

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: P588688

Luminaire Tested: **24CGTS-NUV-LOW-4000K**

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: P588688  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( LCS210329021BSA)  
Test Lab:  
Issue Date: 12/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CGTS-NUV-LOW-4000K  
Description: 2X4 CGT SELECT TROFFER AT LOW LUMEN OUTPUT AND 4000K COLOR SETTING

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

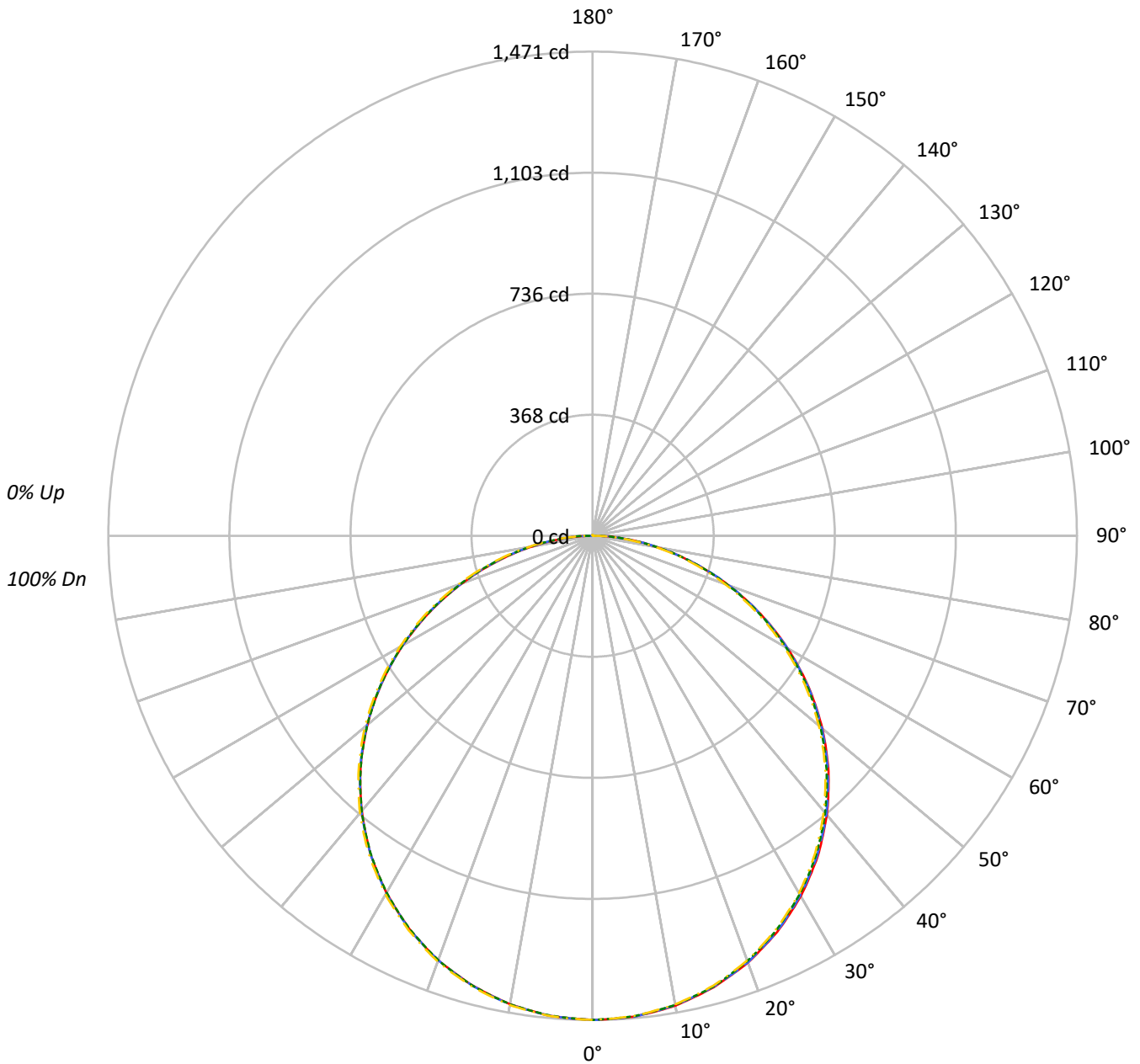
**Summary**

Lumens per Lamp: 4179.4 (1 lamp)  
Luminaire Lumens: 4352.0 lumens  
Efficiency: 104.1%  
Efficacy: 129.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.6  
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	124	124	124	124	121	121	121	121	116	116	116	111	111	111	106	106	106	104																			
1	113	108	103	99	110	105	101	97	101	97	94	97	94	91	93	91	88	86																			
2	102	94	86	80	100	92	85	79	88	82	77	84	80	75	81	77	74	71																			
3	93	82	73	66	90	80	72	66	77	70	64	74	68	63	71	66	62	60																			
