

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: 220p228

Luminaire Tested: **2P2GX-217S23I-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 220p228  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P2GX-217S23I-EB81  
Description: 2X2 P2GX RECESSED LUMINAIRE WITH 6 CELL SILVER PARABOLIC  
LOUVER, 86% PRE-PAINT HOUSING  
Light Source: TWO 2' T8 LINEAR FLUORESCENT LAMPS, F17T8 17W - 1310 LUMENS EA  
Ballast/Driver: -

**Summary**

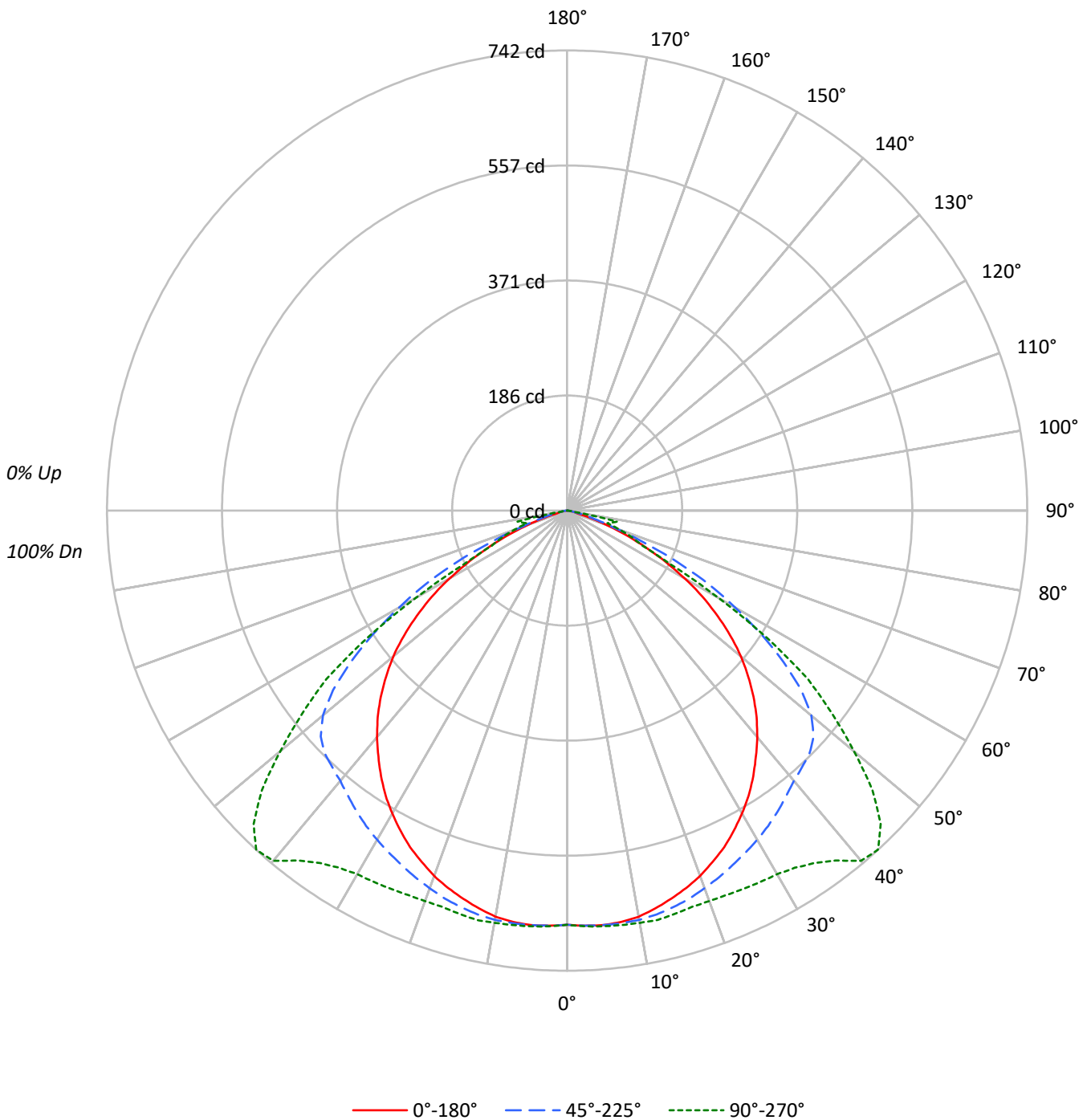
Lumens per Lamp: 1310 (2 lamps)  
Luminaire Lumens: 1918.6 lumens  
Efficiency: 73.2%  
Efficacy: 64.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.66 / 1.55  
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')  
CIE Type: Direct

