

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: P475906

Luminaire Tested: **22GR-LD5-24-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475906
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-F1-UNV-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2478.5 lumens
Efficiency: N/A
Efficacy: 138.5 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

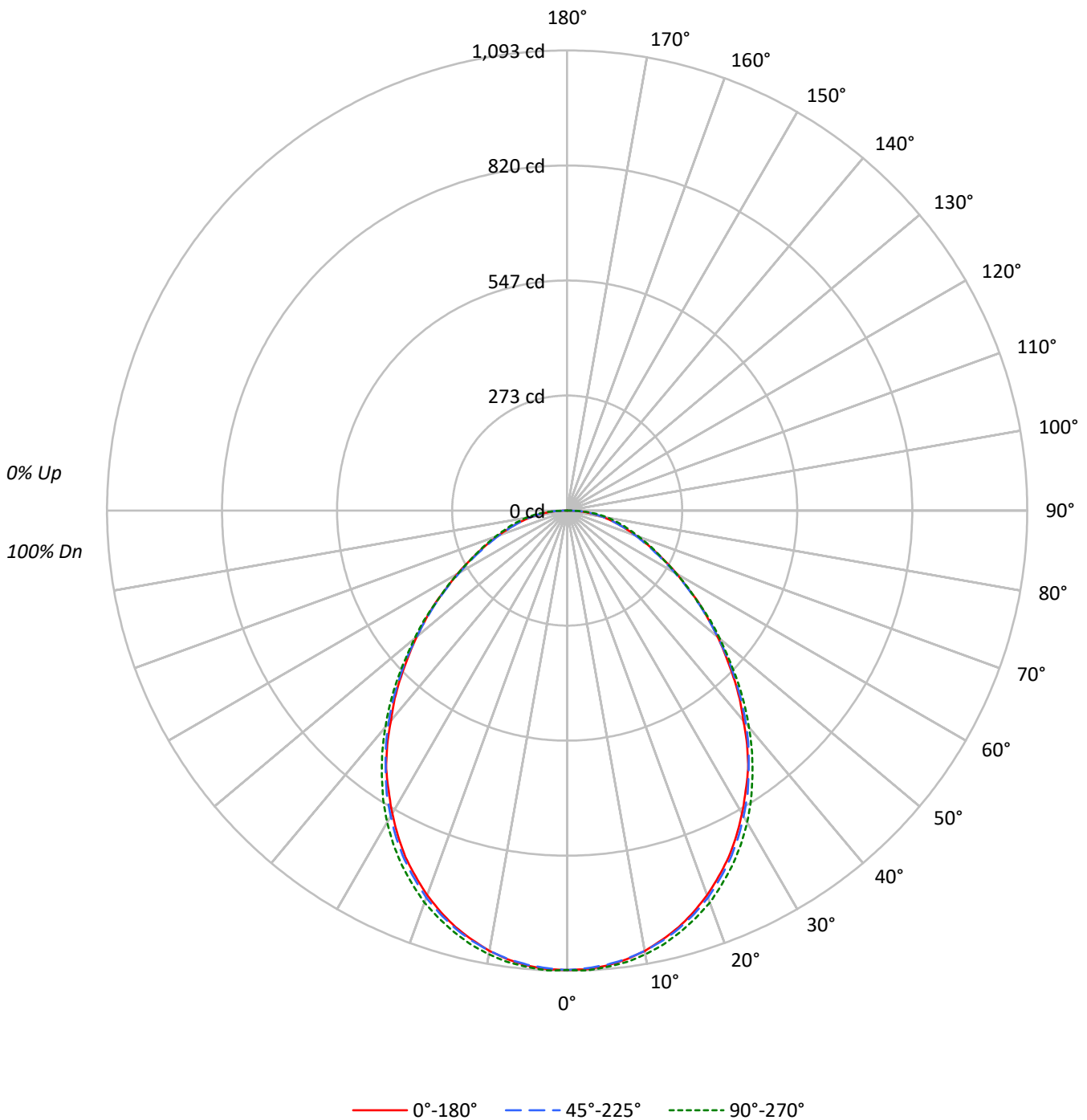
Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2931	2925	2939
10°	2902	2902	2925
15°	2854	2862	2888
20°	2783	2802	2838
25°	2697	2716	2759
30°	2582	2605	2657
35°	2462	2469	2520
40°	2288	2321	2361
45°	2124	2144	2176
50°	1952	1952	1982
55°	1790	1770	1780
60°	1620	1592	1615
65°	1477	1444	1491
70°	1365	1357	1423
75°	1315	1304	1435
80°	1328	1328	1522
85°	1386	1451	1741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	4.2
10°-20°	289.7	11.7
20°-30°	421.2	17.0
30°-40°	471.4	19.0
40°-50°	435.1	17.6
50°-60°	339.5	13.7
60°-70°	229.8	9.3
70°-80°	137.3	5.5
80°-90°	51.6	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°	813.7	32.8
0°-40°	1285.2	51.9
0°-60°	2059.8	83.1
0°-90°	2478.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2478.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1085	1083	1083	1087	1088	103
15°	1024	1024	1027	1034	1037	288
25°	908	908	915	924	929	417
35°	749	748	752	763	767	466
45°	558	561	563	568	572	431
55°	382	378	377	379	379	340
65°	232	230	227	231	234	231
75°	126	125	125	133	138	134
85°	45	44	47	54	56	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1091.2	1091.2	1091.2	1091.2	1091.2
2.5°	1090.1	1088.1	1088.1	1091.2	1093.3
5°	1084.9	1082.8	1082.8	1087.0	1088.1
7.5°	1075.5	1074.5	1074.5	1078.7	1081.8
10°	1061.9	1060.9	1061.9	1066.1	1070.3
12.5°	1044.2	1044.2	1046.3	1051.5	1055.7
15°	1024.3	1024.3	1027.4	1033.7	1036.8
17.5°	999.2	1000.3	1004.4	1011.8	1014.9
20°	972.0	974.1	978.3	984.6	990.9
22.5°	940.7	942.8	947.0	956.4	960.5
25°	908.3	908.3	914.6	924.0	929.2
27.5°	870.7	871.7	878.0	888.4	893.7
30°	830.9	834.1	838.3	847.7	855.0
32.5°	789.1	792.3	797.5	807.9	813.2
35°	749.4	748.4	751.5	763.0	767.2
37.5°	702.4	703.4	707.6	716.0	721.2
40°	651.2	656.4	660.6	666.8	672.1
42.5°	606.2	609.4	612.5	618.8	622.9
45°	558.1	561.3	563.4	567.5	571.7
47.5°	511.1	512.2	515.3	517.4	520.5
50°	466.2	467.2	466.2	469.3	473.5
52.5°	422.3	421.2	421.2	422.3	428.5
55°	381.5	378.4	377.3	379.4	379.4
57.5°	336.6	335.5	335.5	334.5	339.7
60°	301.0	297.9	295.8	297.9	300.0
62.5°	264.4	261.3	259.2	263.4	263.4
65°	232.0	229.9	226.8	231.0	234.1
67.5°	200.7	198.6	197.5	202.8	207.0
70°	173.5	172.5	172.5	177.7	180.8
72.5°	148.4	147.4	147.4	154.7	157.8
75°	126.5	125.4	125.4	132.7	138.0
77.5°	104.5	103.5	106.6	112.9	118.1
80°	85.7	84.7	85.7	94.1	98.2
82.5°	64.8	64.8	66.9	75.3	79.4
85°	44.9	43.9	47.0	54.4	56.4
87.5°	23.0	24.0	25.1	29.3	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)