

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: 109P159

Luminaire Tested: **2EP3GX-217S44I with RK-2X2-220**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 109P159
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2EP3GX-217S44I with RK-2X2-220
Description: 2 X 2 Recessed Troffer with a RK-2X2-220 specular aluminum reflector insert and a 3" deep 16 cell semi-specular low iridescent parabolic louver.
Light Source: Two-F17T8/735 - 1350 Lumens ea. - 17 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

Summary

Lumens per Lamp: 1350 (2 lamps)
Luminaire Lumens: 1647.5 lumens
Efficiency: 61.0%
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 0.7 / 0.87
Luminous Opening: Rectangular (W 1.73' x L: 1.75' x H: 0')
CIE Type: Direct

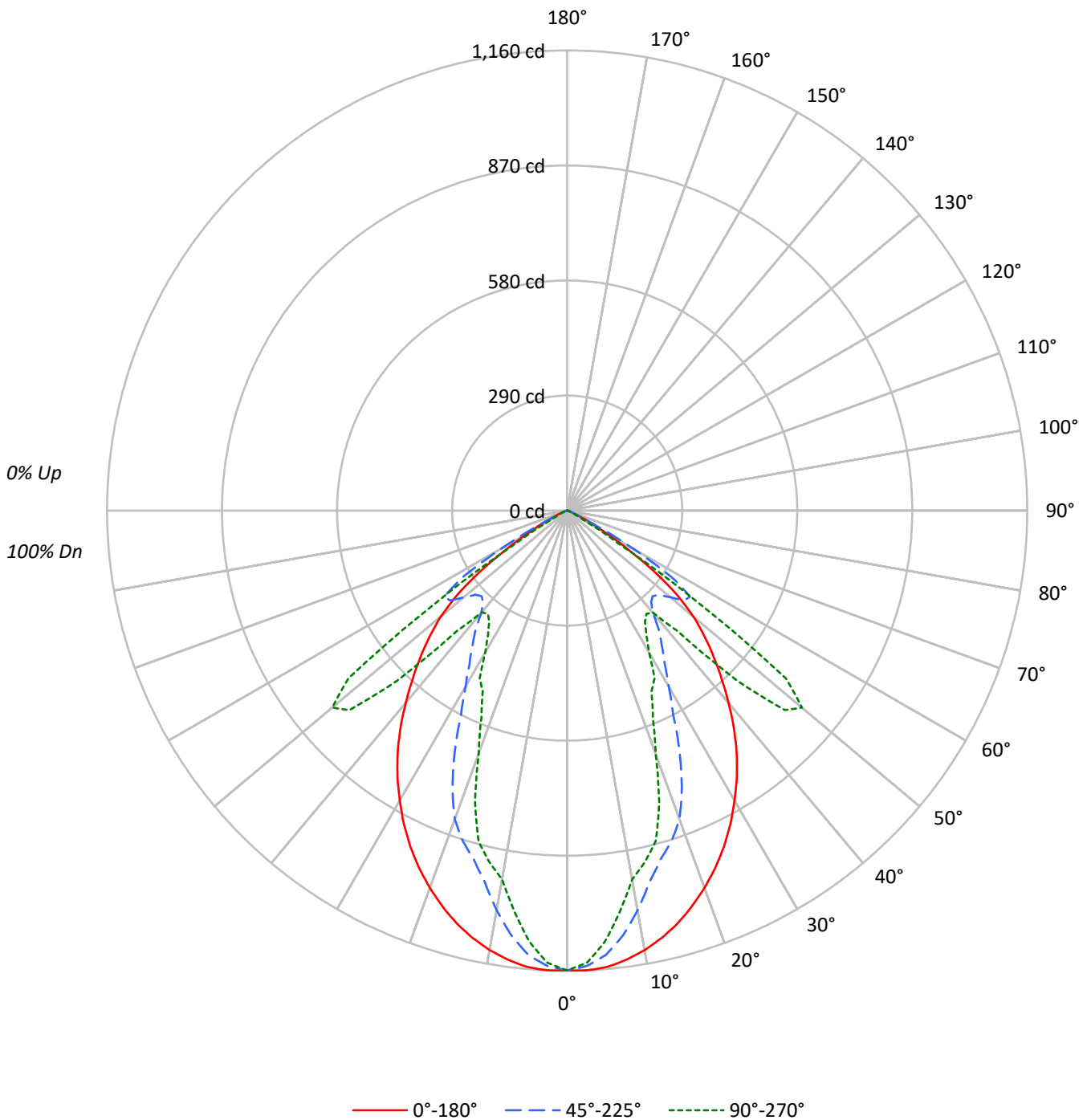
Input Watts (W): 34.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	73	73	73	73	71	71	71	71	68	68	68		65	65	65		62	62	62	61
1	68	66	64	62	67	65	63	61	62	61	59		60	59	58		58	57	56	55
2	63	60	56	54	62	58	55	53	56	54	52		54	52	51		53	51	50	48
3	59	54	50	46	57	53	49	46	51	48	45		49	47	45		48	46	44	43
4	55	49	44	41	53	48	44	40	46	43	40		45	42	39		44	41	39	38
5	51	44	39	36	50	43	39	36	42	38	35		41	38	35		40	37	35	34
6	47	40	36	32	46	40	35	32	39	35	32		38	34	31		37	34	31	30
7	44	37	32	29	43	36	32	29	36	32	29		35	31	28		34	31	28	27
8	41	34	29	26	40	34	29	26	33	29	26		32	29	26		31	28	26	25
9	39	31	27	24	38	31	27	24	31	27	24		30	26	24		29	26	24	23
10	37	29	25	22	36	29	25	22	28	25	22		28	24	22		27	24	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4123	4123	4123
5°	4124	4013	3896
10°	4063	3695	3410
15°	3966	3351	3178
20°	3831	3134	2472
25°	3670	2634	1974
30°	3467	2103	1692
35°	3235	1806	1485
40°	2939	1560	1556
45°	2631	1534	3048
50°	2302	1881	4278
55°	1662	2344	2450
60°	783	1366	370
65°	311	261	135
70°	104	114	73
75°	69	82	55
