

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: P30944

Luminaire Tested: **2GR8-217A19/156-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30944  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2GR8-217A19/156-UNV-EB81  
Description: METALUX 2' X 2' COMMERCIAL TROFFER W/ ACRYLIC PRISMATIC LENS, TYPE  
19, 0.156" THK  
Light Source: (2) T8 LINEAR FLUORESCENT LAMPS 3500K  
Ballast/Driver: -  
QUICKTRONICS QTP2x32T8/UNV ISN-SC

**Summary**

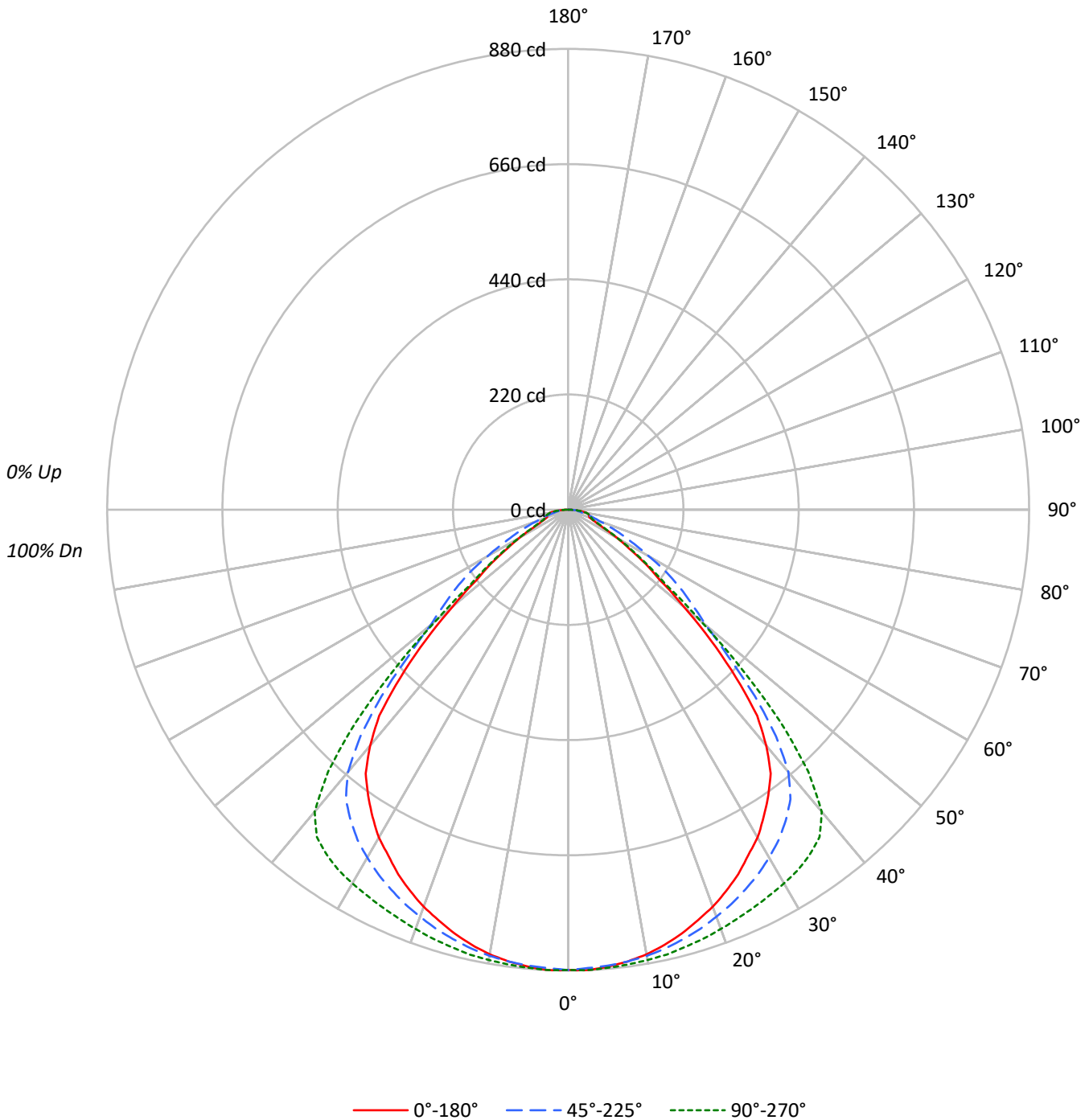
Lumens per Lamp: 1350 (2 lamps)  
Luminaire Lumens: 1944.2 lumens  
Efficiency: 72.0%  
Efficacy: 65.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.41 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.5  
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	86	86	86	86	84	84	84	84	80	80	80	77	77	77	73	73	73	72				
1	80	77	74	72	78	75	73	71	72	70	68	69	68	66	67	66	64	63				
2	74	69	64	61	72	67	63	60	65	62	59	62	60	57	60	58	56	55				
3	68	61	56	52	66	60	56	52	58	54	51	56	53	50	55	52	49	48				
4	63	55	50	46	61	54	49	45	53	48	45	51	47	44	50	46	43	42				
5	58	50	44	40	57	49	44	40	48	43	39	46	42	39	45	42	39	37				
6	54	46	40	36	53	45	39	35	44	39	35	42	38	35	41	38	35	33				
7	50	42	36	32	49	41	36	32	40	35	31	39	35	31	38	34	31	30				
8	47	38	33	29	46	38	32	29	37	32	28	36	31	28	35	31	28	27				
9	44	35	30	26	43	35	30	26	34	29	26	33	29	26	33	29	26	24				
10	41	33	27	24	41	32	27	24	32	27	24	31	27	23	30	26	23	22				

