

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: P588681

Luminaire Tested: **22CGTS-NUV-MID-3500K**

Issue Date: 12/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P588681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( LCS210329025BSA)  
Test Lab:  
Issue Date: 12/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CGTS-NUV-MID-3500K  
Description: 2X2 CGT SELECT TROFFER AT MID LUMEN OUTPUT AND 3500K COLOR SETTING

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

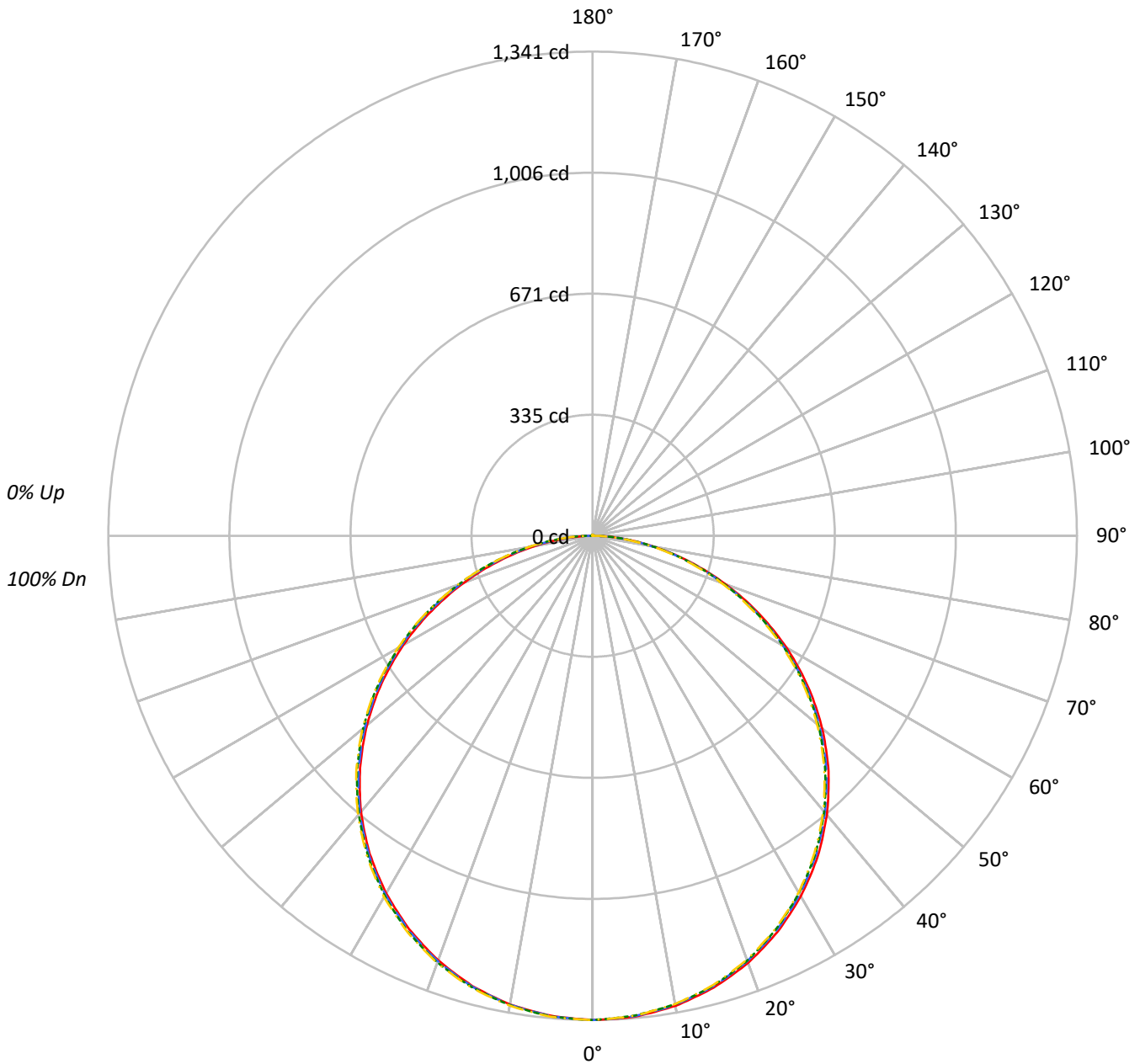
Lumens per Lamp: 3510.7 (1 lamp)  
Luminaire Lumens: 3952.9 lumens  
Efficiency: 112.6%  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
RC	80									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	0																
RCR																																					
0	134	134	134	134	131	131	131	131	125	125	125	120	120	120	115	115	115	112																			
1	122	117	112	107	119	114	109	105	109	105	102	105	102	99	101	98	96	93																			
2	111	101	93	87	108	99	92	86	95	89	84	91	86	82	88	84	80	77																			
3	101	89	79	72	98	87	78	71	84	76	70	80	74	69	77	72	67	65																			
4	92	78	68	61	90	77	68	60	74	66	59	71	64	59	69	63	58	55																			
5	85	70	60	52	82	69	59	52	66	58	51	64	57	51	62	55	50	48																			
6	78	63	53	45	76	62	52	45	60	51	45	58	50	44	56	49	44	42																			
7	72	57	47	40	70	56	47	40	54	46	40	53	45	39	51	44	39	37																			
8	67	52	42	36	66	51	42	36	50	41	35	48	41	35	47	40	35	33																			
9	63	48	38	32	61	47	38	32	46	37	32	44	37	32	43	36	31	29																			
10	59	44	35	29	58	43	35	29	42	34	29	41	34	29	40	33	28	27																			

