

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: P588667

Luminaire Tested: **14CGTS-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: P588667
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-4000K
Description: 1X4 CGT SELECT TROFFER AT HI LUMEN OUTPUT AND 4000K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

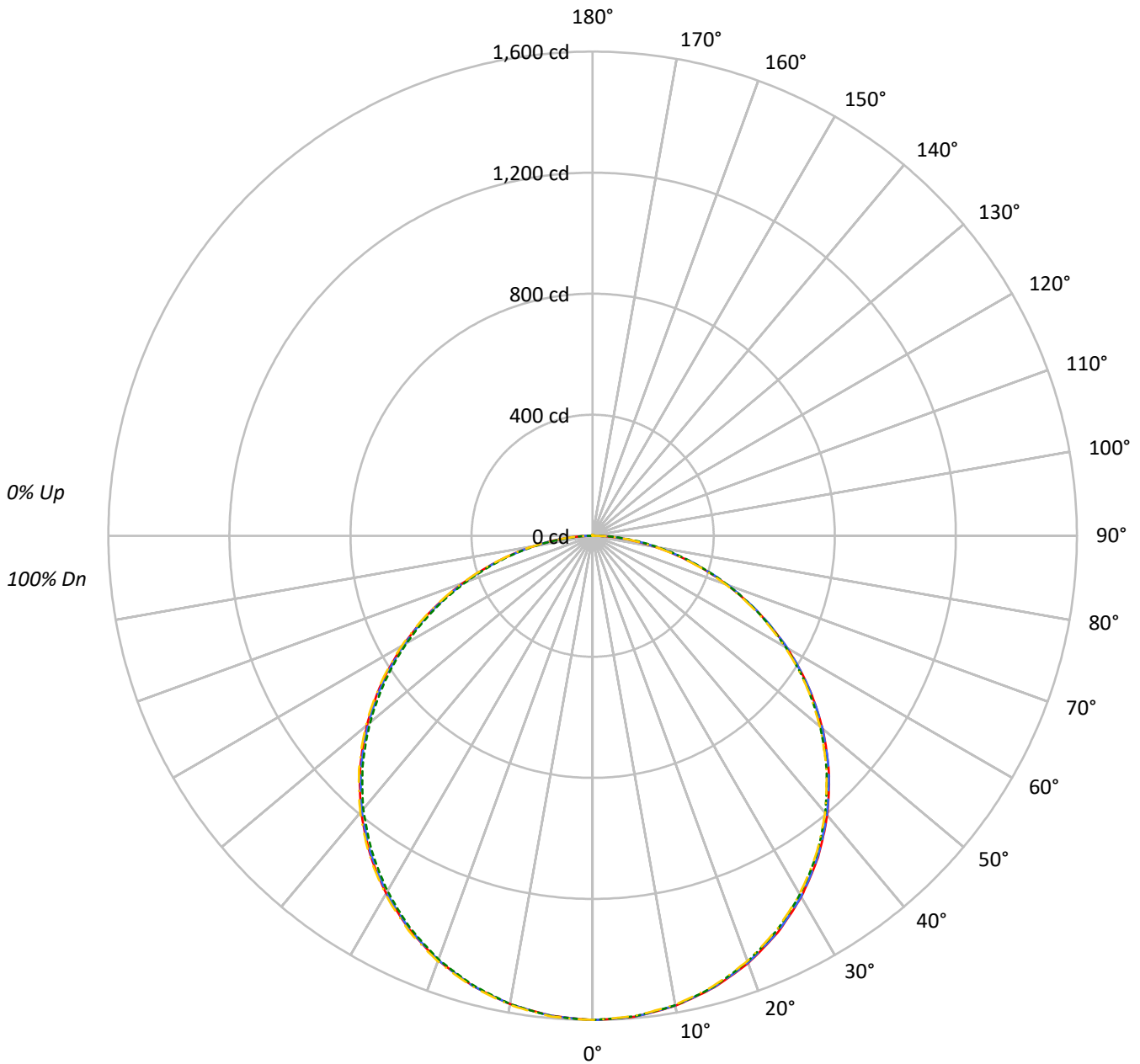
Lumens per Lamp: 3522.2 (1 lamp)
Luminaire Lumens: 4711.9 lumens
Efficiency: 133.8%
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.6
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	159	159	159	159	155	155	155	155	149	149	149	142	142	142	136	136	136	134																			
1	145	138	133	127	141	135	130	125	130	125	121	124	121	117	119	117	114	111																			
2	132	120	111	103	128	118	109	102	113	106	99	109	102	97	104	99	95	92																			
3	120	105	94	85	116	103	93	85	99	90	83	95	88	82	92	86	80	77																			
4	110	93	81	72	106	91	80	72	88	78	71	85	76	70	82	75	69	66																			
5	101	83	71	62	98	82	70	62	79	69	61	76	67	60	74	66	59	57																			
6	93	75	63	54	90	74	62	54	71	61	53	69	60	53	67	59	52	49																			
7	86	68	56	48	84	67	55	47	65	54	47	63	53	47	61	53	46	44																			
8	80	62	50	42	78	61	50	42	59	49	42	57	48	42	56	48	41	39																			
9	75	57	46	38	73	56	45	38	54	45	38	53	44	38	51	43	37	35																			
10	70	52	42	34	68	52	41	34	50	41	34	49	40	34	48	40	34	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4306	4306	4306	4306
5°	4309	4306	4299	4302
10°	4309	4304	4294	4292
15°	4307	4298	4286	4278
20°	4303	4286	4273	4264
25°	4295	4273	4258	4241
30°	4282	4255	4240	4211
35°	4263	4234	4214	4179
40°	4235	4200	4180	4140
45°	4201	4160	4134	4088
50°	4151	4109	4074	4016
55°	4084	4044	3996	3925
60°	3992	3962	3888	3817
65°	3869	3858	3753	3673
70°	3710	3731	3572	3486
75°	3500	3567	3336	3254
80°	3219	3381	3020	2947
85°	2862	3239	2597	2448



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	151.5	3.2	4.3	0°	1600	1600	1600	1600	1600	
10°-20°	435.1	9.2	12.4	5°	1595	1594	1592	1593	1595	152
20°-30°	662.8	14.1	18.8	15°	1546	1543	1538	1536	1546	436
30°-40°	804.7	17.1	22.8	25°	1447	1439	1434	1428	1447	667
40°-50°	841.1	17.9	23.9	35°	1298	1289	1283	1272	1298	812
