

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: P30258

Luminaire Tested: **2RDIAR-332RP-UNV-EB81**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P30258  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2RDIAR-332RP-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: THREE T8 LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA  
Ballast/Driver: -

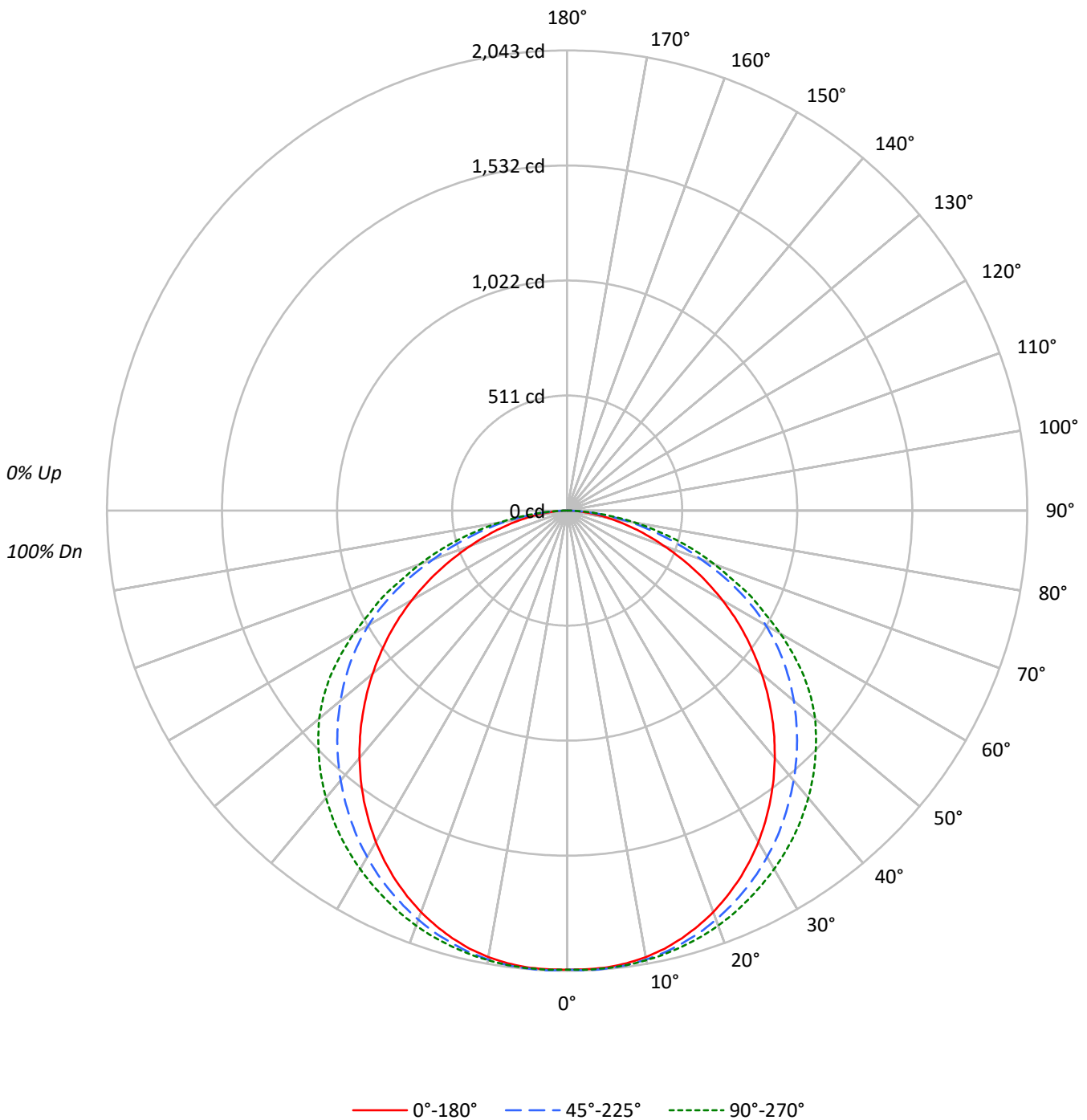
**Summary**

Lumens per Lamp: 3100 (3 lamps)  
Luminaire Lumens: 6162.8 lumens  
Efficiency: 66.3%  
Efficacy: 75.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.34 / 1.42  
Luminous Opening: Rectangular (W 1.71' x L: 3.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 81.93  
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	79	79	79	79	77	77	77	77	74	74	74		70	70	70		68	68	68	66
1	72	69	66	63	70	67	64	62	64	62	60		62	60	58		59	58	57	55
2	65	60	55	51	63	58	54	50	56	52	49		54	51	48		52	49	47	46
3	59	52	47	42	58	51	46	42	49	45	41		47	44	40		46	42	40	38
4	54	46	40	36	53	45	40	35	44	39	35		42	38	34		41	37	34	32
5	50	41	35	31	48	40	35	30	39	34	30		38	33	30		36	32	29	28
6	46	37	31	27	45	36	31	26	35	30	26		34	29	26		33	29	26	24
7	43	33	28	23	41	33	27	23	32	27	23		31	26	23		30	26	23	21
8	40	30	25	21	39	30	25	21	29	24	21		28	24	20		27	23	20	19
9	37	28	22	19	36	28	22	19	27	22	19		26	22	18		25	21	18	17
10	35	26	20	17	34	25	20	17	25	20	17		24	20	17		24	20	17	15

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

	0°	45°	90°
0°	3279	3279	3279
5°	3288	3296	3293
10°	3288	3306	3311
15°	3274	3309	3333
20°	3248	3309	3357
25°	3207	3305	3381
30°	3156	3299	3414
35°	3089	3291	3454
40°	3011	3287	3499
45°	2923	3285	3545
50°	2823	3289	3596
55°	2707	3293	3601
60°	2561	3279	3520
65°	2375	3186	3430
70°	2145	2977	3269
75°	1914	2747	3102
80°	1658	2520	2807
85°	1329	2086	2307



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	194.1	3.1	2.1	0°	2038	2038	2038	2038	2038	
