

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: P475851

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475851  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-FGW080-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2658.0 lumens  
Efficiency: N/A  
Efficacy: 124.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

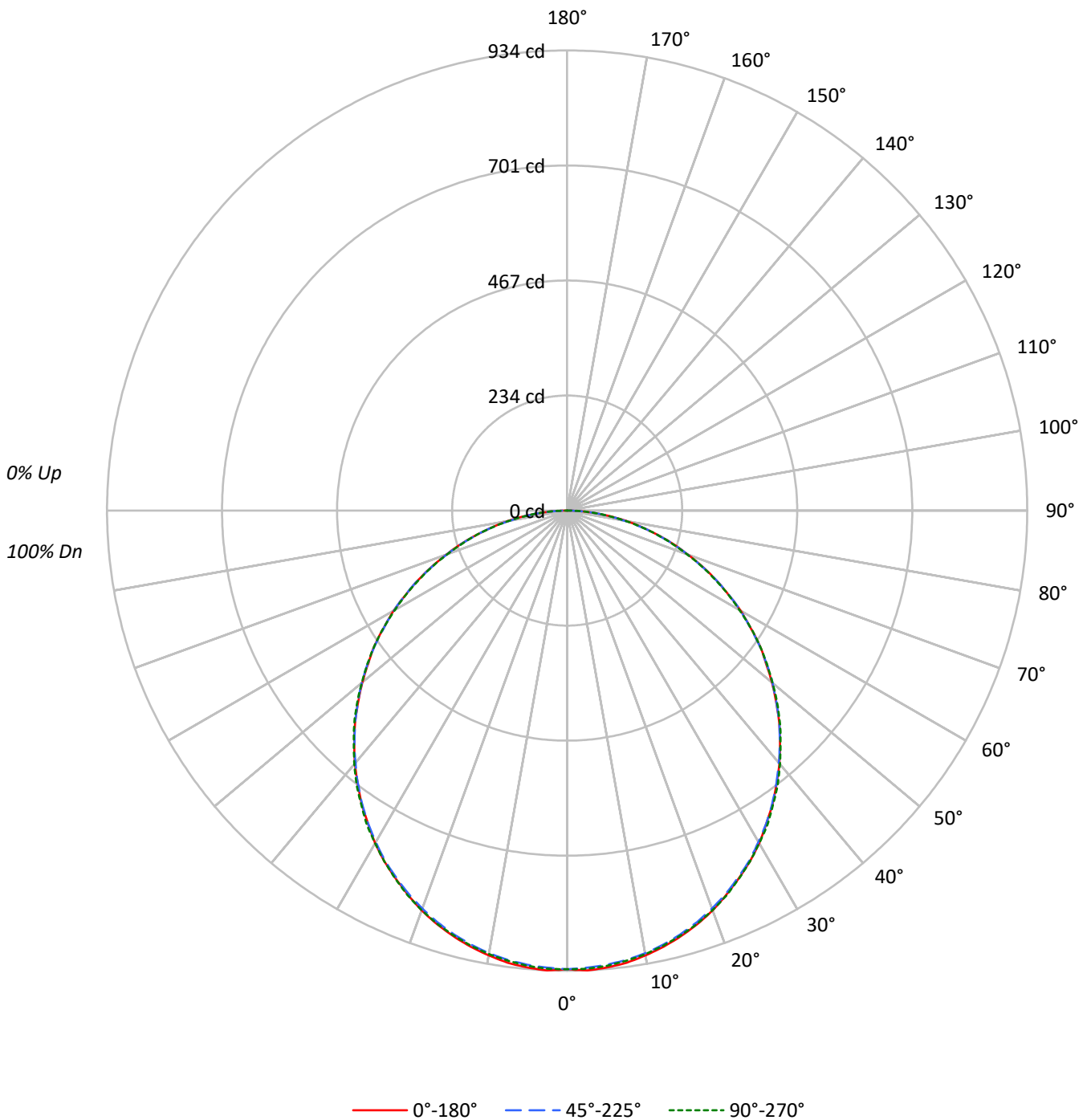
Input Watts (W): 21.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	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	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	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	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	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°	1253	1253	1253
5°	1257	1250	1253
10°	1253	1246	1249
15°	1246	1240	1243
20°	1237	1231	1236
25°	1223	1220	1224
30°	1211	1207	1211
35°	1194	1192	1197
40°	1177	1174	1180
45°	1158	1158	1163
50°	1136	1139	1139
55°	1120	1116	1119
60°	1094	1094	1086
65°	1063	1062	1055
70°	1026	1024	1018
75°	987	984	985
80°	941	923	927
85°	835	835	844



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.0	3.3
10°-20°	251.5	9.5
20°-30°	379.2	14.3
30°-40°	454.4	17.1
40°-50°	469.4	17.7
50°-60°	425.2	16.0
60°-70°	329.3	12.4
70°-80°	199.7	7.5
80°-90°	61.3	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°	718.7	27.0
0°-40°	1173.1	44.1
0°-60°	2067.7	77.8
0°-90°	2658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2658.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	931	927	925	925	927	88
15°	894	892	890	891	892	252
25°	824	822	822	823	824	380
35°	727	724	726	727	728	455
45°	608	607	608	609	611	469
55°	477	475	476	476	477	425
65°	334	332	334	333	332	330
75°	190	190	189	187	190	201
85°	54	55	54	53	55	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	931.0	931.0	931.0	931.0	931.0
2.5°	934.3	931.0	928.6	928.6	930.7
5°	931.0	927.4	925.3	925.3	927.4
7.5°	925.6	921.7	919.9	919.9	921.7
10°	916.9	913.8	912.3	912.3	914.1
12.5°	906.6	903.9	902.1	902.4	904.2
15°	894.3	891.6	890.1	890.7	892.5
17.5°	879.9	877.1	875.9	876.8	879.0
20°	863.6	860.3	859.7	860.6	863.0
22.5°	844.1	842.0	841.7	843.2	845.3
25°	823.9	822.1	821.5	823.3	824.5
27.5°	803.1	799.8	801.0	801.3	803.1
30°	779.7	776.7	776.7	777.9	779.7
32.5°	752.6	750.8	752.3	753.8	756.5
35°	727.0	724.3	725.8	727.0	728.5
37.5°	698.2	697.6	697.9	699.7	702.1
40°	670.2	668.4	668.4	670.8	672.0
42.5°	639.5	638.0	639.2	640.4	641.0
45°	608.5	607.3	608.5	609.4	611.2
47.5°	575.4	575.7	576.0	576.6	578.4
50°	542.7	543.9	544.2	545.4	544.2
52.5°	508.7	509.0	510.2	510.5	510.8
55°	477.4	474.7	475.6	476.2	477.1
57.5°	440.7	439.8	439.8	440.7	441.3
60°	406.7	404.9	406.4	404.6	403.7
62.5°	368.8	369.4	370.0	369.7	368.2
65°	333.9	332.1	333.6	332.7	331.5
67.5°	297.2	295.7	296.3	296.0	295.7
70°	260.8	260.8	260.2	258.7	258.7
72.5°	226.5	224.7	225.3	223.5	223.5
75°	189.8	189.8	189.2	187.4	189.5
77.5°	155.5	154.6	154.0	152.8	152.8
80°	121.5	119.4	119.1	119.1	119.7
82.5°	88.1	86.6	86.0	86.0	86.3
85°	54.1	55.0	54.1	53.2	54.7
87.5°	25.6	24.4	24.4	25.3	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)