

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: P234049

Luminaire Tested: **14GR-LD5-60-F1-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234049  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33313)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-60-F1-UNV-L930-CD1-U  
Description: METALUX 1X4 GRLED TROFFER  
WITH F1 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4809.2 lumens  
Efficiency: N/A  
Efficacy: 80.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.16 / 1.24  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

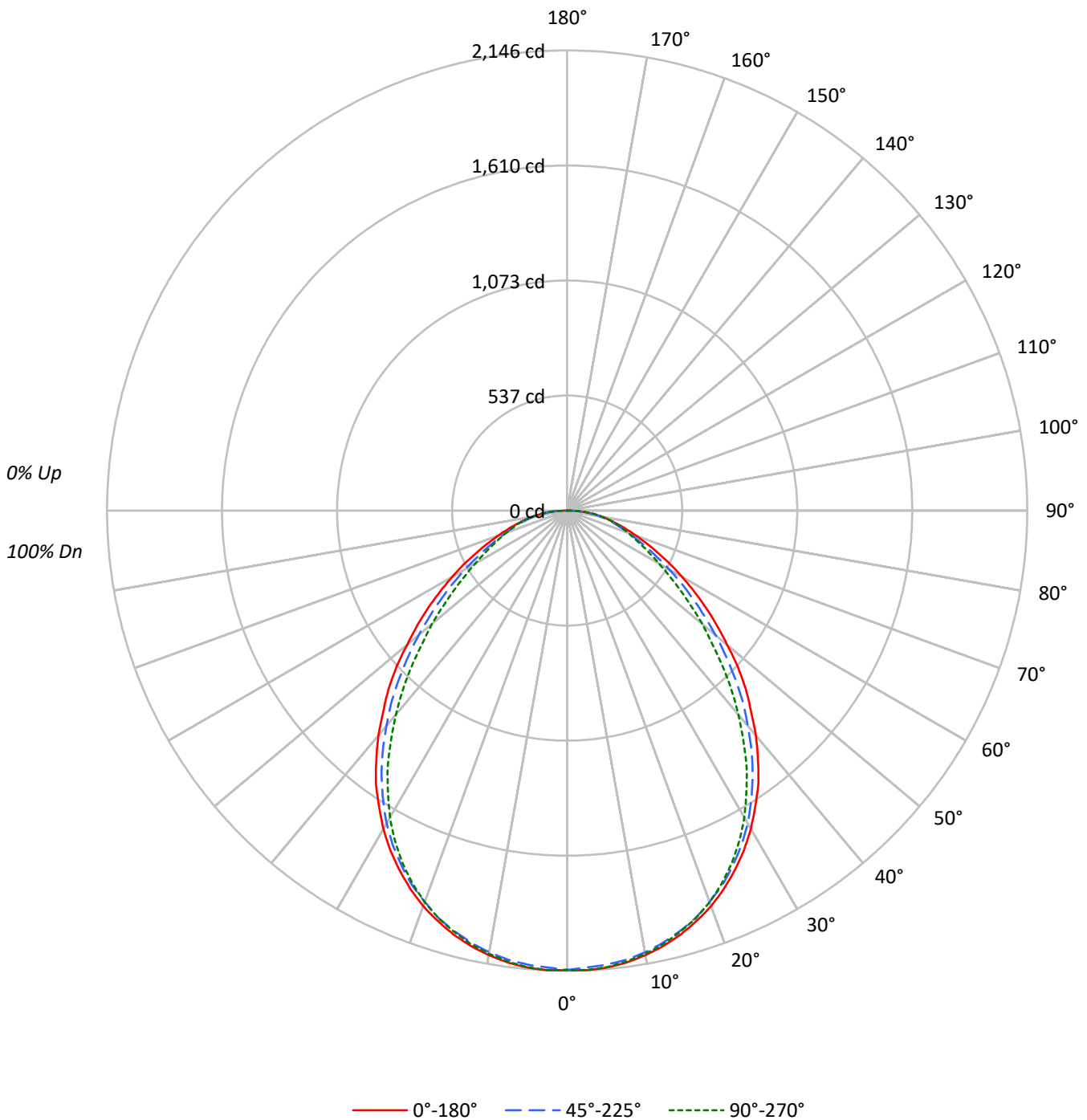
Input Watts (W): 59.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88					85				
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75					73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65					63				
4	85	74	66	59	83	73	65	59	70	64	58	68	62	58	66	61	57					55				
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50					48				
6	73	60	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45					43				
7	68	55	47	41	66	54	47	41	53	46	41	51	45	40	50	44	40					38				
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36					34				
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33					31				
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30					28				

