

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: P588684

Luminaire Tested: **24CGTS-NUV-HI-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: P588684
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-3500K
Description: 2X4 CGT SELECT TROFFER AT HI LUMEN OUTPUT AND 3500K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

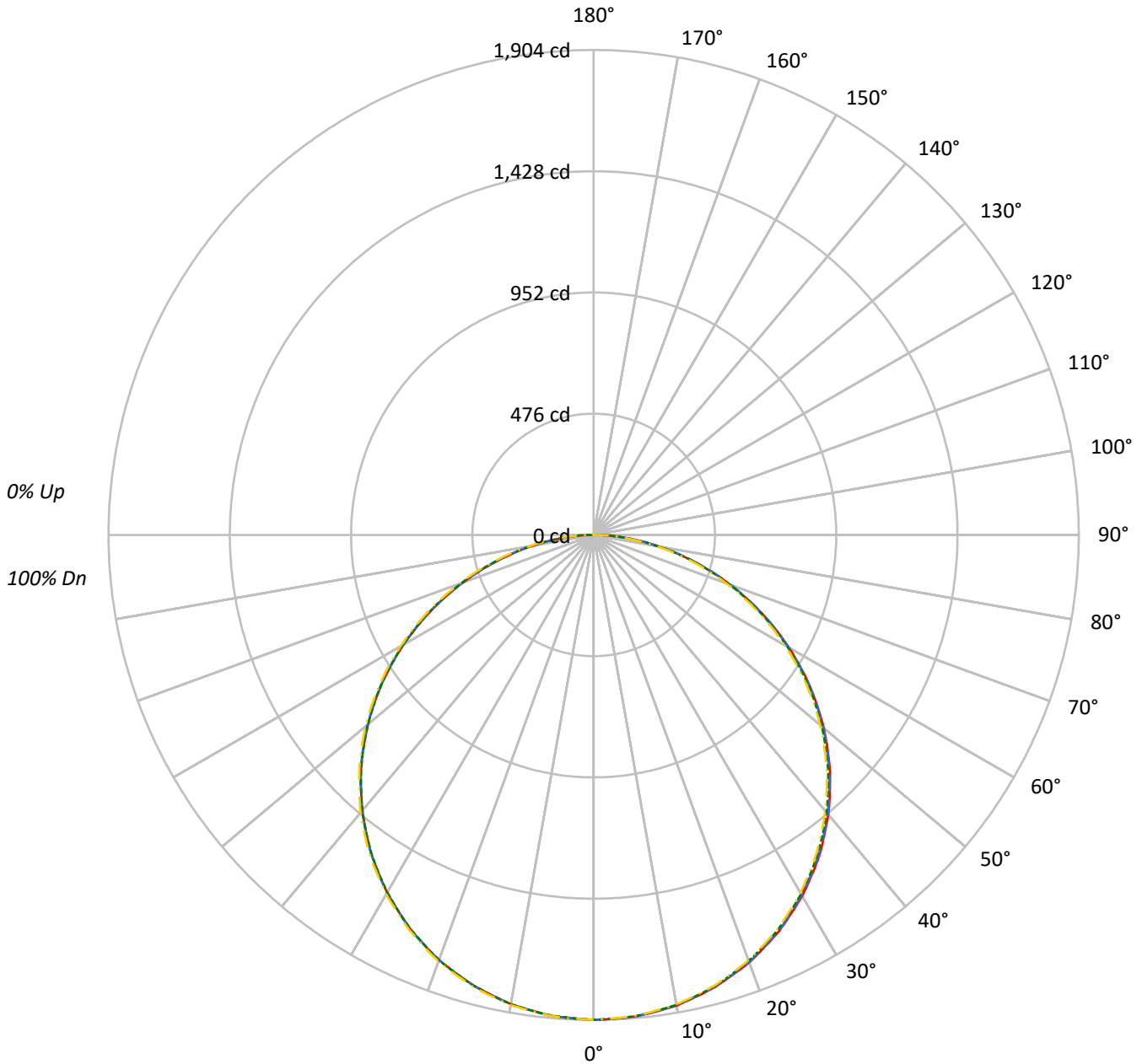
Lumens per Lamp: 4179.4 (1 lamp)
Luminaire Lumens: 5633.0 lumens
Efficiency: 134.8%
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.1
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				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	160	160	160	160	157	157	157	157	150	150	150	143	143	143	137	137	137	135			
1	146	139	133	128	142	136	131	126	130	126	122	125	121	118	120	117	114	112			
2	132	121	112	104	129	118	110	102	114	106	100	109	103	98	105	100	95	92			
3	121	106	95	86	117	104	93	85	100	91	83	96	88	82	92	86	80	77			
4	110	94	82	72	107	92	81	72	88	79	71	85	77	70	82	75	69	66			
5	101	84	71	62	98	82	70	62	79	69	61	76	67	60	74	66	60	57			
6	93	75	63	54	91	74	62	54	71	61	53	69	60	53	67	59	52	50			
7	87	68	56	48	84	67	56	48	65	55	47	63	54	47	61	53	46	44			
8	81	62	50	42	78	61	50	42	59	49	42	58	48	42	56	48	41	39			
9	75	57	46	38	73	56	45	38	55	45	38	53	44	38	52	43	37	35			
10	71	53	42	35	69	52	41	34	50	41	34	49	40	34	48	40	34	32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2562	2562	2562	2562
5°	2563	2561	2560	2559
10°	2563	2559	2556	2556
15°	2561	2556	2549	2551
20°	2557	2548	2543	2543
25°	2551	2540	2532	2531
30°	2543	2529	2518	2517
35°	2532	2516	2503	2502
40°	2516	2498	2480	2482
45°	2496	2475	2455	2455
50°	2468	2447	2419	2421
55°	2431	2413	2377	2379
60°	2383	2362	2318	2324
65°	2319	2299	2242	2253
70°	2239	2221	2144	2165
75°	2135	2126	2021	2058
80°	1993	1999	1849	1925
85°	1857	1775	1589	1734



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	180.2	3.2	4.3	0°	1904	1904	1904	1904	1904	
10°-20°	517.5	9.2	12.4	5°	1898	1896	1896	1894	1898	180
20°-30°	788.2	14.0	18.9	15°	1838	1835	1830	1831	1838	519
30°-40°	956.9	17.0	22.9	25°	1718	1711	1705	1705	1718	792
40°-50°	1001.0	17.8	24.0	35°	1542	1532	1524	1523	1542	964
50°-60°	913.7	16.2	21.9	45°	1312	1301	1290	1290	1312	1011
