

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: ITL62948

Luminaire Tested: **2OPG-217FB23W-UNV-HB81-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: ITL62948
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2OPG-217FB23W-UNV-HB81-U
Description: 2X2 RECESSED LUMINAIRE, MATTE WHITE PAF FINISH, WITH 6 CELL
2" DEEP, STEEL LOUVER, WITH FACETED CROSS BLADES, NO REFLECTOR.
Light Source: TWO LINEAR FLUORESCENT LAMP, F17T8 17W - 1450 LUMENS EA
Ballast/Driver: -

Summary

Lumens per Lamp: 1450 (2 lamps)
Luminaire Lumens: 2390.4 lumens
Efficiency: 82.4%
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.38 / 1.4
Luminous Opening: Rectangular (W 1.79' x L: 1.82' x H: 0')
CIE Type: Direct

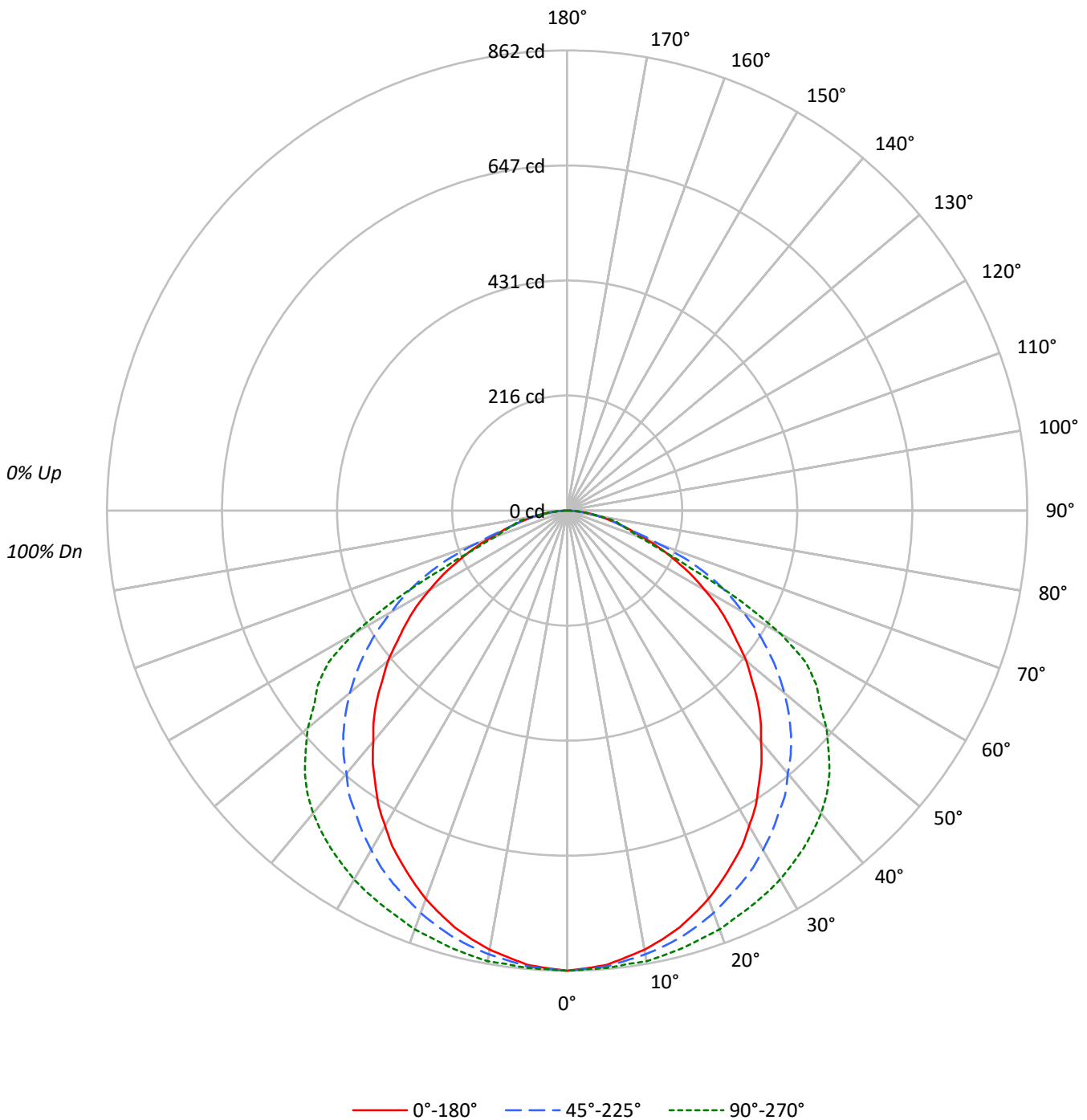
Input Watts (W): 31.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	98	98	98	96	96	96	96	92	92	92		88	88	88		84	84	84	82
1	90	86	83	80	88	85	82	79	81	79	76		78	76	74		75	73	72	70
2	82	76	70	66	80	74	69	65	71	67	64		69	65	62		66	63	61	59
3	75	67	60	55	73	65	59	54	63	58	53		61	56	53		59	55	52	50
4	69	59	52	47	67	58	51	46	56	50	46		54	49	45		52	48	44	43
5	63	53	46	40	62	52	45	40	50	44	39		49	43	39		47	42	39	37
6	58	48	40	35	57	47	40	35	45	39	35		44	38	34		43	38	34	32
7	54	43	36	31	53	42	36	31	41	35	31		40	34	30		39	34	30	28
8	50	39	32	28	49	39	32	27	38	32	27		37	31	27		36	31	27	25
9	47	36	29	25	46	36	29	25	35	29	25		34	28	24		33	28	24	23
10	44	33	27	22	43	33	27	22	32	26	22		31	26	22		30	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2849	2849	2849
5°	2834	2843	2853
10°	2802	2833	2876
15°	2768	2830	2898
20°	2722	2821	2937
25°	2666	2812	2980
30°	2603	2801	3046
35°	2526	2788	3115
40°	2438	2774	3193
45°	2361	2772	3249
50°	2252	2730	3260
55°	2121	2657	3285
60°	1970	2519	3054
65°	1775	2338	2010
70°	1537	1769	1372
75°	1315	1303	1328
80°	1161	1142	1161
85°	986	986	910



