

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: 119P165

Luminaire Tested: **2OPG-232FB26W-UNV-HB81-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 119P165
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2OPG-232FB26W-UNV-HB81-U
Description: 2X4 RECESSED LUMINAIRE, MATTE WHITE PAF FINISH, WITH 12 CELL
2" DEEP, STEEL LOUVER, WITH FACETED CROSS BLADES, NO REFLECTOR
Light Source: TWO LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA
Ballast/Driver: -

Summary

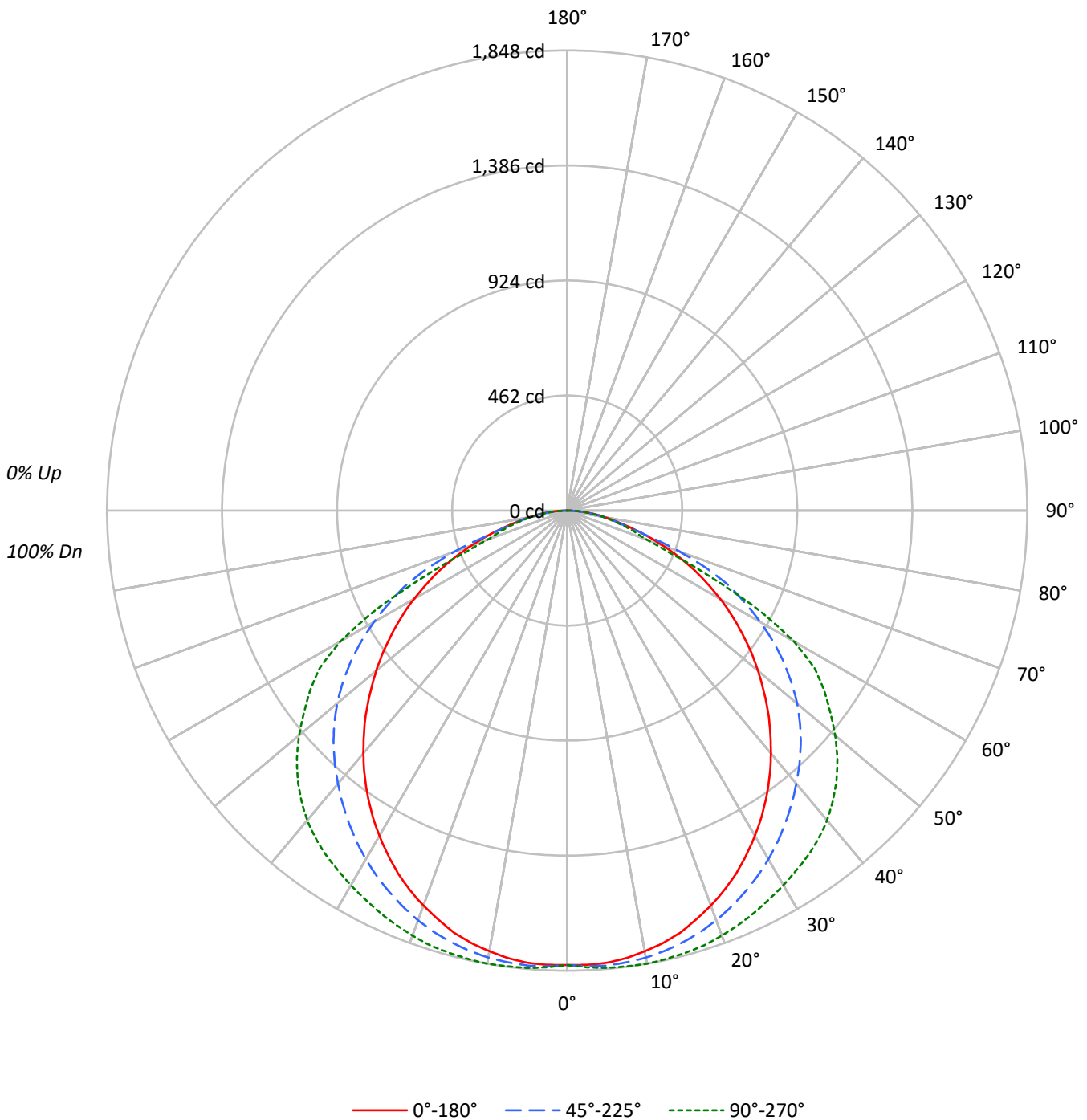
Lumens per Lamp: 3100 (2 lamps)
Luminaire Lumens: 5399.0 lumens
Efficiency: 87.1%
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.42 / 1.44
Luminous Opening: Rectangular (W 1.77' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 56
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