4	85	72	63	56	83	71	62	56	68	61	55	66	59	54	64	58	53	51																			
5	78	65	55	48	76	63	54	48	61	53	47	59	52	47	57	51	46	44																			
6	72	58	49	42	70	57	48	42	55	47	41	53	46	41	52	45	40	38																			
7	67	53	43	37	65	52	43	37	50	42	36	49	41	36	47	41	36	34																			
8	62	48	39	33	61	47	39	33	46	38	32	44	37	32	43	37	32	30																			
9	58	44	35	29	57	43	35	29	42	35	29	41	34	29	40	34	29	27																			
10	54	41	32	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24																			

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

	0°	90°	180°	270°
0°	1979	1979	1979	1979
5°	1980	1978	1978	1977
10°	1980	1977	1974	1975
15°	1978	1975	1969	1971
20°	1976	1969	1965	1965
25°	1970	1962	1956	1955
30°	1964	1954	1945	1945
35°	1956	1944	1934	1933
40°	1944	1930	1916	1917
45°	1928	1912	1897	1897
50°	1907	1891	1869	1870
55°	1878	1864	1837	1838
60°	1841	1825	1791	1796
65°	1791	1776	1732	1741
70°	1730	1716	1657	1673
75°	1649	1643	1561	1590
80°	1540	1545	1428	1487
85°	1434	1371	1227	1338



