

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: P475977

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475977
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-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: 1874.7 lumens
Efficiency: N/A
Efficacy: 124.2 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

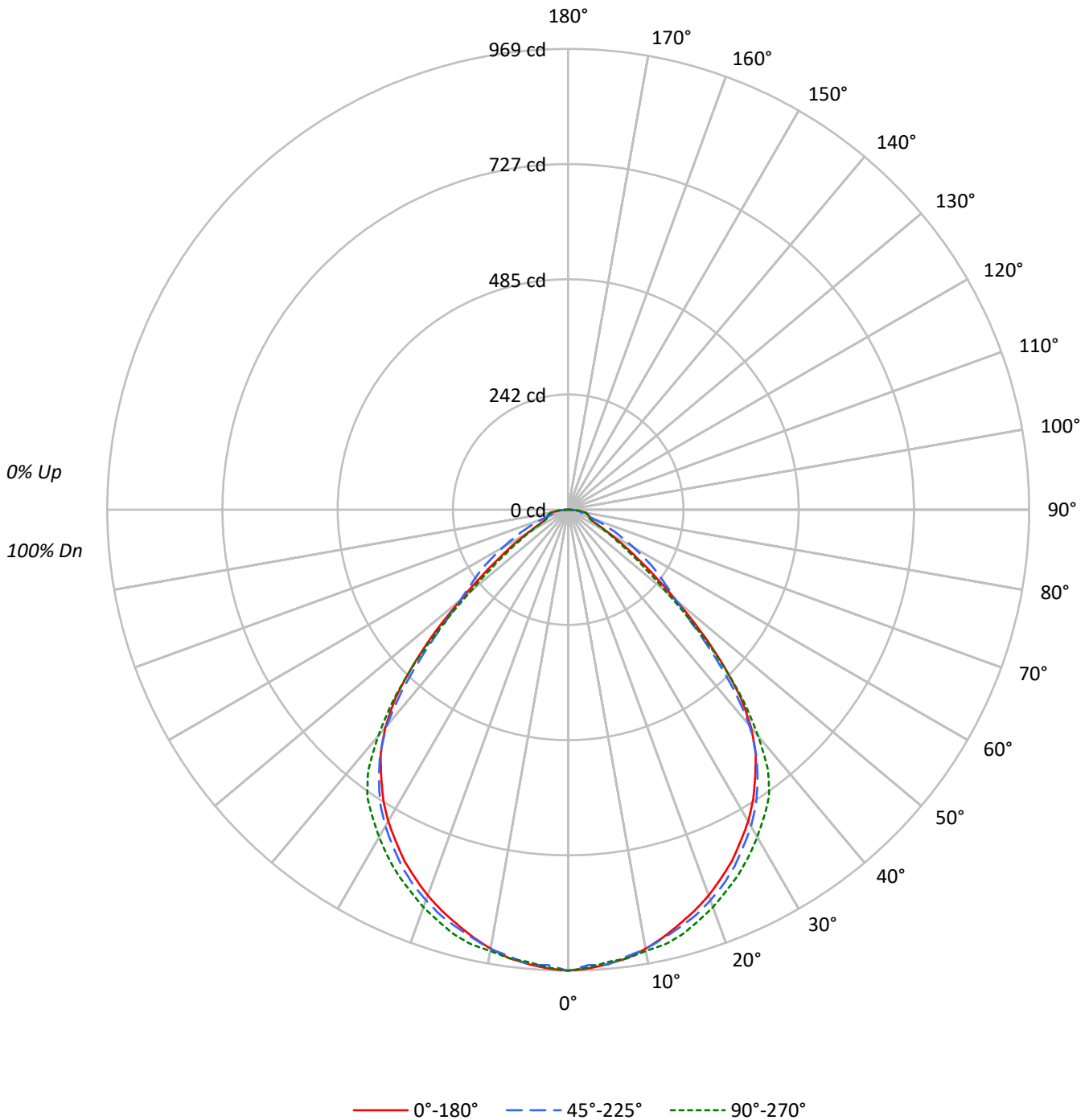
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2609	2609	2609
5°	2591	2593	2579
10°	2561	2562	2574
15°	2514	2531	2576
20°	2472	2503	2547
25°	2419	2456	2514
30°	2351	2387	2469
35°	2251	2279	2418
40°	2101	2085	2182
45°	1744	1646	1730
50°	1229	1235	1127
55°	826	1062	743
60°	533	852	494
65°	369	660	355
70°	371	450	368
75°	456	351	452
80°	558	408	590
85°	543	556	599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.8	4.8
10°-20°	256.9	13.7
20°-30°	381.0	20.3
30°-40°	435.8	23.2
40°-50°	345.0	18.4
50°-60°	188.2	10.0
60°-70°	98.5	5.3
70°-80°	56.9	3.0
80°-90°	21.5	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°	728.7	38.9
0°-40°	1164.6	62.1
0°-60°	1697.8	90.6
0°-90°	1874.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	969	969	969	969	969	
5°	959	952	960	957	955	91
15°	902	907	909	916	925	255
25°	815	816	827	838	847	375
35°	685	685	694	719	736	427
45°	458	456	432	454	454	349
55°	176	220	226	211	158	163
65°	58	117	104	111	56	63
75°	44	70	34	69	44	46
85°	18	23	18	23	19	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	969.4	969.4	969.4	969.4	969.4
2.5°	965.8	960.0	958.6	961.5	963.3
5°	959.0	952.1	960.0	956.8	954.6
7.5°	951.1	948.5	947.1	952.1	951.1
10°	937.4	933.8	937.7	940.6	942.1
12.5°	920.8	922.6	923.3	932.3	936.7
15°	902.5	907.2	908.6	915.8	924.8
17.5°	883.8	884.8	893.5	902.8	907.2
20°	863.3	865.0	874.0	882.7	889.5
22.5°	839.1	841.3	852.5	862.2	867.9
25°	814.7	815.8	827.3	837.7	846.7
27.5°	785.2	790.9	797.8	812.2	821.9
30°	756.7	760.3	768.3	784.1	794.5
32.5°	723.3	724.7	734.8	752.1	766.1
35°	685.1	685.1	693.8	719.0	736.2
37.5°	647.3	642.3	649.1	677.9	690.2
40°	598.1	594.5	593.4	613.2	621.1
42.5°	537.6	530.8	518.5	538.7	545.2
45°	458.4	455.9	432.5	453.8	454.5
47.5°	375.7	377.5	351.2	372.4	356.6
50°	293.6	312.3	295.1	304.1	269.2
52.5°	228.5	263.4	256.9	253.3	205.8
55°	176.0	219.9	226.3	210.9	158.3
57.5°	134.2	187.5	191.4	180.6	120.5
60°	99.0	158.3	158.3	153.3	91.8
62.5°	73.8	136.0	128.8	130.3	70.2
65°	57.9	116.6	103.6	110.8	55.8
67.5°	48.6	97.2	78.4	95.7	48.6
70°	47.1	84.6	57.2	86.4	46.8
72.5°	46.8	77.7	42.8	78.4	47.1
75°	43.9	70.2	33.8	69.1	43.5
77.5°	40.3	58.3	28.1	58.3	40.7
80°	36.0	44.3	26.3	45.3	38.1
82.5°	27.7	31.7	23.4	32.0	29.5
85°	17.6	23.0	18.0	23.4	19.4
87.5°	7.9	12.2	7.9	12.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)