

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: P588691

Luminaire Tested: **24CGTS-NUV-MID-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: P588691
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-MID-4000K
Description: 2X4 CGT SELECT TROFFER AT MID LUMEN OUTPUT AND 4000K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

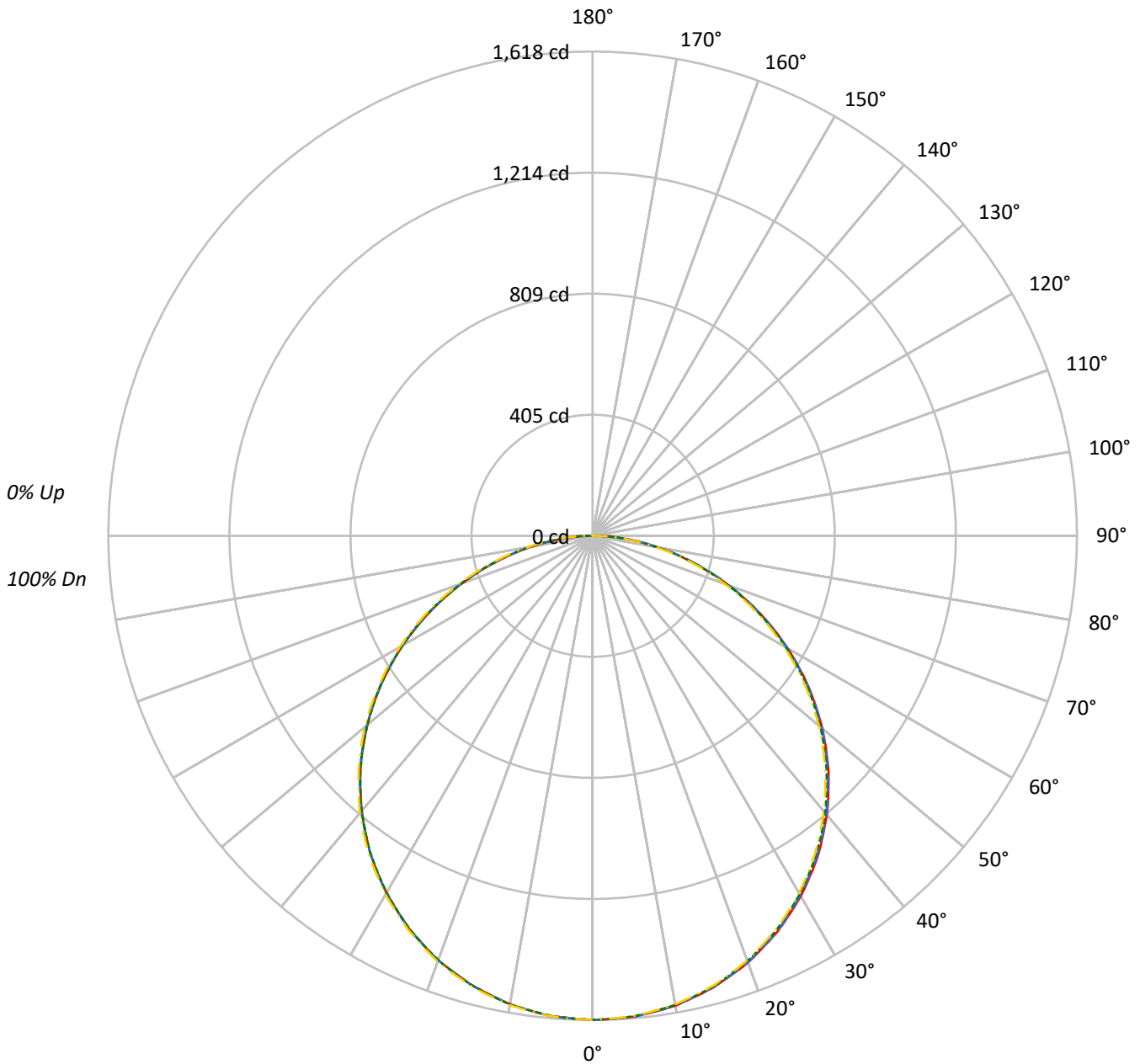
Lumens per Lamp: 4179.4 (1 lamp)
Luminaire Lumens: 4787.0 lumens
Efficiency: 114.5%
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.4
Input Voltage (V): NR
Input Current (A_{in}): 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	136	136	136	136	133	133	133	133	127	127	127	122	122	122	117	117	117	114																			
1	124	118	113	109	121	116	111	107	111	107	104	106	103	100	102	100	97	95																			
2	113	103	95	88	109	101	93	87	97	90	85	93	88	83	89	85	81	79																			
3	102	90	81	73	100	88	79	72	85	77	71	82	75	70	79	73	68	66																			
4	94	80	69	62	91	78	69	61	75	67	60	72	65	59	70	64	59	56																			
5	86	71	61	53	84	70	60	53	67	59	52	65	57	51	63	56	51	48																			
6	79	64	53	46	77	63	53	46	61	52	45	59	51	45	57	50	44	42																			
7	74	58	48	41	72	57	47	40	55	46	40	53	46	40	52	45	39	37																			
8	68	53	43	36	67	52	43	36	50	42	36	49	41	35	48	41	35	33																			
9	64	48	39	32	62	48	39	32	46	38	32	45	37	32	44	37	32	30																			
10	60	45	35	29	58	44	35	29	43	35	29	42	34	29	41	34	29	27																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2177	2177	2177	2177
5°	2178	2176	2176	2174
10°	2178	2175	2172	2172
15°	2176	2172	2166	2168
20°	2173	2165	2161	2161
25°	2167	2158	2152	2151
30°	2161	2149	2140	2139
35°	2152	2138	2127	2126
40°	2138	2123	2108	2109
45°	2121	2104	2086	2087
50°	2097	2080	2056	2057
55°	2066	2050	2020	2022
60°	2025	2007	1970	1975
65°	1971	1954	1905	1915
70°	1903	1887	1822	1840
75°	1814	1807	1717	1748
80°	1694	1699	1571	1636
85°	1578	1508	1349	1473



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	153.2	3.2	3.7	0°	1618	1618	1618	1618	1618	
10°-20°	439.8	9.2	10.5	5°	1613	1611	1611	1610	1613	153
20°-30°	669.8	14.0	16.0	15°	1562	1560	1555	1556	1562	441
30°-40°	813.2	17.0	19.5	25°	1460	1454	1449	1449	1460	673