TEST NUMBER: 119P165
CATALOG NUMBER: 2OPG-232FB26W-UNV-HB81-U

Luminous Intensity Polar Plot





TEST NUMBER: 119P165

CATALOG NUMBER: 2OPG-232FB26W-UNV-HB81-U

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	104	104	104	104	101	101	101	101	97	97	97		93	93	93		89	89	89	87
1	95	91	87	84	93	89	86	83	85	83	80		82	80	78		79	77	75	74
2	87	80	74	69	84	78	73	68	75	70	66		72	68	65		69	66	63	62
3	79	70	63	57	77	68	62	57	66	60	56		63	59	55		61	57	54	52
4	72	62	54	48	70	61	54	48	58	52	47		56	51	47		55	50	46	44
5	66	55	47	42	64	54	47	41	52	46	41		51	45	40		49	44	40	38
6	61	50	42	36	60	49	41	36	47	41	36		46	40	35		44	39	35	33
7	57	45	37	32	55	44	37	32	43	36	32		42	36	31		40	35	31	29
8	53	41	33	28	51	40	33	28	39	33	28		38	32	28		37	32	28	26
9	49	37	30	25	48	37	30	25	36	30	25		35	29	25		34	29	25	23
10	46	35	28	23	45	34	27	23	33	27	23		32	27	23		32	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2910	2910	2910
5°	2918	2935	2951
10°	2909	2951	2992
15°	2897	2963	3034
20°	2864	2971	3081
25°	2827	2973	3133
30°	2776	2977	3198
35°	2719	2976	3287
40°	2649	2980	3380
45°	2573	2992	3450
50°	2483	2991	3485
55°	2382	2952	3502
60°	2267	2857	3351
65°	2120	2716	2448
70°	1897	2238	1552
75°	1620	1540	1448
80°	1423	1368	1331
85°	1335	1244	1134



TEST NUMBER: 119P165

CATALOG NUMBER: ZOPG-232FB26W-UNV-HB81-U

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	174.6	3.2	2.8	0°	1825	1825	1825	1825	1825	
10°-20°	507.0	9.4	8.2	5°	1823	1826	1834	1837	1844	173
20°-30°	780.2	14.5	12.6	15°	1755	1768	1795	1823	1838	494
30°-40°	961.4	17.8	15.5	25°	1607	1633	1690	1750	1781	740
40°-50°	1025.4	19.0	16.5	35°	1397	1437	1529	1634	1689	873
50°-60°	943.0	17.5	15.2	45°	1141	1199	1327	1464	1530	879
60°-70°	651.1	12.1	10.5	55°	857	925	1062	1183	1260	766
70°-80°	279.8	5.2	4.5	65°	562	629	720	699	649	554
80°-90°	76.5	1.4	1.2	75°	263	286	250	237	235	284
90°-100°	0.0	0.0	0.0	85°	73	71	68	64	62	81
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°	1461.7	27.1	23.6							
0°-40°	2423.1	44.9	39.1							
0°-60°	4391.6	81.3	70.8							
0°-90°	5399.0	100.0	87.1							
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°	5399.0	100.0	87.1							



TEST NUMBER: 119P165

CATALOG NUMBER: 2OPG-232FB26W-UNV-HB81-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1825	1825	1825	1825	1825
2.5°	1826	1829	1832	1833	1836
5°	1823	1826	1834	1837	1844
7.5°	1813	1818	1830	1839	1846
10°	1797	1805	1823	1838	1848
12.5°	1779	1789	1811	1833	1844
15°	1755	1768	1795	1823	1838
17.5°	1722	1739	1775	1809	1831
20°	1688	1709	1751	1793	1816
22.5°	1650	1673	1722	1774	1800
25°	1607	1633	1690	1750	1781
27.5°	1559	1590	1655	1725	1759
30°	1508	1543	1617	1696	1737
32.5°	1455	1491	1575	1666	1713
35°	1397	1437	1529	1634	1689
37.5°	1337	1381	1482	1601	1659
40°	1273	1322	1432	1561	1624
42.5°	1208	1261	1381	1515	1580
45°	1141	1199	1327	1464	1530
47.5°	1070	1132	1268	1403	1472
50°	1001	1065	1206	1336	1405
52.5°	930	997	1136	1262	1332
55°	857	925	1062	1183	1260
57.5°	785	854	982	1104	1179
60°	711	783	896	1007	1051
62.5°	635	707	808	879	873
65°	562	629	720	699	649
67.5°	484	546	607	503	453
70°	407	459	480	362	333
72.5°	333	371	342	284	283
75°	263	286	250	237	235
77.5°	202	205	196	190	187
80°	155	155	149	144	145
82.5°	112	111	106	103	100
85°	73	71	68	64	62
87.5°	36	35	32	30	28
90°	0	0	0	0	0

(END OF REPORT)