

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: P476144

Luminaire Tested: **22GR-LD5-90-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476144  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-90-FGW080-UNV-L835-CD1-U  
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7699.3 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

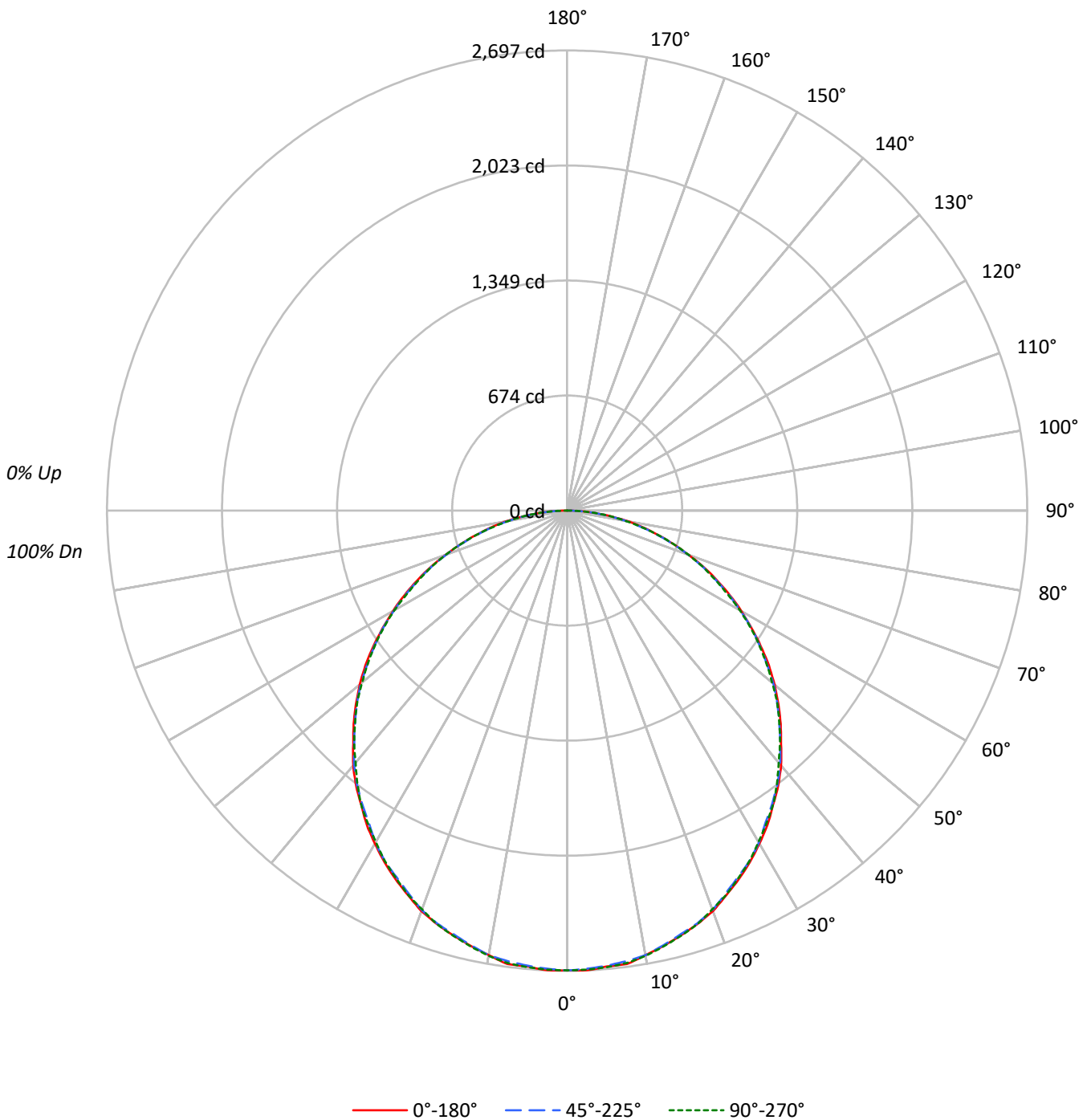
Input Watts (W): 69.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7252	7252	7252
5°	7243	7231	7256
10°	7228	7228	7241
15°	7180	7161	7187
20°	7154	7135	7122
25°	7075	7035	7055
30°	7003	6982	6968
35°	6915	6886	6915
40°	6854	6822	6774
45°	6736	6693	6693
50°	6643	6605	6567
55°	6503	6460	6450
60°	6351	6315	6290
65°	6188	6117	6087
70°	5942	5925	5942
75°	5735	5664	5711
80°	5672	5391	5356
85°	5030	4891	4962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.9	3.3
10°-20°	727.4	9.4
20°-30°	1095.3	14.2
30°-40°	1314.4	17.1
40°-50°	1360.0	17.7
50°-60°	1232.5	16.0
60°-70°	955.3	12.4
70°-80°	579.9	7.5
80°-90°	179.6	2.3
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°	2077.6	27.0
0°-40°	3392.0	44.1
0°-60°	5984.5	77.7
0°-90°	7699.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7699.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2695	2695	2695	2695	2695	
5°	2682	2682	2677	2684	2686	255
15°	2577	2577	2571	2582	2580	728
25°	2383	2378	2369	2378	2376	1098
35°	2105	2105	2096	2098	2105	1320
45°	1770	1768	1759	1759	1759	1366
55°	1386	1384	1377	1375	1375	1239
65°	972	972	961	965	956	961
75°	552	549	545	545	549	587
