

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: P30812

Luminaire Tested: **2GR8IC-232A-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30812
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2GR8IC-232A-UNV-EB81
Description: METALUX 2' X 2' COMMERCIAL TROFFER WITH ACRYLIC PRISMATIC LENS
IC RATED FOR DIRECT CONTACT WITH INSULATION
Light Source: (2) DOUBLE BIPIN T8 LINEAR FLUORESCENT LAMPS
Ballast/Driver: -
GE232MAX-N/ULTRA

Summary

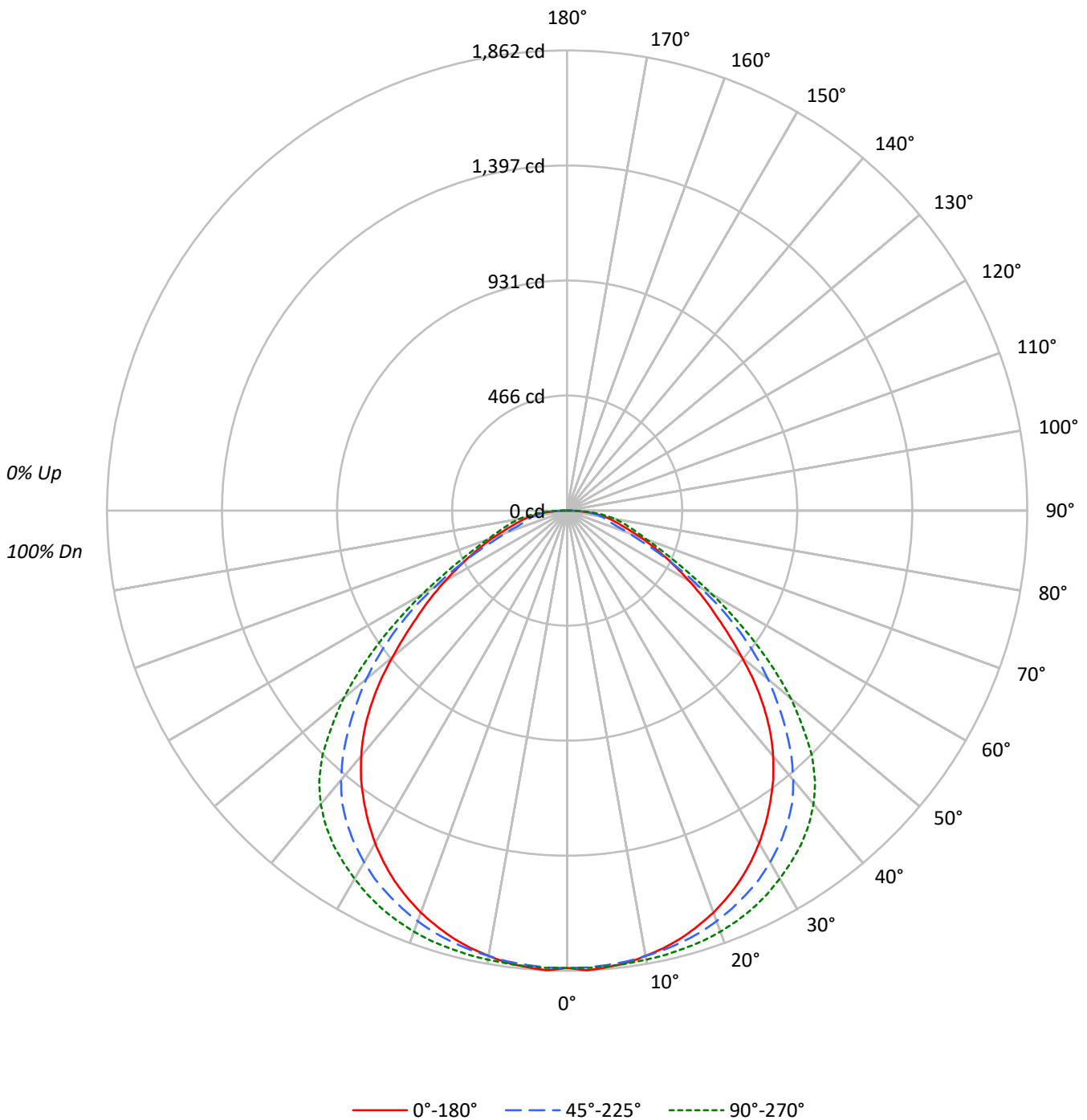
Lumens per Lamp: 3100 (2 lamps)
Luminaire Lumens: 4924.2 lumens
Efficiency: 79.4%
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.38 / 1.39
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 52
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	95	95	95	95	92	92	92	92	88	88	88		84	84	84		81	81	81	79
1	87	83	80	77	85	82	79	76	78	76	74		75	73	71		72	71	69	68
2	80	73	68	64	77	72	67	63	69	65	62		66	63	60		64	61	59	57
3	73	65	59	54	71	64	58	53	61	56	52		59	55	52		57	54	51	49
4	67	58	51	46	65	57	51	46	55	49	45		53	48	45		51	47	44	42
5	62	52	45	40	60	51	45	40	49	44	39		48	43	39		46	42	38	37
6	57	47	40	35	56	46	40	35	45	39	35		43	38	34		42	38	34	32
7	53	43	36	31	52	42	36	31	41	35	31		40	34	31		39	34	30	29
8	49	39	32	28	48	38	32	28	37	32	28		36	31	27		35	31	27	26
9	46	36	29	25	45	35	29	25	34	29	25		33	28	25		33	28	25	23
10	43	33	27	23	42	33	27	23	32	26	23		31	26	22		30	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2970	2970	2970
5°	2988	2973	2981
10°	2982	2982	3006
15°	2973	3000	3047
20°	2956	3019	3096
25°	2927	3035	3144
30°	2879	3044	3187
35°	2809	3038	3232
40°	2717	2983	3249
45°	2557	2839	3177
50°	2302	2646	2951
55°	2045	2381	2585
60°	1829	1986	2166
65°	1633	1568	1807
70°	1482	1224	1609
75°	1389	1110	1624
80°	1497	1312	1830
85°	1602	1639	2099



