

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: P234146

Luminaire Tested: **22GR-LD5-60-A19/156-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234146  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-60-A19/156-UNV-L935-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4964.0 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

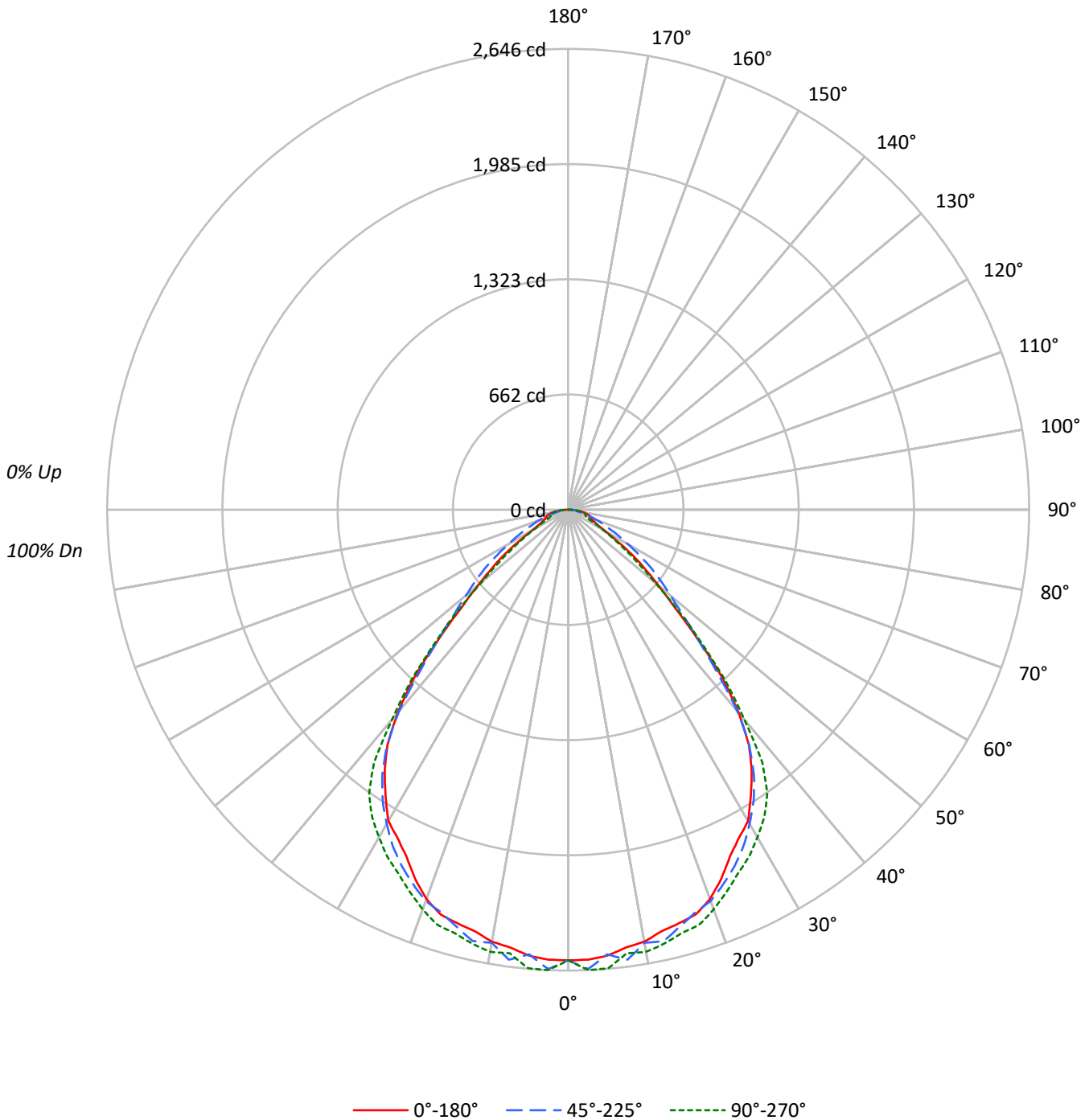
Input Watts (W): 49.58  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

