

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: P476035

Luminaire Tested: **22GR-LD5-85-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476035  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-85-A-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ A LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7999.4 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

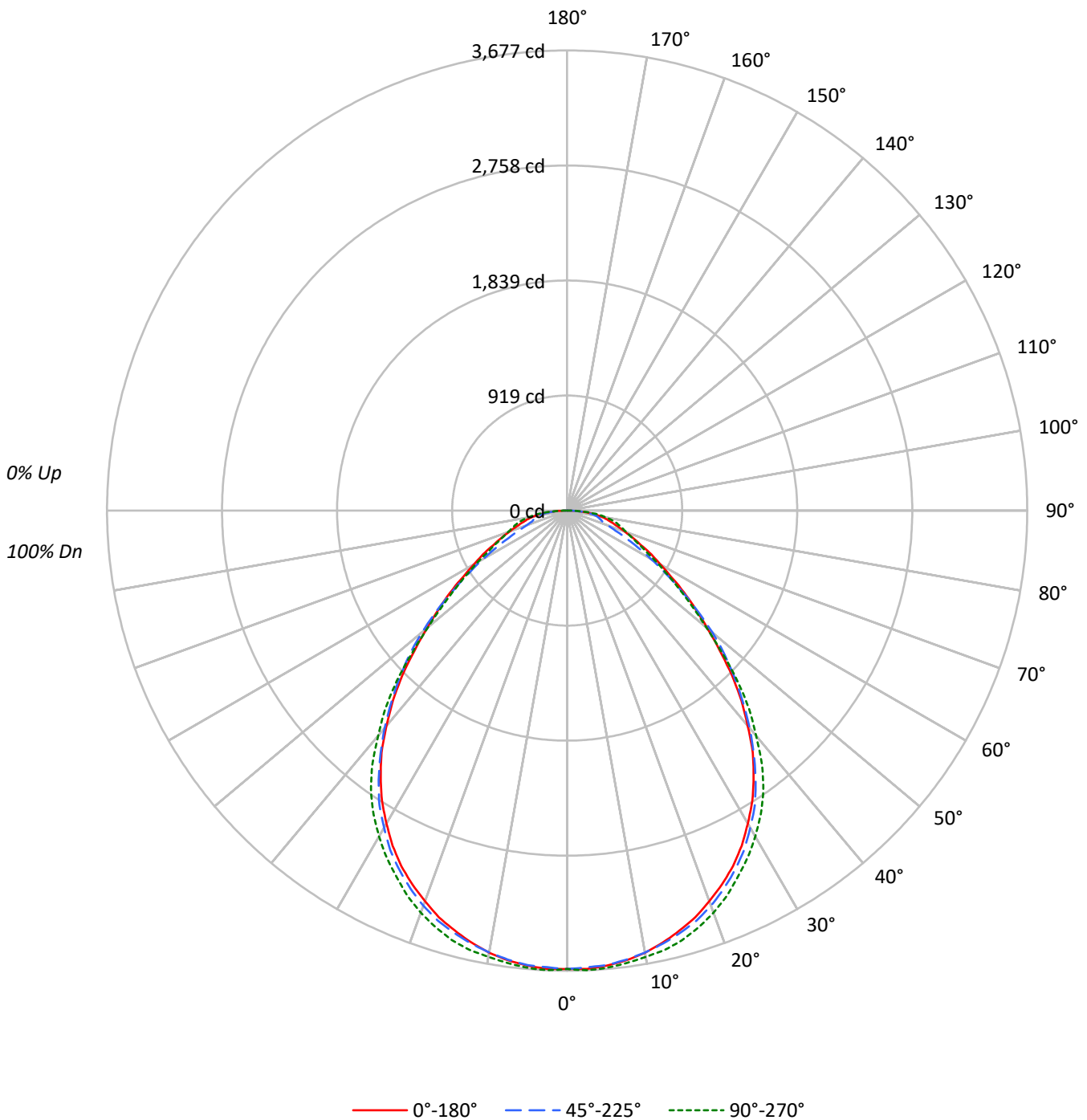
Input Watts (W): 64.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

