

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: 195P100

Luminaire Tested: **2P5GX-232S39MI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 195P100  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2P5GX-232S39MI  
Description: 2 X 4 Recessed Convertible Body Troffer with  
a 27 cell specular low iridescent parabolic louver.  
Light Source: Two-FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Triad B232I120RH Electronic; L.O.B.F. = 87.16

**Summary**

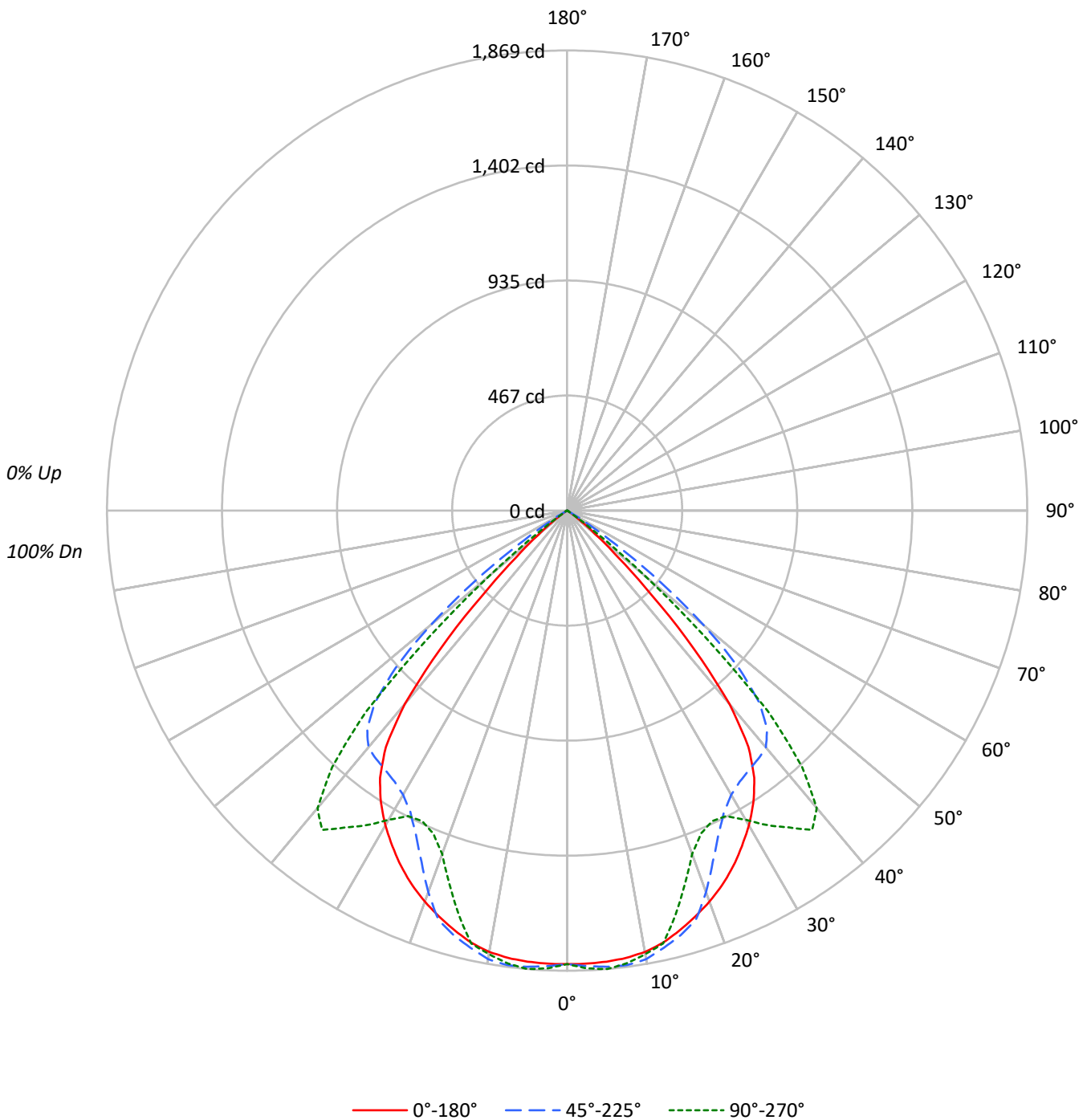
Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 3082.6 lumens  
Efficiency: 54.1%  
Efficacy: 52.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 1.73' x L: 3.76' x H: 0')  
CIE Type: Direct

Input Watts (W): 58.3  
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: 195P100  
CATALOG NUMBER: 2P5GX-232S39MI