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	139.2	3.2	3.3	0°	1471	1471	1471	1471	1471	
10°-20°	399.9	9.2	9.6	5°	1466	1465	1464	1464	1466	139
20°-30°	608.9	14.0	14.6	15°	1420	1418	1414	1415	1420	401
30°-40°	739.3	17.0	17.7	25°	1327	1322	1318	1317	1327	612
40°-50°	773.4	17.8	18.5	35°	1191	1184	1177	1177	1191	745
50°-60°	705.9	16.2	16.9	45°	1013	1005	997	997	1013	781
60°-70°	547.4	12.6	13.1	55°	801	795	783	784	801	715
70°-80°	328.7	7.6	7.9	65°	563	558	544	547	563	557
80°-90°	101.9	2.3	2.4	75°	317	316	300	306	317	336
90°-100°	2.4	0.1	0.1	85°	93	89	80	87	93	99
100°-110°	0.9	0.0	0.0	90°	6	6	2	10	6	15
110°-120°	0.9	0.0	0.0	95°	1	1	1	1	1	2
120°-130°	0.7	0.0	0.0	105°	1	1	1	1	1	1
130°-140°	0.6	0.0	0.0	115°	1	1	1	1	1	1
140°-150°	0.7	0.0	0.0	125°	1	1	1	1	1	1
150°-160°	0.7	0.0	0.0	135°	1	1	1	1	1	0
160°-170°	0.4	0.0	0.0	145°	1	1	1	1	1	1
170°-180°	0.2	0.0	0.0	155°	1	2	2	1	1	1
0°-30°	1148.0	26.4	27.5	165°	1	2	2	1	1	0
0°-40°	1887.3	43.4	45.2	175°	2	2	2	2	2	0
0°-60°	3366.6	77.4	80.6	180°	2	2	2	2	2	
<b>0°-90°</b>	<b>4344.5</b>	<b>99.8</b>	<b>103.9</b>							
90°-120°	4.2	0.1	0.1							
90°-150°	6.3	0.1	0.1							
<b>90°-180°</b>	<b>8.0</b>	<b>0.2</b>	<b>0.2</b>							
0°-180°	4352.0	100.0	104.1							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1
5°	1466.3	1465.6	1466.4	1464.4	1464.8	1465.2	1464.5	1463.6	1464.5	1463.6	1464.5
10°	1449.5	1448.7	1447.8	1446.9	1447.1	1447.4	1445.5	1444.6	1445.1	1444.5	1446.0
15°	1420.2	1419.1	1418.7	1416.9	1417.7	1417.3	1415.2	1413.3	1413.8	1413.5	1414.7
20°	1379.9	1380.1	1378.7	1375.5	1374.9	1373.4	1373.1	1370.9	1372.2	1371.3	1372.2
25°	1327.3	1327.5	1325.9	1322.5	1321.7	1321.0	1318.9	1317.4	1317.6	1316.8	1317.8
30°	1264.4	1263.1	1261.4	1258.5	1257.5	1256.3	1254.0	1252.0	1252.2	1251.9	1253.6
35°	1191.1	1189.3	1187.8	1184.8	1183.6	1180.0	1177.8	1176.7	1177.2	1176.4	1177.3
40°	1106.7	1105.0	1104.7	1099.5	1098.9	1095.3	1092.5	1091.0	1090.9	1091.1	1092.6
45°	1013.4	1012.0	1009.9	1006.2	1005.0	1001.8	999.1	996.5	996.9	996.4	998.1
50°	911.0	910.1	908.6	904.6	903.3	899.4	896.5	893.9	892.9	893.2	894.7
55°	800.7	800.5	798.9	794.3	794.6	789.7	785.8	783.1	783.0	782.9	783.8
60°	684.1	684.3	682.6	678.2	678.2	673.3	669.5	667.0	665.6	665.4	667.0
65°	562.7	563.6	562.7	558.4	557.9	553.3	549.0	545.4	544.1	543.6	546.3
70°	439.7	440.3	440.4	436.9	436.1	431.4	426.8	422.9	421.1	421.1	423.5
75°	317.2	318.0	319.2	316.2	316.0	311.4	307.1	302.8	300.3	301.2	303.9
80°	198.7	200.5	200.6	198.1	199.4	195.1	191.2	186.5	184.3	185.3	189.0
