

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: 104P156

Luminaire Tested: **2P2GX-SS-232S28I**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 104P156
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2P2GX-SS-232S28I
Description: 2 X 4 Recessed Silver Steel Convertible Body Troffer
with a 16 cell semi-specular low iridescent precision
cell II parabolic louver.
Light Source: Two-F32T8/31K - 2900 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad-Utrad B232I120 Electronic.

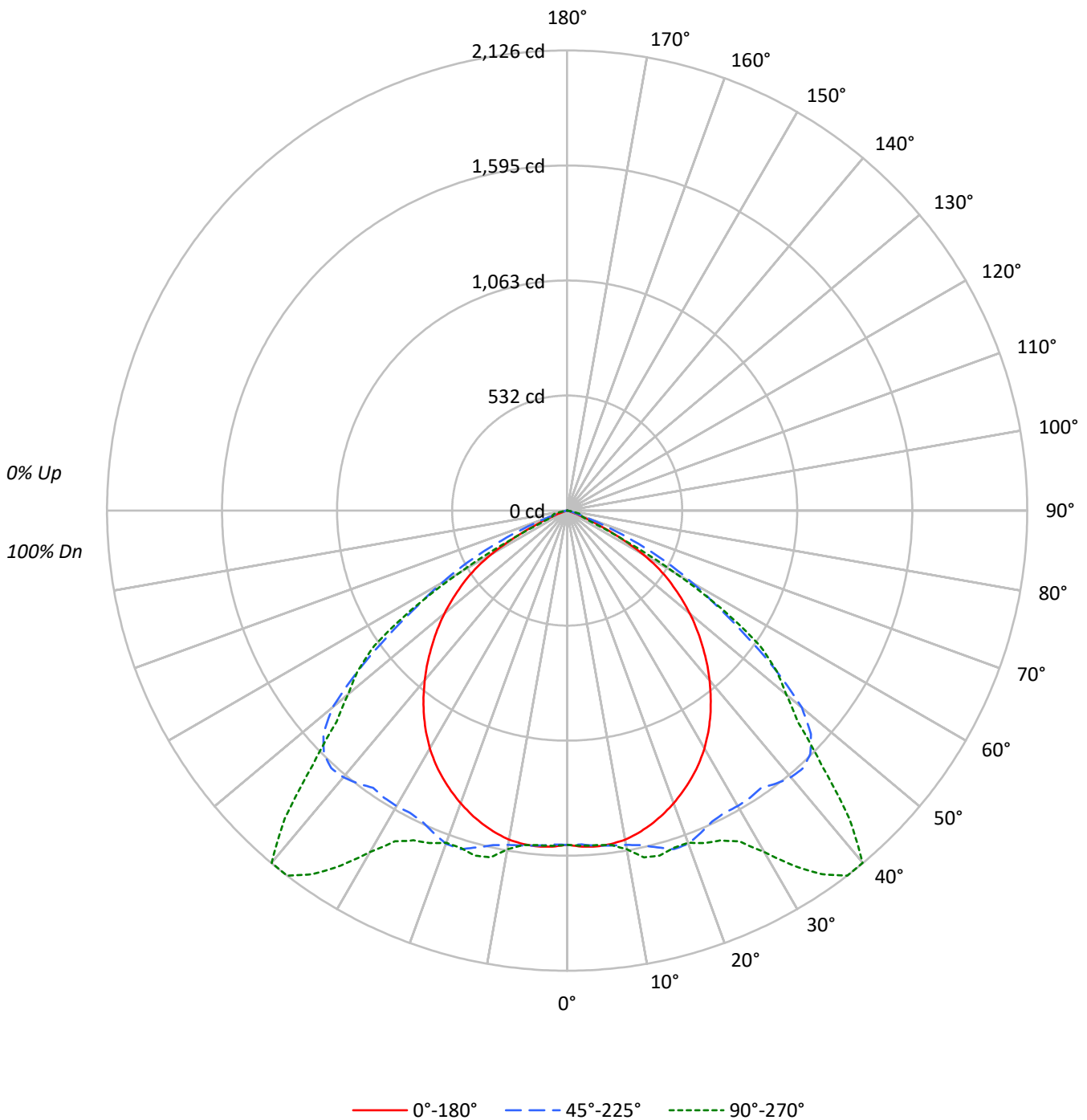
Summary

Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4574.4 lumens
Efficiency: 78.9%
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.83 / 1.66
Luminous Opening: Rectangular (W 1.74' x L: 3.76' x H: 0')
CIE Type: Direct

Input Watts (W): 62.2
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: 104P156
CATALOG NUMBER: 2P2GX-SS-232S28I

