

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: 108P112

Luminaire Tested: **2GC-240KSH12/A125-PAF**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 108P112
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GC-240KSH12/A125-PAF
Description: 2 X 4 Recessed Troffer with a KSH .125
pattern 12 acrylic lens.
Light Source: Two-F40CW - 3150 Lumens ea. - 40 Watts ea.
Ballast/Driver: -

Summary

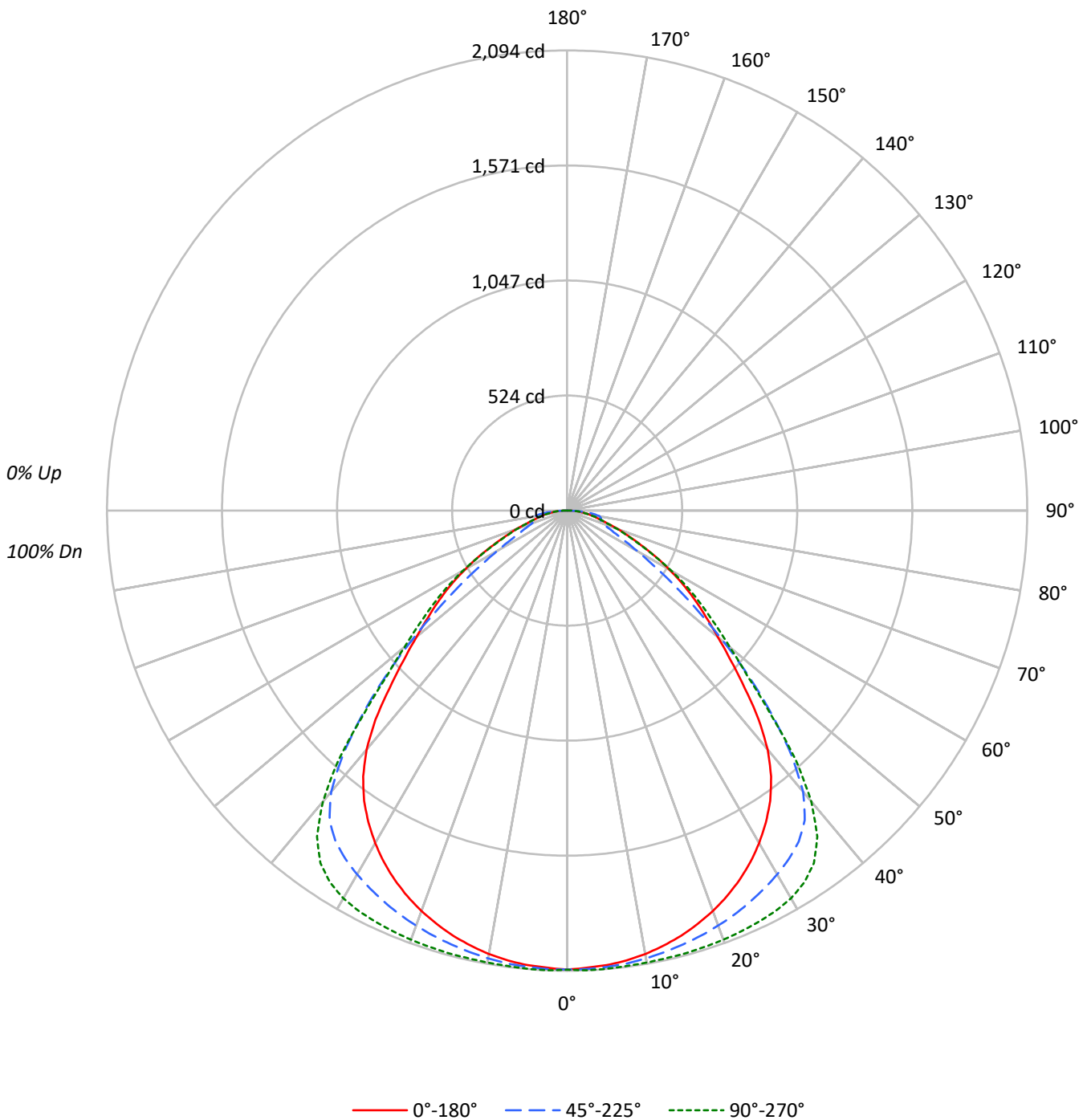
Lumens per Lamp: 3150 (2 lamps)
Luminaire Lumens: 4931.3 lumens
Efficiency: 78.3%
Efficacy: 55.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.43 / 1.37
Luminous Opening: Rectangular (W 1.86' x L: 3.81' x H: 0')
CIE Type: Direct