85°	92.9	93.2	90.3	87.1	88.8	85.5	82.4	80.6	79.5	80.0	83.2
90°	6.5	5.9	5.0	4.1	6.3	5.5	4.4	3.2	2.5	3.7	6.1
95°	1.2	1.3	0.9	0.8	0.6	0.6	0.7	1.1	1.0	1.0	0.6
100°	1.2	1.1	0.8	0.6	0.6	0.6	0.7	1.2	1.3	1.1	0.6
105°	1.1	1.0	0.8	0.6	0.6	0.6	0.9	1.4	1.3	1.4	0.7
110°	1.0	0.8	0.8	0.6	0.7	0.7	1.0	1.4	1.3	1.4	1.0
115°	0.8	0.6	0.8	0.6	0.7	0.8	1.3	1.2	1.3	1.4	1.2
120°	0.6	0.4	0.8	0.6	0.7	0.9	1.4	0.6	1.3	0.9	1.3
125°	0.6	0.4	0.8	0.6	0.8	0.9	1.4	0.6	0.7	0.6	1.4
130°	0.6	0.4	0.8	0.6	0.9	1.0	1.4	0.6	0.7	0.6	1.4
135°	0.6	0.4	0.8	0.6	1.0	1.1	1.4	0.6	0.7	0.7	1.4
140°	0.6	0.5	0.8	0.6	1.1	1.3	1.4	0.8	0.8	0.9	1.4
145°	1.1	1.0	0.8	1.2	1.3	1.4	1.4	1.0	1.0	1.0	1.4
150°	1.3	1.4	1.3	1.4	1.5	1.6	1.7	1.3	1.3	1.1	1.4
155°	1.3	1.4	1.4	1.4	1.7	1.8	1.9	1.4	1.5	1.5	1.4
160°	1.4	1.4	1.4	1.4	2.0	1.9	2.1	1.6	1.5	1.5	1.5
165°	1.4	1.4	1.4	1.4	2.1	2.1	2.2	1.6	1.5	1.5	1.5
170°	1.5	1.4	1.4	1.5	2.2	2.1	2.3	1.6	1.5	1.5	1.4
175°	1.5	1.4	1.8	1.8	2.2	2.1	2.3	1.6	1.5	1.5	1.4
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1471.1	1471.1	1471.1	1471.1	1471.1	1471.1
5°	1464.0	1463.6	1465.5	1465.3	1464.7	1466.3
10°	1445.4	1445.3	1446.7	1447.7	1448.2	1449.5
15°	1414.1	1414.7	1416.1	1417.9	1419.0	1420.2
20°	1371.4	1372.1	1374.3	1376.5	1377.4	1379.9
25°	1316.8	1317.2	1320.0	1322.5	1325.4	1327.3
30°	1252.7	1251.7	1255.9	1258.2	1262.3	1264.4
35°	1177.2	1176.7	1180.0	1183.8	1188.8	1191.1
40°	1092.0	1091.6	1095.2	1099.8	1104.3	1106.7
45°	997.6	996.9	1000.7	1005.1	1010.1	1013.4
50°	894.7	893.4	898.1	903.0	908.0	911.0
55°	784.5	783.5	787.3	793.0	796.8	800.7
60°	668.1	667.3	671.4	676.7	680.3	684.1
65°	547.3	546.8	551.8	556.5	560.2	562.7
70°	426.0	425.2	430.3	434.8	437.1	439.7
75°	307.0	305.8	309.7	313.6	315.4	317.2
80°	193.2	191.9	195.5	197.3	197.9	198.7
85°	87.5	86.7	89.6	91.3	91.9	92.9
90°	9.1	9.8	10.8	10.0	8.1	6.5
95°	0.6	0.9	0.8	0.9	1.2	1.2
100°	0.6	0.6	0.6	0.8	1.1	1.2
105°	0.6	0.6	0.6	0.8	1.0	1.1
110°	0.7	0.6	0.6	0.8	0.8	1.0
115°	0.8	0.6	0.6	0.8	0.6	0.8
120°	0.9	0.6	0.6	0.8	0.5	0.6
125°	0.9	0.6	0.6	0.8	0.5	0.6
130°	1.0	0.6	0.6	0.8	0.5	0.6
135°	1.0	0.6	0.6	0.8	0.5	0.6
140°	1.2	0.7	0.6	0.8	0.5	0.6
145°	1.4	1.3	1.1	0.8	1.0	1.1
150°	1.5	1.3	1.4	1.4	1.3	1.3
155°	1.7	1.3	1.4	1.4	1.3	1.3
160°	1.7	1.4	1.4	1.4	1.3	1.4
165°	1.7	1.4	1.4	1.4	1.3	1.4
170°	1.7	1.5	1.5	1.4	1.5	1.5
175°	1.7	1.9	2.0	1.6	1.6	1.5
180°	1.5	1.5	1.5	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC







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









(END OF REPORT)