

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: P30148

Luminaire Tested: **2RDIA-217RP-UNV-EB81**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30148
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDIA-217RP-UNV-EB81
Description: METALUX RDI OVATION SERIES WITH AIR RETURN SLOTS, 2'x 2' RECESSED
DIRECT/INDIRECT, WITH CENTER MOUNT ROUND PERFORATED WHITE STEEL BASKET
AND ACRYLIC OVERLAY
Light Source: TWO T8 LINEAR FLUORESCENT LAMPS, F17T8 17W - 1325 LUMENS EA
Ballast/Driver: -

Summary

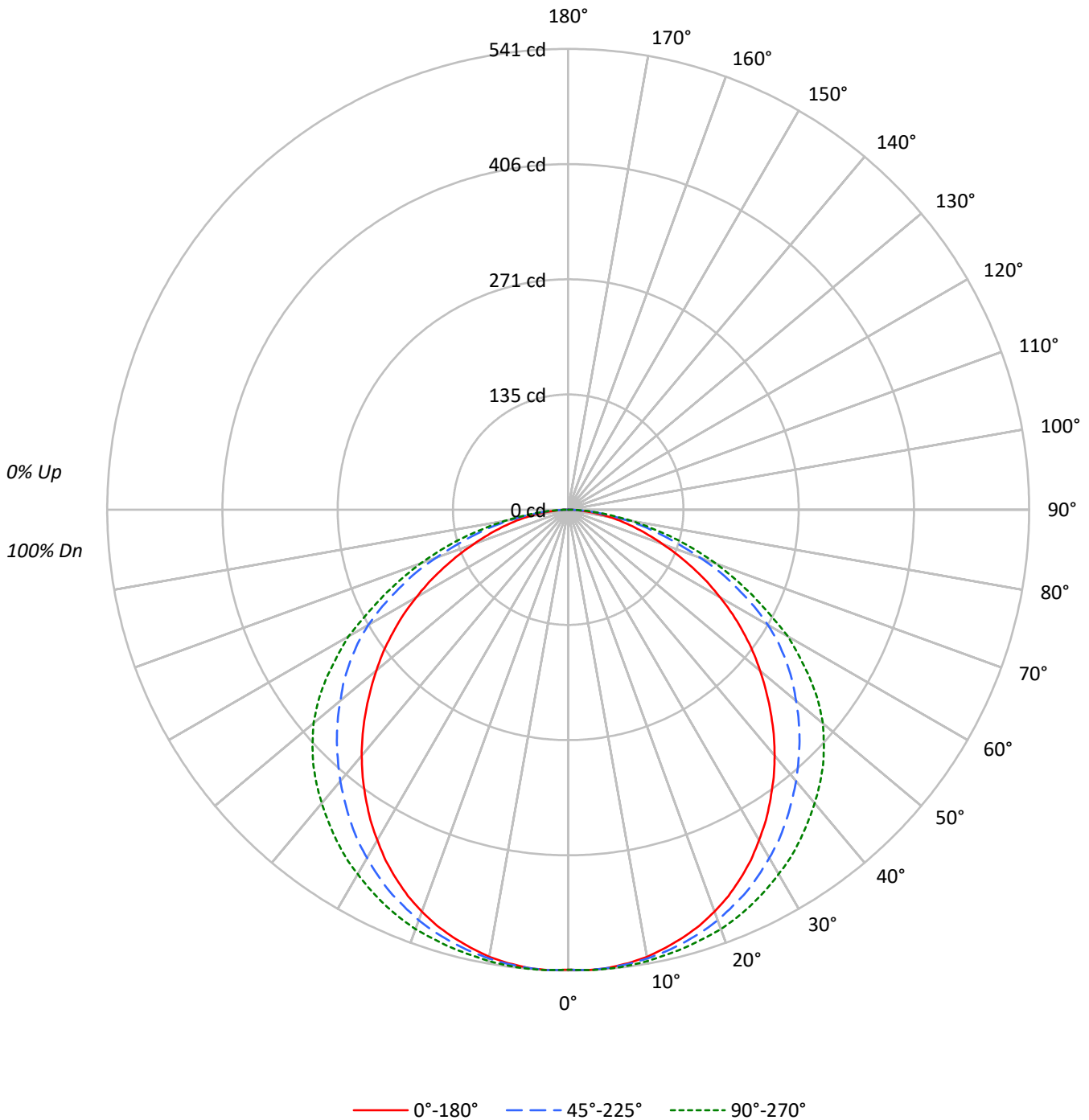
Lumens per Lamp: 1325 (2 lamps)
Luminaire Lumens: 1630.9 lumens
Efficiency: 61.5%
Efficacy: 51.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.36 / 1.42
Luminous Opening: Rectangular (W 1.75' x L: 1.92' x H: 0')
CIE Type: Direct

