

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 08235

Luminaire Tested: **2GC8-3U15/8A-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 08235
Test Lab: LUMINAIRE TESTING LABORATORY, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC8-3U15/8A-UNV-EB81
Description: METALUX 2' X 2' SPECIFICATION GRADE RECESSED FLUORESCENT TROFFER
WITH HIGH REFLECTANCE WHITE INTERIOR FINISH AND ACRYLIC PRISMATIC LENS
Light Source: (3) HORIZONTAL 31 WATT U-SHAPED FLUORESCENT LAMPS AT 2800 LUMENS EA
SYLVAIA FBO31/730
Ballast/Driver: ONE ADVANCE REL-3P32-SC

Summary

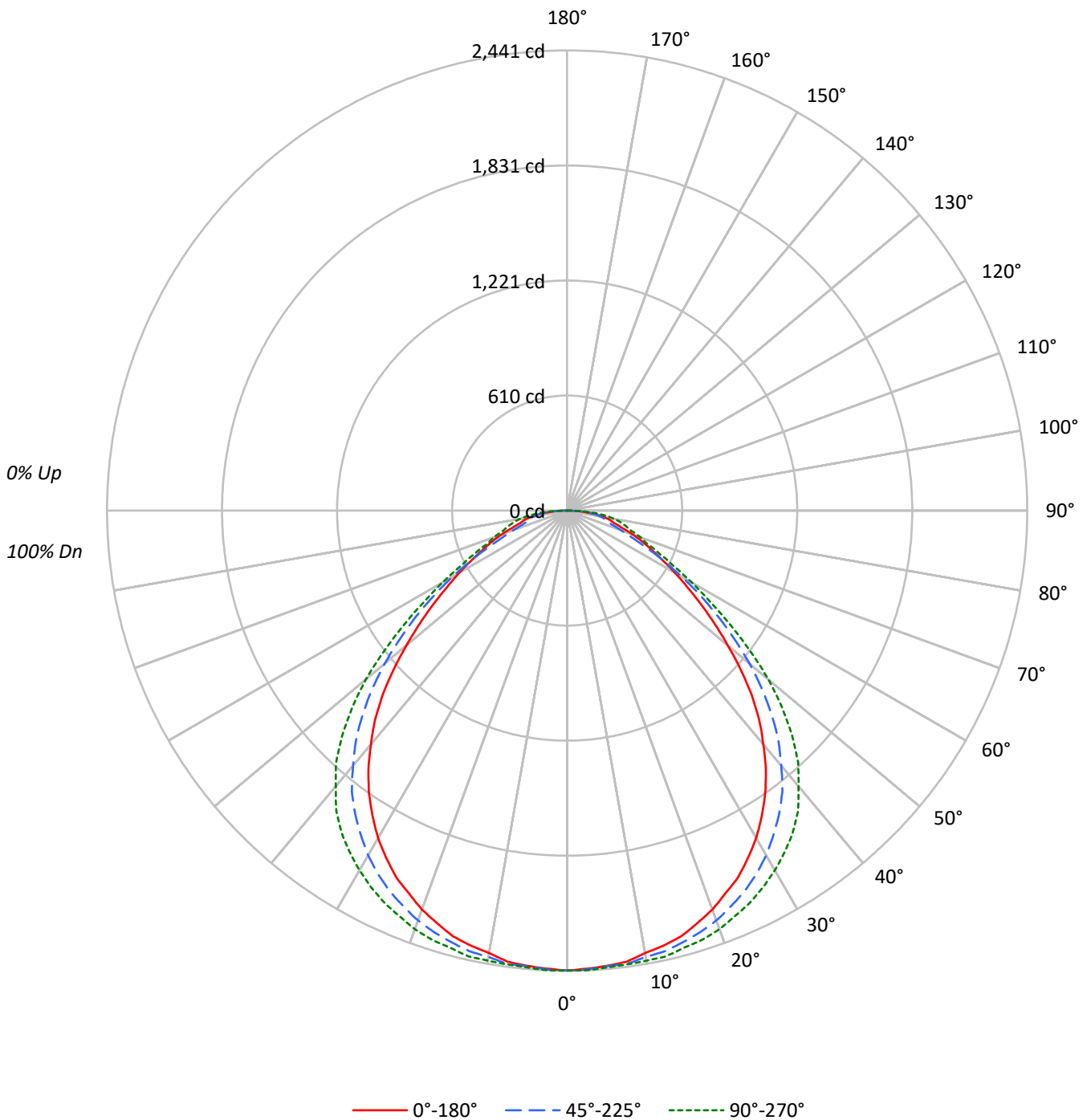
Lumens per Lamp: 2800 (3 lamps)
Luminaire Lumens: 6095.2 lumens
Efficiency: 72.6%
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.33 / 1.35
Luminous Opening: Rectangular (W 1.79' x L: 1.81' x H: 0')
CIE Type: Direct

