

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: P588666

Luminaire Tested: **14CGTS-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: P588666  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( LCS210329017BSA)  
Test Lab:  
Issue Date: 12/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CGTS-NUV-HI-3500K  
Description: 1X4 CGT SELECT TROFFER AT HI LUMEN OUTPUT AND 3500K COLOR SETTING  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

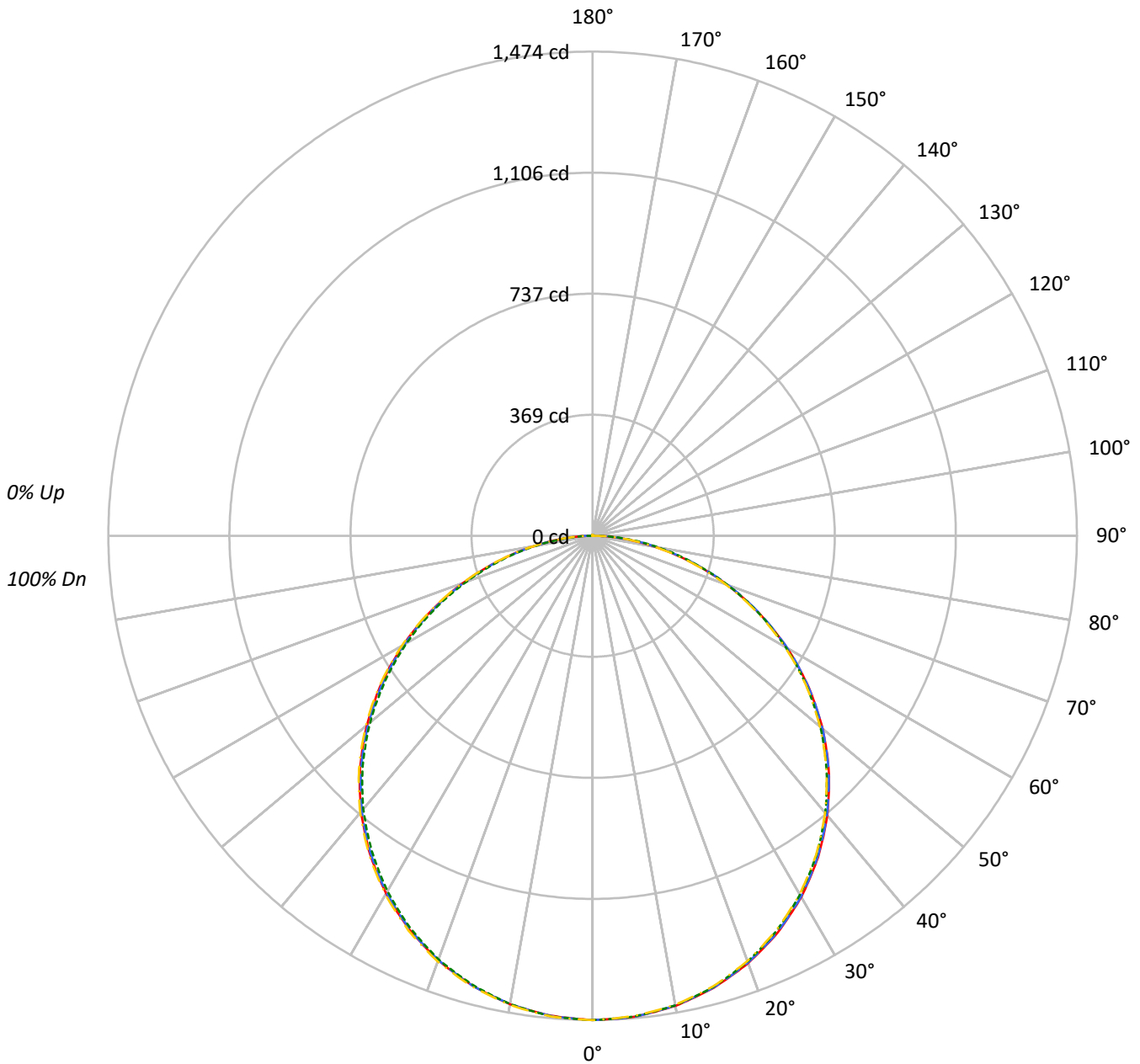
Lumens per Lamp: 3522.2 (1 lamp)  
Luminaire Lumens: 4342.0 lumens  
Efficiency: 123.3%  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 40.3  
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

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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	147	147	147	147	143	143	143	143	137	137	137	131	131	131	126	126	126	123			
1	134	128	122	117	130	125	120	115	119	115	112	115	111	108	110	107	105	102			
2	121	111	102	95	118	109	101	94	104	97	92	100	94	90	96	92	87	85			
3	110	97	87	79	107	95	86	78	91	83	77	88	81	75	85	79	74	71			
4	101	86	75	66	98	84	74	66	81	72	65	78	70	64	75	69	63	60			
5	93	77	65	57	90	75	65	57	73	63	56	70	62	55	68	61	55	52			
6	86	69	58	50	83	68	57	49	65	56	49	63	55	49	61	54	48	46			
7	79	62	51	44	77	61	51	44	59	50	43	58	49	43	56	48	43	40			
8	74	57	46	39	72	56	46	39	54	45	39	53	44	38	51	44	38	36			
9	69	52	42	35	67	51	42	35	50	41	35	49	40	35	47	40	34	32			
10	65	48	38	32	63	48	38	32	46	38	32	45	37	31	44	37	31	29			

