

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: P30951

Luminaire Tested: **2GR8-417A-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30951
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8-417A-UNV-EB81
Description: METALUX 2' X 2' COMMERCIAL TROFFER WITH ACRYLIC PRISMATIC LENS
Light Source: (4) T8 LINEAR FLUORESCENT LAMPS 3500K
Ballast/Driver: -
QUICKTRONICS QTP4x32T8/UNV ISN-SC

Summary

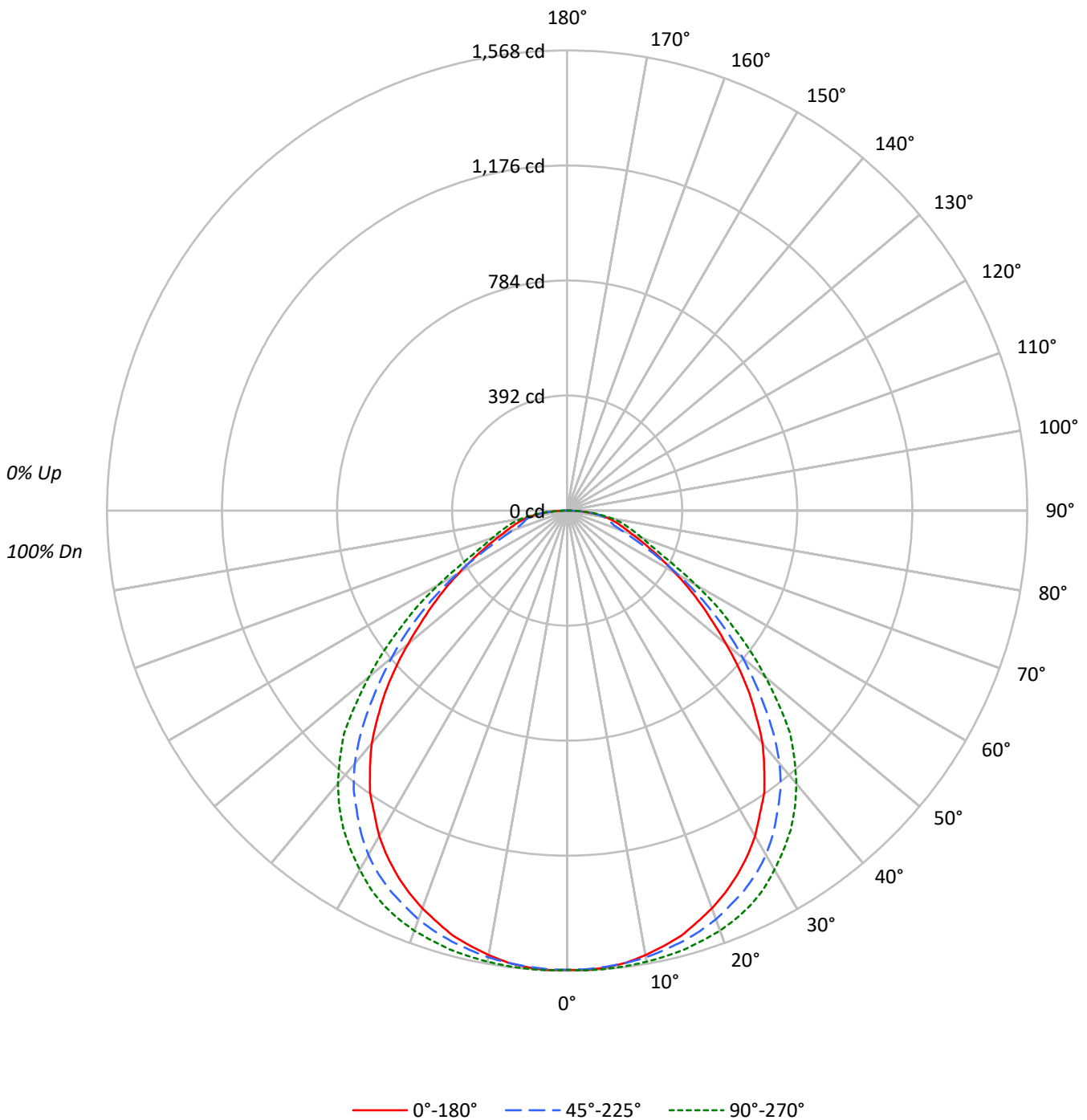
Lumens per Lamp: 1350 (4 lamps)
Luminaire Lumens: 3893.3 lumens
Efficiency: 72.1%
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 56
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			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	86	86	86	86	84	84	84	84	80	80	80	77	77	77	74	74	74	72
1	79	76	73	70	77	74	72	69	71	69	67	68	67	65	66	64	63	62
2	72	67	62	58	71	66	61	58	63	59	56	61	58	55	59	56	54	52
3	66	59	54	49	65	58	53	49	56	52	48	54	50	47	52	49	47	45
4	61	53	47	43	60	52	47	42	50	46	42	49	45	41	47	44	41	39
5	57	48	42	37	55	47	41	37	45	40	36	44	40	36	43	39	36	34
6	52	43	37	33	51	43	37	32	41	36	32	40	35	32	39	35	32	30
7	49	39	33	29	47	39	33	29	38	32	29	37	32	28	36	31	28	27
8	45	36	30	26	44	35	30	26	35	29	26	34	29	26	33	29	25	24
9	42	33	27	23	41	33	27	23	32	27	23	31	27	23	30	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°	4211	4211	4211
5°	4219	4214	4233
10°	4203	4224	4265
15°	4179	4235	4313
20°	4129	4244	4361
25°	4071	4240	4400
30°	3980	4210	4391
35°	3847	4106	4363
40°	3639	3955	4268
45°	3338	3642	4091
50°	2960	3270	3692
55°	2609	2843	3232
60°	2287	2341	2729
65°	2012	1847	2254
70°	1849	1534	2124
75°	1913	1601	2215
80°	2108	1999	2417
85°	2223	2316	2408