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

	0°	45°	90°
0°	2365	2365	2365
5°	2366	2361	2372
10°	2355	2364	2385
15°	2335	2365	2407
20°	2311	2368	2440
25°	2280	2375	2488
30°	2247	2383	2560
35°	2188	2378	2641
40°	2066	2297	2645
45°	1724	1918	2181
50°	1202	1436	1377
55°	844	1225	873
60°	581	958	592
65°	382	713	401
70°	338	504	370
75°	437	405	457
80°	542	356	558
85°	618	525	618



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	83.3	4.3	3.1	0°	879	879	879	879	879	
10°-20°	240.1	12.3	8.9	5°	876	875	874	877	878	83
20°-30°	369.8	19.0	13.7	15°	838	841	849	859	864	236
30°-40°	454.8	23.4	16.8	25°	768	777	800	826	838	354
40°-50°	392.1	20.2	14.5	35°	666	682	724	780	804	415
50°-60°	210.1	10.8	7.8	45°	453	490	504	565	573	344
60°-70°	109.5	5.6	4.1	55°	180	233	261	240	186	164
70°-80°	61.8	3.2	2.3	65°	60	127	112	128	63	65
80°-90°	22.8	1.2	0.8	75°	42	78	39	78	44	43
90°-100°	0.0	0.0	0.0	85°	20	27	17	25	20	21
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°	693.2	35.7	25.7							
0°-40°	1148.0	59.0	42.5							
0°-60°	1750.2	90.0	64.8							
0°-90°	1944.2	100.0	72.0							
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°	1944.2	100.0	72.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	879	879	879	879	879
2.5°	880	877	876	878	880
5°	876	875	874	877	878
7.5°	870	869	870	874	876
10°	862	862	865	871	873
12.5°	851	852	858	865	870
15°	838	841	849	859	864
17.5°	822	828	839	852	859
20°	807	812	827	844	852
22.5°	788	797	815	835	845
25°	768	777	800	826	838
27.5°	744	757	785	816	831
30°	723	734	767	805	824
32.5°	695	709	748	793	816
35°	666	682	724	780	804
37.5°	635	651	697	759	788
40°	588	613	654	722	753
42.5°	534	557	587	661	678
45°	453	490	504	565	573
47.5°	369	412	412	458	446
50°	287	332	343	364	329
52.5°	221	278	299	295	235
55°	180	233	261	240	186
57.5°	138	199	223	203	146
60°	108	171	178	173	110
62.5°	78	148	142	148	81
65°	60	127	112	128	63
67.5°	49	108	87	113	52
70°	43	95	64	102	47
72.5°	42	87	51	90	46
75°	42	78	39	78	44
77.5°	39	64	29	63	40
80°	35	48	23	49	36
82.5°	29	35	19	36	29
85°	20	27	17	25	20
87.5°	9	16	10	14	10
90°	0	0	0	0	0

(END OF REPORT)