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	175.9	3.6	2.8	0°	1851	1851	1851	1851	1851	
10°-20°	510.6	10.4	8.2	5°	1855	1846	1846	1845	1851	176
20°-30°	789.3	16.0	12.7	15°	1790	1788	1806	1821	1834	505
30°-40°	964.6	19.6	15.6	25°	1653	1668	1714	1753	1776	761
40°-50°	963.4	19.6	15.5	35°	1434	1470	1551	1616	1650	896
50°-60°	745.7	15.1	12.0	45°	1127	1164	1251	1345	1400	864
60°-70°	436.3	8.9	7.0	55°	731	768	851	893	924	659
70°-80°	239.1	4.9	3.9	65°	430	401	413	458	476	430
80°-90°	99.2	2.0	1.6	75°	224	212	179	256	262	243
90°-100°	0.0	0.0	0.0	85°	87	84	89	109	114	94
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°	1475.8	30.0	23.8							
0°-40°	2440.4	49.6	39.4							
0°-60°	4149.5	84.3	66.9							
0°-90°	4924.2	100.0	79.4							
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°	4924.2	100.0	79.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1851	1851	1851	1851	1851
2.5°	1862	1851	1850	1847	1852
5°	1855	1846	1846	1845	1851
7.5°	1846	1837	1840	1841	1849
10°	1830	1823	1830	1835	1845
12.5°	1812	1808	1820	1830	1841
15°	1790	1788	1806	1821	1834
17.5°	1762	1765	1790	1811	1826
20°	1731	1736	1768	1796	1813
22.5°	1694	1705	1743	1777	1797
25°	1653	1668	1714	1753	1776
27.5°	1606	1627	1682	1726	1751
30°	1554	1579	1643	1693	1720
32.5°	1497	1528	1600	1657	1687
35°	1434	1470	1551	1616	1650
37.5°	1370	1409	1495	1567	1605
40°	1297	1336	1424	1506	1551
42.5°	1217	1254	1342	1433	1485
45°	1127	1164	1251	1345	1400
47.5°	1029	1067	1156	1244	1291
50°	922	969	1060	1137	1182
52.5°	823	870	959	1018	1055
55°	731	768	851	893	924
57.5°	650	670	739	769	796
60°	570	570	619	649	675
62.5°	496	479	511	545	567
65°	430	401	413	458	476
67.5°	370	336	326	390	402
70°	316	284	261	337	343
72.5°	265	245	211	294	298
75°	224	212	179	256	262
77.5°	192	180	159	220	230
80°	162	148	142	185	198
82.5°	128	116	120	150	160
85°	87	84	89	109	114
87.5°	48	49	50	62	66
90°	0	0	0	0	0

(END OF REPORT)