

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: P475524

Luminaire Tested: **24GR-LD5-42-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475524  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-F1-UNV-L830-CD1-U  
Description: GR 2'X4' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4138.7 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

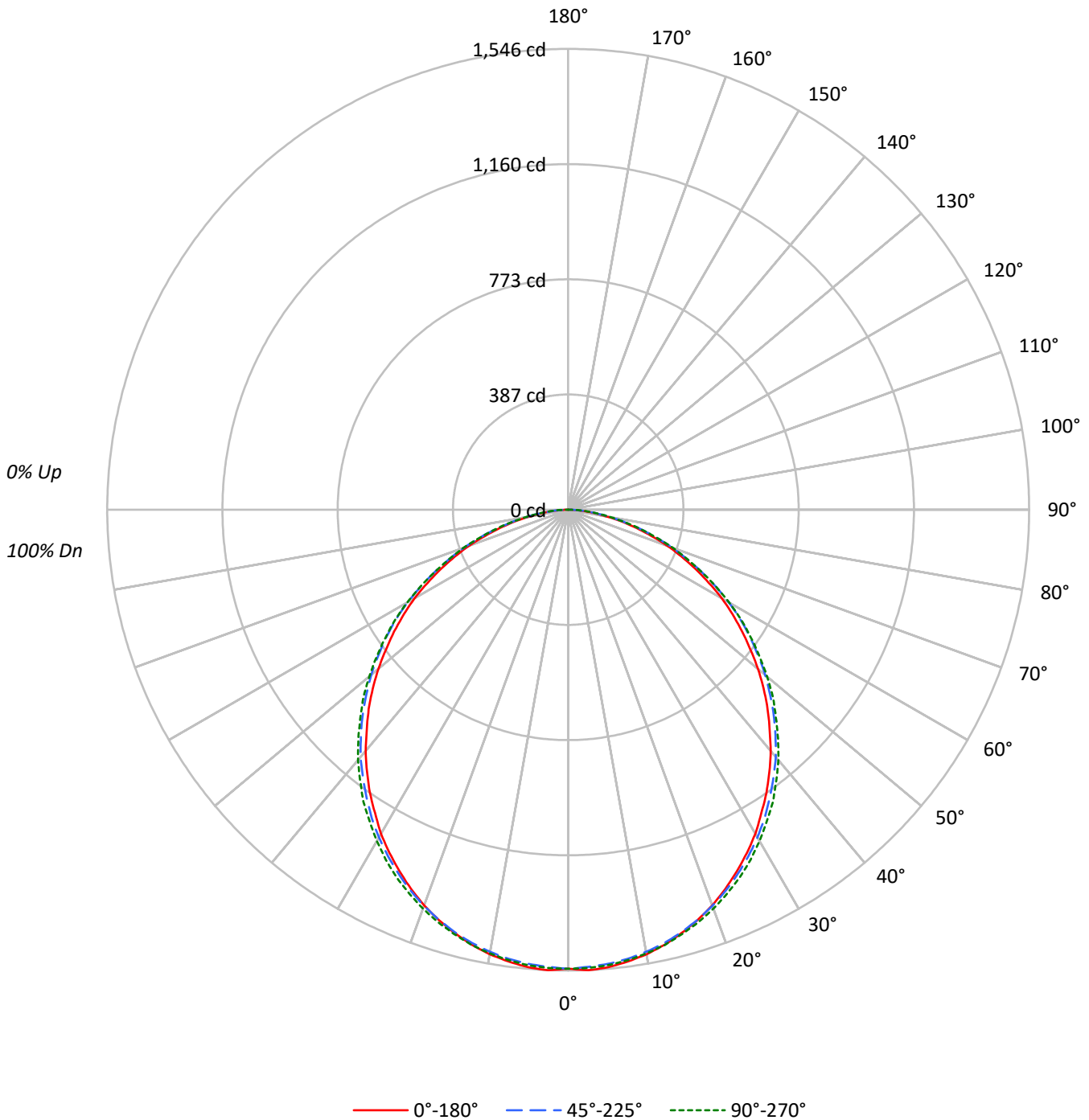
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	2072	2072	2072
5°	2081	2066	2072
10°	2069	2058	2065
15°	2048	2044	2053
20°	2022	2025	2039
25°	1987	2000	2021
30°	1950	1972	1994
35°	1904	1936	1965
40°	1856	1902	1926
45°	1800	1855	1874
50°	1739	1806	1822
55°	1671	1745	1755
60°	1602	1673	1680
65°	1501	1573	1569
70°	1391	1455	1469
75°	1232	1304	1313
80°	1025	1101	1126
85°	777	852	959



