

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: 109P171

Luminaire Tested: **2EP3GX-2U6T8S44I-PAF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P171
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-2U6T8S44I-PAF
Description: 2 X 2 Recessed Troffer with a 3" deep 16 cell
semi-specular low iridescent parabolic louver.
Light Source: Two FB31T8/TL735/6 - 2600 Lumens ea. - 31 Watts ea.
Ballast/Driver: Advance REL-2P32-RH-TP Electronic - L.O.B.F. = 85.4

Summary

Lumens per Lamp: 2600 (2 lamps)
Luminaire Lumens: 3222.6 lumens
Efficiency: 62.0%
Efficacy: 58.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.3 / 1.29
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

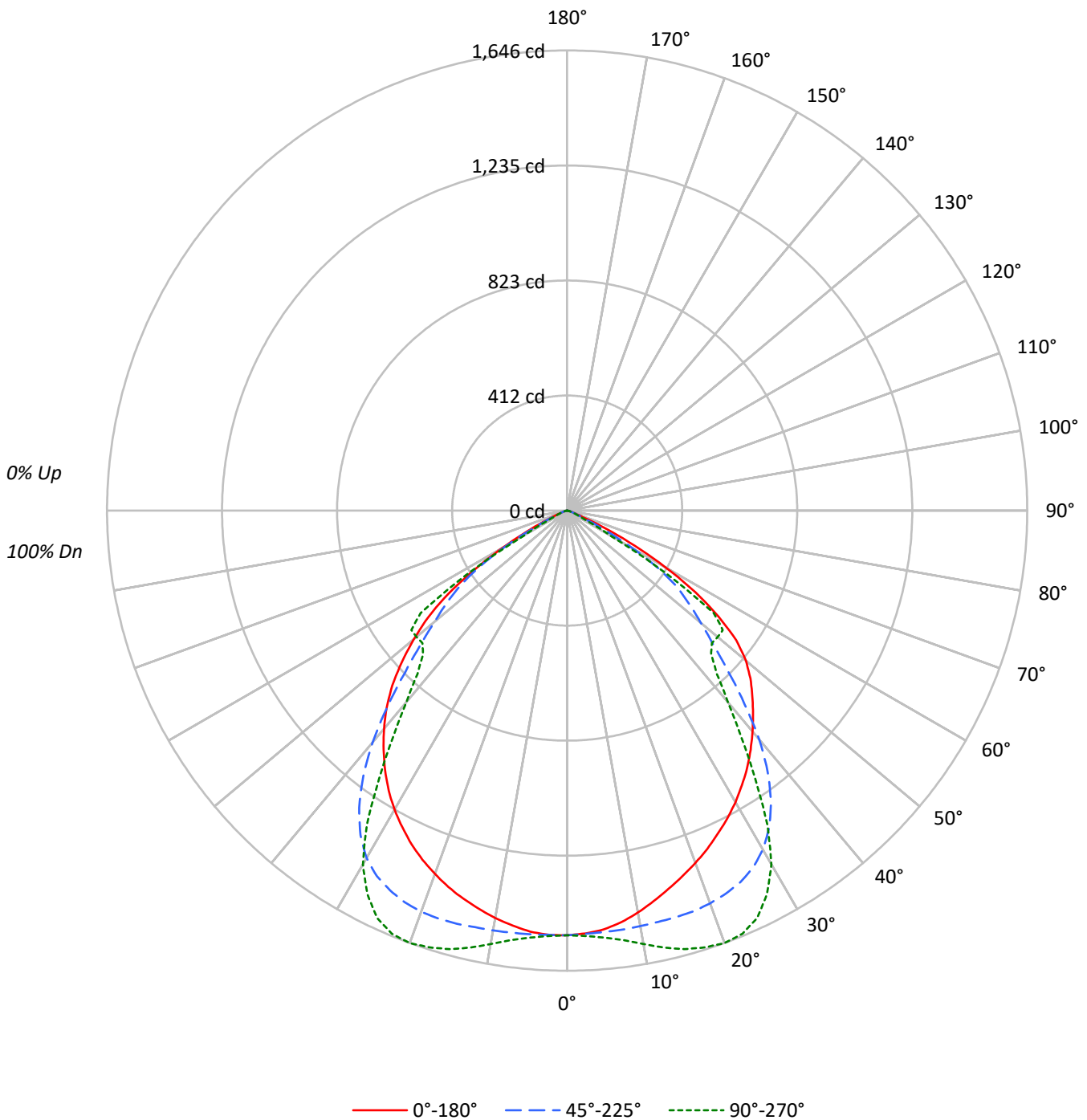
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	74	74	74	74	72	72	72	72	69	69	69		66	66	66		63	63	63	62
1	69	67	65	63	68	66	64	62	63	62	60		61	60	59		59	58	57	56
2	64	60	57	54	63	59	56	54	57	55	52		55	53	51		53	52	50	49
3	60	54	50	47	58	53	50	47	52	48	46		50	47	45		49	46	44	43
4	55	49	45	41	54	48	44	41	47	43	40		46	42	40		44	42	39	38
5	51	44	40	36	50	44	39	36	43	39	36		41	38	35		40	37	35	34
6	48	40	36	32	47	40	35	32	39	35	32		38	34	32		37	34	31	30
7	44	37	32	29	43	37	32	29	36	32	29		35	31	28		34	31	28	27
8	42	34	29	26	41	34	29	26	33	29	26		32	28	26		31	28	25	24
9	39	31	27	24	38	31	27	24	30	26	23		30	26	23		29	26	23	22
10	37	29	24	21	36	29	24	21	28	24	21		28	24	21		27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5403	5403	5403
5°	5370	5474	5399
10°	5273	5685	5346
15°	5159	5980	5292
20°	5076	6231	5235
25°	5004	6311	5169
30°	4945	6001	5073
35°	4876	5094	4929
40°	4792	4151	4732
45°	4713	3662	4447
50°	4615	3890	3957
55°	4099	3969	3219
60°	2888	1266	1899
65°	1254	404	682
70°	343	208	270
75°	179	124	137
80°	102	82	82
85°	41	41	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	145.0	4.5	2.8	0°	1519	1519	1519	1519	1519	
10°-20°	429.8	13.3	8.3	5°	1504	1513	1533	1521	1512	142
20°-30°	672.7	20.9	12.9	15°	1401	1505	1624	1530	1437	395
30°-40°	755.5	23.4	14.5	25°	1275	1466	1608	1499	1317	588
40°-50°	648.0	20.1	12.5	35°	1123	1272	1173	1297	1135	702
