

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: P475928

Luminaire Tested: **22GR-LD5-90-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475928
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-F1-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9236.2 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

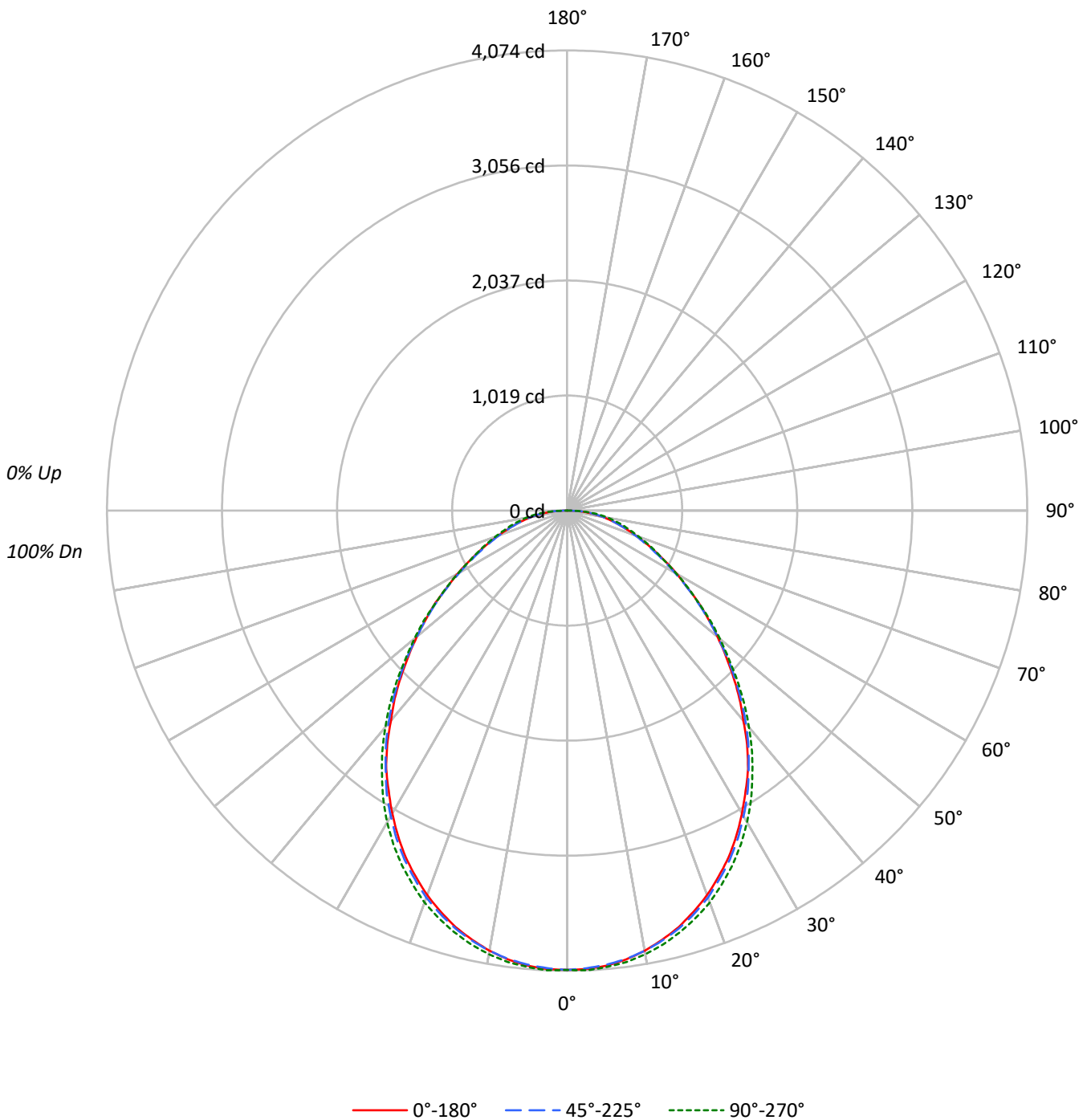
Input Watts (W): 69.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10943	10943	10943
5°	10921	10900	10953
10°	10814	10814	10899
15°	10634	10667	10764
20°	10373	10440	10574
25°	10050	10120	10281
30°	9622	9707	9900
35°	9175	9200	9392
40°	8524	8648	8798
45°	7916	7990	8108
50°	7273	7273	7387
55°	6670	6597	6633
60°	6037	5933	6016
65°	5506	5382	5556
70°	5087	5057	5302
75°	4900	4860	5346
80°	4950	4950	5673
85°	5172	5412	6493