10°-20°	560.5	9.1	6.0	5°	2036	2038	2041	2041	2039	194
20°-30°	857.1	13.9	9.2	15°	1966	1972	1987	1998	2001	554
30°-40°	1045.7	17.0	11.2	25°	1807	1824	1862	1895	1905	832
40°-50°	1105.6	17.9	11.9	35°	1573	1606	1676	1738	1759	983
50°-60°	1026.4	16.7	11.0	45°	1285	1338	1444	1528	1558	991
60°-70°	791.1	12.8	8.5	55°	965	1043	1174	1262	1284	862
70°-80°	458.9	7.4	4.9	65°	624	727	837	873	901	618
80°-90°	123.4	2.0	1.3	75°	308	401	442	491	499	329
90°-100°	0.0	0.0	0.0	85°	72	90	113	121	125	86
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°	1611.8	26.2	17.3							
0°-40°	2657.5	43.1	28.6							
0°-60°	4789.5	77.7	51.5							
0°-90°	6162.8	100.0	66.3							
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°	6162.8	100.0	66.3							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2038	2038	2038	2038	2038
2.5°	2038	2040	2043	2041	2040
5°	2036	2038	2041	2041	2039
7.5°	2027	2030	2035	2036	2035
10°	2013	2017	2024	2027	2027
12.5°	1993	1998	2008	2014	2016
15°	1966	1972	1987	1998	2001
17.5°	1934	1942	1963	1978	1983
20°	1897	1908	1933	1955	1961
22.5°	1854	1868	1899	1926	1935
25°	1807	1824	1862	1895	1905
27.5°	1755	1776	1821	1860	1873
30°	1699	1723	1776	1823	1838
32.5°	1637	1665	1728	1781	1800
35°	1573	1606	1676	1738	1759
37.5°	1505	1542	1621	1690	1714
40°	1434	1476	1565	1639	1666
42.5°	1361	1408	1505	1585	1614
45°	1285	1338	1444	1528	1558
47.5°	1207	1266	1380	1468	1499
50°	1128	1194	1314	1406	1437
52.5°	1046	1120	1246	1338	1365
55°	965	1043	1174	1262	1284
57.5°	882	966	1099	1175	1192
60°	796	887	1019	1079	1094
62.5°	711	808	933	977	990
65°	624	727	837	873	901
67.5°	539	647	736	784	788
70°	456	566	633	676	695
72.5°	380	485	541	585	599
75°	308	401	442	491	499
77.5°	242	310	357	394	400
80°	179	221	272	297	303
82.5°	123	148	189	205	210
85°	72	90	113	121	125
87.5°	30	40	45	45	46
90°	0	0	0	0	0

(END OF REPORT)