

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: P30947

Luminaire Tested: **2GR8-317A-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30947  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR8-317A-UNV-EB81  
Description: METALUX 2' X 2' COMMERCIAL TROFFER WITH ACRYLIC PRISMATIC LENS  
Light Source: (3) T8 LINEAR FLUORESCENT LAMPS 3500K  
Ballast/Driver: -  
QUICKTRONICS QTP3x32T8/UNV ISN-SC

**Summary**

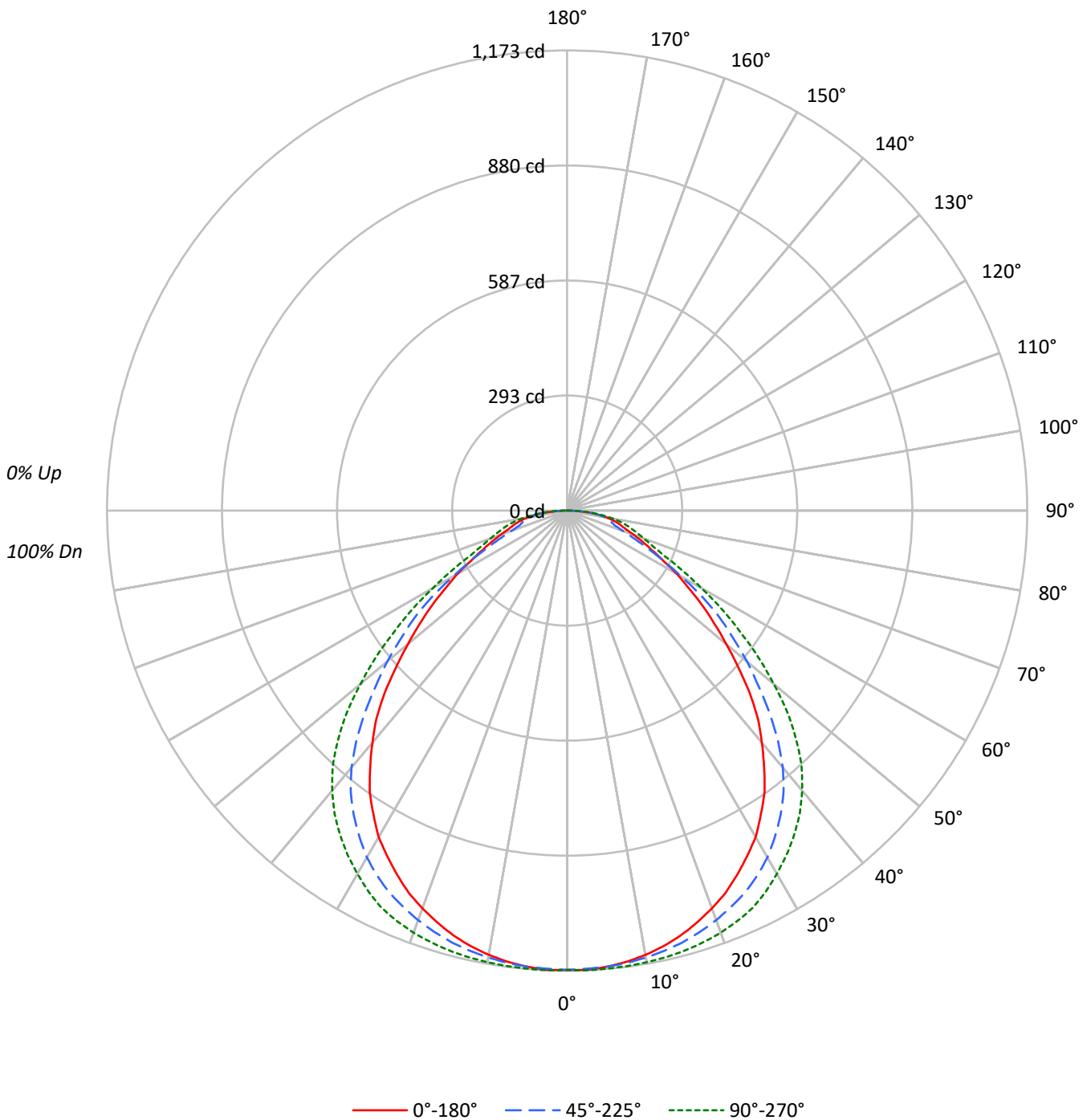
Lumens per Lamp: 1350 (3 lamps)  
Luminaire Lumens: 2957.4 lumens  
Efficiency: 73.0%  
Efficacy: 69.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.35  
Luminous Opening: Rectangular (W 1.75' x L: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 42.8  
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	87	87	87	87	85	85	85	85	81	81	81		78	78	78		75	75	75	73
1	80	77	74	71	78	75	72	70	72	70	68		69	67	66		67	65	64	62
2	73	68	63	59	71	66	62	58	64	60	57		61	58	56		59	57	55	53
3	67	60	54	50	66	59	54	50	57	52	49		55	51	48		53	50	47	45
4	62	54	48	43	60	53	47	43	51	46	42		49	45	41		48	44	41	39
5	57	48	42	37	56	47	42	37	46	41	37		44	40	36		43	39	36	34
6	53	44	37	33	52	43	37	33	42	36	32		40	36	32		39	35	32	30
7	49	40	34	29	48	39	33	29	38	33	29		37	32	29		36	32	28	27
8	46	36	30	26	45	36	30	26	35	30	26		34	29	26		33	29	26	24
9	43	33	28	24	42	33	27	24	32	27	23		31	27	23		31	26	23	22
10	40	31	25	21	39	30	25	21	30	25	21		29	24	21		28	24	21	20