Input Watts (W): 31.44
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	73	73	73	73	72	72	72	72	68	68	68	65	65	65	63	63	63	62
1	67	64	61	59	65	62	60	58	60	58	56	57	56	54	55	54	53	51
2	61	55	51	48	59	54	50	47	52	49	46	50	47	45	48	46	44	42
3	55	49	43	39	54	48	43	39	46	42	38	44	41	38	42	39	37	36
4	50	43	37	33	49	42	37	33	41	36	33	39	35	32	38	34	32	30
5	46	38	33	28	45	38	32	28	36	32	28	35	31	28	34	30	27	26
6	43	34	29	25	42	34	28	25	33	28	24	32	27	24	31	27	24	23
7	40	31	26	22	38	31	25	22	30	25	22	29	25	21	28	24	21	20
8	37	28	23	19	36	28	23	19	27	22	19	26	22	19	26	22	19	18
9	34	26	21	17	33	26	21	17	25	20	17	24	20	17	24	20	17	16
10	32	24	19	16	31	24	19	16	23	19	16	22	18	16	22	18	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1733	1733	1733
5°	1740	1740	1743
10°	1737	1743	1753
15°	1728	1748	1767
20°	1714	1752	1789
25°	1693	1753	1809
30°	1660	1749	1831
35°	1622	1747	1857
40°	1579	1743	1885
45°	1525	1743	1920
50°	1468	1742	1947
55°	1404	1751	1941
60°	1322	1739	1913
65°	1223	1663	1815
70°	1107	1548	1726
75°	1004	1401	1587
80°	906	1257	1386
85°	736	1031	1105



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	51.4	3.2	1.9	0°	540	540	540	540	540	
10°-20°	148.6	9.1	5.6	5°	540	540	540	541	541	51
20°-30°	228.0	14.0	8.6	15°	520	521	526	531	532	147
30°-40°	278.5	17.1	10.5	25°	478	483	495	507	511	220
40°-50°	294.7	18.1	11.1	35°	414	424	446	467	474	259
50°-60°	273.3	16.8	10.3	45°	336	352	384	413	423	259
60°-70°	208.2	12.8	7.9	55°	251	273	313	341	347	224
70°-80°	116.6	7.1	4.4	65°	161	187	219	235	239	160
80°-90°	31.4	1.9	1.2	75°	81	97	113	125	128	87
90°-100°	0.2	0.0	0.0	85°	20	24	28	30	30	22
100°-110°	0.0	0.0	0.0	90°	1	2	1	1	1	2
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°	428.0	26.2	16.2	165°	0	0	0	0	0	0
0°-40°	706.5	43.3	26.7	175°	0	0	0	0	0	0
0°-60°	1274.6	78.1	48.1	180°	0	0	0	0	0	0
0°-90°	1630.7	100.0	61.5							
90°-120°	0.2	0.0	0.0							
90°-150°	0.2	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	1630.9	100.0	61.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	540	540	540	540	540
2.5°	541	541	541	541	541
5°	540	540	540	541	541
7.5°	537	537	538	540	540
10°	533	533	535	537	538
12.5°	527	528	531	534	535
15°	520	521	526	531	532
17.5°	512	514	520	526	528
20°	502	505	513	521	524
22.5°	491	494	504	514	518
25°	478	483	495	507	511
27.5°	464	470	484	498	503
30°	448	455	472	488	494
32.5°	432	440	460	478	485
35°	414	424	446	467	474
37.5°	396	407	431	454	462
40°	377	389	416	441	450
42.5°	357	371	400	427	437
45°	336	352	384	413	423
47.5°	315	333	367	397	407
50°	294	313	349	381	390
52.5°	273	294	332	363	370
55°	251	273	313	341	347
57.5°	229	252	293	316	322
60°	206	231	271	291	298
62.5°	184	209	246	265	267
65°	161	187	219	235	239
67.5°	139	165	194	205	211
70°	118	143	165	178	184
72.5°	99	120	137	152	156
75°	81	97	113	125	128
77.5°	65	74	90	98	100
80°	49	55	68	74	75
82.5°	33	38	46	51	51
85°	20	24	28	30	30
87.5°	9	11	12	12	13
90°	1	2	1	1	1
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



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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)