

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: P475987

Luminaire Tested: **22GR-LD5-85-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475987
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-85-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: 7834.3 lumens
Efficiency: N/A
Efficacy: 120.9 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

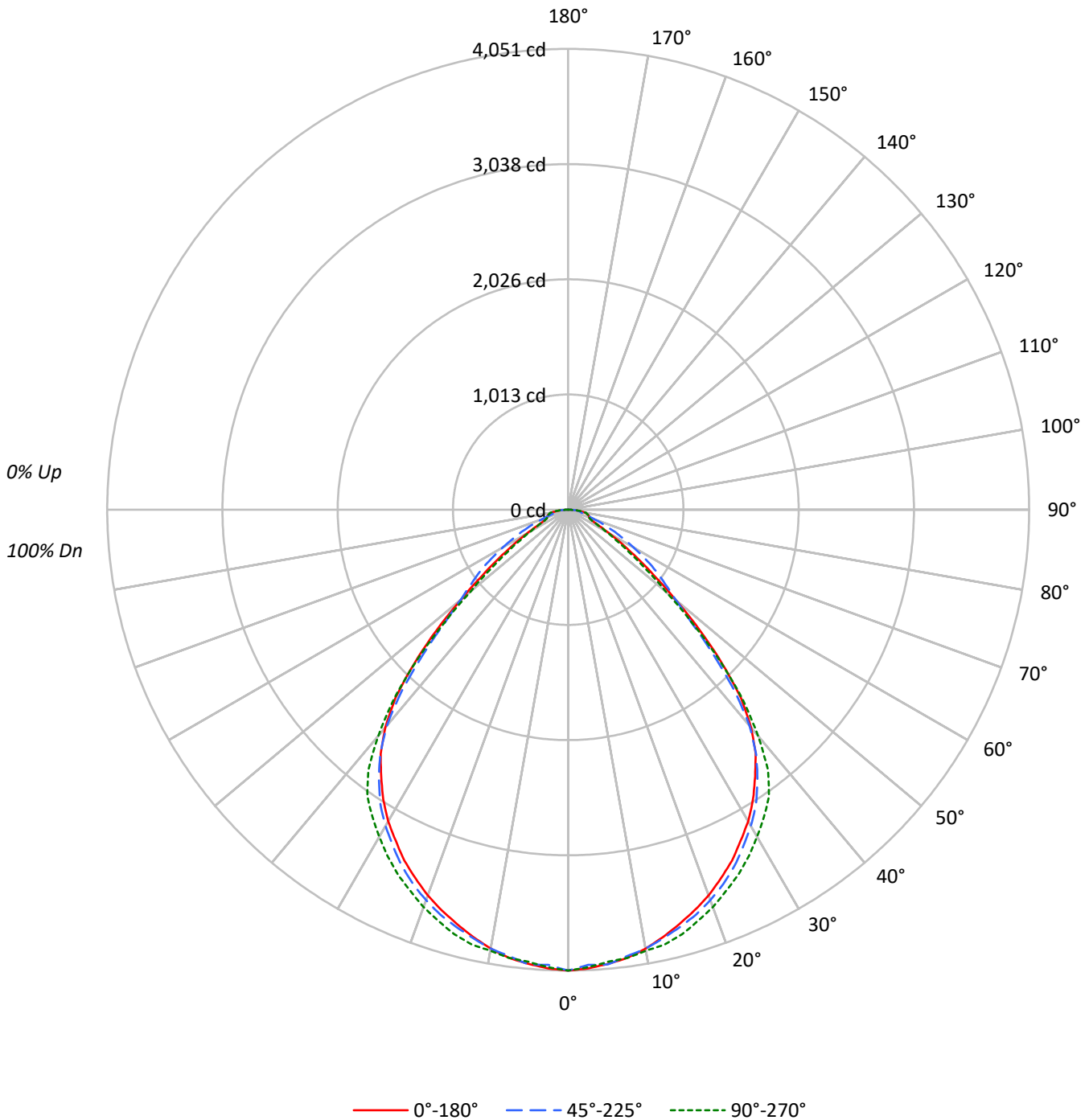
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	10901	10901	10901
5°	10825	10837	10777
10°	10704	10708	10757
15°	10507	10578	10766
20°	10331	10460	10645
25°	10109	10265	10506
30°	9826	9976	10317
35°	9406	9524	10107
40°	8779	8711	9118
45°	7291	6879	7228
50°	5137	5162	4709
55°	3450	4438	3104
60°	2225	3561	2064
65°	1542	2758	1484
70°	1550	1881	1538
75°	1908	1470	1892
80°	2331	1702	2470
85°	2276	2322	2507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.3	4.8
10°-20°	1073.7	13.7
20°-30°	1592.2	20.3
30°-40°	1821.4	23.2
40°-50°	1441.8	18.4
50°-60°	786.7	10.0
60°-70°	411.6	5.3
70°-80°	237.7	3.0
80°-90°	89.9	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°	3045.2	38.9
0°-40°	4866.6	62.1
0°-60°	7095.1	90.6
0°-90°	7834.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7834.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4051	4051	4051	4051	4051	
5°	4008	3979	4012	3998	3990	380
15°	3771	3791	3797	3827	3865	1064
25°	3404	3409	3457	3501	3538	1565
35°	2863	2863	2899	3004	3077	1786
45°	1916	1905	1808	1896	1899	1457
55°	735	919	946	881	662	682
65°	242	487	433	463	233	261
