

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: P588687

Luminaire Tested: **24CGTS-NUV-LOW-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: P588687  
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-3500K  
Description: 2X4 CGT SELECT TROFFER AT LOW LUMEN OUTPUT AND 3500K COLOR SETTING

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

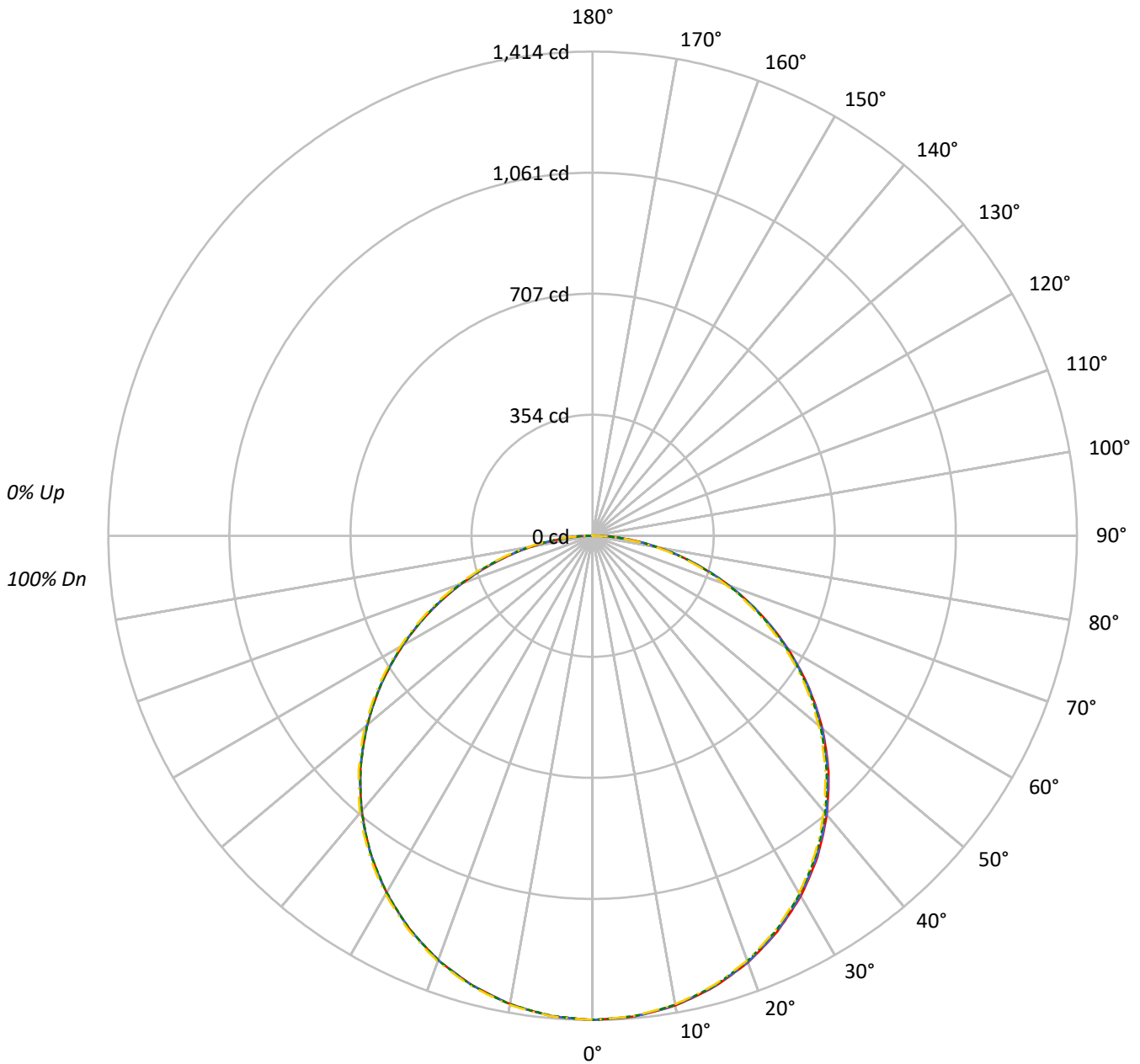
**Summary**

Lumens per Lamp: 4179.4 (1 lamp)  
Luminaire Lumens: 4181.9 lumens  
Efficiency: 100.1%  
Efficacy: 119.5 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): 35  
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

TEST NUMBER: P588687  
CATALOG NUMBER: 24CGTS-NUV-LOW-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P588687

CATALOG NUMBER: 24CGTS-NUV-LOW-3500K

**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	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	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23			