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

	0°	90°	180°	270°
0°	3609	3609	3609	3609
5°	3612	3603	3604	3609
10°	3612	3600	3602	3607
15°	3609	3595	3595	3605
20°	3605	3586	3582	3601
25°	3595	3569	3569	3593
30°	3582	3550	3552	3578
35°	3568	3533	3534	3562
40°	3544	3504	3505	3538
45°	3516	3465	3466	3511
50°	3474	3416	3416	3471
55°	3415	3354	3348	3414
60°	3335	3272	3257	3338
65°	3226	3158	3133	3236
70°	3079	3018	2972	3109
75°	2889	2835	2764	2950
80°	2625	2607	2467	2760
85°	2260	2245	2022	2519



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	127.0	3.2	3.6	0°	1341	1341	1341	1341	1341	
10°-20°	364.8	9.2	10.4	5°	1337	1334	1334	1336	1337	127
20°-30°	556.0	14.1	15.8	15°	1296	1290	1290	1294	1296	366
30°-40°	675.4	17.1	19.2	25°	1211	1202	1202	1210	1211	558
40°-50°	706.5	17.9	20.1	35°	1086	1076	1076	1084	1086	679
50°-60°	643.4	16.3	18.3	45°	924	911	911	923	924	712
60°-70°	495.2	12.5	14.1	55°	728	715	714	728	728	650
70°-80°	291.8	7.4	8.3	65°	507	496	492	508	507	501
80°-90°	86.3	2.2	2.5	75°	278	273	266	284	278	295
90°-100°	0.9	0.0	0.0	85°	73	73	66	82	73	81
100°-110°	0.6	0.0	0.0	90°	2	0	1	2	2	11
110°-120°	0.7	0.0	0.0	95°	1	0	0	1	1	1
120°-130°	0.8	0.0	0.0	105°	0	1	1	0	0	0
130°-140°	0.8	0.0	0.0	115°	0	1	1	0	0	0
140°-150°	1.0	0.0	0.0	125°	0	1	1	0	0	0
150°-160°	0.9	0.0	0.0	135°	1	2	2	0	1	1
160°-170°	0.6	0.0	0.0	145°	2	2	2	1	2	1
170°-180°	0.2	0.0	0.0	155°	2	2	2	2	2	1
0°-30°	1047.7	26.5	29.8	165°	2	3	3	2	2	1
0°-40°	1723.1	43.6	49.1	175°	2	3	3	3	2	0
0°-60°	3073.0	77.7	87.5	180°	2	2	2	2	2	
<b>0°-90°</b>	<b>3946.3</b>	<b>99.8</b>	<b>112.4</b>							
90°-120°	2.3	0.1	0.1							
90°-150°	4.9	0.1	0.1							
<b>90°-180°</b>	<b>7.0</b>	<b>0.2</b>	<b>0.2</b>							
0°-180°	3952.9	100.0	112.6							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2
5°	1337.2	1336.4	1335.6	1335.4	1333.8	1334.7	1334.3	1334.3	1334.3	1335.0	1335.3
10°	1322.0	1320.2	1318.7	1318.1	1317.4	1317.4	1316.6	1317.0	1318.1	1318.2	1318.9
15°	1295.6	1293.6	1291.6	1290.3	1290.3	1289.0	1288.3	1289.2	1290.5	1291.4	1292.3
20°	1259.0	1256.3	1253.4	1251.6	1252.1	1249.9	1249.2	1250.2	1251.0	1252.8	1254.0
25°	1210.9	1208.4	1205.7	1202.9	1202.1	1201.0	1199.9	1200.5	1202.1	1204.1	1205.9
30°	1152.9	1150.0	1147.0	1144.1	1142.6	1141.2	1140.6	1141.0	1143.2	1145.1	1147.8
35°	1086.1	1082.2	1078.6	1074.1	1075.5	1073.0	1071.4	1072.5	1075.7	1077.6	1080.1
40°	1008.8	1005.1	1000.6	996.5	997.4	995.0	993.9	994.6	997.8	999.3	1002.8
45°	923.9	919.4	915.3	910.6	910.6	908.1	906.3	907.9	910.7	913.0	916.0
50°	829.9	824.8	820.4	815.5	816.0	813.2	811.4	812.6	815.9	818.0	822.7
55°	727.8	723.2	718.7	714.1	714.9	712.1	709.4	710.4	713.6	716.2	721.2
60°	619.7	614.8	610.0	605.6	608.0	604.7	602.1	602.0	605.2	608.3	614.4
