

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: P234073

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234073  
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-LD5-60-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: 4675.9 lumens  
Efficiency: N/A  
Efficacy: 78.1 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

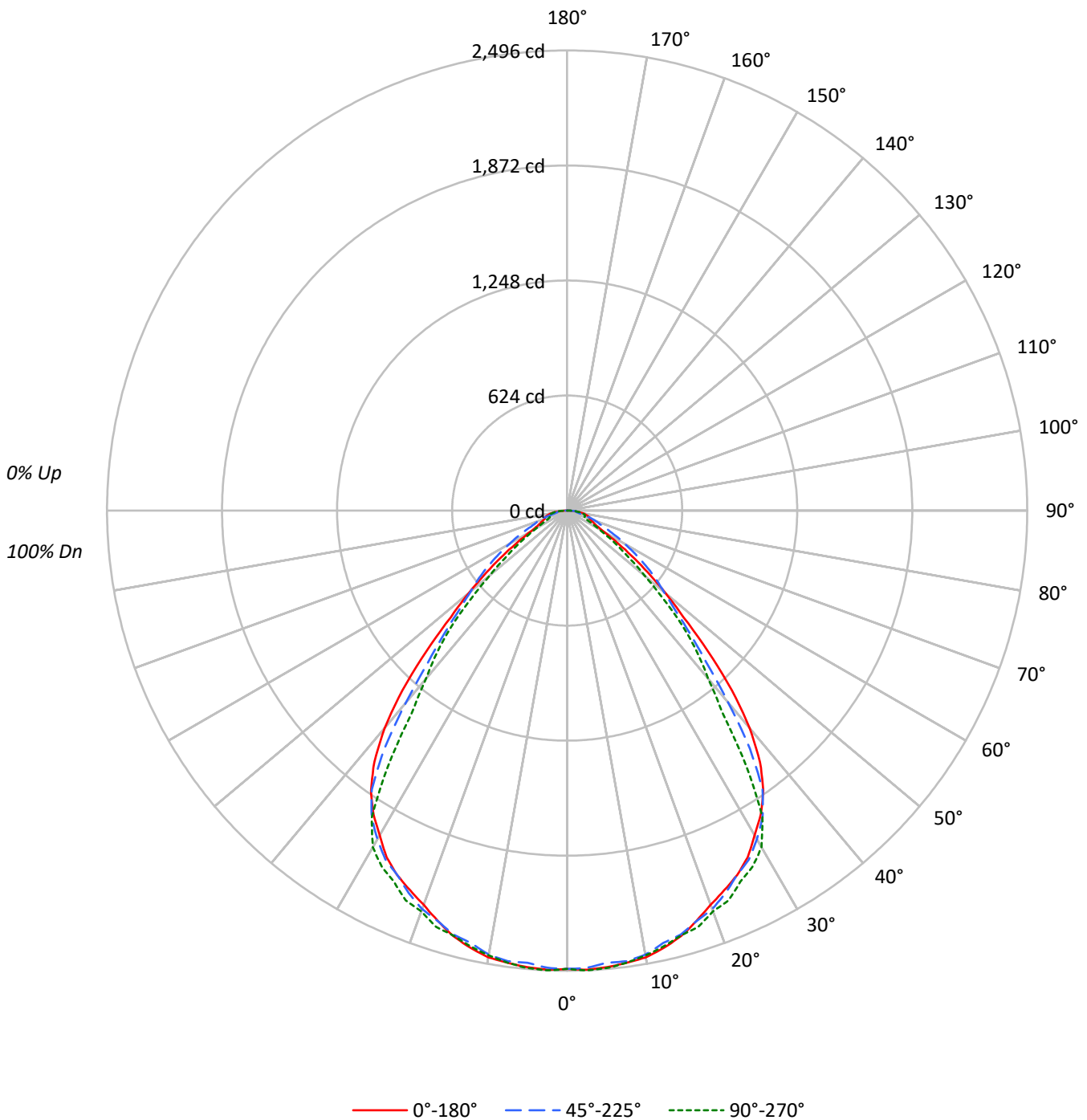
Input Watts (W): 59.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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				88
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	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	51	49				49
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44				44
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37				37
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34				34