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

	0°	90°	180°	270°
0°	1902	1902	1902	1902
5°	1903	1901	1901	1900
10°	1903	1900	1897	1898
15°	1901	1898	1892	1894
20°	1899	1892	1888	1888
25°	1894	1885	1880	1879
30°	1888	1877	1869	1869
35°	1880	1868	1858	1857
40°	1868	1855	1841	1842
45°	1853	1838	1823	1823
50°	1832	1817	1796	1797
55°	1805	1791	1765	1766
60°	1769	1754	1721	1726
65°	1721	1707	1664	1673
70°	1662	1649	1592	1607
75°	1585	1578	1500	1527
80°	1480	1485	1372	1429
85°	1379	1318	1179	1286



TEST NUMBER: P588687

CATALOG NUMBER: 24CGTS-NUV-LOW-3500K

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	133.8	3.2	3.2	0°	1414	1414	1414	1414	1414	
10°-20°	384.2	9.2	9.2	5°	1409	1408	1407	1406	1409	134
20°-30°	585.1	14.0	14.0	15°	1365	1362	1358	1359	1365	385
30°-40°	710.4	17.0	17.0	25°	1276	1270	1266	1266	1276	588
40°-50°	743.2	17.8	17.8	35°	1145	1137	1131	1131	1145	716
50°-60°	678.4	16.2	16.2	45°	974	966	958	958	974	751
60°-70°	526.0	12.6	12.6	55°	770	764	752	753	770	687
70°-80°	315.8	7.6	7.6	65°	541	536	523	526	541	535
80°-90°	97.9	2.3	2.3	75°	305	304	289	294	305	323
90°-100°	2.3	0.1	0.1	85°	89	85	76	83	89	95
100°-110°	0.9	0.0	0.0	90°	6	6	2	9	6	14
110°-120°	0.8	0.0	0.0	95°	1	0	1	1	1	2
120°-130°	0.6	0.0	0.0	105°	1	0	1	0	1	1
130°-140°	0.6	0.0	0.0	115°	1	1	1	0	1	1
140°-150°	0.7	0.0	0.0	125°	0	1	1	0	0	0
150°-160°	0.7	0.0	0.0	135°	0	1	1	0	0	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°	1103.2	26.4	26.4	165°	1	2	2	1	1	0
0°-40°	1813.6	43.4	43.4	175°	2	2	2	2	2	0
0°-60°	3235.1	77.4	77.4	180°	2	2	2	2	2	
0°-90°	4174.8	99.8	99.9							
90°-120°	4.0	0.1	0.1							
90°-150°	5.9	0.1	0.1							
90°-180°	7.0	0.2	0.2							
0°-180°	4181.9	100.0	100.1							



TEST NUMBER: P588687

CATALOG NUMBER: 24CGTS-NUV-LOW-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6
5°	1409.0	1408.4	1409.1	1407.2	1407.6	1407.9	1407.3	1406.4	1407.3	1406.4	1407.2
10°	1392.9	1392.1	1391.3	1390.4	1390.6	1390.9	1389.1	1388.1	1388.7	1388.1	1389.5
15°	1364.7	1363.7	1363.3	1361.6	1362.4	1361.9	1359.9	1358.1	1358.5	1358.3	1359.4
20°	1326.0	1326.2	1324.8	1321.8	1321.2	1319.8	1319.5	1317.4	1318.6	1317.7	1318.6
25°	1275.5	1275.6	1274.1	1270.8	1270.0	1269.4	1267.4	1265.9	1266.1	1265.3	1266.3
30°	1215.0	1213.8	1212.2	1209.4	1208.4	1207.2	1205.0	1203.1	1203.3	1203.0	1204.6
35°	1144.6	1142.9	1141.4	1138.6	1137.3	1133.9	1131.8	1130.7	1131.2	1130.5	1131.3
40°	1063.5	1061.8	1061.5	1056.6	1056.0	1052.5	1049.9	1048.4	1048.3	1048.5	1050.0
45°	973.8	972.4	970.5	966.9	965.8	962.6	960.0	957.6	958.0	957.4	959.1
50°	875.4	874.6	873.1	869.2	868.0	864.3	861.4	859.0	858.0	858.3	859.8
55°	769.5	769.3	767.6	763.2	763.6	758.9	755.1	752.5	752.4	752.4	753.2
60°	657.4	657.6	655.9	651.7	651.7	647.0	643.3	640.9	639.6	639.4	641.0
65°	540.7	541.6	540.7	536.6	536.2	531.6	527.5	524.1	522.8	522.4	525.0
70°	422.5	423.1	423.2	419.8	419.1	414.6	410.1	406.4	404.6	404.6	406.9
75°	304.8	305.5	306.7	303.9	303.6	299.3	295.1	291.0	288.6	289.4	292.0
80°	191.0	192.6	192.7	190.4	191.6	187.5	183.7	179.2	177.1	178.1	181.6
85°	89.3	89.5	86.8	83.7	85.4	82.2	79.1	77.5	76.4	76.9	79.9
90°	6.3	5.7	4.8	3.9	6.1	5.3	4.2	3.1	2.4	3.5	5.9
95°	1.2	1.2	0.8	0.8	0.5	0.5	0.7	1.1	1.0	1.0	0.6
100°	1.1	1.1	0.8	0.6	0.5	0.5	0.7	1.2	1.2	1.1	0.6
105°	1.1	0.9	0.8	0.5	0.5	0.6	0.8	1.3	1.2	1.4	0.7
110°	0.9	0.8	0.8	0.5	0.7	0.7	1.0	1.3	1.2	1.3	1.0
115°	0.8	0.5	0.8	0.5	0.7	0.8	1.2	1.1	1.2	1.3	1.1
120°	0.5	0.4	0.8	0.5	0.7	0.8	1.3	0.5	1.2	0.8	1.2
125°	0.5	0.4	0.8	0.5	0.8	0.8	1.3	0.5	0.7	0.6	1.3
130°	0.5	0.4	0.8	0.5	0.8	1.0	1.3	0.5	0.7	0.6	1.3
135°	0.5	0.4	0.8	0.5	0.9	1.1	1.3	0.6	0.7	0.7	1.3
140°	0.5	0.5	0.8	0.6	1.1	1.2	1.4	0.8	0.8	0.8	1.3
145°	1.1	0.9	0.8	1.1	1.2	1.4	1.4	1.0	1.0	0.9	1.3
150°	1.2	1.3	1.2	1.4	1.5	1.5	1.6	1.2	1.2	1.1	1.3
155°	1.2	1.3	1.3	1.4	1.6	1.7	1.8	1.4	1.5	1.5	1.3
160°	1.4	1.3	1.3	1.4	1.9	1.8	2.0	1.5	1.5	1.5	1.5
165°	1.3	1.3	1.3	1.4	2.0	2.0	2.1	1.5	1.5	1.5	1.5
170°	1.5	1.4	1.4	1.5	2.1	2.0	2.2	1.5	1.5	1.5	1.4
175°	1.5	1.4	1.7	1.7	2.1	2.0	2.2	1.5	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