Input Watts (W): 73
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: 08235

CATALOG NUMBER: 2GC8-3U15/8A-UNV-EB81

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	50	30	10	0													
RCR																																					
0	86	86	86	86	84	84	84	84	81	81	81	77	77	77	74	74	74	73																			
1	80	76	73	71	78	75	72	70	72	69	67	69	67	65	66	65	63	62																			
2	73	67	63	59	71	66	62	58	63	60	57	61	58	56	59	57	54	53																			
3	67	60	54	50	65	59	54	49	57	52	49	55	51	48	53	50	47	45																			
4	62	53	47	43	60	52	47	43	51	46	42	49	45	41	47	44	41	39																			
5	57	48	42	37	55	47	41	37	46	41	37	44	40	36	43	39	36	34																			
6	53	43	37	33	51	43	37	33	42	36	32	40	36	32	39	35	32	30																			
7	49	40	33	29	48	39	33	29	38	33	29	37	32	29	36	32	28	27																			
8	46	36	30	26	45	36	30	26	35	30	26	34	29	26	33	29	26	24																			
9	43	33	28	24	42	33	27	24	32	27	23	31	27	23	31	26	23	22																			
10	40	31	25	21	39	30	25	21	30	25	21	29	24	21	28	24	21	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8106	8106	8106
5°	8084	8091	8111
10°	8039	8110	8177
15°	8042	8155	8255
20°	7962	8181	8354
25°	7867	8164	8413
30°	7696	8102	8451
35°	7430	7957	8460
40°	7022	7663	8284
45°	6503	7217	7926
50°	5747	6533	7205
55°	5016	5647	6122
60°	4392	4671	5076
65°	3899	3632	4253
70°	3584	2924	4002
75°	3312	2785	4159
80°	3769	3406	4898
85°	3736	4041	5527



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	231.2	3.8	2.8	0°	2440	2440	2440	2440	2440	
10°-20°	669.4	11.0	8.0	5°	2424	2426	2426	2431	2432	230
20°-30°	1024.1	16.8	12.2	15°	2338	2346	2371	2400	2400	658
30°-40°	1222.0	20.0	14.5	25°	2146	2172	2227	2273	2295	986
40°-50°	1175.7	19.3	14.0	35°	1832	1875	1962	2043	2086	1141
50°-60°	862.8	14.2	10.3	45°	1384	1434	1536	1631	1687	1061
60°-70°	500.0	8.2	6.0	55°	866	895	975	1015	1057	779
70°-80°	288.1	4.7	3.4	65°	496	456	462	532	541	498
80°-90°	121.8	2.0	1.4	75°	258	250	217	310	324	285
90°-100°	0.0	0.0	0.0	85°	98	97	106	143	145	108
100°-110°	0.0	0.0	0.0	90°	2	2	6	14	12	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1924.8	31.6	22.9							
0°-40°	3146.8	51.6	37.5							
0°-60°	5185.2	85.1	61.7							
0°-90°	6095.2	100.0	72.6							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	6095.2	100.0	72.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2440	2440	2440	2440	2440
2.5°	2432	2435	2436	2438	2441
5°	2424	2426	2426	2431	2432
7.5°	2414	2419	2425	2425	2428
10°	2383	2395	2404	2422	2424
12.5°	2363	2372	2394	2409	2422
15°	2338	2346	2371	2400	2400
17.5°	2295	2312	2345	2375	2387
20°	2252	2272	2314	2351	2363
22.5°	2197	2228	2272	2318	2328
25°	2146	2172	2227	2273	2295
27.5°	2078	2113	2173	2230	2252
30°	2006	2049	2112	2174	2203
32.5°	1921	1964	2038	2114	2148
35°	1832	1875	1962	2043	2086
37.5°	1732	1778	1876	1963	2011
40°	1619	1667	1767	1864	1910
42.5°	1509	1555	1660	1757	1814
45°	1384	1434	1536	1631	1687
47.5°	1249	1301	1403	1487	1546
50°	1112	1170	1264	1337	1394
52.5°	985	1028	1116	1172	1224
55°	866	895	975	1015	1057
57.5°	755	765	835	865	897
60°	661	652	703	738	764
62.5°	571	547	574	626	637
65°	496	456	462	532	541
67.5°	432	388	368	458	457
70°	369	332	301	406	412
72.5°	307	287	250	355	356
75°	258	250	217	310	324
77.5°	233	212	203	274	291
80°	197	178	178	236	256
82.5°	149	141	150	192	205
85°	98	97	106	143	145
87.5°	49	49	55	72	76
90°	2	2	6	14	12

(END OF REPORT)