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	3.5
10°-20°	414.4	10.0
20°-30°	620.9	15.0
30°-40°	736.6	17.8
40°-50°	748.1	18.1
50°-60°	658.8	15.9
60°-70°	484.1	11.7
70°-80°	263.3	6.4
80°-90°	67.1	1.6
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°	1180.8	28.5
0°-40°	1917.4	46.3
0°-60°	3324.3	80.3
0°-90°	4138.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4138.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1540	1540	1540	1540	1540	
5°	1541	1534	1530	1530	1534	146
15°	1470	1468	1468	1470	1474	415
25°	1338	1340	1347	1355	1361	617
35°	1159	1166	1179	1190	1197	725
45°	946	954	975	986	985	729
55°	712	722	744	751	748	637
65°	472	479	494	498	493	467
75°	237	242	251	252	252	252
85°	50	52	55	60	62	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1540.0	1540.0	1540.0	1540.0	1540.0
2.5°	1546.5	1540.4	1535.1	1535.1	1538.7
5°	1540.8	1534.3	1529.8	1529.8	1533.9
7.5°	1529.0	1523.7	1520.1	1520.1	1524.5
10°	1514.4	1509.1	1506.3	1506.7	1511.5
12.5°	1494.9	1490.0	1488.8	1489.6	1495.7
15°	1470.5	1467.7	1467.7	1469.7	1474.2
17.5°	1443.4	1440.5	1442.5	1445.4	1451.1
20°	1412.5	1410.5	1414.1	1418.6	1423.9
22.5°	1377.2	1376.4	1382.5	1388.6	1393.8
25°	1338.2	1339.9	1347.2	1354.9	1361.0
27.5°	1298.0	1299.7	1309.8	1317.9	1324.0
30°	1255.4	1256.2	1269.2	1279.0	1283.4
32.5°	1205.9	1212.4	1226.2	1235.5	1239.6
35°	1159.2	1165.7	1178.7	1190.5	1196.6
37.5°	1108.5	1114.2	1131.2	1143.8	1145.8
40°	1056.5	1061.8	1082.9	1093.5	1096.7
42.5°	999.7	1009.9	1028.9	1039.5	1041.5
45°	946.1	953.8	975.0	986.3	985.1
47.5°	888.9	897.4	918.1	929.1	931.1
50°	830.9	840.6	862.9	870.2	870.6
52.5°	770.0	782.6	802.9	812.6	809.3
55°	712.3	722.5	744.0	750.9	748.1
57.5°	653.1	664.4	684.3	688.0	688.4
60°	595.4	604.8	621.8	625.5	624.3
62.5°	532.1	541.5	556.9	560.5	557.7
65°	471.6	479.4	494.0	497.6	492.8
67.5°	411.6	419.3	430.7	436.3	431.1
70°	353.5	359.6	369.8	373.0	373.4
72.5°	291.8	302.8	310.1	309.7	308.5
75°	237.0	241.9	250.8	251.7	252.5
77.5°	184.7	185.9	195.2	197.7	196.0
80°	132.3	136.8	142.1	144.9	145.3
82.5°	87.3	90.5	95.0	99.8	99.8
85°	50.3	51.5	55.2	60.1	62.1
87.5°	20.3	22.3	26.0	29.6	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)