

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: P30097

Luminaire Tested: **2RDIA-232RP-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30097
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDIA-232RP-UNV-EB81
Description: METALUX RDI OVATION SERIES WITH AIR RETURN SLOTS, 2'x 4' RECESSED
DIRECT/INDIRECT, WITH CENTER MOUNT ROUND PERFORATED WHITE STEEL BASKET
AND ACRYLIC OVERLAY
Light Source: TWO T8 LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA
Ballast/Driver: -

Summary

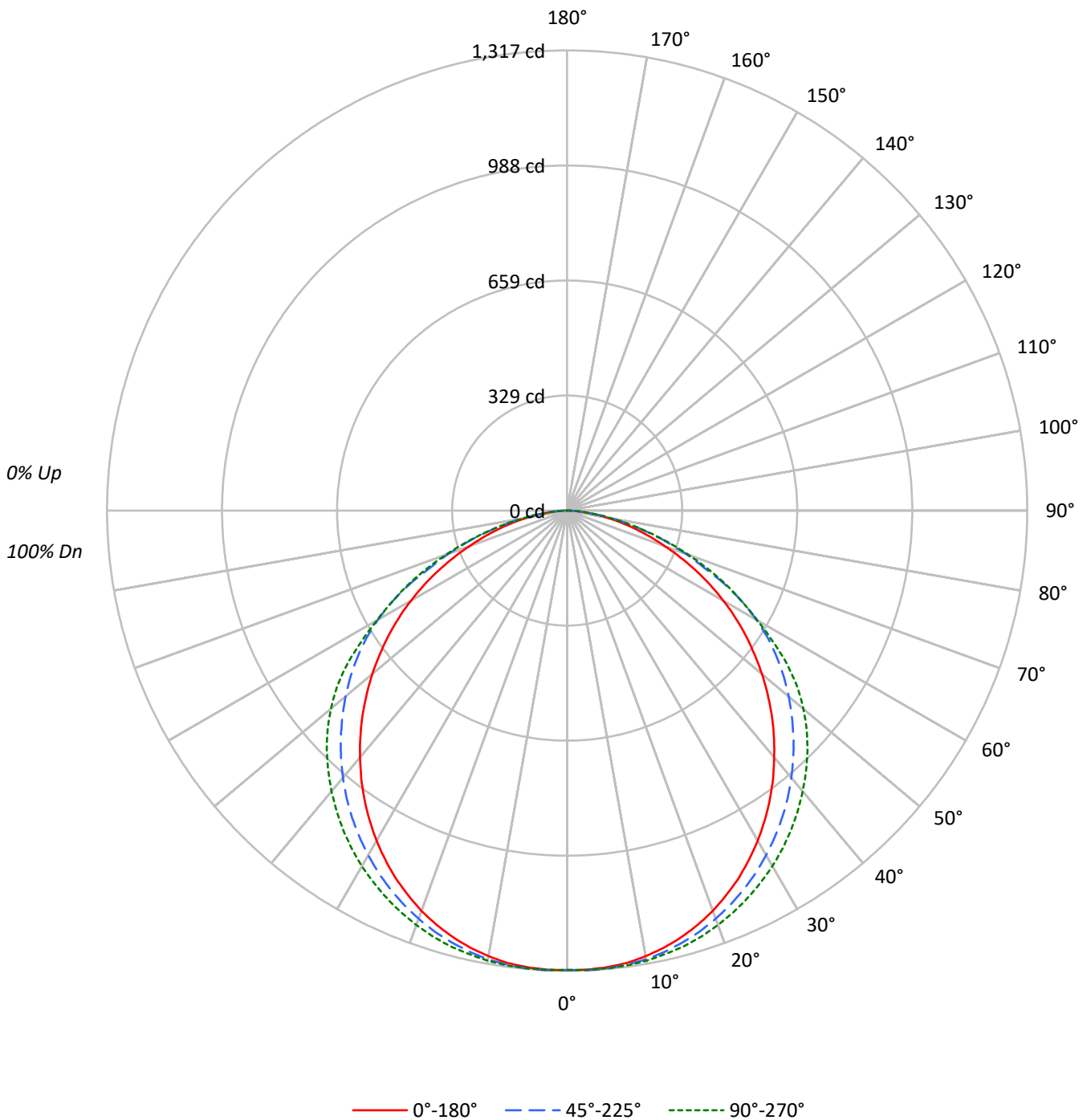
Lumens per Lamp: 3100 (2 lamps)
Luminaire Lumens: 3823.8 lumens
Efficiency: 61.7%
Efficacy: 53.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.32 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 71.9
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

