

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: P588689

Luminaire Tested: **24CGTS-NUV-LOW-5000K**

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: P588689
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-5000K
Description: 2X4 CGT SELECT TROFFER AT LOW LUMEN OUTPUT AND 5000K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

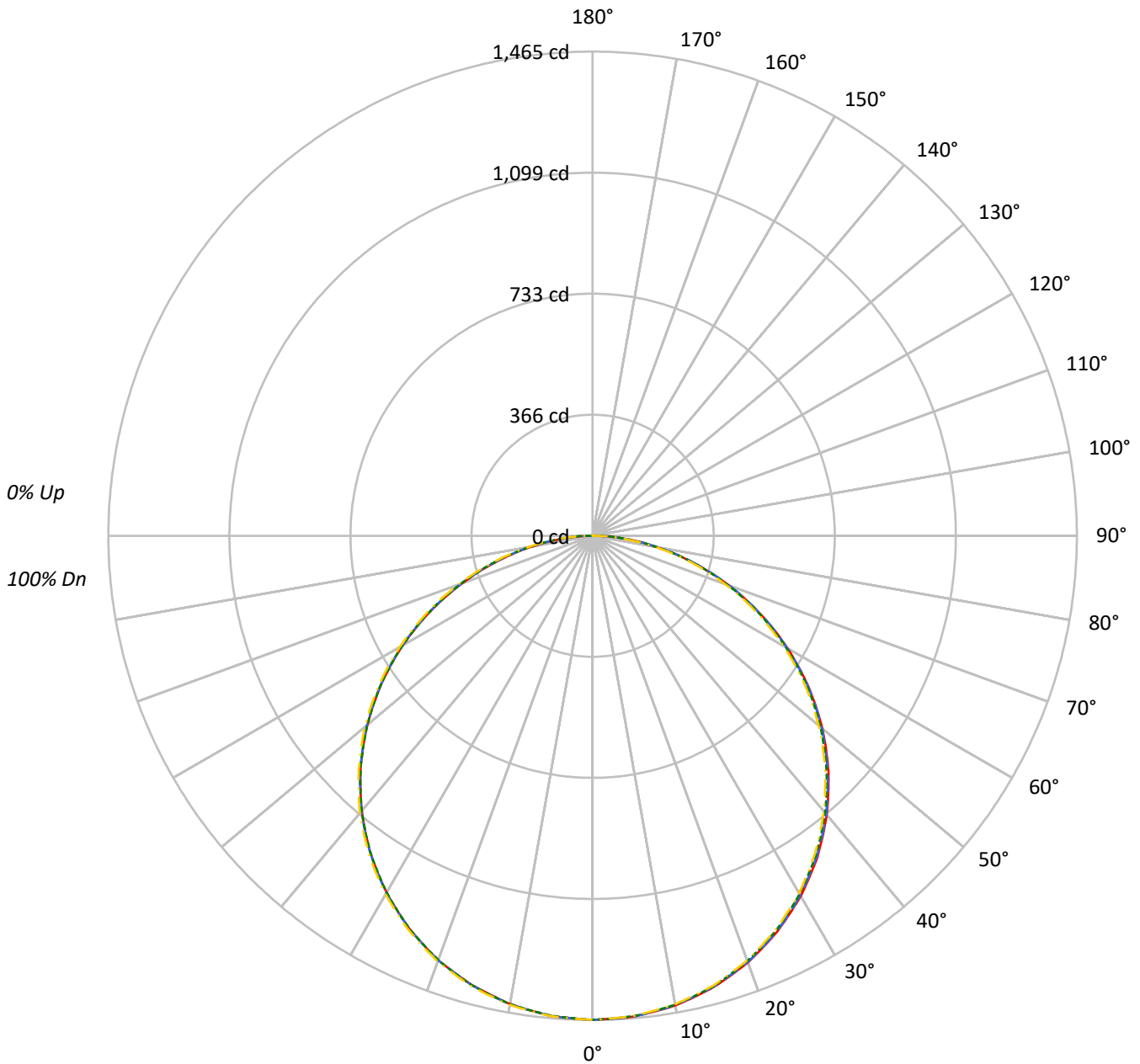
Lumens per Lamp: 4179.4 (1 lamp)
Luminaire Lumens: 4333.1 lumens
Efficiency: 103.7%
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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									
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	123	123	123	123	120	120	120	120	115	115	115	110	110	110	106	106	106	103																			
1	112	107	103	98	109	105	101	97	100	97	94	96	93	91	92	90	88	86																			
2	102	93	86	80	99	91	84	79	87	82	77	84	79	75	81	77	73	71																			
3	93	82	73	66	90	80	72	65	77	70	64	74	68	63	71	66	62	60																			
4	85	72	63	56	82	71	62	55	68	60	54	66	59	54	63	58	53	51																			
5	78	64	55	48	76	63	54	48	61	53	47	59	52	46	57	51	46	44																			
6	72	58	48	42	70	57	48	41	55	47	41	53	46	41	51	45	40	38																			
7	67	52	43	37	65	52	43	37	50	42	36	48	41	36	47	41	36	34																			
8	62	48	39	33	60	47	39	33	46	38	32	44	37	32	43	37	32	30																			
9	58	44	35	29	56	43	35	29	42	34	29	41	34	29	40	33	29	27																			
10	54	40	32	27	53	40	32	27	39	31	26	38	31	26	37	31	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	1971	1971	1971	1971
5°	1972	1970	1969	1968
10°	1972	1968	1966	1966
15°	1970	1966	1961	1962
20°	1967	1960	1956	1956
25°	1962	1954	1947	1947
30°	1956	1945	1937	1936
35°	1948	1936	1925	1924
40°	1935	1922	1908	1909
45°	1920	1904	1889	1889
50°	1899	1882	1861	1862
55°	1870	1856	1829	1830
60°	1833	1817	1783	1788
65°	1784	1769	1725	1733
70°	1722	1708	1649	1666
75°	1642	1635	1554	1582
80°	1533	1538	1422	1481
85°	1428	1366	1221	1334