60°-70°	708.5	12.6	17.0	55°	1036	1028	1013	1014	1036	926
70°-80°	425.4	7.6	10.2	65°	728	722	704	708	728	721
80°-90°	131.9	2.3	3.2	75°	411	409	389	396	411	435
90°-100°	3.2	0.1	0.1	85°	120	115	103	112	120	128
100°-110°	1.2	0.0	0.0	90°	8	8	3	13	8	19
110°-120°	1.1	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°	0.8	0.0	0.0	115°	1	1	2	1	1	1
140°-150°	0.9	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°	1485.9	26.4	35.6	165°	2	3	2	2	2	1
0°-40°	2442.8	43.4	58.4	175°	2	3	2	2	2	0
0°-60°	4357.5	77.4	104.3	180°	2	2	2	2	2	
0°-90°	5623.3	99.8	134.5							
90°-120°	5.4	0.1	0.1							
90°-150°	8.0	0.1	0.2							
90°-180°	10.0	0.2	0.2							
0°-180°	5633.0	100.0	134.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1
5°	1897.8	1897.0	1898.0	1895.4	1896.0	1896.4	1895.5	1894.4	1895.6	1894.4	1895.5
10°	1876.2	1875.1	1874.0	1872.8	1873.1	1873.4	1871.0	1869.8	1870.5	1869.7	1871.6
15°	1838.2	1836.8	1836.3	1834.0	1835.1	1834.4	1831.8	1829.3	1829.9	1829.6	1831.1
20°	1786.1	1786.3	1784.5	1780.4	1779.6	1777.7	1777.3	1774.4	1776.1	1774.9	1776.1
25°	1718.0	1718.2	1716.1	1711.8	1710.7	1709.9	1707.2	1705.2	1705.4	1704.3	1705.7
30°	1636.5	1634.9	1632.7	1629.0	1627.7	1626.1	1623.1	1620.6	1620.8	1620.4	1622.5
35°	1541.8	1539.4	1537.4	1533.6	1532.0	1527.4	1524.5	1523.1	1523.7	1522.7	1523.9
40°	1432.4	1430.3	1429.8	1423.2	1422.3	1417.7	1414.1	1412.2	1412.1	1412.2	1414.3
45°	1311.7	1309.9	1307.2	1302.3	1300.8	1296.6	1293.1	1289.9	1290.3	1289.6	1291.9
50°	1179.1	1178.0	1176.1	1170.8	1169.1	1164.2	1160.3	1157.0	1155.8	1156.2	1158.1
55°	1036.4	1036.2	1034.0	1028.1	1028.5	1022.2	1017.1	1013.6	1013.4	1013.4	1014.5
60°	885.4	885.7	883.5	877.8	877.8	871.4	866.5	863.3	861.5	861.3	863.4
65°	728.4	729.6	728.3	722.8	722.2	716.1	710.5	705.9	704.2	703.7	707.1
70°	569.1	569.9	570.1	565.5	564.5	558.4	552.4	547.4	545.0	545.0	548.1
75°	410.6	411.6	413.1	409.3	409.0	403.1	397.4	392.0	388.7	389.8	393.3
80°	257.2	259.5	259.6	256.4	258.0	252.5	247.5	241.3	238.6	239.9	244.6
85°	120.3	120.6	116.9	112.8	115.0	110.7	106.6	104.4	102.9	103.5	107.6
90°	8.5	7.6	6.5	5.3	8.2	7.1	5.7	4.2	3.3	4.8	8.0
95°	1.6	1.7	1.1	1.0	0.7	0.7	0.9	1.5	1.3	1.3	0.8
100°	1.5	1.5	1.0	0.8	0.7	0.7	0.9	1.6	1.7	1.5	0.8