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

	0°	45°	90°
0°	4116	4116	4116
5°	4117	4117	4135
10°	4104	4129	4172
15°	4079	4145	4225
20°	4036	4155	4283
25°	3975	4165	4336
30°	3900	4144	4339
35°	3763	4068	4329
40°	3542	3923	4276
45°	3271	3624	4106
50°	2898	3275	3757
55°	2568	2905	3297
60°	2271	2355	2777
65°	1979	1855	2270
70°	1850	1541	2127
75°	1901	1602	2241
80°	2085	2004	2429
85°	2178	2339	2500



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	111.2	3.8	2.7	0°	1171	1171	1171	1171	1171	
10°-20°	321.9	10.9	7.9	5°	1167	1166	1167	1170	1172	111
20°-30°	493.8	16.7	12.2	15°	1121	1125	1139	1154	1161	316
30°-40°	589.2	19.9	14.5	25°	1025	1042	1074	1104	1118	472
40°-50°	564.9	19.1	13.9	35°	877	901	948	987	1009	545
50°-60°	426.3	14.4	10.5	45°	658	677	729	792	826	505
60°-70°	246.5	8.3	6.1	55°	419	435	474	526	538	376
70°-80°	142.7	4.8	3.5	65°	238	225	223	261	273	241
80°-90°	61.0	2.1	1.5	75°	140	124	118	140	165	148
90°-100°	0.0	0.0	0.0	85°	54	56	58	65	62	58
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	926.9	31.3	22.9							
0°-40°	1516.0	51.3	37.4							
0°-60°	2507.2	84.8	61.9							
0°-90°	2957.4	100.0	73.0							
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°	2957.4	100.0	73.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1171	1171	1171	1171	1171
2.5°	1172	1170	1169	1172	1173
5°	1167	1166	1167	1170	1172
7.5°	1160	1161	1163	1168	1171
10°	1150	1151	1157	1165	1169
12.5°	1137	1139	1149	1161	1166
15°	1121	1125	1139	1154	1161
17.5°	1101	1108	1126	1145	1154
20°	1079	1089	1111	1135	1145
22.5°	1055	1068	1093	1122	1133
25°	1025	1042	1074	1104	1118
27.5°	993	1010	1049	1083	1096
30°	961	979	1021	1055	1069
32.5°	919	940	986	1022	1041
35°	877	901	948	987	1009
37.5°	825	855	906	948	974
40°	772	799	855	906	932
42.5°	720	745	795	851	885
45°	658	677	729	792	826
47.5°	592	615	661	724	762
50°	530	551	599	659	687
52.5°	473	493	532	596	615
55°	419	435	474	526	538
57.5°	367	378	407	455	467
60°	323	320	335	381	395
62.5°	276	272	275	318	332
65°	238	225	223	261	273
67.5°	208	189	182	221	235
70°	180	164	150	186	207
72.5°	156	142	128	162	185
75°	140	124	118	140	165
77.5°	123	108	110	122	144
80°	103	92	99	108	120
82.5°	81	75	80	90	91
85°	54	56	58	65	62
87.5°	28	32	30	32	29
90°	0	0	0	0	0

(END OF REPORT)