40°-50°	850.7	17.8	20.4	35°	1310	1302	1295	1294	1310	819
50°-60°	776.5	16.2	18.6	45°	1115	1106	1096	1097	1115	859
60°-70°	602.1	12.6	14.4	55°	881	874	861	862	881	787
70°-80°	361.5	7.6	8.7	65°	619	614	598	602	619	613
80°-90°	112.1	2.3	2.7	75°	349	348	330	336	349	369
90°-100°	2.7	0.1	0.1	85°	102	98	87	95	102	109
100°-110°	1.0	0.0	0.0	90°	7	7	3	11	7	16
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°	0.7	0.0	0.0	115°	1	1	1	1	1	1
140°-150°	0.8	0.0	0.0	125°	1	1	1	1	1	1
150°-160°	0.8	0.0	0.0	135°	1	1	1	1	1	0
160°-170°	0.5	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°	1262.8	26.4	30.2	165°	2	2	2	2	2	0
0°-40°	2075.9	43.4	49.7	175°	2	2	2	2	2	0
0°-60°	3703.1	77.4	88.6	180°	2	2	2	2	2	
0°-90°	4778.7	99.8	114.3							
90°-120°	4.6	0.1	0.1							
90°-150°	6.8	0.1	0.2							
90°-180°	8.0	0.2	0.2							
0°-180°	4787.0	100.0	114.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1
5°	1612.8	1612.1	1613.0	1610.8	1611.2	1611.6	1610.8	1609.9	1610.9	1609.9	1610.8
10°	1594.4	1593.5	1592.5	1591.5	1591.8	1592.1	1590.0	1588.9	1589.6	1588.9	1590.5
15°	1562.1	1561.0	1560.5	1558.5	1559.5	1558.9	1556.6	1554.6	1555.1	1554.8	1556.1
20°	1517.8	1518.1	1516.5	1513.0	1512.3	1510.7	1510.4	1507.9	1509.3	1508.3	1509.4
25°	1460.0	1460.2	1458.4	1454.7	1453.8	1453.1	1450.8	1449.1	1449.3	1448.4	1449.5
30°	1390.7	1389.3	1387.5	1384.3	1383.2	1381.8	1379.3	1377.2	1377.4	1377.0	1378.9
35°	1310.2	1308.2	1306.5	1303.3	1301.9	1298.0	1295.5	1294.3	1294.9	1294.0	1295.0
40°	1217.3	1215.4	1215.1	1209.4	1208.7	1204.8	1201.7	1200.1	1200.0	1200.1	1201.9
45°	1114.7	1113.1	1110.9	1106.7	1105.5	1101.9	1098.9	1096.1	1096.5	1095.9	1097.8
50°	1002.0	1001.1	999.5	995.0	993.5	989.3	986.1	983.2	982.2	982.5	984.2
55°	880.8	880.6	878.7	873.7	874.1	868.6	864.4	861.4	861.2	861.2	862.2
60°	752.4	752.7	750.8	746.0	746.0	740.5	736.4	733.7	732.1	731.9	733.7
65°	619.0	620.0	618.9	614.2	613.7	608.6	603.8	599.9	598.4	598.0	600.9
70°	483.7	484.3	484.5	480.6	479.7	474.6	469.4	465.2	463.2	463.2	465.8
75°	348.9	349.7	351.1	347.8	347.6	342.5	337.7	333.1	330.3	331.3	334.2
80°	218.6	220.5	220.6	217.9	219.3	214.6	210.3	205.1	202.7	203.9	207.9
85°	102.2	102.5	99.3	95.8	97.7	94.1	90.6	88.7	87.4	88.0	91.5
90°	7.2	6.5	5.5	4.5	7.0	6.1	4.9	3.6	2.8	4.1	6.8