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

	0°	45°	90°
0°	9858	9858	9858
5°	9861	9846	9906
10°	9801	9797	9893
15°	9677	9729	9900
20°	9510	9622	9792
25°	9308	9413	9584
30°	8971	9093	9341
35°	8531	8628	8977
40°	7887	7972	8252
45°	7084	7212	7326
50°	6125	6343	6063
55°	5345	5204	5135
60°	4628	4167	4448
65°	4137	3272	3996
70°	3837	2709	3942
75°	3830	2863	4374
80°	4245	3603	4931
85°	4424	3909	5582



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	346.7	4.3
10°-20°	987.4	12.3
20°-30°	1460.3	18.3
30°-40°	1647.9	20.6
40°-50°	1452.7	18.2
50°-60°	996.5	12.5
60°-70°	588.1	7.4
70°-80°	366.9	4.6
80°-90°	153.0	1.9
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°	2794.4	34.9
0°-40°	4442.3	55.5
0°-60°	6891.5	86.1
0°-90°	7999.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7999.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3663	3663	3663	3663	3663	
5°	3650	3643	3645	3658	3667	346
15°	3474	3477	3492	3535	3554	979
25°	3135	3146	3170	3211	3228	1440
35°	2597	2619	2626	2690	2733	1618
45°	1862	1871	1895	1906	1925	1430
55°	1139	1111	1109	1072	1094	1022
65°	650	571	514	594	628	655
75°	368	332	275	385	421	395
85°	143	134	127	166	181	155
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3663.3	3663.3	3663.3	3663.3	3663.3
2.5°	3665.3	3655.9	3652.5	3667.3	3676.6
5°	3650.5	3643.1	3645.1	3657.9	3667.3
7.5°	3624.4	3619.0	3619.0	3637.2	3646.6
10°	3587.0	3585.5	3585.5	3607.6	3620.5
12.5°	3535.2	3536.7	3544.1	3574.2	3596.3
15°	3473.7	3477.1	3492.4	3535.2	3553.5
17.5°	3406.7	3406.7	3436.2	3469.7	3492.4
20°	3321.0	3326.4	3359.9	3397.3	3419.5
22.5°	3233.3	3242.6	3270.7	3313.6	3333.8
25°	3134.8	3146.1	3170.2	3211.1	3227.9
27.5°	3019.5	3034.3	3060.4	3089.9	3125.4
30°	2887.0	2909.7	2926.4	2967.3	3006.2
32.5°	2753.0	2773.7	2792.4	2835.3	2879.6
35°	2596.9	2619.0	2626.4	2690.0	2732.8
37.5°	2436.8	2446.1	2449.6	2513.1	2559.4
40°	2245.2	2263.4	2269.3	2319.6	2349.1
42.5°	2060.5	2068.3	2079.2	2116.6	2152.1
45°	1861.5	1870.8	1895.0	1906.3	1925.0
47.5°	1653.1	1681.2	1708.8	1673.3	1675.3
50°	1463.0	1485.6	1515.2	1448.2	1448.2
52.5°	1293.5	1304.8	1306.8	1251.2	1262.0
55°	1139.3	1111.3	1109.3	1072.3	1094.5
57.5°	984.7	947.7	934.4	923.1	949.2
60°	860.0	793.1	774.3	791.1	826.5
62.5°	757.6	671.9	636.4	679.3	711.3
65°	649.7	571.4	513.8	594.1	627.5
67.5°	566.0	491.6	417.2	530.5	554.6
70°	487.7	430.0	344.3	482.2	501.0
72.5°	424.6	379.8	298.0	435.4	458.1
75°	368.4	331.5	275.4	385.2	420.7
77.5°	324.1	282.7	257.1	333.0	375.8
80°	273.9	232.5	232.5	279.3	318.2
82.5°	215.7	182.3	188.2	227.1	255.2
85°	143.3	134.0	126.6	165.5	180.8
87.5°	72.4	74.4	67.0	85.7	87.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)