

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: 191P102

Luminaire Tested: **2PGX-232S29MI-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 191P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2PGX-232S29MI-PAF
Description: 2 X 4 Recessed Convertible Body Troffer with a 4" deep
18 cell specular low iridescent parabolic louver.
Light Source: Two FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.6

Summary

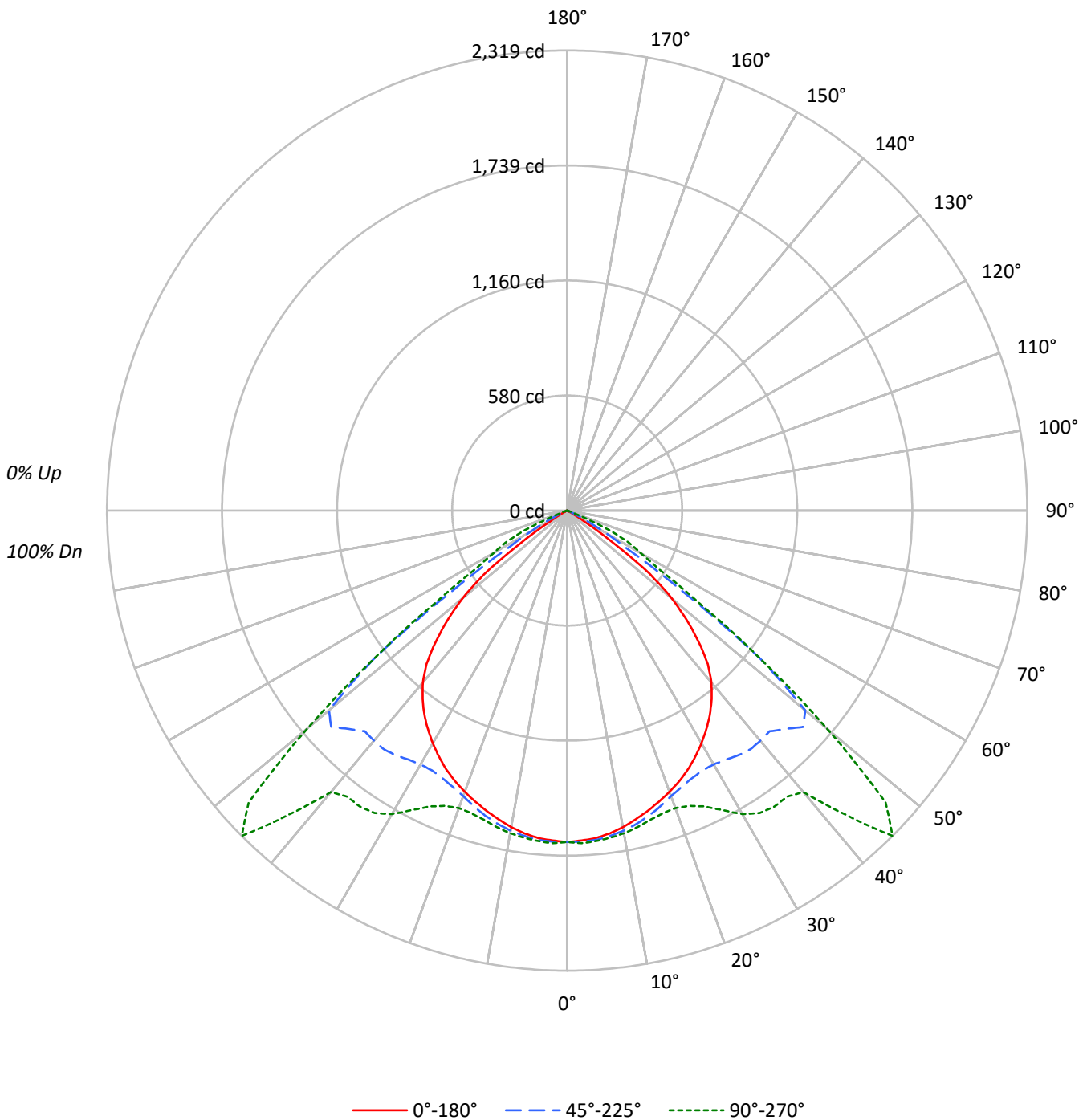
Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 4160.6 lumens
Efficiency: 73.0%
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.8 / 1.69
Luminous Opening: Rectangular (W 1.73' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 59.3
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