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				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	0
RCR																		
0	93	93	93	93	91	91	91	91	87	87	87	83	83	83	80	80	80	78
1	86	83	80	77	84	81	79	76	78	76	74	75	73	72	72	71	69	68
2	80	74	69	65	78	72	68	65	70	66	63	67	64	62	65	63	60	59
3	73	66	60	56	72	65	60	55	63	58	54	61	57	54	59	55	53	51
4	68	59	53	48	66	58	53	48	56	51	48	55	50	47	53	49	46	45
5	63	54	47	43	61	53	47	42	51	46	42	50	45	41	48	44	41	39
6	58	49	42	38	57	48	42	37	47	41	37	45	41	37	44	40	37	35
7	54	44	38	34	53	44	38	33	43	37	33	42	37	33	41	36	33	31
8	51	41	34	30	49	40	34	30	39	34	30	38	33	30	37	33	30	28
9	47	37	31	27	46	37	31	27	36	31	27	35	30	27	35	30	27	26
10	44	35	29	25	43	34	29	25	33	28	25	33	28	25	32	28	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3163	3163	3163
5°	3155	3168	3181
10°	3150	3181	3210
15°	3140	3203	3268
20°	3124	3239	3348
25°	3099	3285	3448
30°	3054	3343	3562
35°	2978	3397	3619
40°	2805	3303	3418
45°	2450	2835	2799
50°	2108	2191	2273
55°	1874	1579	1964
60°	1626	1108	1657
65°	1326	838	1301
70°	1080	748	1049
75°	878	936	895
80°	881	1308	881
85°	1008	1425	973



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	198.5	4.0	3.2	0°	2089	2089	2089	2089	2089	
10°-20°	577.9	11.7	9.2	5°	2076	2082	2084	2087	2093	197
20°-30°	905.8	18.4	14.4	15°	2003	2017	2043	2069	2085	565
30°-40°	1125.2	22.8	17.9	25°	1855	1891	1966	2034	2064	854
40°-50°	988.4	20.0	15.7	35°	1611	1698	1838	1932	1958	1001
50°-60°	582.4	11.8	9.2	45°	1144	1245	1324	1339	1307	885
60°-70°	293.2	5.9	4.7	55°	710	600	598	632	744	636
70°-80°	181.2	3.7	2.9	65°	370	273	234	269	363	374
80°-90°	78.7	1.6	1.2	75°	150	188	160	189	153	168
90°-100°	0.0	0.0	0.0	85°	58	82	82	77	56	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°	1682.1	34.1	26.7	165°	0	0	0	0	0	0
0°-40°	2807.3	56.9	44.6	175°	0	0	0	0	0	0
0°-60°	4378.2	88.8	69.5	180°	0	0	0	0	0	0
0°-90°	4931.3	100.0	78.3							
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°	4931.3	100.0	78.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2089	2089	2089	2089	2089
2.5°	2082	2087	2088	2089	2094
5°	2076	2082	2084	2087	2093
7.5°	2065	2071	2079	2084	2090
10°	2049	2057	2069	2079	2088
12.5°	2028	2039	2057	2075	2086
15°	2003	2017	2043	2069	2085
17.5°	1973	1992	2028	2063	2082
20°	1939	1962	2010	2056	2078
22.5°	1900	1929	1990	2046	2072
25°	1855	1891	1966	2034	2064
27.5°	1805	1848	1940	2020	2054
30°	1747	1802	1912	2001	2037
32.5°	1683	1752	1879	1974	2007
35°	1611	1698	1838	1932	1958
37.5°	1525	1635	1776	1858	1870
40°	1419	1554	1671	1734	1729
42.5°	1291	1423	1512	1567	1541
45°	1144	1245	1324	1339	1307
47.5°	1009	1067	1127	1145	1111
50°	895	899	930	966	965
52.5°	797	742	752	792	846
55°	710	600	598	632	744
57.5°	625	482	468	502	648
60°	537	389	366	402	547
62.5°	452	321	289	323	448
65°	370	273	234	269	363
67.5°	301	237	197	230	295
70°	244	209	169	204	237
72.5°	189	196	161	195	187
75°	150	188	160	189	153
77.5°	125	173	158	174	127
80°	101	148	150	148	101
82.5°	75	118	124	115	76
85°	58	82	82	77	56
87.5°	35	40	41	37	33
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)