50°-60°	765.6	16.2	21.7	45°	1104	1093	1086	1074	1104	851
60°-70°	589.8	12.5	16.7	55°	870	862	852	837	870	778
70°-80°	348.9	7.4	9.9	65°	608	606	589	577	608	601
80°-90°	104.9	2.2	3.0	75°	337	343	321	313	337	357
90°-100°	1.0	0.0	0.0	85°	93	105	84	79	93	101
100°-110°	0.9	0.0	0.0	90°	3	1	1	2	3	14
110°-120°	0.9	0.0	0.0	95°	1	0	1	1	1	1
120°-130°	0.7	0.0	0.0	105°	1	0	3	0	1	1
130°-140°	0.8	0.0	0.0	115°	1	1	3	0	1	1
140°-150°	1.1	0.0	0.0	125°	1	1	1	0	1	1
150°-160°	1.0	0.0	0.0	135°	1	1	1	0	1	1
160°-170°	0.8	0.0	0.0	145°	2	2	1	2	2	1
170°-180°	0.3	0.0	0.0	155°	2	2	2	2	2	1
0°-30°	1249.3	26.5	35.5	165°	2	3	3	2	2	1
0°-40°	2054.1	43.6	58.3	175°	2	4	3	3	2	0
0°-60°	3660.8	77.7	103.9	180°	2	2	2	2	2	
0°-90°	4704.3	99.8	133.6							
90°-120°	2.8	0.1	0.1							
90°-150°	5.5	0.1	0.2							
90°-180°	8.0	0.2	0.2							
0°-180°	4711.9	100.0	133.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0
5°	1595.0	1595.4	1595.2	1594.8	1593.9	1593.6	1592.3	1592.2	1591.5	1592.1	1591.9
10°	1577.0	1577.3	1575.6	1575.5	1575.1	1574.1	1573.0	1572.6	1571.6	1570.7	1571.2
15°	1545.9	1547.4	1544.7	1543.1	1542.9	1541.3	1540.5	1540.1	1538.4	1538.1	1538.3
20°	1502.7	1502.8	1500.8	1499.2	1496.8	1496.2	1494.9	1493.6	1492.2	1491.9	1491.1
25°	1446.6	1447.4	1445.0	1442.2	1439.1	1438.7	1436.9	1435.5	1434.1	1433.3	1432.2
30°	1378.2	1379.1	1376.5	1372.2	1369.3	1368.7	1367.4	1365.6	1364.7	1362.9	1362.0
35°	1297.8	1298.9	1295.8	1291.1	1288.9	1287.9	1286.5	1284.1	1282.9	1281.5	1279.0
40°	1205.6	1206.8	1204.0	1199.4	1195.7	1195.7	1194.8	1191.9	1189.9	1188.2	1185.9
45°	1103.8	1106.1	1103.0	1097.9	1093.0	1091.9	1091.9	1088.6	1086.2	1084.1	1081.3
50°	991.6	993.9	990.8	986.4	981.5	980.5	979.9	976.9	973.1	970.9	967.6
55°	870.5	872.4	870.2	865.9	862.0	859.8	859.9	855.3	851.7	848.6	846.0
60°	741.8	743.3	742.7	738.7	736.2	733.2	732.5	727.2	722.5	719.3	717.9
65°	607.6	609.5	610.0	606.6	605.9	602.3	599.6	594.8	589.4	585.4	584.7
70°	471.5	473.5	475.4	472.4	474.2	468.9	464.7	459.5	454.0	450.3	450.4
75°	336.6	339.3	342.2	340.2	343.1	337.7	332.2	326.5	320.9	317.4	318.1
80°	207.7	211.3	215.2	215.0	218.2	213.4	206.9	199.6	194.9	192.1	193.2
85°	92.7	96.6	99.5	100.3	104.9	100.5	94.0	88.1	84.1	81.5	81.3
90°	3.2	3.0	2.0	2.0	1.3	1.1	1.0	1.0	1.3	0.7	0.4