65°	506.6	502.3	497.8	494.0	496.0	493.3	489.9	489.0	492.1	496.0	502.3
70°	391.3	387.0	383.9	380.5	383.6	380.2	377.0	375.4	377.8	382.0	389.0
75°	277.9	274.7	272.2	269.8	272.7	270.1	266.5	264.4	265.8	270.3	277.4
80°	169.4	166.8	166.8	165.4	168.2	165.5	161.5	158.2	159.2	163.5	171.5
85°	73.2	71.2	70.8	70.5	72.7	70.3	66.1	64.4	65.5	68.6	74.7
90°	1.8	1.5	1.4	1.3	0.5	0.5	0.6	0.6	0.6	0.5	1.2
95°	0.7	0.7	0.7	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	0.4	0.5	0.5	0.5	0.5	0.7	0.6	0.5	0.5	0.5	0.5
105°	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.8
110°	0.4	0.4	0.5	0.4	0.9	1.0	1.0	0.9	0.8	0.9	1.0
115°	0.4	0.4	0.5	0.4	1.0	1.1	1.1	1.0	1.0	1.2	1.1
120°	0.4	0.4	0.5	0.4	1.1	1.3	1.3	1.0	1.1	1.1	1.4
125°	0.4	0.4	0.5	0.4	1.2	1.4	1.3	1.0	1.1	1.1	1.4
130°	0.4	0.4	0.5	0.4	1.3	1.6	1.5	1.2	1.3	1.5	1.6
135°	0.7	0.4	0.5	0.4	1.6	1.6	1.6	1.6	1.6	1.8	1.7
140°	1.1	0.9	0.5	0.7	1.6	1.8	1.7	1.7	1.7	2.0	1.9
145°	1.5	1.5	0.8	1.2	1.9	1.9	1.9	2.0	1.9	2.0	2.0
150°	1.5	1.5	1.5	1.5	2.1	2.2	2.2	2.2	2.0	2.2	2.2
155°	1.5	1.5	1.4	1.5	2.3	2.4	2.5	2.4	2.2	2.6	2.5
160°	1.5	1.5	1.4	1.5	2.7	2.8	2.8	2.4	2.6	2.6	2.9
165°	1.9	1.8	1.6	1.6	2.8	2.8	2.9	2.4	2.6	2.6	2.8
170°	2.1	2.2	1.9	2.1	2.9	2.8	3.0	2.4	2.6	2.6	2.9
175°	2.5	2.7	2.3	2.8	3.1	2.8	3.0	2.4	2.6	2.6	2.9
180°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1341.2	1341.2	1341.2	1341.2	1341.2	1341.2
5°	1335.9	1336.0	1337.5	1337.2	1337.4	1337.2
10°	1319.9	1320.1	1321.9	1321.8	1322.0	1322.0
15°	1293.6	1294.0	1295.9	1295.7	1296.0	1295.6
20°	1257.1	1257.5	1259.3	1259.1	1259.4	1259.0
25°	1208.8	1210.1	1212.3	1212.0	1212.3	1210.9
30°	1150.7	1151.6	1154.2	1155.1	1154.8	1152.9
35°	1083.4	1084.2	1086.9	1087.3	1086.9	1086.1
40°	1006.9	1007.3	1010.0	1010.6	1010.1	1008.8
45°	920.7	922.6	924.8	925.8	924.7	923.9
50°	826.6	829.2	830.9	831.7	830.9	829.9
55°	726.2	727.6	730.1	730.8	729.4	727.8
60°	619.5	620.2	622.9	623.0	621.0	619.7
65°	507.9	508.2	511.5	510.8	508.4	506.6
70°	394.6	395.2	397.9	396.9	393.6	391.3
75°	284.1	283.7	286.2	284.6	281.2	277.9
80°	178.8	178.1	179.9	178.4	173.4	169.4
85°	82.3	81.6	83.1	80.6	76.6	73.2
90°	3.1	2.5	3.5	3.6	2.7	1.8
95°	0.5	0.8	0.7	0.7	0.8	0.7
100°	0.5	0.5	0.6	0.6	0.5	0.4
105°	0.6	0.5	0.5	0.5	0.4	0.4
110°	0.9	0.5	0.5	0.5	0.4	0.4
115°	1.0	0.5	0.5	0.5	0.4	0.4
120°	1.1	0.5	0.5	0.5	0.4	0.4
125°	1.2	0.5	0.5	0.5	0.4	0.4
130°	1.5	0.5	0.5	0.5	0.4	0.4
135°	1.6	0.5	0.5	0.5	0.5	0.7
140°	1.6	1.1	1.1	0.5	1.0	1.1
145°	1.9	1.4	1.5	0.9	1.4	1.5
150°	2.2	1.5	1.5	1.4	1.5	1.5
155°	2.4	1.5	1.5	1.4	1.5	1.5
160°	2.5	1.5	1.5	1.4	1.5	1.5
165°	2.5	1.6	1.6	1.6	1.7	1.9
170°	2.5	2.0	2.1	1.9	2.0	2.1
175°	2.5	2.6	2.9	2.2	2.6	2.5
180°	2.5	2.5	2.5	2.5	2.5	2.5



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)