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

	0°	90°	180°	270°
0°	3968	3968	3968	3968
5°	3970	3967	3961	3965
10°	3971	3966	3957	3955
15°	3969	3961	3949	3942
20°	3965	3950	3938	3929
25°	3958	3937	3924	3908
30°	3946	3921	3908	3881
35°	3929	3902	3883	3850
40°	3903	3870	3852	3814
45°	3871	3833	3809	3766
50°	3825	3786	3754	3700
55°	3763	3727	3682	3617
60°	3679	3651	3583	3518
65°	3565	3555	3459	3384
70°	3419	3438	3291	3212
75°	3225	3288	3074	2999
80°	2966	3116	2783	2717
85°	2637	2986	2393	2254



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	90°	180°	270°	360°	Flux
0°-10°	139.6	3.2	4.0	0°	1474	1474	1474	1474	
10°-20°	400.9	9.2	11.4	5°	1470	1469	1466	1468	140
20°-30°	610.7	14.1	17.3	15°	1424	1422	1418	1415	402
30°-40°	741.5	17.1	21.1	25°	1333	1326	1322	1316	614
40°-50°	775.1	17.9	22.0	35°	1196	1188	1182	1172	748
50°-60°	705.5	16.2	20.0	45°	1017	1007	1001	990	784
60°-70°	543.5	12.5	15.4	55°	802	794	785	771	716
70°-80°	321.5	7.4	9.1	65°	560	558	543	532	554
80°-90°	96.6	2.2	2.7	75°	310	316	296	288	329
90°-100°	1.0	0.0	0.0	85°	85	97	78	73	93
100°-110°	0.8	0.0	0.0	90°	3	1	1	1	13
110°-120°	0.8	0.0	0.0	95°	1	0	1	1	1
120°-130°	0.7	0.0	0.0	105°	1	0	2	0	1
130°-140°	0.8	0.0	0.0	115°	1	1	2	0	1
140°-150°	1.0	0.0	0.0	125°	1	1	1	0	1
150°-160°	0.9	0.0	0.0	135°	1	1	1	0	1
160°-170°	0.7	0.0	0.0	145°	2	1	1	2	1
170°-180°	0.3	0.0	0.0	155°	2	2	2	2	1
0°-30°	1151.2	26.5	32.7	165°	2	3	3	2	1
0°-40°	1892.8	43.6	53.7	175°	2	3	3	3	0
0°-60°	3373.3	77.7	95.8	180°	2	2	2	2	
0°-90°	4334.9	99.8	123.1						
90°-120°	2.7	0.1	0.1						
90°-150°	5.2	0.1	0.1						
90°-180°	7.0	0.2	0.2						
0°-180°	4342.0	100.0	123.3						