Luminous Intensity Polar Plot





TEST NUMBER: 104P156

CATALOG NUMBER: 2P2GX-SS-232S28I

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	94	94	94	94	92	92	92	92	88	88	88	84	84	84	80	80	80	80	80	80	80	80	80	79														
1	87	84	82	79	85	83	80	78	79	77	75	76	75	73	74	72	71	71	71	71	71	71	71	69														
2	81	75	70	67	79	74	69	66	71	67	64	68	65	63	66	64	61	61	61	61	61	61	61	60														
3	74	67	61	56	72	65	60	56	63	59	55	61	57	54	59	56	53	53	53	53	53	53	53	52														
4	68	59	53	48	66	58	52	48	56	51	47	55	50	47	53	49	46	46	46	46	46	46	46	44														
5	63	53	47	42	61	52	46	41	51	45	41	49	44	41	48	44	40	40	40	40	40	40	40	39														
6	58	48	41	36	56	47	41	36	46	40	36	44	39	36	43	39	35	35	35	35	35	35	35	34														
7	53	43	37	32	52	43	36	32	41	36	32	40	35	32	39	35	31	31	31	31	31	31	31	30														
8	50	39	33	28	48	39	33	28	38	32	28	37	32	28	36	31	28	28	28	28	28	28	28	26														
9	46	36	30	25	45	36	30	25	35	29	25	34	29	25	33	28	25	25	25	25	25	25	25	24														
10	43	33	27	23	42	33	27	23	32	27	23	31	26	23	31	26	23	23	23	23	23	23	23	21														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2541	2541	2541
5°	2573	2567	2564
10°	2580	2620	2655
15°	2557	2744	2811
20°	2520	2868	2859
25°	2473	2878	3052
30°	2411	2994	3462
35°	2318	3140	4120
40°	2200	3454	4562
45°	2057	3698	3870
50°	1894	3622	3382
55°	1684	2897	3121
60°	1343	2195	1889
65°	677	1413	459
70°	168	486	346
75°	83	127	394
80°	57	85	76
85°	57	57	57



TEST NUMBER: 104P156

CATALOG NUMBER: 2P2GX-SS-232S28I

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	148.6	3.2	2.6	0°	1544	1544	1544	1544	1544	
10°-20°	449.8	9.8	7.8	5°	1558	1552	1554	1551	1552	148
20°-30°	726.0	15.9	12.5	15°	1501	1525	1611	1672	1650	423
30°-40°	1006.6	22.0	17.4	25°	1362	1453	1585	1699	1681	627
40°-50°	1087.6	23.8	18.8	35°	1154	1329	1563	1933	2051	720
50°-60°	821.3	18.0	14.2	45°	884	1077	1589	1748	1663	681
60°-70°	293.6	6.4	5.1	55°	587	843	1010	1055	1088	520
70°-80°	37.1	0.8	0.6	65°	174	333	363	223	118	190
80°-90°	3.8	0.1	0.1	75°	13	16	20	53	62	16
90°-100°	0.0	0.0	0.0	85°	3	3	3	3	3	3
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°	1324.4	29.0	22.8	165°	0	0	0	0	0	0
0°-40°	2331.0	51.0	40.2	175°	0	0	0	0	0	0
0°-60°	4239.9	92.7	73.1	180°	0	0	0	0	0	0
0°-90°	4574.4	100.0	78.9							
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°	4574.4	100.0	78.9							



TEST NUMBER: 104P156

CATALOG NUMBER: 2P2GX-SS-232S28I

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544	1544	1544	1544	1544
2.5°	1554	1546	1544	1545	1550
5°	1558	1552	1554	1551	1552
7.5°	1554	1558	1561	1557	1558
10°	1544	1556	1568	1582	1589
12.5°	1525	1544	1583	1632	1641
15°	1501	1525	1611	1672	1650
17.5°	1472	1505	1640	1665	1634
20°	1439	1486	1638	1654	1633
22.5°	1402	1468	1612	1671	1663
25°	1362	1453	1585	1699	1681
27.5°	1318	1438	1574	1714	1723
30°	1269	1419	1576	1766	1822
32.5°	1213	1383	1573	1847	1944
35°	1154	1329	1563	1933	2051
37.5°	1090	1268	1589	1995	2126
40°	1024	1208	1608	2019	2124
42.5°	955	1141	1614	1959	1931
45°	884	1077	1589	1748	1663
47.5°	813	1014	1528	1498	1445
50°	740	956	1415	1300	1321
52.5°	663	897	1222	1175	1221
55°	587	843	1010	1055	1088
57.5°	506	766	821	896	853
60°	408	654	667	659	574
62.5°	290	505	520	420	310
65°	174	333	363	223	118
67.5°	89	173	217	112	76
70°	35	71	101	94	72
72.5°	18	25	37	80	68
75°	13	16	20	53	62
77.5°	9	11	12	28	42
80°	6	8	9	10	8
82.5°	4	5	6	6	5
85°	3	3	3	3	3
87.5°	2	1	1	2	1
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: 104P156

CATALOG NUMBER: 2P2GX-SS-232S28I

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)