

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: P588685

Luminaire Tested: **24CGTS-NUV-HI-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: P588685
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-HI-4000K
Description: 2X4 CGT SELECT TROFFER AT HI LUMEN OUTPUT AND 4000K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

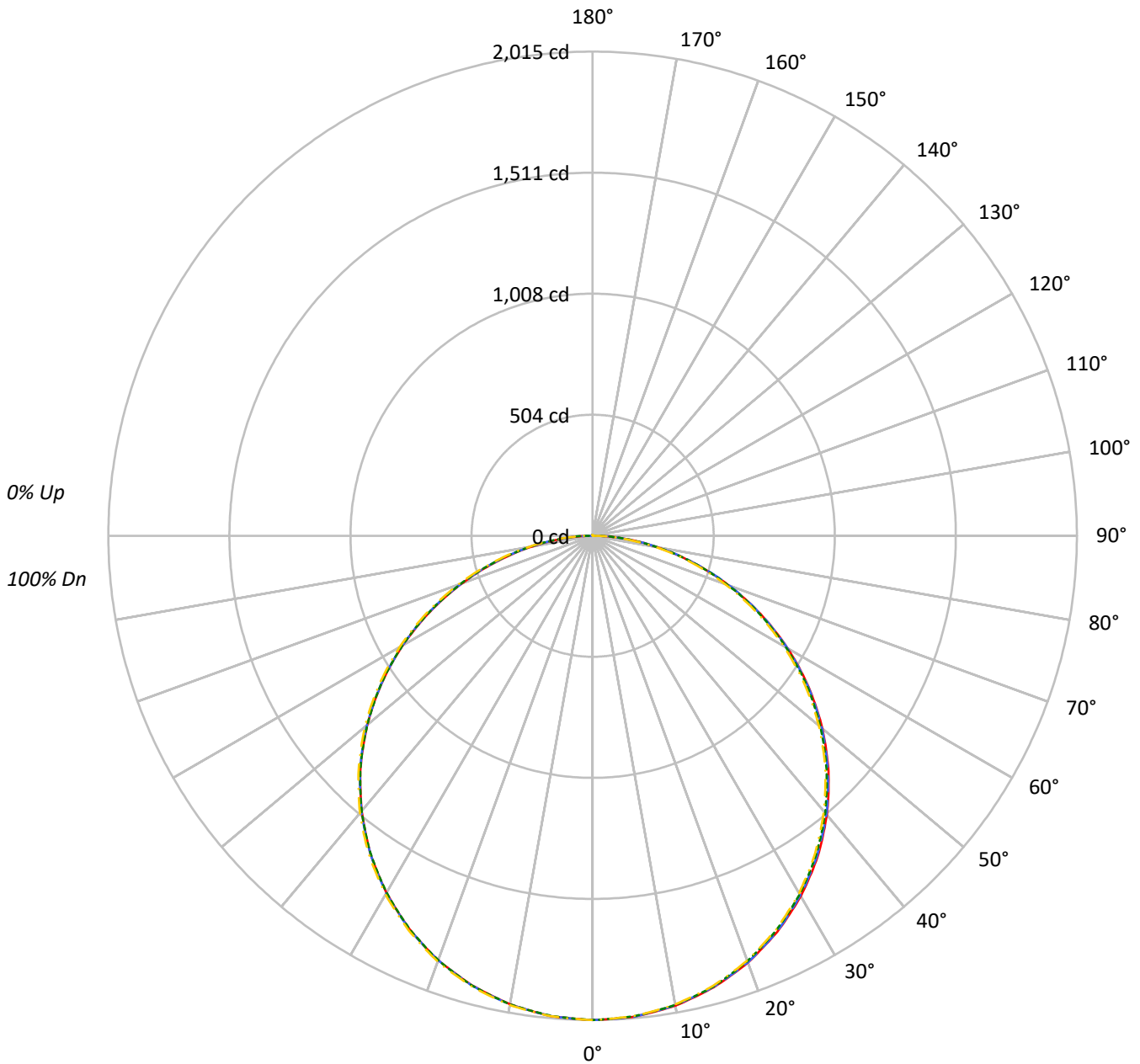
Lumens per Lamp: 4179.4 (1 lamp)
Luminaire Lumens: 5962.1 lumens
Efficiency: 142.7%
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 47.6
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	170	170	170	170	166	166	166	166	158	158	158	152	152	152	145	145	145	142																			
1	155	147	141	135	151	144	138	133	138	133	129	132	129	125	127	124	121	118																			
2	140	128	118	110	136	125	116	108	120	112	106	115	109	103	111	106	101	98																			
3	128	112	100	91	124	110	99	90	106	96	88	102	93	87	98	91	85	82																			
4	117	99	86	77	113	97	85	76	94	83	75	90	81	74	87	79	73	70																			
5	107	88	75	66	104	87	75	65	84	73	65	81	71	64	78	70	63	60																			
6	99	80	67	57	96	78	66	57	76	65	56	73	63	56	71	62	55	52																			
7	92	72	59	51	89	71	59	50	69	58	50	67	57	49	65	56	49	46																			
8	85	66	53	45	83	65	53	45	63	52	45	61	51	44	59	50	44	41																			
9	80	60	48	40	78	59	48	40	58	47	40	56	47	40	55	46	40	37																			
10	75	56	44	37	73	55	44	36	53	43	36	52	43	36	51	42	36	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2712	2712	2712	2712
5°	2713	2710	2710	2708
10°	2713	2709	2705	2705
15°	2710	2705	2698	2700
20°	2707	2697	2692	2692
25°	2699	2688	2680	2679
30°	2691	2676	2665	2664
35°	2680	2663	2649	2648
40°	2663	2644	2625	2627
45°	2642	2620	2599	2599
50°	2612	2590	2561	2562
55°	2573	2554	2516	2518
60°	2522	2500	2454	2460
65°	2454	2434	2373	2385
70°	2370	2350	2269	2292
75°	2259	2250	2139	2178
80°	2110	2116	1956	2037
85°	1965	1879	1681	1834



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	190.8	3.2	4.6	0°	2015	2015	2015	2015	2015	
10°-20°	547.8	9.2	13.1	5°	2009	2007	2006	2005	2009	191
20°-30°	834.2	14.0	20.0	15°	1946	1942	1937	1938	1946	549
30°-40°	1012.7	17.0	24.2	25°	1818	1811	1805	1805	1818	838
40°-50°	1059.5	17.8	25.3	35°	1632	1621	1613	1612	1632	1021
