

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: P588675

Luminaire Tested: **22CGTS-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: P588675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (LCS210329025BSA)
Test Lab:
Issue Date: 12/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CGTS-NUV-HI-3500K
Description: 2X2 CGT SELECT TROFFER AT HI LUMEN OUTPUT AND 3500K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

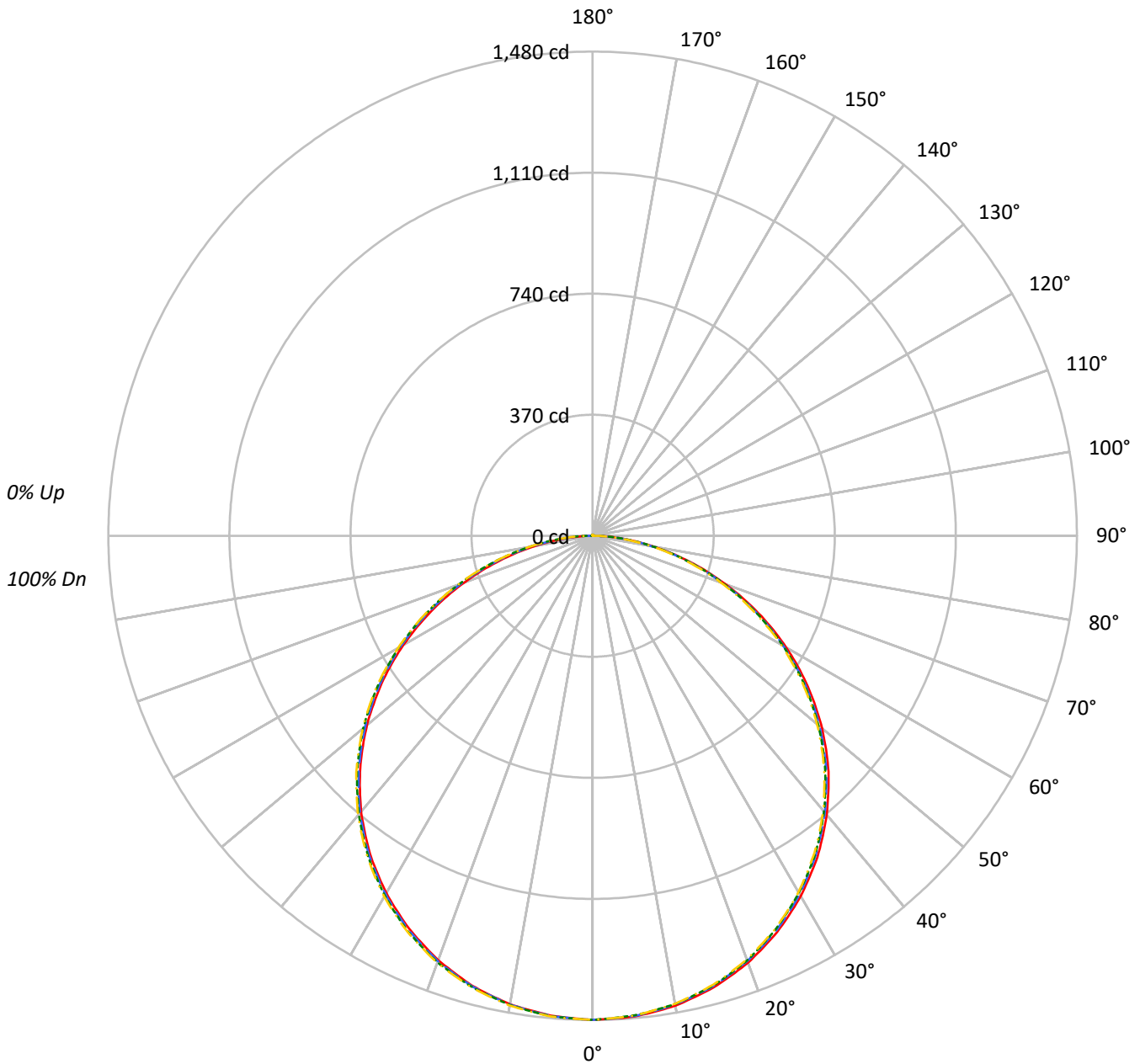
Summary

Lumens per Lamp: 3510.7 (1 lamp)
Luminaire Lumens: 4361.1 lumens
Efficiency: 124.2%
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 39.8
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

