

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: P476020

Luminaire Tested: **22GR-LD5-50-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476020  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-50-A19/156-UNV-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4902.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

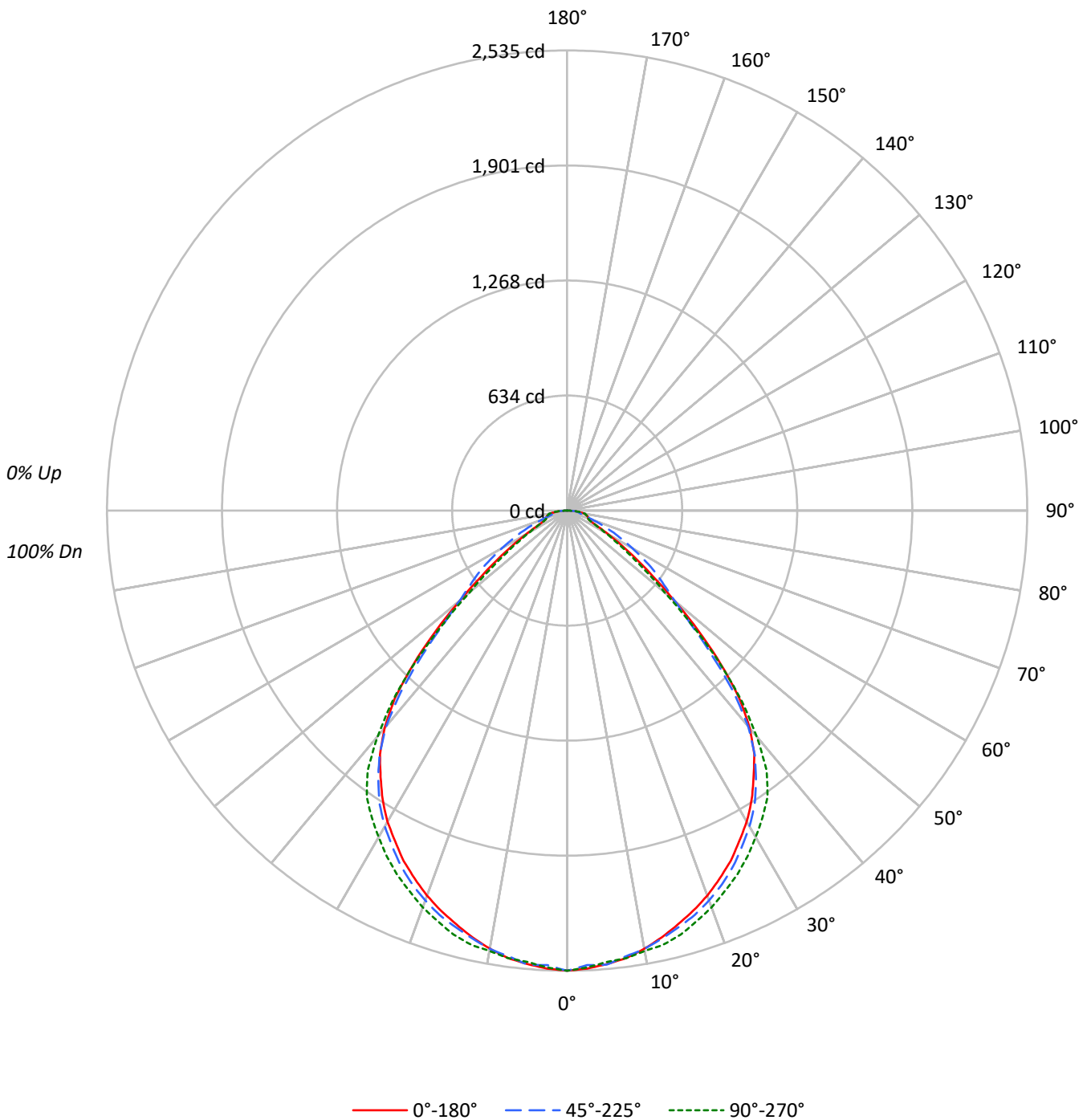
Input Watts (W): 36.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79					77				
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70					68				
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

