

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P29720

Luminaire Tested: **24FP5830C9**

Test Date: 09/07/17

**Test Information**

Test Method: LM-79-08  
Report Number: P29720  
Test Lab: INNOVATION CENTER(G2)  
Test Date: 09/07/17  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24FP5830C9  
Description: 2x4, 5800LM, UNV LED FLAT PANEL FIXTURE  
Light Source: -  
Ballast/Driver: -

**Summary**

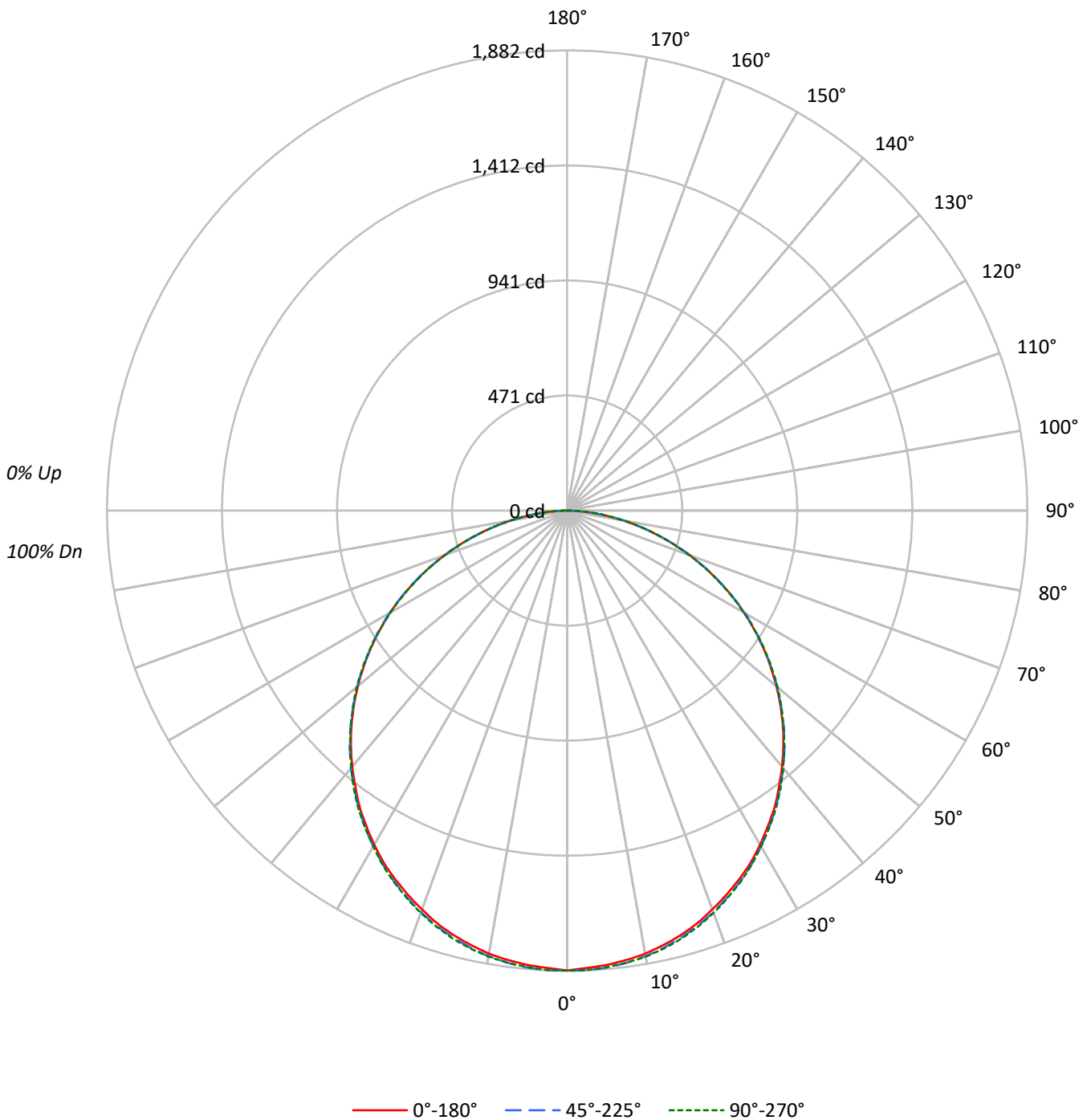
Lumens per Lamp: N/A  
Luminaire Lumens: 5432.7 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 57.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.487  
Voltage Rise (V): NR  
Power Factor: 0.9963  
Total Harmonic Distortion (THDi): 10.5%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 24 HR  
Ambient Temperature (°C): 24.9  
Test Distance: 25 FT