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

	0°	45°	90°
0°	7219	7219	7219
5°	7235	7189	7228
10°	7203	7157	7180
15°	7139	7084	7096
20°	7039	6962	6966
25°	6879	6795	6748
30°	6667	6553	6430
35°	6394	6208	6004
40°	6023	5765	5462
45°	5615	5277	4884
50°	5107	4734	4314
55°	4649	4197	3760
60°	4169	3697	3339
65°	3717	3294	3070
70°	3380	3003	2969
75°	3160	2924	3071
80°	3177	3023	3198
85°	3317	3101	3538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.6	4.2
10°-20°	574.3	11.9
20°-30°	842.1	17.5
30°-40°	939.9	19.5
40°-50°	850.9	17.7
50°-60°	642.5	13.4
60°-70°	420.0	8.7
70°-80°	246.7	5.1
80°-90°	90.3	1.9
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°	1619.0	33.7
0°-40°	2558.8	53.2
0°-60°	4052.2	84.3
0°-90°	4809.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4809.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2142	2142	2142	2142	2142	
5°	2139	2135	2126	2138	2137	203
15°	2046	2043	2031	2042	2034	577
25°	1850	1843	1828	1824	1815	851
35°	1554	1541	1509	1475	1460	968
45°	1178	1160	1107	1048	1025	905
55°	791	773	714	658	640	708
65°	466	452	413	389	385	468
75°	243	236	225	229	236	261
85°	86	82	80	90	92	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2142.5	2142.5	2142.5	2142.5	2142.5
2.5°	2145.9	2142.5	2132.4	2145.9	2144.7
5°	2139.1	2134.6	2125.5	2138.0	2136.8
7.5°	2125.5	2121.1	2112.0	2123.3	2121.1
10°	2105.2	2100.7	2091.7	2104.1	2098.5
12.5°	2079.2	2074.8	2064.6	2075.9	2071.3
15°	2046.5	2043.1	2030.8	2042.0	2034.1
17.5°	2007.0	2001.4	1992.3	1999.1	1993.5
20°	1963.0	1956.2	1941.5	1948.3	1942.7
22.5°	1909.9	1900.9	1890.7	1890.7	1882.9
25°	1850.2	1843.3	1827.6	1824.2	1815.1
27.5°	1785.7	1780.1	1759.8	1754.2	1738.4
30°	1713.5	1705.6	1684.2	1666.1	1652.6
32.5°	1633.4	1627.7	1598.4	1574.7	1555.5
35°	1554.3	1540.8	1509.2	1475.3	1459.6
37.5°	1461.8	1451.7	1412.2	1370.4	1348.9
40°	1369.3	1356.8	1310.6	1264.3	1241.7
42.5°	1268.7	1257.4	1213.5	1158.2	1134.4
45°	1178.4	1160.4	1107.4	1047.5	1025.0
47.5°	1079.2	1059.9	1003.5	940.3	914.3
50°	974.2	961.7	903.0	842.1	822.9
52.5°	880.5	861.3	805.9	746.2	725.8
55°	791.3	773.2	714.5	658.1	640.0
57.5°	702.1	681.8	631.0	580.2	562.2
60°	618.6	598.3	548.6	506.8	495.5
62.5°	543.0	520.4	476.3	443.6	435.8
65°	466.2	451.5	413.2	389.4	385.0
67.5°	401.9	383.8	353.3	342.0	339.8
70°	343.1	330.8	304.8	301.4	301.4
72.5°	290.1	280.0	260.8	263.0	266.4
75°	242.7	235.9	224.6	229.2	235.9
77.5°	202.0	195.3	188.5	195.3	199.8
80°	163.7	156.9	155.8	161.4	164.8
82.5°	123.0	117.4	118.5	127.6	131.0
85°	85.8	82.4	80.2	90.3	91.5
87.5°	44.0	41.7	40.7	48.6	46.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)