

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: 114P117

Luminaire Tested: **EP3GX2048-232S26I**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 114P117  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: EP3GX2048-232S26I  
Description: 20" X 48" Recessed Troffer with a 3" deep 12 cell semi-specular low iridescent parabolic louver.  
Light Source: Two - FO32/735 - 2800 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.6

**Summary**

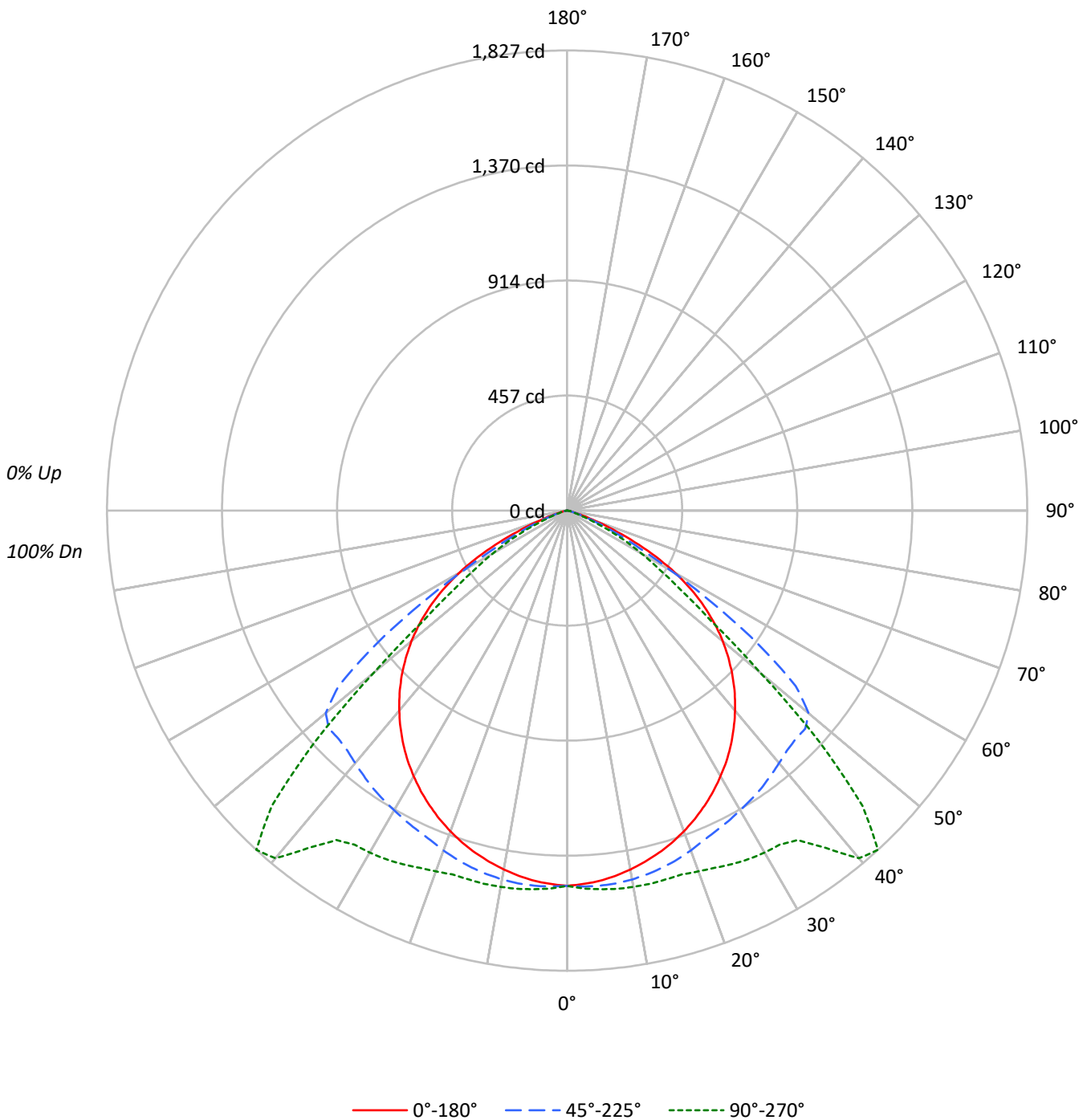
Lumens per Lamp: 2800 (2 lamps)  
Luminaire Lumens: 4002.1 lumens  
Efficiency: 71.5%  
Efficacy: 67.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.81 / 1.59  
Luminous Opening: Rectangular (W 1.4' x L: 3.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 59  
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					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	0	
RCR																						
0	85	85	85	85	83	83	83	83	79	79	79	76	76	76	73	73	73	73	73	73	71	
1	79	77	74	72	77	75	73	71	72	70	68	69	68	66	67	66	64	67	66	64	63	
2	73	68	64	60	71	67	63	60	64	61	58	62	59	57	60	58	56	60	58	56	54	
3	67	61	55	51	66	59	55	51	57	53	50	56	52	49	54	51	48	54	51	48	47	
4	62	54	48	44	60	53	48	44	51	47	43	50	46	43	48	45	42	48	45	42	41	
5	57	49	43	38	56	48	42	38	46	41	38	45	41	37	44	40	37	44	40	37	35	
6	53	44	38	33	51	43	37	33	42	37	33	41	36	33	40	36	32	40	36	32	31	
7	49	40	34	30	48	39	33	29	38	33	29	37	32	29	36	32	29	36	32	29	27	
8	45	36	30	26	44	36	30	26	35	30	26	34	29	26	33	29	26	33	29	26	24	
9	42	33	27	24	41	33	27	24	32	27	23	31	27	23	30	26	23	30	26	23	22	
10	40	30	25	21	39	30	25	21	29	25	21	29	24	21	28	24	21	28	24	21	20	