TEST NUMBER: P588675
CATALOG NUMBER: 22CGTS-NUV-HI-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P588675

CATALOG NUMBER: 22CGTS-NUV-HI-3500K

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	148	148	148	148	144	144	144	144	138	138	138	132	132	132	127	127	127	124																			
1	135	129	123	118	131	126	121	116	120	116	113	115	112	109	111	108	106	103																			
2	122	112	103	96	119	109	101	95	105	98	92	101	95	90	97	92	88	85																			
3	111	98	88	79	108	96	86	79	92	84	77	89	82	76	85	80	74	72																			
4	102	87	75	67	99	85	75	67	82	73	66	79	71	65	76	69	64	61																			
5	93	77	66	58	91	76	65	57	73	64	57	71	62	56	68	61	55	53																			
6	86	69	58	50	84	68	58	50	66	56	49	64	55	49	62	54	48	46																			
7	80	63	52	44	78	62	51	44	60	51	44	58	50	43	56	49	43	40																			
8	74	57	47	39	72	56	46	39	55	46	39	53	45	39	52	44	38	36																			
9	69	53	42	35	68	52	42	35	50	41	35	49	41	35	48	40	35	32																			
10	65	49	39	32	63	48	38	32	47	38	32	45	37	32	44	37	31	29																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3982	3982	3982	3982
5°	3985	3975	3976	3981
10°	3985	3971	3973	3980
15°	3982	3966	3966	3977
20°	3977	3956	3952	3973
25°	3967	3938	3938	3964
30°	3952	3917	3919	3948
35°	3936	3898	3898	3930
40°	3909	3865	3867	3904
45°	3879	3823	3824	3873
50°	3833	3769	3768	3830
55°	3767	3700	3694	3766
60°	3680	3610	3594	3682
65°	3558	3484	3457	3570
70°	3397	3330	3279	3430
75°	3188	3127	3048	3254
80°	2896	2875	2721	3045
85°	2495	2476	2229	2779



TEST NUMBER: P588675

CATALOG NUMBER: 22CGTS-NUV-HI-3500K

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	90°	180°	270°	360°	Flux
0°-10°	140.1	3.2	4.0	0°	1480	1480	1480	1480	
10°-20°	402.5	9.2	11.5	5°	1475	1472	1472	1474	140
20°-30°	613.3	14.1	17.5	15°	1429	1424	1424	1428	404
30°-40°	745.1	17.1	21.2	25°	1336	1326	1326	1335	616
40°-50°	779.4	17.9	22.2	35°	1198	1186	1187	1196	749
50°-60°	709.8	16.3	20.2	45°	1019	1005	1005	1018	786
60°-70°	546.3	12.5	15.6	55°	803	789	787	803	717
70°-80°	321.9	7.4	9.2	65°	559	547	543	561	553
80°-90°	95.3	2.2	2.7	75°	307	301	293	313	325
90°-100°	1.1	0.0	0.0	85°	81	80	72	90	89
100°-110°	0.7	0.0	0.0	90°	2	1	1	3	12
110°-120°	0.8	0.0	0.0	95°	1	1	1	1	1
120°-130°	0.9	0.0	0.0	105°	0	1	1	1	1
130°-140°	0.9	0.0	0.0	115°	0	1	1	1	0
140°-150°	1.1	0.0	0.0	125°	0	1	1	1	0
150°-160°	1.0	0.0	0.0	135°	1	2	2	1	1
160°-170°	0.7	0.0	0.0	145°	2	2	2	2	1
170°-180°	0.3	0.0	0.0	155°	2	3	2	2	1
0°-30°	1155.9	26.5	32.9	165°	2	3	3	2	1
0°-40°	1900.9	43.6	54.1	175°	3	3	3	3	0
0°-60°	3390.2	77.7	96.6	180°	3	3	3	3	
0°-90°	4353.6	99.8	124.0						
90°-120°	2.6	0.1	0.1						
90°-150°	5.5	0.1	0.2						
90°-180°	7.0	0.2	0.2						
0°-180°	4361.1	100.0	124.2						