105°	1.5	1.2	1.0	0.7	0.7	0.8	1.1	1.8	1.7	1.9	0.9
110°	1.2	1.0	1.0	0.7	0.9	0.9	1.3	1.8	1.7	1.8	1.3
115°	1.0	0.7	1.0	0.7	0.9	1.0	1.7	1.5	1.7	1.8	1.5
120°	0.7	0.5	1.0	0.7	0.9	1.1	1.8	0.7	1.6	1.1	1.7
125°	0.7	0.5	1.0	0.7	1.0	1.1	1.8	0.7	0.9	0.8	1.8
130°	0.7	0.5	1.0	0.7	1.1	1.3	1.8	0.7	0.9	0.8	1.8
135°	0.7	0.5	1.0	0.7	1.2	1.5	1.8	0.8	0.9	0.9	1.8
140°	0.7	0.6	1.0	0.8	1.5	1.7	1.9	1.0	1.0	1.1	1.8
145°	1.5	1.2	1.0	1.5	1.7	1.9	1.9	1.3	1.3	1.2	1.8
150°	1.7	1.8	1.7	1.9	2.0	2.1	2.2	1.7	1.7	1.5	1.8
155°	1.7	1.8	1.8	1.9	2.2	2.3	2.5	1.9	2.0	2.0	1.8
160°	1.9	1.8	1.8	1.9	2.6	2.5	2.7	2.1	2.0	2.0	2.0
165°	1.8	1.8	1.8	1.9	2.7	2.7	2.8	2.1	2.0	2.0	2.0
170°	2.0	1.9	1.9	2.0	2.8	2.7	3.0	2.1	2.0	2.0	1.9
175°	2.0	1.9	2.3	2.3	2.8	2.7	3.0	2.1	2.0	2.0	1.9
180°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1904.1	1904.1	1904.1	1904.1	1904.1	1904.1
5°	1895.0	1894.4	1896.9	1896.6	1895.9	1897.8
10°	1870.8	1870.7	1872.5	1873.9	1874.5	1876.2
15°	1830.3	1831.1	1832.9	1835.3	1836.7	1838.2
20°	1775.1	1776.0	1778.8	1781.7	1782.8	1786.1
25°	1704.4	1705.0	1708.5	1711.8	1715.6	1718.0
30°	1621.4	1620.2	1625.5	1628.6	1633.9	1636.5
35°	1523.7	1523.0	1527.3	1532.2	1538.7	1541.8
40°	1413.4	1413.0	1417.6	1423.5	1429.4	1432.4
45°	1291.3	1290.4	1295.3	1300.9	1307.4	1311.7
50°	1158.0	1156.4	1162.4	1168.8	1175.2	1179.1
55°	1015.5	1014.1	1019.0	1026.5	1031.3	1036.4
60°	864.8	863.8	869.0	875.9	880.5	885.4
65°	708.4	707.8	714.2	720.3	725.1	728.4
70°	551.4	550.4	556.9	562.8	565.8	569.1
75°	397.3	395.8	400.9	405.9	408.2	410.6
80°	250.1	248.4	253.1	255.4	256.2	257.2
85°	113.3	112.3	116.0	118.2	119.0	120.3
90°	11.8	12.7	13.9	12.9	10.5	8.5
95°	0.7	1.1	1.0	1.1	1.5	1.6
100°	0.7	0.8	0.8	1.0	1.5	1.5
105°	0.7	0.7	0.8	1.0	1.3	1.5
110°	0.9	0.7	0.7	1.0	1.0	1.2
115°	1.0	0.7	0.7	1.0	0.8	1.0
120°	1.1	0.7	0.7	1.0	0.6	0.7
125°	1.1	0.7	0.7	1.0	0.6	0.7
130°	1.2	0.7	0.7	1.0	0.6	0.7
135°	1.3	0.7	0.7	1.0	0.6	0.7
140°	1.5	0.9	0.8	1.0	0.6	0.7
145°	1.8	1.7	1.5	1.0	1.2	1.5
150°	2.0	1.7	1.8	1.9	1.7	1.7
155°	2.2	1.7	1.8	1.8	1.7	1.7
160°	2.2	1.8	1.9	1.9	1.7	1.9
165°	2.2	1.8	1.9	1.9	1.7	1.8
170°	2.2	2.0	2.0	1.9	2.0	2.0
175°	2.2	2.5	2.6	2.1	2.1	2.0
180°	2.0	2.0	2.0	2.0	2.0	2.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)