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	383.5	4.2
10°-20°	1079.5	11.7
20°-30°	1569.5	17.0
30°-40°	1756.8	19.0
40°-50°	1621.5	17.6
50°-60°	1265.3	13.7
60°-70°	856.5	9.3
70°-80°	511.5	5.5
80°-90°	192.1	2.1
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°	3032.4	32.8
0°-40°	4789.2	51.9
0°-60°	7676.0	83.1
0°-90°	9236.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9236.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4066	4066	4066	4066	4066	
5°	4043	4035	4035	4051	4055	383
15°	3817	3817	3829	3852	3864	1074
25°	3385	3385	3408	3443	3463	1554
35°	2793	2789	2801	2843	2859	1737
45°	2080	2092	2100	2115	2131	1605
55°	1422	1410	1406	1414	1414	1268
65°	865	857	845	861	872	861
75°	471	467	467	495	514	500
85°	168	164	175	202	210	178
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4066.5	4066.5	4066.5	4066.5	4066.5
2.5°	4062.6	4054.8	4054.8	4066.5	4074.3
5°	4043.1	4035.3	4035.3	4050.9	4054.8
7.5°	4008.1	4004.2	4004.2	4019.7	4031.4
10°	3957.4	3953.5	3957.4	3973.0	3988.6
12.5°	3891.2	3891.2	3899.0	3918.5	3934.0
15°	3817.2	3817.2	3828.9	3852.2	3863.9
17.5°	3723.7	3727.6	3743.2	3770.4	3782.1
20°	3622.4	3630.2	3645.8	3669.2	3692.5
22.5°	3505.6	3513.4	3529.0	3564.0	3579.6
25°	3384.8	3384.8	3408.2	3443.3	3462.7
27.5°	3244.6	3248.5	3271.9	3310.8	3330.3
30°	3096.6	3108.3	3123.9	3158.9	3186.2
32.5°	2940.8	2952.5	2972.0	3010.9	3030.4
35°	2792.8	2788.9	2800.6	2843.4	2859.0
37.5°	2617.5	2621.4	2637.0	2668.1	2687.6
40°	2426.6	2446.1	2461.7	2485.1	2504.5
42.5°	2259.2	2270.8	2282.5	2305.9	2321.5
45°	2080.0	2091.7	2099.5	2115.0	2130.6
47.5°	1904.7	1908.6	1920.3	1928.1	1939.8
50°	1737.2	1741.1	1737.2	1748.9	1764.5
52.5°	1573.6	1569.7	1569.7	1573.6	1597.0
55°	1421.7	1410.0	1406.1	1413.9	1413.9
57.5°	1254.2	1250.3	1250.3	1246.4	1265.9
60°	1121.8	1110.1	1102.3	1110.1	1117.9
62.5°	985.5	973.8	966.0	981.6	981.6
65°	864.7	856.9	845.2	860.8	872.5
67.5°	747.9	740.1	736.2	755.6	771.2
70°	646.6	642.7	642.7	662.2	673.9
72.5°	553.1	549.2	549.2	576.5	588.2
75°	471.3	467.4	467.4	494.7	514.2
77.5°	389.5	385.6	397.3	420.7	440.1
80°	319.4	315.5	319.4	350.6	366.1
82.5°	241.5	241.5	249.3	280.4	296.0
85°	167.5	163.6	175.3	202.5	210.3
87.5°	85.7	89.6	93.5	109.1	109.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)