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

	0°	45°	90°
0°	3064	3064	3064
5°	3047	3086	3115
10°	3022	3105	3168
15°	2995	3123	3228
20°	2965	3143	3335
25°	2932	3181	3515
30°	2892	3263	3723
35°	2847	3377	4009
40°	2784	3514	4837
45°	2702	3731	4822
50°	2582	4002	3199
55°	2384	3334	1983
60°	2044	1929	1407
65°	1440	1080	852
70°	709	499	349
75°	246	207	199
80°	118	130	130
85°	71	71	71



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	142.2	3.6	2.5	0°	1490	1490	1490	1490	1490	
10°-20°	413.8	10.3	7.4	5°	1476	1481	1495	1502	1509	140
20°-30°	652.6	16.3	11.7	15°	1407	1429	1467	1498	1516	397
30°-40°	852.9	21.3	15.2	25°	1292	1332	1402	1494	1549	595
40°-50°	978.8	24.5	17.5	35°	1134	1196	1345	1494	1597	709
50°-60°	665.6	16.6	11.9	45°	929	1028	1283	1627	1658	715
60°-70°	254.8	6.4	4.6	55°	665	814	930	600	553	590
70°-80°	36.9	0.9	0.7	65°	296	359	222	186	175	295
80°-90°	4.3	0.1	0.1	75°	31	31	26	25	25	46
90°-100°	0.0	0.0	0.0	85°	3	3	3	3	3	4
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°	1208.7	30.2	21.6	165°	0	0	0	0	0	0
0°-40°	2061.6	51.5	36.8	175°	0	0	0	0	0	0
0°-60°	3706.1	92.6	66.2	180°	0	0	0	0	0	0
0°-90°	4002.1	100.0	71.5							
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°	4002.1	100.0	71.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1490	1490	1490	1490	1490
2.5°	1484	1486	1494	1495	1502
5°	1476	1481	1495	1502	1509
7.5°	1463	1473	1493	1505	1515
10°	1447	1461	1487	1505	1517
12.5°	1428	1446	1478	1503	1518
15°	1407	1429	1467	1498	1516
17.5°	1383	1408	1453	1490	1515
20°	1355	1386	1436	1488	1524
22.5°	1325	1360	1417	1490	1535
25°	1292	1332	1402	1494	1549
27.5°	1257	1302	1389	1498	1560
30°	1218	1269	1374	1498	1568
32.5°	1178	1234	1360	1497	1572
35°	1134	1196	1345	1494	1597
37.5°	1087	1155	1327	1516	1688
40°	1037	1114	1309	1587	1802
42.5°	985	1073	1292	1655	1827
45°	929	1028	1283	1627	1658
47.5°	869	980	1282	1429	1360
50°	807	930	1251	1138	1000
52.5°	739	877	1144	825	721
55°	665	814	930	600	553
57.5°	585	734	688	456	433
60°	497	630	469	350	342
62.5°	398	505	325	264	259
65°	296	359	222	186	175
67.5°	196	213	142	114	100
70°	118	107	83	64	58
72.5°	63	58	45	38	36
75°	31	31	26	25	25
77.5°	18	18	17	17	17
80°	10	11	11	11	11
82.5°	6	6	6	7	7
85°	3	3	3	3	3
87.5°	1	1	1	1	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



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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)