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	148.6	3.8	2.8	0°	1565	1565	1565	1565	1565	
10°-20°	429.5	11.0	8.0	5°	1562	1560	1560	1564	1567	148
20°-30°	656.9	16.9	12.2	15°	1500	1503	1520	1539	1548	422
30°-40°	778.7	20.0	14.4	25°	1371	1389	1428	1466	1482	631
40°-50°	740.4	19.0	13.7	35°	1171	1195	1250	1299	1328	728
50°-60°	553.0	14.2	10.2	45°	877	895	957	1030	1075	674
60°-70°	320.1	8.2	5.9	55°	556	571	606	674	689	500
70°-80°	186.7	4.8	3.5	65°	316	293	290	339	354	318
80°-90°	79.4	2.0	1.5	75°	184	163	154	183	213	195
90°-100°	0.0	0.0	0.0	85°	72	74	75	83	78	77
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°	1235.1	31.7	22.9							
0°-40°	2013.8	51.7	37.3							
0°-60°	3307.1	84.9	61.2							
0°-90°	3893.3	100.0	72.1							
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°	3893.3	100.0	72.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1565	1565	1565	1565	1565
2.5°	1567	1565	1564	1565	1568
5°	1562	1560	1560	1564	1567
7.5°	1553	1552	1554	1560	1565
10°	1538	1539	1546	1555	1561
12.5°	1520	1523	1533	1548	1555
15°	1500	1503	1520	1539	1548
17.5°	1471	1479	1503	1527	1536
20°	1442	1453	1482	1510	1523
22.5°	1409	1422	1455	1492	1505
25°	1371	1389	1428	1466	1482
27.5°	1328	1350	1395	1434	1452
30°	1281	1306	1355	1394	1413
32.5°	1223	1254	1306	1349	1372
35°	1171	1195	1250	1299	1328
37.5°	1103	1132	1195	1240	1275
40°	1036	1059	1126	1181	1215
42.5°	955	985	1045	1108	1146
45°	877	895	957	1030	1075
47.5°	793	809	867	941	978
50°	707	726	781	848	882
52.5°	627	646	697	765	789
55°	556	571	606	674	689
57.5°	489	494	520	583	602
60°	425	417	435	494	507
62.5°	367	351	358	407	422
65°	316	293	290	339	354
67.5°	274	248	236	284	306
70°	235	214	195	241	270
72.5°	208	186	168	210	241
75°	184	163	154	183	213
77.5°	161	142	145	160	189
80°	136	121	129	140	156
82.5°	107	98	105	116	119
85°	72	74	75	83	78
87.5°	35	41	39	44	37
90°	0	0	0	0	0

(END OF REPORT)