

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: P475997

Luminaire Tested: **22GR-LD5-60-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475997
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-60-A19/156-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5672.3 lumens
Efficiency: N/A
Efficacy: 127.8 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

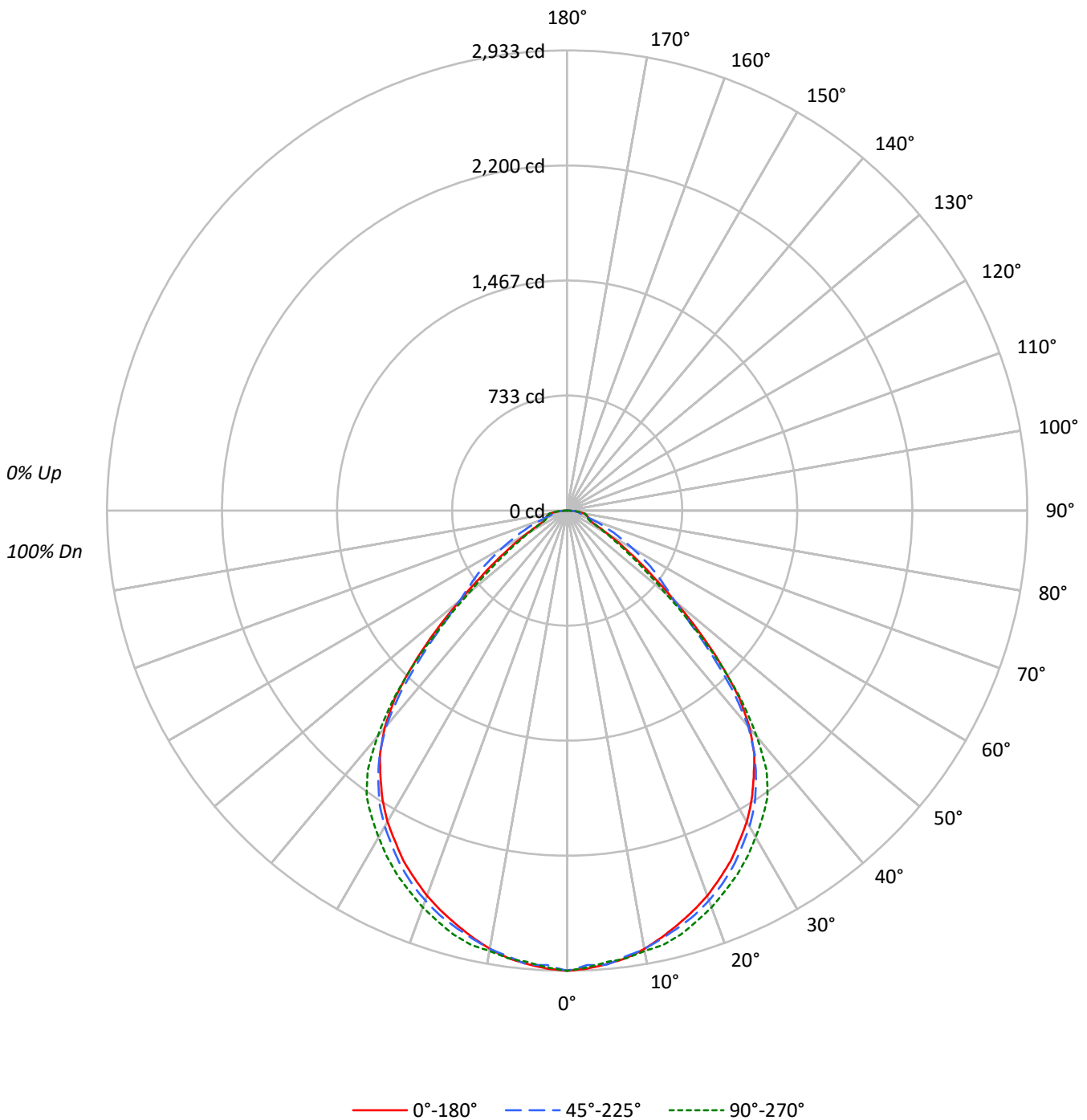
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7893	7893	7893
5°	7838	7847	7803
10°	7750	7753	7789
15°	7607	7659	7795
20°	7480	7573	7707
25°	7319	7432	7607
30°	7115	7223	7470
35°	6810	6896	7318
40°	6356	6307	6601
45°	5279	4980	5233
50°	3719	3738	3409
55°	2498	3213	2248
60°	1611	2578	1494
65°	1116	1997	1075
70°	1122	1362	1113
75°	1381	1064	1369
80°	1688	1232	1788
85°	1646	1680	1815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.6	4.8
10°-20°	777.4	13.7
20°-30°	1152.8	20.3
30°-40°	1318.7	23.2
40°-50°	1043.9	18.4
50°-60°	569.6	10.0
60°-70°	298.0	5.3
70°-80°	172.1	3.0
80°-90°	65.1	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°	2204.8	38.9
0°-40°	3523.6	62.1
0°-60°	5137.1	90.6
0°-90°	5672.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5672.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2933	2933	2933	2933	2933	
5°	2902	2881	2905	2895	2888	275
15°	2731	2745	2749	2771	2798	770
25°	2465	2468	2503	2535	2562	1133
35°	2073	2073	2099	2175	2228	1293
45°	1387	1380	1309	1373	1375	1055
55°	532	665	685	638	479	494
65°	175	353	314	335	169	189