TEST NUMBER: 191P102
CATALOG NUMBER: 2PGX-232S29MI-PAF

Luminous Intensity Polar Plot





TEST NUMBER: 191P102

CATALOG NUMBER: 2PGX-232S29MI-PAF

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	74	74	74	74	74	74	74	74	73														
1	81	79	76	74	80	77	75	73	74	72	71	71	70	69	69	68	67	67	67	67	67	67	65														
2	75	71	67	63	74	69	66	63	67	64	61	65	62	60	62	60	59	59	59	59	59	59	57														
3	70	63	58	54	68	62	58	54	60	56	53	58	55	52	56	54	51	51	51	51	51	51	50														
4	64	57	51	47	63	56	51	47	54	50	46	52	49	45	51	48	45	45	45	45	45	45	43														
5	59	51	45	41	58	50	45	41	49	44	40	47	43	40	46	42	40	40	40	40	40	40	38														
6	55	46	40	36	54	45	40	36	44	39	36	43	39	35	42	38	35	35	35	35	35	35	34														
7	51	42	36	32	50	41	36	32	40	35	31	39	35	31	38	34	31	31	31	31	31	31	30														
8	47	38	32	28	46	38	32	28	37	32	28	36	31	28	35	31	28	28	28	28	28	28	27														
9	44	35	29	25	43	34	29	25	34	29	25	33	28	25	32	28	25	25	25	25	25	25	24														
10	41	32	27	23	40	32	26	23	31	26	23	30	26	23	30	26	23	23	23	23	23	23	21														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2745	2760	2770
10°	2715	2745	2767
15°	2677	2720	2758
20°	2649	2689	2801
25°	2622	2710	2996
30°	2580	2815	3365
35°	2529	3032	3669
40°	2437	3262	3988
45°	2192	3632	5413
50°	1769	4021	4396
55°	832	2040	2325
60°	96	693	1406
65°	47	156	937
70°	29	43	63
75°	26	32	32
80°	19	19	19
85°	0	0	0



TEST NUMBER: 191P102

CATALOG NUMBER: 2PGX-232S29MI-PAF

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	157.9	3.8	2.8	0°	1670	1670	1670	1670	1670	
10°-20°	449.4	10.8	7.9	5°	1657	1658	1666	1667	1672	157
20°-30°	703.9	16.9	12.3	15°	1567	1573	1592	1606	1614	442
30°-40°	945.7	22.7	16.6	25°	1440	1449	1488	1586	1645	663
40°-50°	1173.2	28.2	20.6	35°	1255	1272	1505	1730	1821	782
50°-60°	634.3	15.2	11.1	45°	939	1107	1556	2010	2319	715
60°-70°	90.4	2.2	1.6	55°	289	576	709	849	808	280
70°-80°	5.2	0.1	0.1	65°	12	14	40	142	240	13
80°-90°	0.6	0.0	0.0	75°	4	4	5	5	5	4
90°-100°	0.0	0.0	0.0	85°	0	1	0	0	0	1
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	0
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°	1311.2	31.5	23.0	165°	0	0	0	0	0	0
0°-40°	2256.9	54.2	39.6	175°	0	0	0	0	0	0
0°-60°	4064.3	97.7	71.3	180°	0	0	0	0	0	0
0°-90°	4160.6	100.0	73.0							
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°	4160.6	100.0	73.0							



TEST NUMBER: 191P102

CATALOG NUMBER: 2PGX-232S29MI-PAF

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1670	1670	1670	1670	1670
2.5°	1664	1664	1670	1672	1678
5°	1657	1658	1666	1667	1672
7.5°	1641	1645	1654	1658	1663
10°	1620	1625	1638	1646	1651
12.5°	1594	1600	1617	1629	1634
15°	1567	1573	1592	1606	1614
17.5°	1538	1544	1563	1587	1600
20°	1508	1515	1531	1573	1595
22.5°	1476	1484	1507	1570	1610
25°	1440	1449	1488	1586	1645
27.5°	1399	1409	1476	1619	1702
30°	1354	1364	1477	1667	1766
32.5°	1306	1318	1488	1713	1807
35°	1255	1272	1505	1730	1821
37.5°	1196	1228	1517	1723	1818
40°	1131	1186	1514	1748	1851
42.5°	1049	1149	1509	1854	2080
45°	939	1107	1556	2010	2319
47.5°	817	1053	1613	2034	2177
50°	689	970	1566	1672	1712
52.5°	526	828	1228	1203	1229
55°	289	576	709	849	808
57.5°	101	262	365	572	541
60°	29	74	210	393	426
62.5°	16	23	107	267	351
65°	12	14	40	142	240
67.5°	8	10	15	45	66
70°	6	7	9	12	13
72.5°	5	6	7	7	7
75°	4	4	5	5	5
77.5°	3	3	3	3	3
80°	2	2	2	2	2
82.5°	1	1	1	1	1
85°	0	1	0	0	0
87.5°	0	0	0	0	0
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



TEST NUMBER: 191P102

CATALOG NUMBER: 2PGX-232S29MI-PAF

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)