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

	0°	45°	90°
0°	6821	6821	6821
5°	6773	6781	6743
10°	6698	6700	6731
15°	6574	6619	6737
20°	6464	6545	6661
25°	6325	6423	6574
30°	6148	6242	6455
35°	5885	5959	6324
40°	5493	5450	5705
45°	4562	4304	4523
50°	3214	3230	2946
55°	2159	2776	1942
60°	1393	2228	1291
65°	965	1726	928
70°	970	1177	962
75°	1194	919	1184
80°	1458	1065	1545
85°	1423	1451	1568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.3	4.8
10°-20°	671.8	13.7
20°-30°	996.3	20.3
30°-40°	1139.7	23.2
40°-50°	902.2	18.4
50°-60°	492.3	10.0
60°-70°	257.5	5.3
70°-80°	148.7	3.0
80°-90°	56.2	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°	1905.4	38.9
0°-40°	3045.1	62.1
0°-60°	4439.5	90.6
0°-90°	4902.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4902.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2535	2535	2535	2535	2535	
5°	2508	2490	2510	2502	2496	238
15°	2360	2372	2376	2395	2418	666
25°	2130	2133	2163	2190	2214	979
35°	1792	1792	1814	1880	1925	1117
45°	1199	1192	1131	1186	1188	912
55°	460	575	592	551	414	427
65°	152	305	271	290	146	164
75°	115	184	88	181	114	119
85°	46	60	47	61	51	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2534.8	2534.8	2534.8	2534.8	2534.8
2.5°	2525.4	2510.4	2506.6	2514.1	2518.8
5°	2507.5	2489.7	2510.4	2501.9	2496.2
7.5°	2486.8	2480.3	2476.5	2489.7	2486.8
10°	2451.1	2441.7	2452.0	2459.6	2463.3
12.5°	2407.8	2412.5	2414.4	2437.9	2449.2
15°	2359.8	2372.0	2375.8	2394.6	2418.2
17.5°	2310.9	2313.7	2336.3	2360.8	2372.0
20°	2257.3	2262.0	2285.5	2308.1	2325.9
22.5°	2194.2	2199.9	2229.0	2254.4	2269.5
25°	2130.2	2133.1	2163.2	2190.5	2214.0
27.5°	2053.1	2068.1	2086.0	2123.6	2149.1
30°	1978.7	1988.2	2008.9	2050.3	2077.5
32.5°	1891.2	1895.0	1921.3	1966.5	2003.2
35°	1791.5	1791.5	1814.1	1879.9	1925.1
37.5°	1692.7	1679.5	1697.4	1772.7	1804.7
40°	1563.8	1554.4	1551.6	1603.3	1624.0
42.5°	1405.7	1387.9	1355.9	1408.6	1425.5
45°	1198.7	1192.1	1131.0	1186.5	1188.4
47.5°	982.3	987.0	918.3	973.8	932.4
50°	767.8	816.7	771.6	795.1	703.8
52.5°	597.5	688.8	671.8	662.4	538.2
55°	460.1	574.9	591.8	551.4	414.0
57.5°	351.0	490.2	500.6	472.3	315.2
60°	258.8	414.0	414.0	400.8	239.9
62.5°	192.9	355.7	336.8	340.6	183.5
65°	151.5	304.9	271.0	289.8	145.8
67.5°	127.0	254.0	205.1	250.3	127.0
70°	123.3	221.1	149.6	225.8	122.3
72.5°	122.3	203.2	112.0	205.1	123.3
75°	114.8	183.5	88.4	180.7	113.9
77.5°	105.4	152.4	73.4	152.4	106.3
80°	94.1	115.7	68.7	118.6	99.7
82.5°	72.5	82.8	61.2	83.7	77.2
85°	46.1	60.2	47.0	61.2	50.8
87.5°	20.7	32.0	20.7	32.9	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)