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	81.3	3.4	2.8	0°	862	862	862	862	862	
10°-20°	233.5	9.8	8.1	5°	854	854	857	860	860	81
20°-30°	356.3	14.9	12.3	15°	809	814	827	840	847	228
30°-40°	435.6	18.2	15.0	25°	731	743	771	802	817	337
40°-50°	458.6	19.2	15.8	35°	626	649	691	745	772	392
50°-60°	413.0	17.3	14.2	45°	505	529	593	660	695	388
60°-70°	269.2	11.3	9.3	55°	368	397	461	527	570	329
70°-80°	113.6	4.8	3.9	65°	227	257	299	288	257	226
80°-90°	29.4	1.2	1.0	75°	103	109	102	102	104	111
90°-100°	0.0	0.0	0.0	85°	26	26	26	24	24	30
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
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°	671.1	28.1	23.1							
0°-40°	1106.7	46.3	38.2							
0°-60°	1978.3	82.8	68.2							
0°-90°	2390.4	100.0	82.4							
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°	2390.4	100.0	82.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862	862	862	862	862
2.5°	858	857	859	859	860
5°	854	854	857	860	860
7.5°	844	844	850	854	857
10°	835	838	844	852	857
12.5°	823	826	836	847	852
15°	809	814	827	840	847
17.5°	792	800	815	833	840
20°	774	782	802	823	835
22.5°	753	764	786	813	825
25°	731	743	771	802	817
27.5°	709	722	754	790	808
30°	682	698	734	774	798
32.5°	657	674	714	761	785
35°	626	649	691	745	772
37.5°	598	619	671	728	757
40°	565	592	643	709	740
42.5°	537	560	620	685	720
45°	505	529	593	660	695
47.5°	469	499	563	632	664
50°	438	465	531	599	634
52.5°	400	432	497	563	597
55°	368	397	461	527	570
57.5°	335	364	423	493	531
60°	298	327	381	442	462
62.5°	264	293	342	378	366
65°	227	257	299	288	257
67.5°	193	217	247	200	184
70°	159	180	183	148	142
72.5°	129	140	132	122	122
75°	103	109	102	102	104
77.5°	80	83	80	84	93
80°	61	61	60	65	61
82.5°	42	43	41	43	40
85°	26	26	26	24	24
87.5°	10	10	10	10	9
90°	0	0	0	0	0

(END OF REPORT)