95°	1.3	1.0	0.8	0.7	0.4	0.5	0.5	1.0	1.2	0.6	0.4
100°	1.3	0.9	0.5	0.6	0.4	0.5	0.6	1.2	1.6	0.7	0.5
105°	1.3	0.9	0.4	0.4	0.5	0.6	0.7	1.6	2.7	1.0	0.6
110°	1.2	0.9	0.4	0.4	0.6	0.7	0.9	1.8	3.2	1.1	0.8
115°	0.9	0.8	0.4	0.4	1.0	0.9	1.2	1.8	2.6	1.2	0.9
120°	0.6	0.7	0.4	0.4	0.9	0.9	1.2	1.6	2.0	1.2	1.0
125°	0.6	0.7	0.4	0.4	0.9	0.9	1.2	1.6	1.1	1.2	1.0
130°	0.6	0.7	0.4	0.4	1.0	0.9	1.3	2.0	1.0	1.3	1.2
135°	0.6	1.2	0.6	0.5	1.1	1.2	1.5	2.8	1.0	2.0	1.2
140°	0.8	1.6	1.2	1.0	1.2	1.3	1.8	3.1	1.1	2.7	1.4
145°	1.6	1.8	1.6	1.6	1.6	1.8	2.0	3.3	1.3	3.1	1.6
150°	1.6	2.1	2.0	1.6	2.1	2.1	2.3	3.4	1.8	3.2	2.0
155°	1.8	2.2	2.2	1.8	2.3	2.3	2.9	3.4	2.3	2.4	2.4
160°	2.0	2.4	2.2	1.9	2.7	2.7	3.0	3.4	3.2	2.3	3.1
165°	2.2	2.4	2.4	2.1	2.8	3.0	3.2	3.4	3.4	2.3	3.4
170°	2.2	2.8	3.0	2.5	3.1	3.1	3.2	3.4	3.4	2.3	3.4
175°	2.3	3.2	3.2	2.8	3.5	3.4	3.5	3.4	3.4	2.3	3.4
180°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1600.0	1600.0	1600.0	1600.0	1600.0	1600.0
5°	1592.5	1592.7	1592.3	1594.1	1594.5	1595.0
10°	1571.1	1570.8	1573.0	1573.9	1576.0	1577.0
15°	1538.4	1535.6	1538.4	1541.2	1544.3	1545.9
20°	1490.7	1489.1	1493.0	1496.5	1500.3	1502.7
25°	1431.4	1428.4	1433.4	1439.4	1443.6	1446.6
30°	1361.6	1355.3	1362.6	1368.4	1374.6	1378.2
35°	1277.9	1272.0	1279.4	1286.6	1293.9	1297.8
40°	1184.6	1178.4	1184.8	1194.3	1201.6	1205.6
45°	1080.3	1074.1	1081.8	1091.6	1099.4	1103.8
50°	966.3	959.2	967.5	978.4	985.8	991.6
55°	845.0	836.7	845.4	856.7	864.8	870.5
60°	717.0	709.3	716.4	728.3	736.0	741.8
65°	584.5	576.8	583.0	594.4	602.3	607.6
70°	450.2	443.1	449.2	458.5	466.0	471.5
75°	319.0	313.0	318.1	324.9	331.5	336.6
80°	194.7	190.2	194.3	199.2	203.5	207.7
85°	83.6	79.3	82.8	86.0	89.2	92.7
90°	0.6	1.5	1.7	2.1	2.4	3.2
95°	0.4	0.7	0.7	0.8	0.9	1.3
100°	0.4	0.6	0.6	0.5	0.8	1.3
105°	0.5	0.5	0.4	0.4	0.8	1.3
110°	0.6	0.5	0.4	0.4	0.8	1.2
115°	0.8	0.5	0.4	0.4	0.8	0.9
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°	0.9	0.5	0.4	0.4	0.7	0.6
135°	1.0	0.5	0.4	0.5	0.8	0.6
140°	1.2	0.9	0.8	1.0	1.6	0.8
145°	1.6	1.6	1.8	1.6	1.8	1.6
150°	1.9	1.6	1.8	1.8	2.0	1.6
155°	2.2	1.6	1.8	2.0	2.1	1.8
160°	2.7	1.8	1.8	2.0	2.2	2.0
165°	2.8	2.2	2.2	2.3	3.0	2.2
170°	3.1	2.3	2.8	3.2	3.2	2.2
175°	3.2	3.3	3.3	3.3	3.2	2.3
180°	2.3	2.3	2.3	2.3	2.3	2.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)