

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: P475892

Luminaire Tested: **22GR-LD5-90-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475892
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-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8738.2 lumens
Efficiency: N/A
Efficacy: 126.1 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

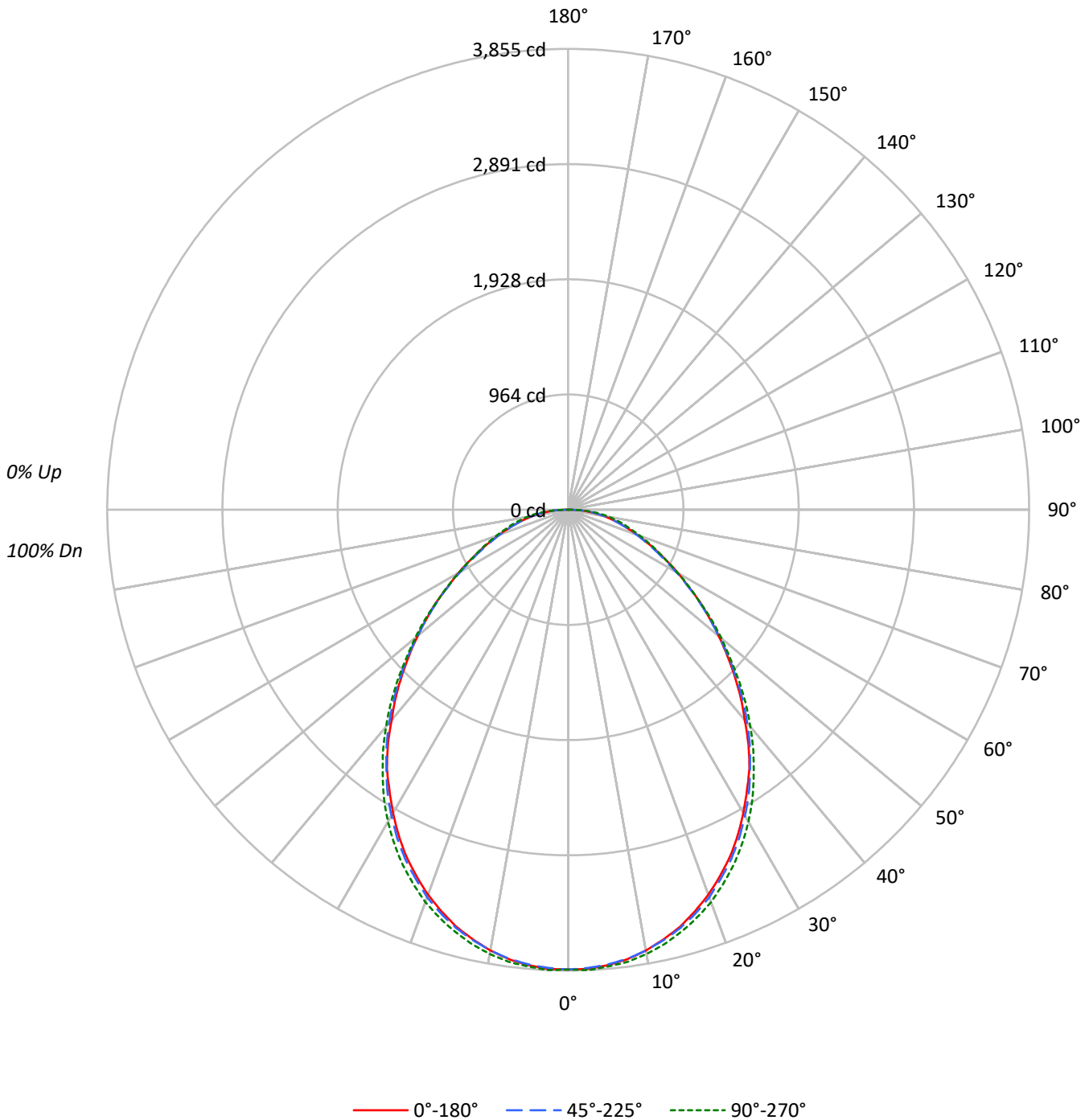
Input Watts (W): 69.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10353	10353	10353
5°	10333	10313	10363
10°	10230	10230	10311
15°	10061	10092	10184
20°	9814	9877	10004
25°	9508	9574	9727
30°	9103	9183	9367
35°	8680	8704	8885
40°	8065	8181	8324
45°	7489	7559	7671
50°	6880	6880	6988
55°	6310	6241	6276
60°	5712	5613	5692
65°	5209	5092	5256
70°	4813	4784	5016
75°	4636	4598	5057
80°	4683	4683	5368
85°	4894	5119	6144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.8	4.2
10°-20°	1021.2	11.7
20°-30°	1484.9	17.0
30°-40°	1662.1	19.0
40°-50°	1534.1	17.6
50°-60°	1197.1	13.7
60°-70°	810.3	9.3
70°-80°	483.9	5.5
80°-90°	181.8	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°	2868.9	32.8
0°-40°	4531.0	51.9
0°-60°	7262.1	83.1
0°-90°	8738.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8738.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3847	3847	3847	3847	3847	
5°	3825	3818	3818	3832	3836	363
15°	3611	3611	3622	3644	3656	1016
25°	3202	3202	3224	3258	3276	1471
35°	2642	2638	2650	2690	2705	1643
45°	1968	1979	1986	2001	2016	1518
55°	1345	1334	1330	1338	1338	1200
65°	818	811	800	814	826	815
