9	1419.1	1338.1	1196.4	1136.7
40°	1266.0	1278.3	1117.3	1011.7	978.3
42.5°	1088.3	1091.8	915.8	881.5	859.5
45°	886.8	925.5	771.6	761.9	730.2
47.5°	702.9	775.1	646.7	652.8	577.1
50°	571.9	644.0	561.2	563.9	450.4
52.5°	452.2	522.6	495.3	487.4	353.7
55°	349.3	417.9	427.5	424.0	276.2
57.5°	256.9	330.8	359.0	372.2	212.9
60°	188.2	270.1	297.4	323.8	161.0
62.5°	149.6	234.0	243.7	282.4	124.9
65°	131.1	215.6	193.6	244.6	98.5
67.5°	117.0	205.0	157.5	216.4	86.2
70°	105.6	184.8	136.4	193.6	81.8
72.5°	105.6	161.8	107.3	171.6	82.7
75°	95.9	138.1	73.9	145.2	82.7
77.5°	85.3	117.9	55.4	117.9	77.4
80°	73.9	92.4	45.7	90.6	69.5
82.5°	54.5	69.5	39.6	67.7	56.3
85°	35.2	57.2	40.5	49.3	39.6
87.5°	16.7	29.0	25.5	24.7	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)