

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: 108P113

Luminaire Tested: **2GCXF-240KSH12/125-PAF**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 108P113  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GCXF-240KSH12/125-PAF  
Description: 2 X 4 Recessed Troffer with a flat extruded aluminum door  
frame equipped with a KSH .125 pattern 12 acrylic lens.  
Light Source: Two-F40CW - 3150 Lumens ea. - 40 Watts ea.  
Ballast/Driver: -

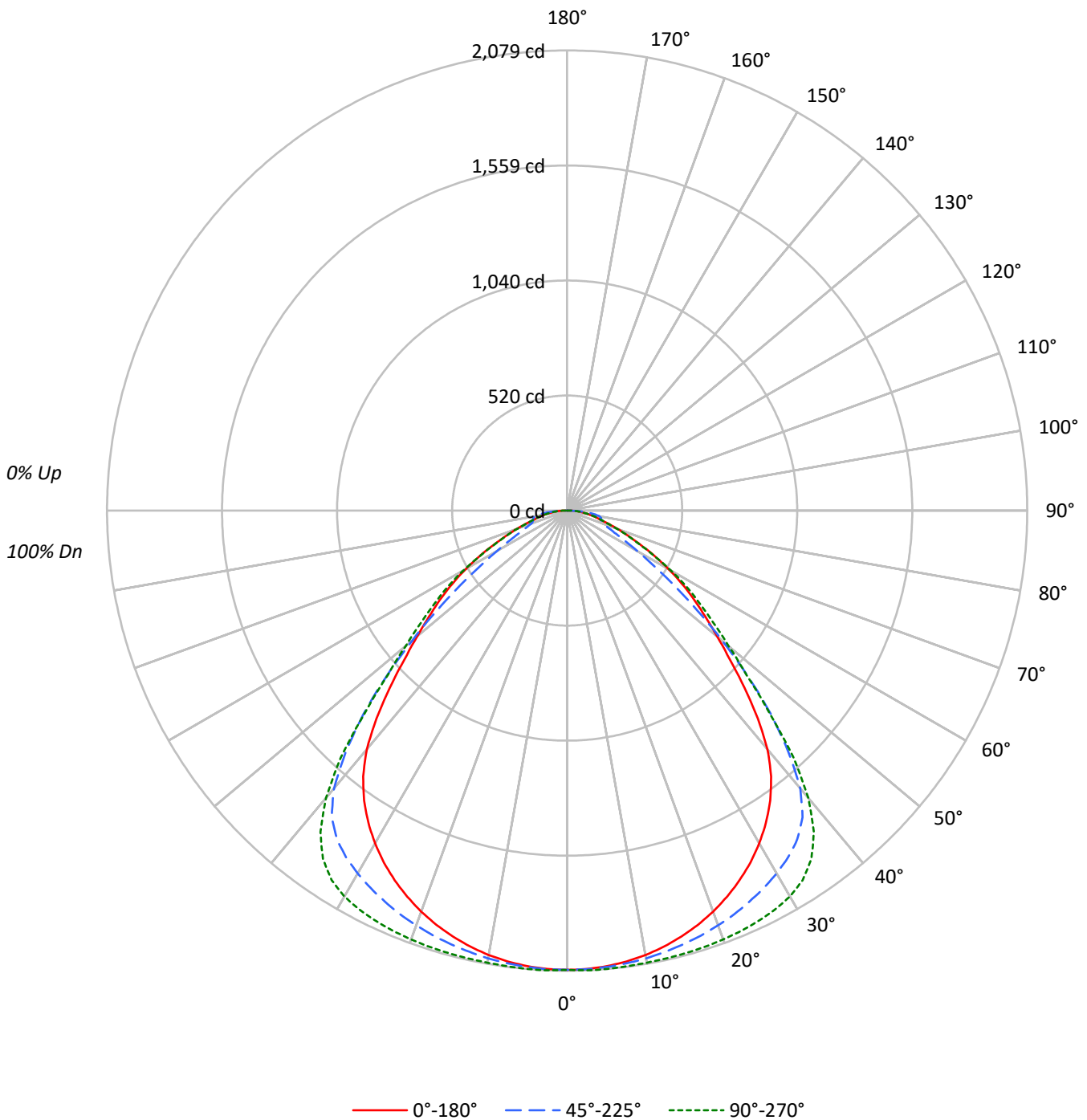
**Summary**

Lumens per Lamp: 3150 (2 lamps)  
Luminaire Lumens: 4879.3 lumens  
Efficiency: 77.4%  
Efficacy: 55.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.42 / 1.36  
Luminous Opening: Rectangular (W 1.66' x L: 3.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 88.3  
Input Voltage (V): NR  
Input Current (Ain): 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									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	50	30	10	0														
RCR																																						
0	92	92	92	92	90	90	90	90	86	86	86	82	82	82	79	79	79	77	77	77	77	77	77	77														
1	85	82	79	77	83	80	78	75	77	75	73	74	72	71	71	70	69	67	67	67	67	67	67	67														
2	79	73	68	65	77	72	67	64	69	65	62	67	64	61	64	62	60	58	58	58	58	58	58	58														
3	73	65	60	55	71	64	59	55	62	58	54	60	56	53	58	55	52	51	51	51	51	51	51	51														
4	67	59	53	48	65	58	52	48	56	51	47	54	50	46	53	49	46	44	44	44	44	44	44	44														
5	62	53	47	42	61	52	46	42	51	45	41	49	45	41	48	44	41	39	39	39	39	39	39	39														
6	58	48	42	37	56	47	41	37	46	41	37	45	40	36	44	39	36	35	35	35	35	35	35	35														
7	54	44	38	33	52	43	37	33	42	37	33	41	36	33	40	36	32	31	31	31	31	31	31	31														
8	50	40	34	30	49	40	34	30	39	33	30	38	33	29	37	33	29	28	28	28	28	28	28	28														
9	47	37	31	27	46	37	31	27	36	31	27	35	30	27	34	30	27	25	25	25	25	25	25	25														
10	44	34	28	25	43	34	28	25	33	28	24	32	28	24	32	27	24	23	23	23	23	23	23	23														

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

	0°	45°	90°
0°	3580	3580	3580
5°	3578	3585	3600
10°	3572	3598	3633
15°	3560	3622	3697
20°	3540	3661	3786
25°	3508	3710	3895
30°	3458	3771	4010
35°	3368	3818	4050