Input Watts (W): 30  
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									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	87	87	87	87	85	85	85	85	81	81	81	78	78	78	75	75	75	73						73													
1	81	78	75	73	79	76	74	72	73	71	69	70	69	67	68	66	65						64														
2	74	69	64	60	72	67	63	60	65	61	58	62	60	57	60	58	56						54														
3	68	61	55	51	66	60	55	50	57	53	50	56	52	49	54	51	48						46														
4	62	54	48	43	61	53	47	43	51	46	42	50	45	42	48	44	41						40														
5	57	48	42	37	56	47	42	37	46	41	37	44	40	36	43	39	36						34														
6	53	43	37	33	51	43	37	32	41	36	32	40	35	32	39	35	32						30														
7	49	39	33	29	48	39	33	29	38	32	28	36	32	28	36	31	28						27														
8	45	36	30	25	44	35	29	25	34	29	25	33	29	25	33	28	25						24														
9	42	33	27	23	41	32	27	23	31	26	23	31	26	22	30	26	22						21														
10	40	30	24	21	39	30	24	21	29	24	20	28	24	20	28	23	20						19														

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

	0°	45°	90°
0°	1957	1957	1957
5°	1974	1974	1979
10°	1979	1993	2008
15°	1966	2008	2041
20°	1955	2021	2089
25°	1937	2040	2176
30°	1908	2074	2291
35°	1871	2118	2482
40°	1824	2176	2819
45°	1761	2291	2963
50°	1668	2343	2753
55°	1512	2176	2421
60°	1283	1834	1653
65°	964	1359	929
70°	565	685	780
75°	192	351	849
80°	118	152	152
85°	67	101	134



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	64.0	3.3	2.4	0°	668	668	668	668	668	
10°-20°	186.8	9.7	7.1	5°	671	670	671	671	673	64
20°-30°	292.8	15.3	11.2	15°	648	651	662	670	673	183
30°-40°	377.1	19.7	14.4	25°	599	609	631	660	673	276
40°-50°	428.6	22.3	16.4	35°	523	543	592	656	694	327
50°-60°	354.5	18.5	13.5	45°	425	456	553	670	715	327
60°-70°	166.9	8.7	6.4	55°	296	341	426	458	474	263
70°-80°	43.8	2.3	1.7	65°	139	173	196	138	134	138
80°-90°	4.1	0.2	0.2	75°	17	24	31	46	75	27
90°-100°	0.0	0.0	0.0	85°	2	3	3	4	4	3
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°	543.6	28.3	20.7							
0°-40°	920.7	48.0	35.1							
0°-60°	1703.7	88.8	65.0							
0°-90°	1918.6	100.0	73.2							
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°	1918.6	100.0	73.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	668	668	668	668	668
2.5°	670	669	670	670	671
5°	671	670	671	671	673
7.5°	669	669	671	673	674
10°	665	665	670	673	675
12.5°	657	659	667	673	676
15°	648	651	662	670	673
17.5°	638	642	656	666	670
20°	627	632	648	663	670
22.5°	613	621	640	662	671
25°	599	609	631	660	673
27.5°	582	595	622	659	675
30°	564	580	613	656	677
32.5°	545	562	603	654	683
35°	523	543	592	656	694
37.5°	500	523	580	662	711
40°	477	501	569	674	737
42.5°	452	479	561	683	742
45°	425	456	553	670	715
47.5°	396	432	539	634	668
50°	366	405	514	582	604
52.5°	332	375	476	517	539
55°	296	341	426	458	474
57.5°	259	302	371	390	382
60°	219	262	313	302	282
62.5°	178	217	258	213	187
65°	139	173	196	138	134
67.5°	101	129	132	102	113
70°	66	87	80	82	91
72.5°	37	52	50	62	68
75°	17	24	31	46	75
77.5°	12	13	17	43	82
80°	7	8	9	14	9
82.5°	4	5	6	6	6
85°	2	3	3	4	4
87.5°	1	1	1	2	2
90°	0	0	0	0	0

(END OF REPORT)