75°	133	212	102	209	132	138
85°	53	70	54	71	59	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2933.1	2933.1	2933.1	2933.1	2933.1
2.5°	2922.2	2904.8	2900.5	2909.2	2914.6
5°	2901.6	2880.9	2904.8	2895.0	2888.5
7.5°	2877.6	2870.0	2865.6	2880.9	2877.6
10°	2836.2	2825.3	2837.3	2846.0	2850.4
12.5°	2786.1	2791.6	2793.8	2821.0	2834.0
15°	2730.6	2744.8	2749.1	2770.9	2798.1
17.5°	2674.0	2677.3	2703.4	2731.7	2744.8
20°	2611.9	2617.4	2644.6	2670.7	2691.4
22.5°	2539.0	2545.5	2579.3	2608.7	2626.1
25°	2465.0	2468.2	2503.1	2534.6	2561.9
27.5°	2375.7	2393.1	2413.8	2457.3	2486.7
30°	2289.7	2300.6	2324.5	2372.4	2404.0
32.5°	2188.4	2192.8	2223.3	2275.5	2318.0
35°	2073.0	2073.0	2099.1	2175.3	2227.6
37.5°	1958.7	1943.4	1964.1	2051.2	2088.2
40°	1809.5	1798.6	1795.4	1855.3	1879.2
42.5°	1626.6	1605.9	1568.9	1629.9	1649.5
45°	1387.1	1379.5	1308.7	1372.9	1375.1
47.5°	1136.7	1142.1	1062.6	1126.9	1079.0
50°	888.4	945.0	892.8	920.0	814.4
52.5°	691.4	797.0	777.4	766.5	622.8
55°	532.4	665.2	684.8	638.0	479.1
57.5°	406.1	567.2	579.2	546.6	364.7
60°	299.4	479.1	479.1	463.8	277.6
62.5°	223.2	411.6	389.8	394.1	212.3
65°	175.3	352.8	313.6	335.3	168.8
67.5°	147.0	294.0	237.4	289.6	147.0
70°	142.6	255.9	173.1	261.3	141.5
72.5°	141.5	235.2	129.6	237.4	142.6
75°	132.8	212.3	102.3	209.0	131.7
77.5°	121.9	176.4	84.9	176.4	123.0
80°	108.9	133.9	79.5	137.2	115.4
82.5°	83.8	95.8	70.8	96.9	89.3
85°	53.3	69.7	54.4	70.8	58.8
87.5°	24.0	37.0	24.0	38.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)