

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: P476008

Luminaire Tested: **22GR-LD5-50-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476008
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4897.2 lumens
Efficiency: N/A
Efficacy: 132.7 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

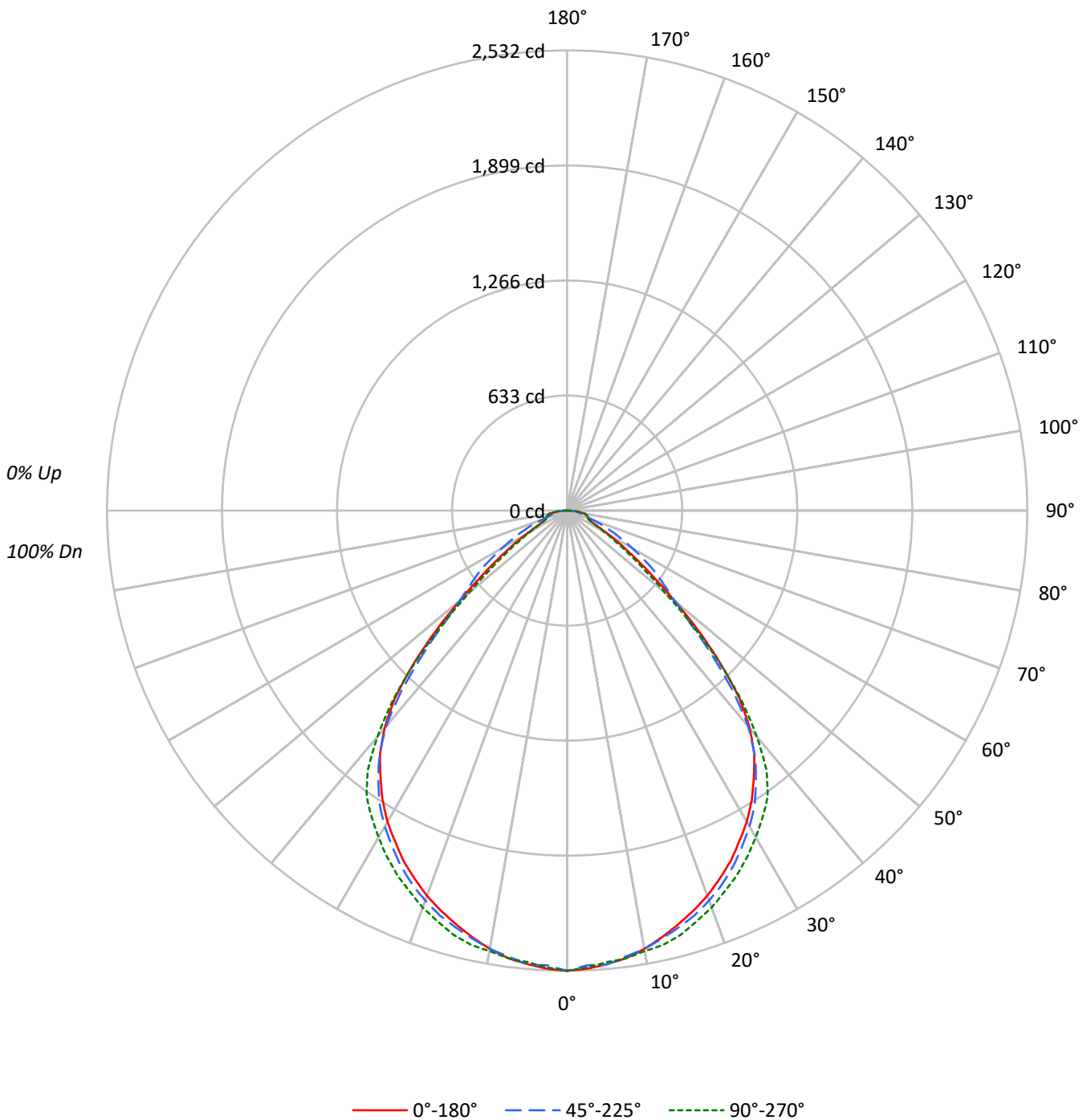
Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6814	6814	6814
5°	6767	6774	6736
10°	6691	6694	6724
15°	6568	6612	6730
20°	6458	6538	6654
25°	6319	6416	6567
30°	6142	6236	6449
35°	5879	5954	6318
40°	5488	5445	5699
45°	4558	4300	4518
50°	3211	3227	2943
55°	2157	2774	1940
60°	1391	2226	1290
65°	963	1724	928
70°	969	1176	961
75°	1193	919	1182
80°	1457	1063	1543
85°	1423	1451	1568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.1	4.8
10°-20°	671.1	13.7
20°-30°	995.3	20.3
30°-40°	1138.5	23.2
40°-50°	901.3	18.4
50°-60°	491.8	10.0
60°-70°	257.3	5.3
70°-80°	148.6	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°	1903.5	38.9
0°-40°	3042.1	62.1
0°-60°	4435.2	90.6
0°-90°	4897.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4897.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2532	2532	2532	2532	2532	
5°	2505	2487	2508	2499	2494	238
15°	2358	2370	2374	2392	2416	665
25°	2128	2131	2161	2188	2212	978
35°	1790	1790	1812	1878	1923	1116
45°	1198	1191	1130	1185	1187	911
55°	460	574	591	551	414	426
65°	151	305	271	290	146	163
