

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: P475984

Luminaire Tested: **22GR-LD5-50-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475984
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-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4637.7 lumens
Efficiency: N/A
Efficacy: 125.7 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

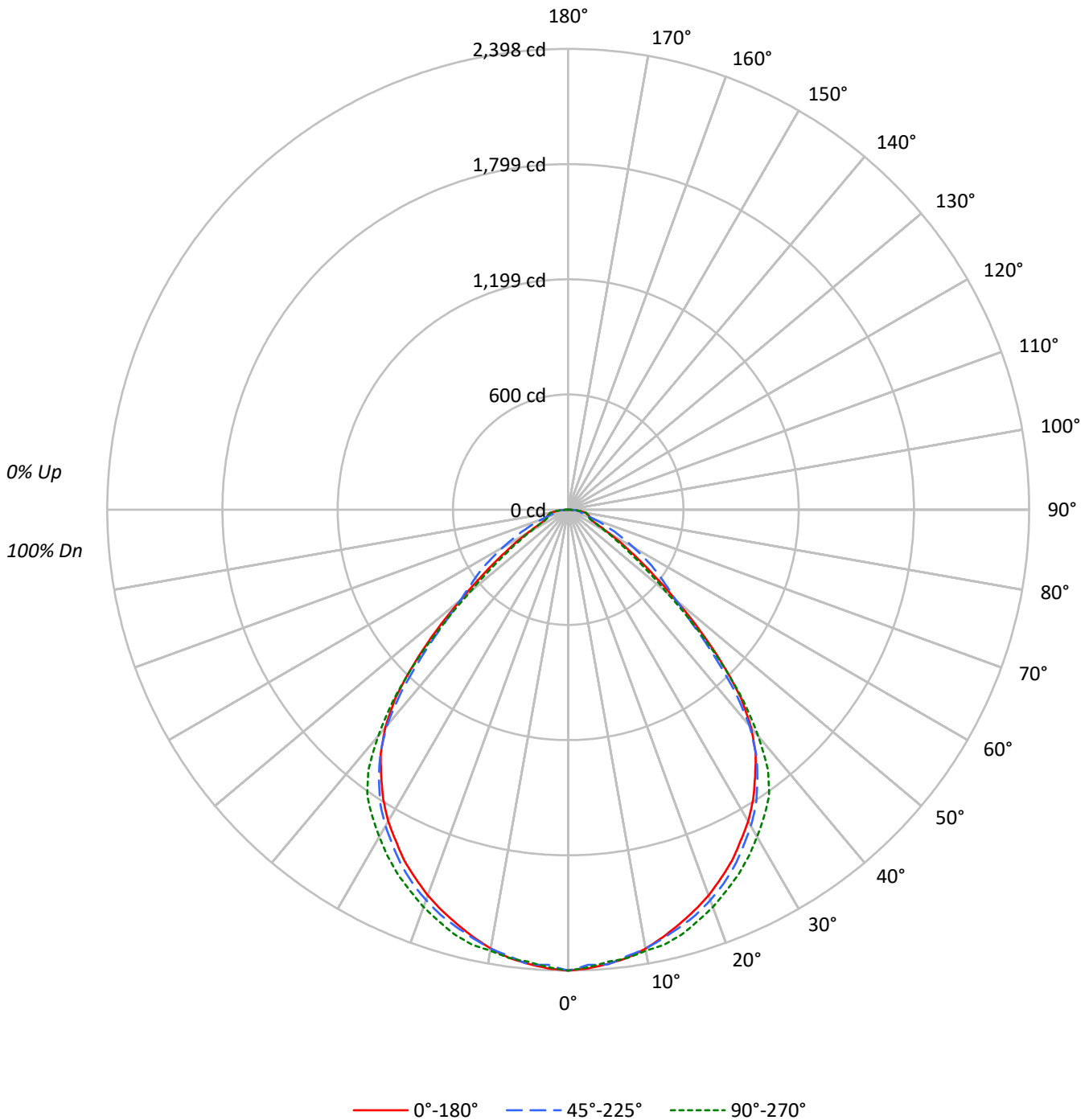
Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6453	6453	6453
5°	6408	6415	6379
10°	6336	6339	6368
15°	6220	6262	6374
20°	6115	6192	6302
25°	5984	6076	6219
30°	5817	5905	6107
35°	5568	5638	5983
40°	5197	5156	5397
45°	4316	4072	4279
50°	3041	3056	2788
55°	2042	2627	1838
60°	1318	2108	1222
65°	912	1633	879
70°	917	1113	910
75°	1129	870	1120
80°	1379	1007	1463
85°	1346	1374	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.5	4.8
10°-20°	635.6	13.7
20°-30°	942.5	20.3
30°-40°	1078.2	23.2
40°-50°	853.5	18.4
50°-60°	465.7	10.0
60°-70°	243.7	5.3
70°-80°	140.7	3.0
80°-90°	53.2	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°	1802.7	38.9
0°-40°	2880.9	62.1
0°-60°	4200.1	90.6
0°-90°	4637.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4637.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2398	2398	2398	2398	2398	
5°	2372	2355	2375	2367	2362	225
15°	2233	2244	2248	2266	2288	630
25°	2015	2018	2046	2072	2095	926
35°	1695	1695	1716	1779	1821	1057
45°	1134	1128	1070	1122	1124	862
55°	435	544	560	522	392	404
65°	143	288	256	274	138	155