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

	0°	45°	90°
0°	8378	8378	8378
5°	8407	8327	8425
10°	8420	8368	8383
15°	8334	8304	8323
20°	8160	8248	8294
25°	8110	8106	8262
30°	7913	8009	8204
35°	7631	7599	6983
40°	6775	5980	5235
45°	5141	4473	4233
50°	3647	3580	2873
55°	2497	3056	1974
60°	1544	2438	1320
65°	1271	1878	956
70°	1266	1634	980
75°	1519	1170	1310
80°	1744	1081	1642
85°	1655	1902	1860



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.9	5.0
10°-20°	673.4	14.4
20°-30°	1012.6	21.7
30°-40°	1103.9	23.6
40°-50°	773.0	16.5
50°-60°	437.6	9.4
60°-70°	239.4	5.1
70°-80°	145.1	3.1
80°-90°	55.0	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°	1921.9	41.1
0°-40°	3025.8	64.7
0°-60°	4236.4	90.6
0°-90°	4675.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4675.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2486	2486	2486	2486	2486	
5°	2485	2481	2462	2491	2491	236
15°	2389	2383	2380	2415	2386	672
25°	2181	2186	2180	2231	2222	1002
35°	1855	1846	1847	1753	1698	1143
45°	1079	1126	939	927	888	838
55°	425	508	520	516	336	389
65°	159	262	236	298	120	164
75°	117	168	90	177	101	121
85°	43	70	49	60	48	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2486.4	2486.4	2486.4	2486.4	2486.4
2.5°	2492.9	2489.7	2482.2	2497.1	2496.1
5°	2485.4	2481.1	2461.9	2490.7	2490.7
7.5°	2474.6	2464.0	2465.0	2481.1	2473.6
10°	2460.8	2442.6	2445.8	2450.1	2450.1
12.5°	2428.7	2411.6	2402.9	2416.9	2421.2
15°	2389.1	2382.6	2380.5	2414.7	2385.8
17.5°	2333.4	2347.3	2334.5	2362.3	2366.6
20°	2275.6	2302.3	2300.2	2319.5	2313.0
22.5°	2228.5	2245.6	2245.6	2269.1	2288.5
25°	2181.4	2185.7	2180.3	2230.6	2222.1
27.5°	2120.4	2117.2	2134.3	2160.0	2177.1
30°	2033.7	2034.7	2058.3	2092.6	2108.6
32.5°	1954.5	1944.9	1973.7	1988.8	1971.6
35°	1855.0	1846.4	1847.4	1753.3	1697.6
37.5°	1719.0	1726.5	1628.0	1455.7	1382.9
40°	1540.2	1555.3	1359.4	1230.9	1190.2
42.5°	1324.0	1328.3	1114.3	1072.5	1045.7
45°	1078.9	1126.1	938.7	926.9	888.4
47.5°	855.2	943.0	786.8	794.2	702.2
50°	695.7	783.5	682.9	686.1	548.0
52.5°	550.2	635.8	602.6	593.0	430.3
55°	425.0	508.5	520.2	515.9	336.1
57.5°	312.6	402.5	436.7	452.8	259.0
60°	229.1	328.6	361.8	393.9	195.9
62.5°	181.9	284.7	296.5	343.6	152.0
65°	159.4	262.3	235.5	297.6	119.9
67.5°	142.3	249.4	191.6	263.3	104.9
70°	128.5	224.8	165.9	235.5	99.5
72.5°	128.5	197.0	130.6	208.7	100.6
75°	116.7	168.1	89.9	176.6	100.6
77.5°	103.8	143.4	67.4	143.4	94.2
80°	89.9	112.4	55.7	110.2	84.6
82.5°	66.4	84.6	48.1	82.4	68.5
85°	42.8	69.6	49.2	59.9	48.1
87.5°	20.3	35.4	31.0	30.0	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)