80°	41	61	41
85°	41	41	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	104.1	6.3	3.9	0°	1159	1159	1159	1159	1159	
10°-20°	262.4	15.9	9.7	5°	1155	1144	1124	1101	1091	109
20°-30°	315.7	19.2	11.7	15°	1077	1010	910	885	863	303
30°-40°	301.3	18.3	11.2	25°	935	800	671	544	503	429
40°-50°	325.0	19.7	12.0	35°	745	598	416	362	342	464
50°-60°	287.3	17.4	10.6	45°	523	338	305	429	606	403
60°-70°	44.9	2.7	1.7	55°	268	203	378	476	395	235
70°-80°	5.8	0.4	0.2	65°	37	56	31	20	16	45
80°-90°	0.9	0.1	0.0	75°	5	5	6	5	4	6
90°-100°	0.0	0.0	0.0	85°	1	1	1	1	0	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°	682.2	41.4	25.3	165°	0	0	0	0	0	0
0°-40°	983.5	59.7	36.4	175°	0	0	0	0	0	0
0°-60°	1595.9	96.9	59.1	180°	0	0	0	0	0	0
0°-90°	1647.5	100.0	61.0							
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°	1647.5	100.0	61.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159	1159	1159	1159	1159
2.5°	1160	1156	1149	1143	1141
5°	1155	1144	1124	1101	1091
7.5°	1142	1123	1080	1037	1019
10°	1125	1093	1023	964	944
12.5°	1103	1055	959	923	907
15°	1077	1010	910	885	863
17.5°	1046	960	874	817	772
20°	1012	905	828	719	653
22.5°	975	851	756	611	565
25°	935	800	671	544	503
27.5°	891	755	579	491	477
30°	844	706	512	459	412
32.5°	796	655	458	398	371
35°	745	598	416	362	342
37.5°	690	533	379	335	328
40°	633	466	336	325	335
42.5°	577	396	313	346	411
45°	523	338	305	429	606
47.5°	470	292	314	575	744
50°	416	255	340	646	773
52.5°	350	229	372	612	695
55°	268	203	378	476	395
57.5°	181	175	312	236	149
60°	110	140	192	88	52
62.5°	68	96	85	34	26
65°	37	56	31	20	16
67.5°	17	26	16	13	11
70°	10	12	11	9	7
72.5°	7	8	8	7	5
75°	5	5	6	5	4
77.5°	3	4	4	3	3
80°	2	2	3	2	2
82.5°	1	1	2	1	1
85°	1	1	1	1	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



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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)