### Luminous Intensity Polar Plot





TEST NUMBER: 195P100

CATALOG NUMBER: 2P5GX-232S39MI

**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	64	64	64	64	63	63	63	63	60	60	60	58	58	58	55	55	55	54	54	54	54	54	54	54													
1	61	59	58	56	59	58	56	55	56	55	54	54	53	52	52	51	50	49	49	49	49	49	49	49													
2	57	54	51	49	56	53	51	49	51	49	48	50	48	46	48	47	45	45	45	45	45	45	45	45													
3	53	49	46	43	52	48	45	43	47	44	42	46	43	42	44	43	41	40	40	40	40	40	40	40													
4	50	45	41	39	49	44	41	38	43	40	38	42	39	37	41	39	37	36	36	36	36	36	36	36													
5	47	41	37	35	46	41	37	34	40	36	34	39	36	34	38	35	33	32	32	32	32	32	32	32													
6	44	38	34	31	43	37	34	31	36	33	31	36	33	30	35	32	30	29	29	29	29	29	29	29													
7	41	35	31	28	40	34	31	28	34	30	28	33	30	28	32	30	27	27	27	27	27	27	27	27													
8	38	32	28	26	37	32	28	25	31	28	25	30	27	25	30	27	25	24	24	24	24	24	24	24													
9	36	30	26	23	35	29	26	23	29	25	23	28	25	23	28	25	23	22	22	22	22	22	22	22													
10	34	28	24	21	33	27	24	21	27	24	21	26	23	21	26	23	21	20	20	20	20	20	20	20													

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

	0°	45°	90°
0°	3044	3044	3044
5°	3051	3086	3101
10°	3054	3105	3070
15°	3020	3054	2911
20°	2972	2900	2610
25°	2909	2650	2538
30°	2817	2544	2767
35°	2673	2597	3170
40°	2211	2710	3402
45°	1141	2578	2695
50°	391	1867	1041
55°	78	694	89
60°	26	63	26
65°	20	23	20
70°	14	14	14
75°	13	13	6
80°	10	10	0
85°	0	0	0



TEST NUMBER: 195P100

CATALOG NUMBER: 2P5GX-232S39MI

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	176.6	5.7	3.1	0°	1842	1842	1842	1842	1842	
10°-20°	493.0	16.0	8.6	5°	1839	1850	1860	1860	1869	175
20°-30°	690.1	22.4	12.1	15°	1765	1795	1785	1744	1701	497
30°-40°	851.7	27.6	14.9	25°	1595	1594	1453	1404	1392	733
40°-50°	711.3	23.1	12.5	35°	1325	1249	1287	1477	1571	810
50°-60°	151.6	4.9	2.7	45°	488	746	1103	1167	1153	401
60°-70°	5.9	0.2	0.1	55°	27	129	241	87	31	42
70°-80°	2.0	0.1	0.0	65°	5	5	6	5	5	5
80°-90°	0.3	0.0	0.0	75°	2	2	2	2	1	2
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0	0
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°	1359.8	44.1	23.9	165°	0	0	0	0	0	0
0°-40°	2211.4	71.7	38.8	175°	0	0	0	0	0	0
0°-60°	3074.4	99.7	53.9	180°	0	0	0	0	0	0
0°-90°	3082.6	100.0	54.1							
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°	3082.6	100.0	54.1							



TEST NUMBER: 195P100

CATALOG NUMBER: 2P5GX-232S39MI

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1842	1842	1842	1842	1842
2.5°	1842	1844	1852	1853	1861
5°	1839	1850	1860	1860	1869
7.5°	1833	1853	1862	1855	1855
10°	1820	1846	1850	1829	1829
12.5°	1798	1826	1818	1806	1801
15°	1765	1795	1785	1744	1701
17.5°	1729	1757	1741	1634	1590
20°	1690	1707	1649	1533	1484
22.5°	1646	1652	1545	1451	1420
25°	1595	1594	1453	1404	1392
27.5°	1537	1531	1379	1388	1399
30°	1476	1453	1333	1399	1450
32.5°	1408	1356	1305	1441	1515
35°	1325	1249	1287	1477	1571
37.5°	1210	1144	1273	1499	1635
40°	1025	1028	1256	1505	1577
42.5°	764	893	1202	1378	1412
45°	488	746	1103	1167	1153
47.5°	278	591	945	881	756
50°	152	432	726	547	405
52.5°	75	277	474	263	154
55°	27	129	241	87	31
57.5°	11	35	84	19	11
60°	8	11	19	10	8
62.5°	6	8	8	7	6
65°	5	5	6	5	5
67.5°	4	4	4	4	3
70°	3	3	3	3	3
72.5°	3	3	2	2	2
75°	2	2	2	2	1
77.5°	1	2	2	1	1
80°	1	1	1	1	0
82.5°	1	1	1	0	0
85°	0	0	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: 195P100

CATALOG NUMBER: 2P5GX-232S39MI

**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)