40°	3171	3691	3815
45°	2764	3177	3150
50°	2373	2450	2558
55°	2105	1778	2199
60°	1825	1259	1867
65°	1494	959	1470
70°	1221	863	1200
75°	1007	1066	1033
80°	1003	1470	1013
85°	1168	1623	1148



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	197.1	4.0	3.1	0°	2075	2075	2075	2075	2075	
10°-20°	573.7	11.8	9.1	5°	2066	2066	2070	2072	2079	196
20°-30°	898.0	18.4	14.3	15°	1993	2001	2028	2055	2070	562
30°-40°	1110.0	22.7	17.6	25°	1843	1874	1949	2017	2046	849
40°-50°	972.3	19.9	15.4	35°	1599	1680	1813	1901	1923	994
50°-60°	574.9	11.8	9.1	45°	1133	1222	1302	1317	1291	876
60°-70°	292.7	6.0	4.6	55°	700	591	591	626	731	627
70°-80°	181.4	3.7	2.9	65°	366	273	235	270	360	369
80°-90°	79.2	1.6	1.3	75°	151	187	160	189	155	168
90°-100°	0.0	0.0	0.0	85°	59	82	82	78	58	55
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	5
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1668.8	34.2	26.5	165°	0	0	0	0	0	0
0°-40°	2778.8	57.0	44.1	175°	0	0	0	0	0	0
0°-60°	4326.0	88.7	68.7	180°	0	0	0	0	0	0
0°-90°	4879.3	100.0	77.4							
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°	4879.3	100.0	77.4							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2075	2075	2075	2075	2075
2.5°	2073	2071	2074	2074	2079
5°	2066	2066	2070	2072	2079
7.5°	2055	2056	2063	2069	2076
10°	2039	2040	2054	2064	2074
12.5°	2018	2023	2042	2060	2072
15°	1993	2001	2028	2055	2070
17.5°	1963	1975	2013	2048	2067
20°	1928	1946	1994	2040	2062
22.5°	1888	1912	1974	2030	2055
25°	1843	1874	1949	2017	2046
27.5°	1793	1832	1923	2001	2033
30°	1736	1785	1893	1979	2013
32.5°	1672	1735	1858	1947	1980
35°	1599	1680	1813	1901	1923
37.5°	1514	1616	1747	1822	1831
40°	1408	1532	1639	1698	1694
42.5°	1276	1400	1481	1544	1514
45°	1133	1222	1302	1317	1291
47.5°	997	1046	1106	1127	1098
50°	884	884	913	952	953
52.5°	786	731	741	781	832
55°	700	591	591	626	731
57.5°	615	477	464	498	638
60°	529	387	365	400	541
62.5°	446	320	290	324	443
65°	366	273	235	270	360
67.5°	298	237	198	232	295
70°	242	209	171	206	238
72.5°	190	196	162	196	188
75°	151	187	160	189	155
77.5°	126	171	157	174	129
80°	101	148	148	148	102
82.5°	76	118	123	115	78
85°	59	82	82	78	58
87.5°	35	41	43	39	35
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)