

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: 146P115

Luminaire Tested: **P5GX2048-232S29VDT**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 146P115
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: P5GX2048-232S29VDT
Description: 20 X 48 Recessed Convertible Body Luminaire Troffer with
an 18 cell semi-specular VDT Louver.
Light Source: Two - FO32/35K - 2800 Lumens ea. 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.1

Summary

Lumens per Lamp: 2800 (2 lamps)
Luminaire Lumens: 3582.3 lumens
Efficiency: 64.0%
Efficacy: 59.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.75 / 1.43
Luminous Opening: Rectangular (W 1.41' x L: 3.76' x H: 0')
CIE Type: Direct

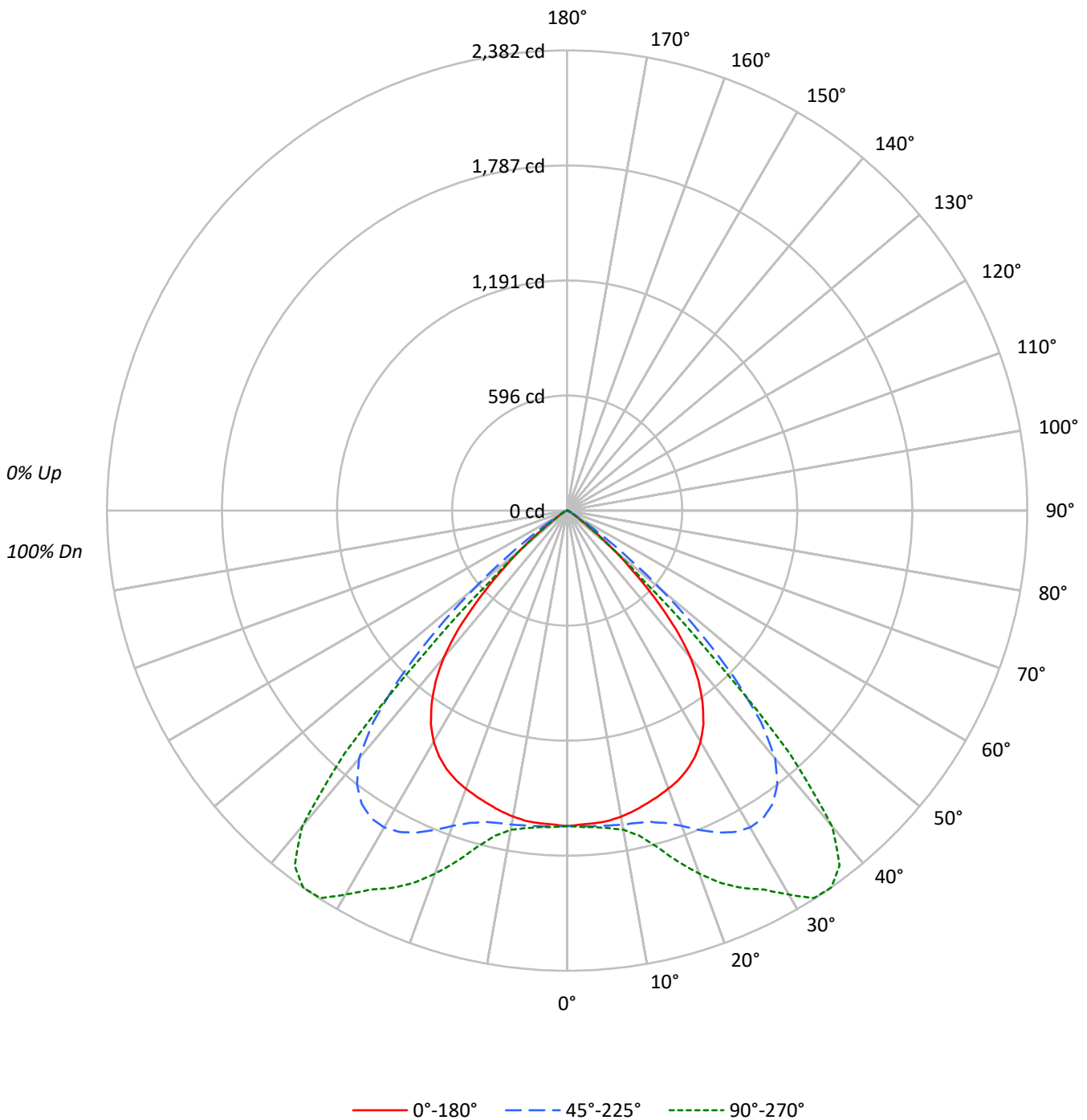
Input Watts (W): 60.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3328	3328	3328
5°	3325	3356	3366
10°	3330	3415	3473
15°	3319	3520	3805
20°	3323	3768	4338
25°	3319	4136	4849
30°	3250	4458	5401
35°	3046	4613	5927
40°	2647	4454	5681
45°	1856	3520	2998
50°	970	2001	932
55°	309	675	284
60°	130	167	163
65°	82	87	106
70°	60	60	72
75°	39	47	47
80°	35	35	35
85°	23	23	23



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	156.6	4.4	2.8	0°	1633	1633	1633	1633	1633	
10°-20°	480.1	13.4	8.6	5°	1625	1632	1640	1643	1645	155
20°-30°	842.4	23.5	15.0	15°	1573	1600	1668	1763	1803	445
30°-40°	1124.8	31.4	20.1	25°	1476	1561	1839	2084	2156	678
40°-50°	796.8	22.2	14.2	35°	1224	1445	1854	2222	2382	756
50°-60°	152.9	4.3	2.7	45°	644	893	1221	1264	1040	494
60°-70°	21.0	0.6	0.4	55°	87	130	190	121	80	105
70°-80°	6.6	0.2	0.1	65°	17	19	18	21	22	18
80°-90°	1.2	0.0	0.0	75°	5	6	6	6	6	6
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	1	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°	1479.1	41.3	26.4	165°	0	0	0	0	0	0
0°-40°	2603.9	72.7	46.5	175°	0	0	0	0	0	0
0°-60°	3553.6	99.2	63.5	180°	0	0	0	0	0	0
0°-90°	3582.3	100.0	64.0							
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°	3582.3	100.0	64.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1633	1633	1633	1633	1633
2.5°	1627	1631	1636	1637	1639
5°	1625	1632	1640	1643	1645
7.5°	1620	1630	1644	1654	1658
10°	1609	1623	1650	1669	1678
12.5°	1593	1612	1656	1702	1723
15°	1573	1600	1668	1763	1803
17.5°	1553	1587	1696	1848	1904
20°	1532	1577	1737	1938	2000
22.5°	1508	1569	1789	2017	2087
25°	1476	1561	1839	2084	2156
27.5°	1435	1549	1876	2129	2212
30°	1381	1532	1894	2161	2295
32.5°	1312	1500	1888	2211	2378
35°	1224	1445	1854	2222	2382
37.5°	1119	1363	1787	2143	2316
40°	995	1248	1674	1972	2135
42.5°	836	1094	1485	1696	1703
45°	644	893	1221	1264	1040
47.5°	460	664	923	761	537
50°	306	441	631	411	294
52.5°	176	255	376	231	157
55°	87	130	190	121	80
57.5°	48	66	84	62	56
60°	32	39	41	42	40
62.5°	23	27	25	29	30
65°	17	19	18	21	22
67.5°	13	14	13	15	16
70°	10	10	10	11	12
72.5°	7	8	8	8	9
75°	5	6	6	6	6
77.5°	4	4	4	5	5
80°	3	3	3	3	3
82.5°	1	2	2	2	2
85°	1	1	1	1	1
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



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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)