TEST NUMBER: P29720  
CATALOG NUMBER: 24FP5830C9

### Luminous Intensity Polar Plot





TEST NUMBER: P29720  
 CATALOG NUMBER: 24FP5830C9

**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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2531	2531	2531
5°	2519	2534	2531
10°	2514	2528	2530
15°	2503	2517	2523
20°	2486	2503	2507
25°	2470	2485	2488
30°	2452	2464	2464
35°	2431	2441	2444
40°	2401	2415	2413
45°	2375	2384	2382
50°	2338	2346	2351
55°	2297	2304	2306
60°	2250	2258	2247
65°	2184	2190	2174
70°	2097	2093	2093
75°	1965	1981	1981
80°	1805	1821	1829
85°	1559	1590	1606



TEST NUMBER: P29720  
 CATALOG NUMBER: 24FP5830C9

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.1	3.3
10°-20°	509.8	9.4
20°-30°	771.3	14.2
30°-40°	929.5	17.1
40°-50°	966.9	17.8
50°-60°	878.9	16.2
60°-70°	679.1	12.5
70°-80°	402.1	7.4
80°-90°	116.9	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1459.2	26.9
0°-40°	2388.7	44.0
0°-60°	4234.5	77.9
0°-90°	5432.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5432.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1881	1881	1881	1881	1881	
5°	1865	1876	1876	1875	1874	177
15°	1797	1807	1807	1808	1811	507
25°	1664	1676	1674	1675	1676	767
35°	1480	1487	1486	1487	1488	925
45°	1248	1255	1253	1255	1252	962
55°	979	985	982	984	983	875
65°	686	690	688	684	683	679
75°	378	381	381	378	381	401
85°	101	103	103	101	104	115
90°	0	0	0	0	0	



TEST NUMBER: P29720  
 CATALOG NUMBER: 24FP5830C9

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1881	1881	1881	1881	1881
2.5°	1872	1882	1882	1881	1881
5°	1865	1876	1876	1875	1874
7.5°	1854	1865	1865	1865	1865
10°	1840	1850	1850	1851	1852
12.5°	1820	1831	1831	1833	1834
15°	1797	1807	1807	1808	1811
17.5°	1770	1780	1780	1780	1783
20°	1736	1749	1748	1750	1751
22.5°	1701	1714	1712	1714	1715
25°	1664	1676	1674	1675	1676
27.5°	1624	1634	1632	1633	1634
30°	1578	1588	1586	1587	1586
32.5°	1529	1539	1537	1539	1538
35°	1480	1487	1486	1487	1488
37.5°	1423	1435	1431	1433	1433
40°	1367	1377	1375	1375	1374
42.5°	1309	1319	1316	1316	1315
45°	1248	1255	1253	1255	1252
47.5°	1183	1194	1188	1192	1188
50°	1117	1128	1121	1124	1123
52.5°	1049	1058	1053	1055	1054
55°	979	985	982	984	983
57.5°	908	916	913	910	909
60°	836	840	839	836	835
62.5°	762	768	764	761	759
65°	686	690	688	684	683
67.5°	610	612	610	607	609
70°	533	535	532	528	532
72.5°	455	459	456	453	456
75°	378	381	381	378	381
77.5°	305	308	306	304	307
80°	233	236	235	232	236
82.5°	164	166	165	164	167
85°	101	103	103	101	104
87.5°	43	45	45	45	47
90°	0	0	0	0	0

(END OF REPORT)