75°	184	293	141	289	182	191
85°	74	96	75	98	81	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4051.1	4051.1	4051.1	4051.1	4051.1
2.5°	4036.1	4012.0	4006.0	4018.0	4025.5
5°	4007.5	3978.9	4012.0	3998.5	3989.5
7.5°	3974.4	3963.9	3957.9	3978.9	3974.4
10°	3917.3	3902.2	3918.8	3930.8	3936.8
12.5°	3848.1	3855.6	3858.6	3896.2	3914.3
15°	3771.4	3791.0	3797.0	3827.0	3864.6
17.5°	3693.2	3697.7	3733.8	3772.9	3791.0
20°	3607.5	3615.0	3652.6	3688.7	3717.3
22.5°	3506.7	3515.8	3562.4	3603.0	3627.0
25°	3404.5	3409.0	3457.1	3500.7	3538.3
27.5°	3281.2	3305.2	3333.8	3394.0	3434.6
30°	3162.4	3177.4	3210.5	3276.7	3320.3
32.5°	3022.5	3028.6	3070.7	3142.8	3201.5
35°	2863.1	2863.1	2899.2	3004.5	3076.7
37.5°	2705.2	2684.2	2712.8	2833.1	2884.2
40°	2499.2	2484.2	2479.7	2562.4	2595.5
42.5°	2246.6	2218.0	2166.9	2251.1	2278.2
45°	1915.8	1905.3	1807.5	1896.2	1899.2
47.5°	1569.9	1577.4	1467.7	1556.4	1490.2
50°	1227.1	1305.3	1233.1	1270.7	1124.8
52.5°	954.9	1100.7	1073.7	1058.6	860.1
55°	735.3	918.8	945.9	881.2	661.7
57.5°	560.9	783.5	800.0	754.9	503.8
60°	413.5	661.7	661.7	640.6	383.5
62.5°	308.3	568.4	538.3	544.4	293.2
65°	242.1	487.2	433.1	463.2	233.1
67.5°	203.0	406.0	327.8	400.0	203.0
70°	197.0	353.4	239.1	360.9	195.5
72.5°	195.5	324.8	178.9	327.8	197.0
75°	183.5	293.2	141.4	288.7	182.0
77.5°	168.4	243.6	117.3	243.6	169.9
80°	150.4	185.0	109.8	189.5	159.4
82.5°	115.8	132.3	97.7	133.8	123.3
85°	73.7	96.2	75.2	97.7	81.2
87.5°	33.1	51.1	33.1	52.6	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)