75°	115	183	88	180	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°	2532.3	2532.3	2532.3	2532.3	2532.3
2.5°	2522.9	2507.9	2504.1	2511.7	2516.4
5°	2505.1	2487.2	2507.9	2499.4	2493.8
7.5°	2484.4	2477.8	2474.1	2487.2	2484.4
10°	2448.7	2439.3	2449.6	2457.1	2460.9
12.5°	2405.4	2410.1	2412.0	2435.5	2446.8
15°	2357.5	2369.7	2373.5	2392.3	2415.8
17.5°	2308.6	2311.4	2334.0	2358.4	2369.7
20°	2255.0	2259.7	2283.2	2305.8	2323.7
22.5°	2192.1	2197.7	2226.8	2252.2	2267.3
25°	2128.1	2131.0	2161.0	2188.3	2211.8
27.5°	2051.1	2066.1	2084.0	2121.6	2146.9
30°	1976.8	1986.2	2006.9	2048.2	2075.5
32.5°	1889.4	1893.1	1919.5	1964.6	2001.2
35°	1789.7	1789.7	1812.3	1878.1	1923.2
37.5°	1691.0	1677.9	1695.7	1770.9	1802.9
40°	1562.3	1552.9	1550.0	1601.7	1622.4
42.5°	1404.3	1386.5	1354.5	1407.2	1424.1
45°	1197.6	1191.0	1129.9	1185.3	1187.2
47.5°	981.4	986.1	917.4	972.9	931.5
50°	767.0	815.9	770.8	794.3	703.1
52.5°	596.9	688.1	671.2	661.8	537.7
55°	459.7	574.3	591.3	550.8	413.6
57.5°	350.6	489.7	500.1	471.9	314.9
60°	258.5	413.6	413.6	400.4	239.7
62.5°	192.7	355.3	336.5	340.3	183.3
65°	151.3	304.6	270.7	289.5	145.7
67.5°	126.9	253.8	204.9	250.0	126.9
70°	123.1	220.9	149.5	225.6	122.2
72.5°	122.2	203.0	111.9	204.9	123.1
75°	114.7	183.3	88.4	180.5	113.7
77.5°	105.3	152.3	73.3	152.3	106.2
80°	94.0	115.6	68.6	118.4	99.6
82.5°	72.4	82.7	61.1	83.7	77.1
85°	46.1	60.2	47.0	61.1	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)