50°-60°	459.4	14.3	8.8	45°	937	816	728	821	884	723
60°-70°	97.5	3.0	1.9	55°	661	484	640	464	519	577
70°-80°	13.2	0.4	0.3	65°	149	71	48	64	81	171
80°-90°	1.6	0.0	0.0	75°	13	12	9	11	10	16
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	0	2
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°	1247.5	38.7	24.0	165°	0	0	0	0	0	0
0°-40°	2002.9	62.2	38.5	175°	0	0	0	0	0	0
0°-60°	3110.3	96.5	59.8	180°	0	0	0	0	0	0
0°-90°	3222.6	100.0	62.0							
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°	3222.6	100.0	62.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1519	1519	1519	1519	1519	1519	1519	1519	1519
2.5°	1514	1514	1515	1521	1523	1522	1519	1519	1519
5°	1504	1504	1513	1527	1533	1530	1521	1515	1512
7.5°	1485	1489	1512	1538	1550	1544	1523	1506	1497
10°	1460	1469	1509	1554	1574	1561	1525	1494	1480
12.5°	1431	1447	1507	1573	1601	1581	1526	1479	1459
15°	1401	1426	1505	1589	1624	1599	1530	1464	1437
17.5°	1371	1404	1503	1597	1638	1607	1530	1448	1412
20°	1341	1383	1495	1597	1646	1609	1527	1429	1383
22.5°	1310	1362	1483	1588	1638	1603	1517	1409	1352
25°	1275	1340	1466	1560	1608	1576	1499	1385	1317
27.5°	1241	1316	1440	1511	1547	1527	1474	1358	1277
30°	1204	1288	1400	1435	1461	1451	1435	1326	1235
32.5°	1164	1255	1345	1334	1333	1353	1376	1289	1188
35°	1123	1218	1272	1192	1173	1215	1297	1242	1135
37.5°	1078	1174	1179	1036	1024	1061	1198	1187	1079
40°	1032	1123	1069	895	894	924	1083	1125	1019
42.5°	984	1064	940	777	793	810	952	1054	956
45°	937	992	816	689	728	724	821	973	884
47.5°	889	908	708	635	702	670	712	878	802
50°	834	814	623	607	703	642	619	767	715
52.5°	763	708	552	586	702	615	543	642	626
55°	661	583	484	536	640	553	464	507	519
57.5°	544	449	395	418	428	419	366	370	392
60°	406	313	277	233	178	232	248	243	267
62.5°	273	197	152	100	81	101	133	147	160
65°	149	114	71	55	48	54	64	83	81
67.5°	59	56	40	35	30	34	36	45	42
70°	33	30	26	23	20	22	24	27	26
72.5°	21	19	18	16	13	15	16	18	16
75°	13	13	12	11	9	10	11	12	10
77.5°	8	8	8	7	6	7	7	8	6
80°	5	5	5	5	4	4	5	5	4
82.5°	3	3	3	3	2	2	3	2	2
85°	1	1	1	1	1	1	1	1	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)