75°	446	442	442	468	486	473
85°	158	155	166	192	199	169
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3847.2	3847.2	3847.2	3847.2	3847.2
2.5°	3843.5	3836.2	3836.2	3847.2	3854.6
5°	3825.1	3817.7	3817.7	3832.5	3836.2
7.5°	3791.9	3788.2	3788.2	3803.0	3814.0
10°	3744.0	3740.3	3744.0	3758.8	3773.5
12.5°	3681.4	3681.4	3688.7	3707.2	3721.9
15°	3611.4	3611.4	3622.4	3644.5	3655.6
17.5°	3522.9	3526.6	3541.3	3567.1	3578.2
20°	3427.1	3434.5	3449.2	3471.3	3493.4
22.5°	3316.6	3323.9	3338.7	3371.8	3386.6
25°	3202.3	3202.3	3224.4	3257.6	3276.0
27.5°	3069.7	3073.3	3095.5	3132.3	3150.7
30°	2929.6	2940.7	2955.4	2988.6	3014.4
32.5°	2782.2	2793.3	2811.7	2848.6	2867.0
35°	2642.2	2638.5	2649.6	2690.1	2704.8
37.5°	2476.4	2480.0	2494.8	2524.3	2542.7
40°	2295.8	2314.2	2329.0	2351.1	2369.5
42.5°	2137.3	2148.4	2159.4	2181.6	2196.3
45°	1967.8	1978.9	1986.2	2001.0	2015.7
47.5°	1802.0	1805.7	1816.7	1824.1	1835.2
50°	1643.5	1647.2	1643.5	1654.6	1669.3
52.5°	1488.8	1485.1	1485.1	1488.8	1510.9
55°	1345.0	1334.0	1330.3	1337.7	1337.7
57.5°	1186.6	1182.9	1182.9	1179.2	1197.6
60°	1061.3	1050.2	1042.9	1050.2	1057.6
62.5°	932.3	921.3	913.9	928.6	928.6
65°	818.1	810.7	799.7	814.4	825.5
67.5°	707.5	700.2	696.5	714.9	729.6
70°	611.7	608.0	608.0	626.5	637.5
72.5°	523.3	519.6	519.6	545.4	556.4
75°	445.9	442.2	442.2	468.0	486.4
77.5°	368.5	364.8	375.9	398.0	416.4
80°	302.2	298.5	302.2	331.7	346.4
82.5°	228.5	228.5	235.8	265.3	280.1
85°	158.5	154.8	165.8	191.6	199.0
87.5°	81.1	84.8	88.4	103.2	103.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)