TEST NUMBER: P30097

CATALOG NUMBER: 2RDIA-232RP-UNV-EB81

Luminous Intensity Polar Plot





TEST NUMBER: P30097

CATALOG NUMBER: 2RDIA-232RP-UNV-EB81

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	72	72	72	72	69	69	69	66	66	66	63	63	63	62
1	67	64	62	59	65	63	60	58	60	58	56	58	56	55	56	54	53	52
2	61	56	52	48	59	55	51	48	53	49	47	51	48	45	49	46	44	43
3	56	49	44	40	54	48	43	40	46	42	39	45	41	38	43	40	38	36
4	51	43	38	34	49	43	38	34	41	37	33	40	36	33	38	35	32	31
5	47	39	33	29	45	38	33	29	37	32	29	36	31	28	34	31	28	27
6	43	35	29	25	42	34	29	25	33	28	25	32	28	25	31	27	25	23
7	40	32	26	22	39	31	26	22	30	25	22	29	25	22	28	25	22	21
8	37	29	24	20	36	28	23	20	28	23	20	27	23	20	26	22	19	18
9	35	26	21	18	34	26	21	18	25	21	18	25	21	18	24	20	18	16
10	33	24	19	16	32	24	19	16	23	19	16	23	19	16	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1769	1769	1769
5°	1772	1777	1776
10°	1769	1782	1787
15°	1761	1782	1798
20°	1745	1780	1807
25°	1724	1776	1816
30°	1695	1770	1826
35°	1661	1762	1835
40°	1619	1753	1842
45°	1576	1743	1851
50°	1524	1733	1848
55°	1464	1719	1806
60°	1391	1685	1693
65°	1296	1579	1601
70°	1172	1416	1448
75°	1050	1242	1258
80°	891	1015	1000
85°	664	741	726



TEST NUMBER: P30097

CATALOG NUMBER: 2RDIA-232RP-UNV-EB81

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	125.1	3.3	2.0	0°	1315	1315	1315	1315	1315	
10°-20°	360.7	9.4	5.8	5°	1312	1313	1316	1315	1315	125
20°-30°	550.3	14.4	8.9	15°	1264	1268	1279	1287	1291	356
30°-40°	668.3	17.5	10.8	25°	1161	1172	1196	1215	1223	534
40°-50°	700.7	18.3	11.3	35°	1011	1032	1073	1104	1117	632
50°-60°	638.5	16.7	10.3	45°	828	862	916	956	973	638
60°-70°	471.6	12.3	7.6	55°	624	672	733	766	770	557
70°-80°	250.6	6.6	4.0	65°	407	463	496	495	503	402
80°-90°	57.7	1.5	0.9	75°	202	241	239	243	242	214
90°-100°	0.4	0.0	0.0	85°	43	47	48	47	47	50
100°-110°	0.0	0.0	0.0	90°	2	4	5	2	0	3
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°	1036.1	27.1	16.7	165°	0	0	0	0	0	0
0°-40°	1704.4	44.6	27.5	175°	0	0	0	0	0	0
0°-60°	3043.6	79.6	49.1	180°	0	0	0	0	0	0
0°-90°	3823.4	100.0	61.7							
90°-120°	0.4	0.0	0.0							
90°-150°	0.4	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	3823.8	100.0	61.7							



TEST NUMBER: P30097

CATALOG NUMBER: 2RDIA-232RP-UNV-EB81

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1315	1315	1315	1315	1315
2.5°	1315	1315	1317	1316	1316
5°	1312	1313	1316	1315	1315
7.5°	1306	1307	1311	1312	1313
10°	1295	1298	1304	1306	1308
12.5°	1281	1284	1293	1298	1300
15°	1264	1268	1279	1287	1291
17.5°	1243	1249	1263	1273	1278
20°	1219	1226	1243	1257	1262
22.5°	1191	1200	1221	1237	1244
25°	1161	1172	1196	1215	1223
27.5°	1127	1141	1169	1191	1200
30°	1091	1107	1139	1165	1175
32.5°	1052	1070	1107	1136	1147
35°	1011	1032	1073	1104	1117
37.5°	968	992	1037	1070	1084
40°	922	950	998	1034	1049
42.5°	876	906	958	996	1012
45°	828	862	916	956	973
47.5°	778	816	872	915	930
50°	728	768	828	870	883
52.5°	676	721	782	821	831
55°	624	672	733	766	770
57.5°	571	621	682	702	699
60°	517	569	626	629	629
62.5°	462	516	565	560	564
65°	407	463	496	495	503
67.5°	351	409	421	434	435
70°	298	355	360	368	368
72.5°	248	300	299	305	304
75°	202	241	239	243	242
77.5°	157	178	183	185	182
80°	115	126	131	130	129
82.5°	77	82	85	83	83
85°	43	47	48	47	47
87.5°	16	19	19	17	15
90°	2	4	5	2	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



TEST NUMBER: P30097

CATALOG NUMBER: 2RDIA-232RP-UNV-EB81

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)