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4
5°	1469.7	1470.1	1470.0	1469.6	1468.7	1468.4	1467.2	1467.2	1466.5	1467.0	1466.9
10°	1453.1	1453.5	1451.9	1451.8	1451.4	1450.5	1449.5	1449.1	1448.2	1447.3	1447.8
15°	1424.5	1425.9	1423.4	1421.9	1421.8	1420.3	1419.5	1419.2	1417.6	1417.3	1417.5
20°	1384.7	1384.8	1382.9	1381.5	1379.3	1378.7	1377.5	1376.3	1375.0	1374.7	1374.0
25°	1333.0	1333.7	1331.6	1328.9	1326.1	1325.7	1324.1	1322.8	1321.5	1320.7	1319.8
30°	1269.9	1270.8	1268.4	1264.5	1261.8	1261.2	1260.0	1258.3	1257.6	1255.9	1255.0
35°	1195.9	1196.9	1194.0	1189.7	1187.7	1186.8	1185.5	1183.2	1182.1	1180.9	1178.5
40°	1111.0	1112.0	1109.4	1105.2	1101.8	1101.8	1101.0	1098.3	1096.5	1094.9	1092.8
45°	1017.2	1019.2	1016.3	1011.7	1007.2	1006.1	1006.1	1003.2	1000.9	999.0	996.4
50°	913.7	915.8	913.0	909.0	904.4	903.5	903.0	900.2	896.7	894.6	891.6
55°	802.1	803.9	801.9	797.9	794.3	792.3	792.4	788.2	784.8	782.0	779.6
60°	683.6	685.0	684.4	680.7	678.4	675.6	675.0	670.1	665.8	662.8	661.5
65°	559.9	561.7	562.1	559.0	558.3	555.0	552.5	548.1	543.2	539.4	538.8
70°	434.5	436.3	438.1	435.3	437.0	432.1	428.2	423.4	418.3	414.9	415.0
75°	310.2	312.7	315.3	313.5	316.2	311.2	306.1	300.9	295.7	292.5	293.1
80°	191.4	194.7	198.3	198.1	201.1	196.7	190.7	183.9	179.6	177.0	178.0
85°	85.4	89.0	91.7	92.4	96.7	92.6	86.6	81.2	77.5	75.1	74.9
90°	2.9	2.8	1.9	1.9	1.2	1.0	0.9	0.9	1.2	0.7	0.4
95°	1.2	0.9	0.8	0.7	0.4	0.5	0.5	0.9	1.1	0.6	0.4
100°	1.2	0.8	0.5	0.6	0.4	0.5	0.6	1.1	1.5	0.7	0.5
105°	1.2	0.8	0.4	0.4	0.5	0.6	0.7	1.5	2.5	0.9	0.6
110°	1.1	0.8	0.4	0.4	0.6	0.7	0.8	1.6	2.9	1.0	0.8
115°	0.8	0.8	0.4	0.4	0.9	0.8	1.1	1.6	2.4	1.1	0.8
120°	0.6	0.7	0.4	0.4	0.8	0.8	1.1	1.5	1.8	1.1	0.9
125°	0.6	0.7	0.4	0.4	0.8	0.8	1.1	1.5	1.0	1.1	0.9
130°	0.6	0.7	0.4	0.4	0.9	0.8	1.2	1.8	0.9	1.2	1.1
135°	0.6	1.1	0.6	0.5	1.0	1.1	1.4	2.6	0.9	1.8	1.1
140°	0.8	1.5	1.1	0.9	1.1	1.2	1.7	2.8	1.0	2.5	1.3
145°	1.5	1.6	1.5	1.5	1.4	1.6	1.8	3.0	1.2	2.8	1.5
150°	1.5	1.9	1.8	1.5	1.9	1.9	2.1	3.1	1.6	2.9	1.8
155°	1.6	2.0	2.0	1.6	2.1	2.1	2.6	3.1	2.1	2.2	2.2
160°	1.8	2.2	2.0	1.7	2.5	2.5	2.7	3.1	2.9	2.1	2.8
165°	2.0	2.2	2.2	1.9	2.6	2.7	2.9	3.1	3.1	2.1	3.1
170°	2.0	2.6	2.7	2.3	2.8	2.8	2.9	3.1	3.1	2.1	3.1
175°	2.1	2.9	2.9	2.6	3.2	3.1	3.2	3.1	3.1	2.1	3.1
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°	1474.4	1474.4	1474.4	1474.4	1474.4	1474.4
5°	1467.5	1467.7	1467.3	1468.9	1469.3	1469.7
10°	1447.8	1447.5	1449.4	1450.3	1452.3	1453.1
15°	1417.6	1415.0	1417.6	1420.2	1423.0	1424.5
20°	1373.7	1372.1	1375.7	1379.0	1382.5	1384.7
25°	1319.0	1316.2	1320.9	1326.4	1330.3	1333.0
30°	1254.7	1248.9	1255.6	1261.0	1266.6	1269.9
35°	1177.6	1172.1	1178.9	1185.6	1192.3	1195.9
40°	1091.6	1085.8	1091.8	1100.5	1107.3	1111.0
45°	995.5	989.7	996.8	1005.8	1013.1	1017.2
50°	890.4	883.9	891.5	901.5	908.4	913.7
55°	778.7	771.0	779.0	789.5	796.9	802.1
60°	660.7	653.6	660.1	671.1	678.2	683.6
65°	538.6	531.5	537.2	547.7	555.0	559.9
70°	414.9	408.3	413.9	422.5	429.4	434.5
75°	294.0	288.4	293.1	299.3	305.5	310.2
80°	179.5	175.3	179.0	183.6	187.6	191.4
85°	77.0	73.0	76.3	79.3	82.2	85.4
90°	0.6	1.3	1.6	1.9	2.2	2.9
95°	0.4	0.7	0.7	0.8	0.8	1.2
100°	0.4	0.6	0.6	0.5	0.8	1.2
105°	0.5	0.5	0.4	0.4	0.8	1.2
110°	0.6	0.5	0.4	0.4	0.8	1.1
115°	0.8	0.5	0.4	0.4	0.8	0.8
120°	0.8	0.5	0.4	0.4	0.7	0.6
125°	0.8	0.5	0.4	0.4	0.7	0.6
130°	0.8	0.5	0.4	0.4	0.7	0.6
135°	0.9	0.5	0.4	0.5	0.8	0.6
140°	1.1	0.8	0.8	0.9	1.5	0.8
145°	1.4	1.5	1.6	1.5	1.6	1.5
150°	1.7	1.5	1.6	1.7	1.8	1.5
155°	2.0	1.5	1.6	1.8	1.9	1.6
160°	2.5	1.6	1.6	1.8	2.0	1.8
165°	2.6	2.0	2.0	2.1	2.7	2.0
170°	2.8	2.1	2.5	2.9	2.9	2.0
175°	2.9	3.0	3.0	3.0	2.9	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)