TEST NUMBER: P588675

CATALOG NUMBER: 22CGTS-NUV-HI-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6
5°	1475.2	1474.3	1473.5	1473.3	1471.5	1472.5	1472.0	1472.0	1472.0	1472.8	1473.1
10°	1458.5	1456.5	1454.8	1454.1	1453.4	1453.4	1452.5	1453.0	1454.1	1454.2	1455.0
15°	1429.3	1427.1	1425.0	1423.4	1423.5	1422.0	1421.2	1422.2	1423.7	1424.7	1425.6
20°	1388.9	1386.0	1382.7	1380.8	1381.4	1378.9	1378.1	1379.3	1380.1	1382.1	1383.5
25°	1335.9	1333.1	1330.1	1327.0	1326.2	1325.0	1323.8	1324.4	1326.2	1328.4	1330.3
30°	1271.9	1268.7	1265.4	1262.2	1260.5	1259.0	1258.3	1258.8	1261.2	1263.3	1266.2
35°	1198.2	1193.9	1189.9	1184.9	1186.5	1183.7	1181.9	1183.2	1186.7	1188.8	1191.5
40°	1112.9	1108.8	1103.9	1099.4	1100.3	1097.7	1096.5	1097.3	1100.8	1102.5	1106.3
45°	1019.2	1014.2	1009.8	1004.5	1004.6	1001.8	999.9	1001.6	1004.7	1007.3	1010.6
50°	915.5	909.9	905.0	899.7	900.3	897.1	895.1	896.5	900.1	902.5	907.6
55°	802.9	797.9	792.9	787.8	788.7	785.6	782.6	783.7	787.3	790.1	795.6
60°	683.7	678.3	672.9	668.1	670.7	667.1	664.3	664.1	667.7	671.1	677.9
65°	558.8	554.1	549.2	545.0	547.2	544.2	540.5	539.4	542.9	547.1	554.1
70°	431.7	427.0	423.6	419.8	423.2	419.5	415.9	414.2	416.8	421.5	429.1
75°	306.6	303.0	300.3	297.7	300.8	297.9	294.0	291.6	293.2	298.2	306.0
80°	186.9	184.0	184.0	182.5	185.5	182.6	178.2	174.6	175.6	180.4	189.2
85°	80.8	78.5	78.1	77.8	80.2	77.6	72.9	71.1	72.2	75.7	82.4
90°	1.9	1.6	1.5	1.5	0.6	0.6	0.7	0.7	0.7	0.6	1.3
95°	0.8	0.8	0.8	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	0.5	0.6	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.6
105°	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.7	0.8	0.8	0.9
110°	0.5	0.5	0.6	0.5	1.0	1.1	1.1	1.0	0.9	1.0	1.1
115°	0.5	0.5	0.6	0.5	1.1	1.2	1.2	1.1	1.1	1.3	1.2
120°	0.5	0.5	0.6	0.5	1.2	1.4	1.4	1.1	1.2	1.2	1.5
125°	0.5	0.5	0.6	0.5	1.3	1.5	1.4	1.1	1.2	1.2	1.5
130°	0.5	0.5	0.6	0.5	1.4	1.8	1.6	1.3	1.4	1.6	1.7
135°	0.8	0.5	0.6	0.5	1.7	1.8	1.7	1.7	1.8	2.0	1.9
140°	1.2	1.0	0.6	0.8	1.8	2.0	1.9	1.9	1.9	2.2	2.1
145°	1.6	1.6	0.9	1.3	2.1	2.1	2.1	2.2	2.1	2.2	2.2
150°	1.6	1.6	1.6	1.6	2.3	2.4	2.5	2.5	2.2	2.5	2.5
155°	1.6	1.6	1.5	1.6	2.6	2.7	2.8	2.7	2.5	2.9	2.8
160°	1.6	1.6	1.5	1.6	3.0	3.1	3.1	2.7	2.9	2.9	3.2
165°	2.1	2.0	1.8	1.7	3.1	3.1	3.2	2.7	2.9	2.9	3.1
170°	2.3	2.4	2.1	2.3	3.2	3.1	3.4	2.7	2.9	2.9	3.2
175°	2.8	3.0	2.6	3.1	3.4	3.1	3.4	2.7	2.9	2.9	3.2
180°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8