50°-60°	967.1	16.2	23.1	45°	1388	1377	1366	1366	1388	1070
60°-70°	749.9	12.6	17.9	55°	1097	1089	1073	1073	1097	980
70°-80°	450.2	7.6	10.8	65°	771	764	745	749	771	763
80°-90°	139.5	2.3	3.3	75°	435	433	411	419	435	460
90°-100°	3.4	0.1	0.1	85°	127	122	109	119	127	135
100°-110°	1.3	0.0	0.0	90°	9	9	4	13	9	20
110°-120°	1.2	0.0	0.0	95°	2	1	1	1	2	3
120°-130°	0.9	0.0	0.0	105°	2	1	2	1	2	2
130°-140°	0.9	0.0	0.0	115°	1	1	2	1	1	1
140°-150°	1.0	0.0	0.0	125°	1	1	1	1	1	1
150°-160°	0.9	0.0	0.0	135°	1	1	1	1	1	1
160°-170°	0.6	0.0	0.0	145°	2	2	1	2	2	1
170°-180°	0.2	0.0	0.0	155°	2	2	2	2	2	1
0°-30°	1572.7	26.4	37.6	165°	2	3	2	2	2	1
0°-40°	2585.5	43.4	61.9	175°	2	3	2	3	2	0
0°-60°	4612.0	77.4	110.4	180°	2	2	2	2	2	
0°-90°	5951.7	99.8	142.4							
90°-120°	5.8	0.1	0.1							
90°-150°	8.6	0.1	0.2							
90°-180°	10.0	0.2	0.2							
0°-180°	5962.1	100.0	142.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
5°	2008.7	2007.8	2008.9	2006.1	2006.7	2007.2	2006.2	2005.0	2006.3	2005.0	2006.2
10°	1985.8	1984.6	1983.4	1982.2	1982.5	1982.9	1980.3	1979.0	1979.8	1978.9	1980.9
15°	1945.6	1944.1	1943.6	1941.1	1942.2	1941.6	1938.7	1936.2	1936.8	1936.5	1938.1
20°	1890.4	1890.7	1888.7	1884.4	1883.5	1881.5	1881.1	1878.1	1879.8	1878.6	1879.9
25°	1818.3	1818.6	1816.4	1811.8	1810.6	1809.7	1806.9	1804.8	1805.0	1803.9	1805.3
30°	1732.1	1730.4	1728.1	1724.1	1722.7	1721.0	1717.9	1715.2	1715.4	1715.0	1717.3
35°	1631.8	1629.3	1627.2	1623.2	1621.4	1616.6	1613.5	1612.0	1612.7	1611.6	1612.9
40°	1516.1	1513.8	1513.3	1506.3	1505.4	1500.5	1496.7	1494.6	1494.5	1494.7	1496.9
45°	1388.3	1386.4	1383.5	1378.4	1376.8	1372.4	1368.7	1365.2	1365.7	1365.0	1367.3
50°	1248.0	1246.8	1244.8	1239.2	1237.4	1232.1	1228.1	1224.6	1223.3	1223.7	1225.7
55°	1097.0	1096.7	1094.4	1088.1	1088.6	1081.9	1076.5	1072.8	1072.6	1072.6	1073.8
60°	937.1	937.4	935.1	929.1	929.1	922.3	917.1	913.7	911.8	911.6	913.8
65°	770.9	772.2	770.8	765.0	764.4	757.9	752.0	747.1	745.3	744.7	748.4
70°	602.4	603.2	603.4	598.5	597.4	591.1	584.6	579.4	576.8	576.8	580.2
75°	434.6	435.6	437.2	433.2	432.9	426.6	420.6	414.9	411.4	412.6	416.3
80°	272.3	274.6	274.8	271.4	273.1	267.2	262.0	255.4	252.5	253.9	258.9
85°	127.3	127.6	123.7	119.3	121.7	117.2	112.8	110.5	108.9	109.6	113.9
90°	9.0	8.1	6.8	5.6	8.7	7.6	6.1	4.4	3.5	5.1	8.4