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

	0°	45°	90°
0°	8285	8285	8285
5°	8264	8238	8497
10°	8189	8211	8382
15°	8151	8213	8345
20°	8107	8147	8322
25°	7761	7980	8146
30°	7634	7703	8032
35°	7179	7270	7787
40°	6361	6317	6566
45°	4751	4762	4894
50°	3345	3805	3239
55°	2468	3213	2214
60°	1543	2540	1446
65°	1259	2012	1011
70°	1249	1675	996
75°	1548	1230	1288
80°	1726	970	1573
85°	1720	1804	1760



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.3	5.0
10°-20°	701.5	14.1
20°-30°	1038.9	20.9
30°-40°	1163.8	23.4
40°-50°	855.1	17.2
50°-60°	478.0	9.6
60°-70°	266.4	5.4
70°-80°	156.5	3.2
80°-90°	57.5	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°	1986.7	40.0
0°-40°	3150.5	63.5
0°-60°	4483.6	90.3
0°-90°	4964.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4964.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2587	2587	2587	2587	2587	
5°	2571	2619	2563	2615	2643	243
15°	2458	2474	2477	2515	2517	694
25°	2196	2214	2258	2290	2305	1018
35°	1836	1837	1860	1944	1992	1138
45°	1049	1134	1051	1126	1081	820
55°	442	538	575	574	396	394
65°	166	295	266	340	133	172
75°	125	177	99	200	104	126
85°	47	69	49	63	48	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2587.1	2587.1	2587.1	2587.1	2587.1
2.5°	2586.0	2609.3	2639.8	2643.2	2645.5
5°	2570.7	2618.7	2562.6	2615.2	2643.2
7.5°	2535.6	2564.9	2605.8	2553.1	2568.4
10°	2518.1	2525.1	2525.1	2590.6	2577.7
12.5°	2478.3	2525.1	2536.8	2523.9	2552.0
15°	2458.5	2473.7	2477.2	2514.6	2516.9
17.5°	2436.2	2432.7	2424.5	2451.4	2499.3
20°	2378.9	2366.1	2390.6	2423.4	2442.0
22.5°	2294.7	2298.2	2327.5	2354.3	2375.4
25°	2196.5	2214.0	2258.4	2290.0	2305.2
27.5°	2122.8	2148.5	2178.9	2216.4	2246.7
30°	2064.3	2061.9	2083.0	2136.8	2171.9
32.5°	1950.8	1959.0	1981.3	2045.6	2094.7
35°	1836.3	1837.4	1859.6	1943.9	1991.8
37.5°	1704.1	1694.7	1707.6	1798.8	1830.4
40°	1521.6	1524.0	1511.1	1575.4	1570.7
42.5°	1308.7	1327.4	1260.8	1345.0	1339.2
45°	1049.1	1134.5	1051.4	1126.3	1080.7
47.5°	828.1	954.4	885.4	940.4	854.9
50°	671.3	801.1	763.7	788.3	650.2
52.5°	550.9	656.1	667.8	673.7	507.6
55°	442.1	538.0	575.4	574.3	396.5
57.5°	326.3	437.4	480.7	498.3	300.6
60°	240.9	363.7	396.5	435.1	225.8
62.5°	194.1	319.3	327.5	381.3	172.0
65°	166.1	294.7	265.5	340.3	133.4
67.5°	147.4	274.9	216.4	304.1	113.5
70°	133.4	244.5	178.9	272.5	106.4
72.5°	129.8	208.2	138.0	243.3	105.2
75°	125.1	176.6	99.4	200.0	104.1
77.5°	107.6	150.9	71.3	154.4	97.1
80°	93.6	120.4	52.6	115.8	85.3
82.5°	72.5	91.2	46.8	87.7	69.0
85°	46.8	69.0	49.1	63.2	47.9
87.5°	22.2	38.6	35.1	33.9	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)