75°	109	174	84	171	108	113
85°	44	57	44	58	48	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2398.1	2398.1	2398.1	2398.1	2398.1
2.5°	2389.2	2375.0	2371.4	2378.6	2383.0
5°	2372.3	2355.4	2375.0	2367.0	2361.6
7.5°	2352.7	2346.5	2343.0	2355.4	2352.7
10°	2318.9	2310.0	2319.8	2326.9	2330.5
12.5°	2278.0	2282.4	2284.2	2306.5	2317.1
15°	2232.6	2244.1	2247.7	2265.5	2287.8
17.5°	2186.3	2189.0	2210.3	2233.5	2244.1
20°	2135.5	2140.0	2162.2	2183.6	2200.5
22.5°	2075.9	2081.2	2108.8	2132.9	2147.1
25°	2015.4	2018.0	2046.5	2072.3	2094.6
27.5°	1942.4	1956.6	1973.5	2009.1	2033.2
30°	1872.0	1881.0	1900.5	1939.7	1965.5
32.5°	1789.3	1792.8	1817.7	1860.5	1895.2
35°	1694.9	1694.9	1716.3	1778.6	1821.3
37.5°	1601.4	1589.0	1605.9	1677.1	1707.4
40°	1479.5	1470.6	1467.9	1516.9	1536.5
42.5°	1329.9	1313.0	1282.7	1332.6	1348.6
45°	1134.1	1127.9	1070.0	1122.5	1124.3
47.5°	929.3	933.8	868.8	921.3	882.2
50°	726.4	772.7	729.9	752.2	665.9
52.5°	565.3	651.6	635.6	626.7	509.2
55°	435.3	543.9	559.9	521.6	391.7
57.5°	332.0	463.8	473.6	446.9	298.2
60°	244.8	391.7	391.7	379.2	227.0
62.5°	182.5	336.5	318.7	322.2	173.6
65°	143.3	288.4	256.4	274.2	138.0
67.5°	120.2	240.3	194.1	236.8	120.2
70°	116.6	209.2	141.5	213.6	115.7
72.5°	115.7	192.3	105.9	194.1	116.6
75°	108.6	173.6	83.7	170.9	107.7
77.5°	99.7	144.2	69.4	144.2	100.6
80°	89.0	109.5	65.0	112.2	94.4
82.5°	68.5	78.3	57.9	79.2	73.0
85°	43.6	57.0	44.5	57.9	48.1
87.5°	19.6	30.3	19.6	31.2	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)