TEST NUMBER: P588675

CATALOG NUMBER: 22CGTS-NUV-HI-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1479.6	1479.6	1479.6	1479.6	1479.6	1479.6
5°	1473.8	1473.9	1475.5	1475.2	1475.4	1475.2
10°	1456.1	1456.4	1458.3	1458.2	1458.5	1458.5
15°	1427.2	1427.6	1429.7	1429.5	1429.8	1429.3
20°	1386.8	1387.3	1389.3	1389.1	1389.3	1388.9
25°	1333.6	1335.0	1337.4	1337.1	1337.4	1335.9
30°	1269.5	1270.5	1273.3	1274.3	1274.0	1271.9
35°	1195.2	1196.2	1199.1	1199.5	1199.1	1198.2
40°	1110.8	1111.3	1114.3	1114.9	1114.3	1112.9
45°	1015.7	1017.8	1020.2	1021.3	1020.1	1019.2
50°	911.9	914.8	916.7	917.5	916.7	915.5
55°	801.2	802.7	805.5	806.2	804.7	802.9
60°	683.4	684.2	687.2	687.3	685.1	683.7
65°	560.4	560.7	564.2	563.5	560.9	558.8
70°	435.4	436.0	438.9	437.8	434.3	431.7
75°	313.4	313.0	315.7	314.0	310.3	306.6
80°	197.2	196.5	198.5	196.8	191.3	186.9
85°	90.8	90.0	91.7	89.0	84.5	80.8
90°	3.4	2.8	3.9	4.0	3.0	1.9
95°	0.6	0.9	0.8	0.8	0.9	0.8
100°	0.6	0.6	0.7	0.7	0.6	0.5
105°	0.7	0.6	0.6	0.6	0.5	0.5
110°	1.0	0.6	0.6	0.6	0.5	0.5
115°	1.1	0.6	0.6	0.6	0.5	0.5
120°	1.2	0.6	0.6	0.6	0.5	0.5
125°	1.3	0.6	0.6	0.6	0.5	0.5
130°	1.6	0.6	0.6	0.6	0.5	0.5
135°	1.7	0.6	0.6	0.6	0.6	0.8
140°	1.8	1.2	1.2	0.6	1.1	1.2
145°	2.1	1.5	1.6	1.0	1.5	1.6
150°	2.4	1.6	1.6	1.5	1.6	1.6
155°	2.7	1.6	1.6	1.5	1.6	1.6
160°	2.8	1.6	1.6	1.5	1.6	1.6
165°	2.8	1.8	1.8	1.7	1.9	2.1
170°	2.8	2.2	2.3	2.1	2.2	2.3
175°	2.8	2.9	3.2	2.5	2.9	2.8
180°	2.8	2.8	2.8	2.8	2.8	2.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)