85°	163	161	158	158	161	185
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2695.0	2695.0	2695.0	2695.0	2695.0
2.5°	2697.3	2686.0	2688.2	2692.8	2692.8
5°	2681.5	2681.5	2676.9	2683.7	2686.0
7.5°	2681.5	2670.1	2663.4	2670.1	2674.7
10°	2645.3	2640.7	2645.3	2643.0	2649.8
12.5°	2613.6	2609.1	2609.1	2615.8	2615.8
15°	2577.4	2577.4	2570.6	2581.9	2579.6
17.5°	2541.2	2541.2	2536.6	2536.6	2541.2
20°	2498.2	2486.9	2491.4	2489.1	2486.9
22.5°	2439.3	2432.5	2428.0	2434.8	2437.1
25°	2382.8	2378.2	2369.2	2378.2	2376.0
27.5°	2321.7	2317.1	2314.9	2310.4	2314.9
30°	2253.8	2249.3	2247.0	2242.5	2242.5
32.5°	2185.9	2176.8	2165.5	2176.8	2174.6
35°	2105.0	2105.0	2096.0	2098.2	2105.0
37.5°	2032.6	2028.1	2023.5	2016.8	2019.0
40°	1951.1	1944.3	1942.1	1937.6	1928.5
42.5°	1856.1	1856.1	1847.0	1849.3	1847.0
45°	1770.1	1767.8	1758.8	1758.8	1758.8
47.5°	1679.6	1677.3	1670.5	1666.0	1670.5
50°	1586.8	1577.8	1577.8	1571.0	1568.7
52.5°	1490.1	1483.3	1474.2	1476.5	1472.0
55°	1386.0	1383.7	1376.9	1374.7	1374.7
57.5°	1281.9	1284.2	1279.6	1270.6	1272.8
60°	1180.1	1177.8	1173.3	1168.8	1168.8
62.5°	1076.0	1076.0	1066.9	1066.9	1057.9
65°	971.9	971.9	960.6	965.1	956.0
67.5°	868.4	866.1	859.3	857.0	859.3
70°	755.2	757.5	753.0	753.0	755.2
72.5°	653.4	651.1	648.9	648.9	653.4
75°	551.6	549.3	544.8	544.8	549.3
77.5°	458.8	447.5	445.2	449.7	443.0
80°	366.0	350.2	347.9	345.6	345.6
82.5°	258.0	251.2	253.4	251.2	255.7
85°	162.9	160.7	158.4	158.4	160.7
87.5°	76.9	72.4	72.4	70.1	70.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)