95°	1.3	1.4	1.0	0.9	0.6	0.6	0.8	1.2	1.1	1.1	0.7
100°	1.3	1.2	0.9	0.7	0.6	0.6	0.8	1.3	1.4	1.2	0.7
105°	1.2	1.1	0.9	0.6	0.6	0.7	1.0	1.5	1.4	1.6	0.8
110°	1.1	0.9	0.9	0.6	0.8	0.8	1.1	1.5	1.4	1.5	1.1
115°	0.9	0.6	0.9	0.6	0.8	0.9	1.4	1.3	1.4	1.5	1.3
120°	0.6	0.4	0.9	0.6	0.8	1.0	1.5	0.6	1.4	1.0	1.4
125°	0.6	0.4	0.9	0.6	0.9	1.0	1.5	0.6	0.8	0.7	1.5
130°	0.6	0.4	0.9	0.6	1.0	1.1	1.5	0.6	0.8	0.7	1.5
135°	0.6	0.4	0.9	0.6	1.1	1.2	1.5	0.7	0.8	0.8	1.5
140°	0.6	0.5	0.9	0.7	1.2	1.4	1.6	0.9	0.9	1.0	1.5
145°	1.2	1.1	0.9	1.3	1.4	1.6	1.6	1.1	1.1	1.1	1.5
150°	1.4	1.5	1.4	1.6	1.7	1.8	1.9	1.4	1.4	1.2	1.5
155°	1.4	1.5	1.5	1.6	1.9	1.9	2.1	1.6	1.7	1.7	1.5
160°	1.6	1.5	1.5	1.6	2.2	2.1	2.3	1.8	1.7	1.7	1.7
165°	1.5	1.5	1.5	1.6	2.3	2.3	2.4	1.8	1.7	1.7	1.7
170°	1.7	1.6	1.6	1.7	2.4	2.3	2.6	1.8	1.7	1.7	1.6
175°	1.7	1.6	1.9	1.9	2.4	2.3	2.6	1.8	1.7	1.7	1.6
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1618.1	1618.1	1618.1	1618.1	1618.1	1618.1
5°	1610.4	1609.9	1612.0	1611.7	1611.1	1612.8
10°	1589.9	1589.8	1591.3	1592.5	1592.9	1594.4
15°	1555.4	1556.1	1557.7	1559.6	1560.8	1562.1
20°	1508.5	1509.3	1511.6	1514.1	1515.1	1517.8
25°	1448.4	1448.9	1451.9	1454.7	1457.9	1460.0
30°	1377.9	1376.8	1381.4	1384.0	1388.5	1390.7
35°	1294.9	1294.3	1297.9	1302.1	1307.6	1310.2
40°	1201.2	1200.8	1204.7	1209.7	1214.7	1217.3
45°	1097.3	1096.6	1100.8	1105.5	1111.0	1114.7
50°	984.1	982.7	987.8	993.3	998.7	1002.0
55°	862.9	861.8	866.0	872.3	876.4	880.8
60°	734.9	734.1	738.5	744.3	748.3	752.4
65°	602.0	601.5	606.9	612.1	616.2	619.0
70°	468.6	467.7	473.3	478.3	480.8	483.7
75°	337.7	336.3	340.7	345.0	346.9	348.9
80°	212.5	211.1	215.1	217.1	217.7	218.6
85°	96.3	95.4	98.5	100.5	101.1	102.2
90°	10.0	10.8	11.8	10.9	8.9	7.2
95°	0.6	1.0	0.9	1.0	1.3	1.3
100°	0.6	0.7	0.7	0.9	1.2	1.3
105°	0.6	0.6	0.7	0.9	1.1	1.2
110°	0.8	0.6	0.6	0.9	0.9	1.1
115°	0.9	0.6	0.6	0.9	0.7	0.9
120°	1.0	0.6	0.6	0.9	0.5	0.6
125°	1.0	0.6	0.6	0.9	0.5	0.6
130°	1.1	0.6	0.6	0.9	0.5	0.6
135°	1.1	0.6	0.6	0.9	0.5	0.6
140°	1.3	0.8	0.7	0.9	0.5	0.6
145°	1.5	1.4	1.2	0.9	1.1	1.2
150°	1.7	1.4	1.5	1.6	1.4	1.4
155°	1.9	1.4	1.5	1.5	1.4	1.4
160°	1.9	1.5	1.6	1.6	1.4	1.6
165°	1.9	1.5	1.6	1.6	1.4	1.5
170°	1.9	1.7	1.7	1.6	1.7	1.7
175°	1.9	2.1	2.2	1.8	1.8	1.7
180°	1.7	1.7	1.7	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)