TEST NUMBER: P588687

CATALOG NUMBER: 24CGTS-NUV-LOW-3500K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1413.6	1413.6	1413.6	1413.6	1413.6	1413.6
5°	1406.8	1406.4	1408.3	1408.0	1407.5	1409.0
10°	1388.9	1388.9	1390.2	1391.2	1391.6	1392.9
15°	1358.8	1359.4	1360.8	1362.5	1363.6	1364.7
20°	1317.8	1318.5	1320.6	1322.7	1323.6	1326.0
25°	1265.3	1265.8	1268.4	1270.8	1273.7	1275.5
30°	1203.8	1202.8	1206.8	1209.1	1213.0	1215.0
35°	1131.2	1130.7	1133.9	1137.5	1142.3	1144.6
40°	1049.4	1049.0	1052.5	1056.8	1061.2	1063.5
45°	958.7	958.0	961.7	965.8	970.6	973.8
50°	859.7	858.5	863.0	867.7	872.5	875.4
55°	753.9	752.9	756.5	762.1	765.7	769.5
60°	642.0	641.3	645.2	650.3	653.7	657.4
65°	525.9	525.5	530.2	534.8	538.3	540.7
70°	409.3	408.6	413.5	417.8	420.0	422.5
75°	295.0	293.8	297.6	301.4	303.0	304.8
80°	185.6	184.4	187.9	189.6	190.2	191.0
85°	84.1	83.3	86.1	87.8	88.3	89.3
90°	8.7	9.4	10.3	9.6	7.8	6.3
95°	0.5	0.8	0.8	0.8	1.1	1.2
100°	0.5	0.6	0.6	0.8	1.1	1.1
105°	0.5	0.5	0.6	0.8	1.0	1.1
110°	0.7	0.5	0.5	0.8	0.8	0.9
115°	0.8	0.5	0.5	0.8	0.6	0.8
120°	0.8	0.5	0.5	0.8	0.5	0.5
125°	0.8	0.5	0.5	0.8	0.5	0.5
130°	0.9	0.5	0.5	0.8	0.5	0.5
135°	1.0	0.5	0.5	0.8	0.5	0.5
140°	1.1	0.7	0.6	0.8	0.5	0.5
145°	1.3	1.2	1.1	0.8	0.9	1.1
150°	1.5	1.2	1.3	1.4	1.2	1.2
155°	1.6	1.2	1.3	1.3	1.2	1.2
160°	1.6	1.3	1.4	1.4	1.2	1.4
165°	1.6	1.3	1.4	1.4	1.2	1.3
170°	1.6	1.5	1.5	1.4	1.5	1.5
175°	1.6	1.8	1.9	1.5	1.5	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)