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	138.6	3.2	3.3	0°	1465	1465	1465	1465	1465	
10°-20°	398.1	9.2	9.5	5°	1460	1458	1458	1457	1460	139
20°-30°	606.3	14.0	14.5	15°	1414	1412	1408	1408	1414	399
30°-40°	736.0	17.0	17.6	25°	1322	1316	1312	1312	1322	609
40°-50°	770.0	17.8	18.4	35°	1186	1178	1172	1172	1186	742
50°-60°	702.9	16.2	16.8	45°	1009	1001	992	993	1009	778
60°-70°	545.0	12.6	13.0	55°	797	791	780	780	797	712
70°-80°	327.2	7.6	7.8	65°	560	556	542	544	560	555
80°-90°	101.4	2.3	2.4	75°	316	315	299	304	316	334
90°-100°	2.4	0.1	0.1	85°	92	88	79	86	92	98
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°	1143.0	26.4	27.3	165°	1	2	2	1	1	0
0°-40°	1879.0	43.4	45.0	175°	2	2	2	2	2	0
0°-60°	3351.9	77.4	80.2	180°	2	2	2	2	2	
0°-90°	4325.5	99.8	103.5							
90°-120°	4.2	0.1	0.1							
90°-150°	6.3	0.1	0.1							
90°-180°	8.0	0.2	0.2							
0°-180°	4333.1	100.0	103.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7
5°	1459.8	1459.2	1460.0	1458.0	1458.4	1458.8	1458.1	1457.2	1458.1	1457.2	1458.1
10°	1443.2	1442.3	1441.5	1440.6	1440.8	1441.1	1439.2	1438.2	1438.8	1438.2	1439.7
15°	1414.0	1412.9	1412.5	1410.7	1411.6	1411.1	1409.0	1407.2	1407.6	1407.4	1408.5
20°	1373.9	1374.1	1372.7	1369.5	1368.9	1367.5	1367.1	1364.9	1366.2	1365.3	1366.2
25°	1321.5	1321.7	1320.1	1316.7	1315.9	1315.3	1313.2	1311.6	1311.8	1311.0	1312.0
30°	1258.8	1257.6	1255.9	1253.0	1252.0	1250.8	1248.5	1246.6	1246.7	1246.4	1248.1
35°	1185.9	1184.1	1182.6	1179.7	1178.4	1174.9	1172.7	1171.6	1172.1	1171.3	1172.2
40°	1101.9	1100.2	1099.8	1094.7	1094.1	1090.5	1087.8	1086.3	1086.2	1086.3	1087.9
45°	1009.0	1007.6	1005.5	1001.8	1000.6	997.4	994.7	992.2	992.5	992.0	993.7
50°	907.0	906.2	904.7	900.6	899.3	895.5	892.5	890.0	889.0	889.3	890.8
55°	797.2	797.1	795.4	790.8	791.2	786.3	782.4	779.7	779.6	779.5	780.4
60°	681.1	681.3	679.6	675.2	675.2	670.3	666.5	664.1	662.7	662.5	664.1
65°	560.3	561.2	560.2	556.0	555.5	550.8	546.6	543.0	541.7	541.3	543.9
70°	437.8	438.4	438.5	435.0	434.2	429.6	424.9	421.1	419.2	419.2	421.6
75°	315.9	316.6	317.8	314.8	314.6	310.1	305.7	301.5	299.0	299.9	302.5
80°	197.9	199.6	199.7	197.2	198.5	194.2	190.4	185.6	183.5	184.5	188.1
85°	92.5	92.8	89.9	86.7	88.5	85.1	82.0	80.3	79.1	79.7	82.8
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°	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7
5°	1457.6	1457.2	1459.1	1458.9	1458.3	1459.8
10°	1439.1	1439.0	1440.4	1441.4	1441.9	1443.2
15°	1407.9	1408.5	1409.9	1411.7	1412.8	1414.0
20°	1365.4	1366.2	1368.3	1370.5	1371.4	1373.9
25°	1311.0	1311.5	1314.2	1316.7	1319.7	1321.5
30°	1247.2	1246.3	1250.4	1252.7	1256.8	1258.8
35°	1172.1	1171.5	1174.8	1178.6	1183.6	1185.9
40°	1087.2	1086.9	1090.5	1095.0	1099.5	1101.9
45°	993.3	992.6	996.4	1000.7	1005.7	1009.0
50°	890.7	889.5	894.1	899.1	904.0	907.0
55°	781.1	780.1	783.8	789.6	793.3	797.2
60°	665.2	664.4	668.5	673.8	677.3	681.1
65°	544.9	544.4	549.3	554.1	557.7	560.3
70°	424.1	423.4	428.4	432.9	435.2	437.8
75°	305.6	304.4	308.4	312.2	314.0	315.9
80°	192.3	191.1	194.7	196.5	197.1	197.9
85°	87.1	86.4	89.2	90.9	91.5	92.5
90°	9.1	9.7	10.7	9.9	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)