95°	1.7	1.8	1.2	1.1	0.8	0.8	1.0	1.5	1.4	1.4	0.9
100°	1.6	1.5	1.1	0.9	0.8	0.8	1.0	1.7	1.8	1.5	0.9
105°	1.5	1.3	1.1	0.8	0.8	0.9	1.2	1.9	1.8	2.0	1.0
110°	1.3	1.1	1.1	0.8	1.0	1.0	1.4	1.9	1.8	1.9	1.4
115°	1.1	0.8	1.1	0.8	1.0	1.1	1.8	1.6	1.8	1.9	1.6
120°	0.8	0.5	1.1	0.8	1.0	1.2	1.9	0.8	1.7	1.2	1.8
125°	0.8	0.5	1.1	0.8	1.1	1.2	1.9	0.8	1.0	0.9	1.9
130°	0.8	0.5	1.1	0.8	1.2	1.4	1.9	0.8	1.0	0.9	1.9
135°	0.8	0.5	1.1	0.8	1.3	1.5	1.9	0.9	1.0	1.0	1.9
140°	0.8	0.7	1.1	0.9	1.5	1.8	2.0	1.1	1.1	1.2	1.9
145°	1.5	1.3	1.1	1.6	1.8	2.0	2.0	1.4	1.4	1.3	1.9
150°	1.8	1.9	1.8	2.0	2.1	2.2	2.3	1.8	1.8	1.5	1.9
155°	1.8	1.9	1.9	2.0	2.3	2.4	2.6	2.0	2.1	2.1	1.9
160°	2.0	1.9	1.9	2.0	2.7	2.6	2.8	2.2	2.1	2.1	2.1
165°	1.9	1.9	1.9	2.0	2.8	2.8	3.0	2.2	2.1	2.1	2.1
170°	2.1	2.0	2.0	2.1	3.0	2.8	3.2	2.2	2.1	2.1	2.0
175°	2.1	2.0	2.4	2.4	3.0	2.8	3.2	2.2	2.1	2.1	2.0
180°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
5°	2005.6	2005.0	2007.7	2007.3	2006.6	2008.7
10°	1980.1	1980.0	1981.9	1983.3	1983.9	1985.8
15°	1937.2	1938.0	1940.0	1942.4	1944.0	1945.6
20°	1878.8	1879.8	1882.7	1885.7	1886.9	1890.4
25°	1803.9	1804.6	1808.3	1811.7	1815.8	1818.3
30°	1716.1	1714.8	1720.5	1723.7	1729.3	1732.1
35°	1612.7	1612.0	1616.5	1621.7	1628.5	1631.8
40°	1496.0	1495.5	1500.4	1506.6	1512.9	1516.1
45°	1366.7	1365.8	1371.0	1376.9	1383.8	1388.3
50°	1225.6	1223.9	1230.3	1237.1	1243.9	1248.0
55°	1074.8	1073.4	1078.5	1086.4	1091.6	1097.0
60°	915.3	914.2	919.8	927.1	932.0	937.1
65°	749.8	749.1	755.9	762.4	767.4	770.9
70°	583.6	582.5	589.4	595.6	598.8	602.4
75°	420.5	418.9	424.3	429.6	432.0	434.6
80°	264.7	262.9	267.8	270.3	271.2	272.3
85°	119.9	118.8	122.7	125.1	125.9	127.3
90°	12.5	13.4	14.7	13.6	11.1	9.0
95°	0.8	1.2	1.1	1.2	1.6	1.7
100°	0.8	0.9	0.9	1.1	1.5	1.6
105°	0.8	0.8	0.9	1.1	1.4	1.5
110°	1.0	0.8	0.8	1.1	1.1	1.3
115°	1.1	0.8	0.8	1.1	0.9	1.1
120°	1.2	0.8	0.8	1.1	0.7	0.8
125°	1.2	0.8	0.8	1.1	0.7	0.8
130°	1.3	0.8	0.8	1.1	0.7	0.8
135°	1.4	0.8	0.8	1.1	0.7	0.8
140°	1.6	1.0	0.9	1.1	0.7	0.8
145°	1.9	1.8	1.5	1.1	1.3	1.5
150°	2.1	1.8	1.9	2.0	1.8	1.8
155°	2.3	1.8	1.9	1.9	1.8	1.8
160°	2.3	1.9	2.0	2.0	1.8	2.0
165°	2.3	1.9	2.0	2.0	1.8	1.9
170°	2.3	2.1	2.1	2.0	2.1	2.1
175°	2.3	2.6	2.7	2.2	2.2	2.1
180°	2.1	2.1	2.1	2.1	2.1	2.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)