

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: 223p148

Luminaire Tested: **2RDI-214T5RP-UNV-EBT1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 223p148
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2RDI-214T5RP-UNV-EBT1-U
Description: 2X2 RECESSED DIRECT/INDIRECT LUMINAIRE WITH CENTER MOUNTED
ROUND PERFORATED WHITE STEEL DIFFUSER
Light Source: TWO 2' LINEAR FLUORECENT T5 LAMPS
F14T5/835 14 WATT
Ballast/Driver: -

Summary

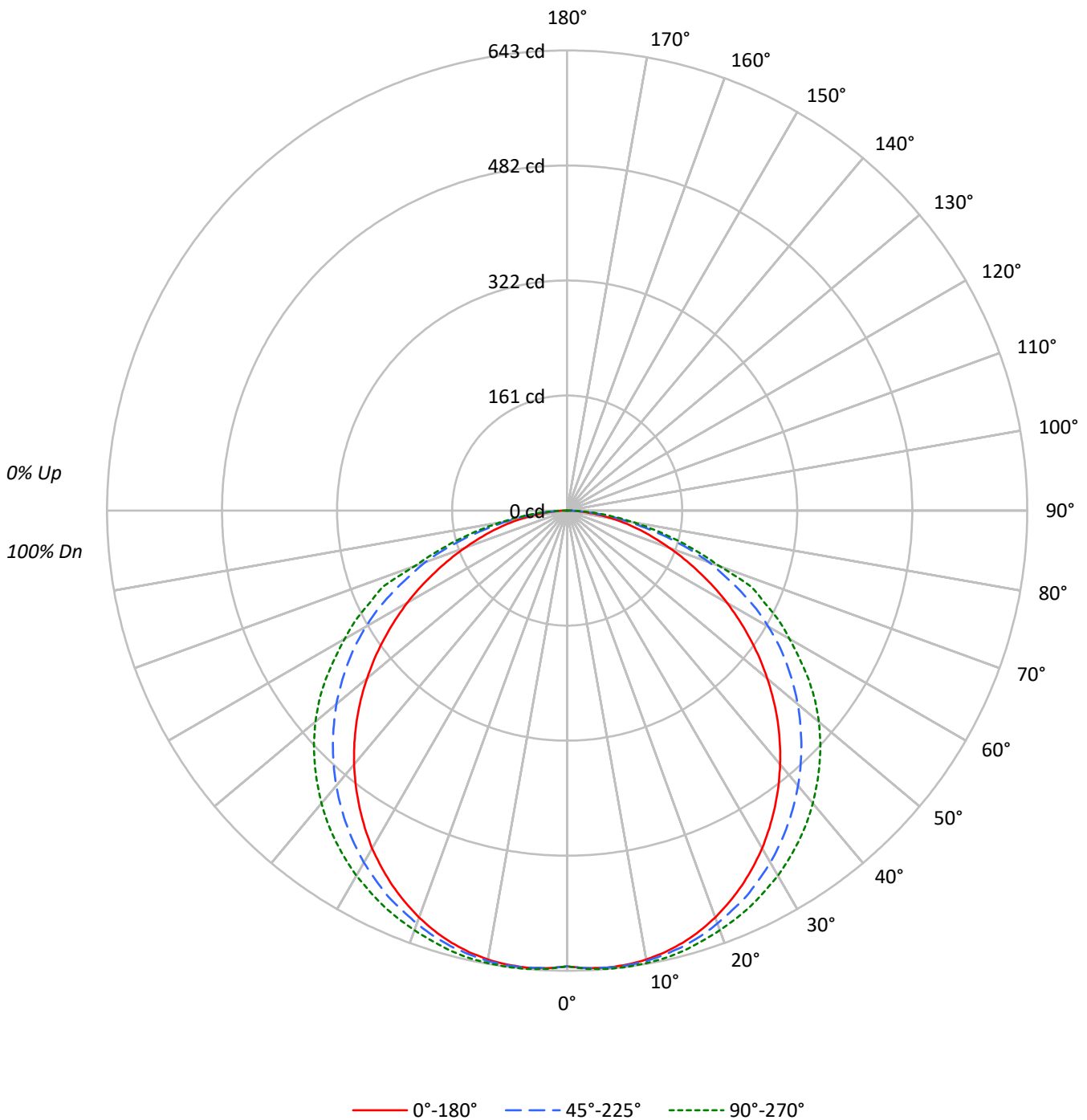
Lumens per Lamp: 1350 (2 lamps)
Luminaire Lumens: 1977.3 lumens
Efficiency: 73.2%
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.37 / 1.44
Luminous Opening: Rectangular (W 1.94' x L: 1.92' x H: 0')
CIE Type: Direct

Input Watts (W): 33
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	87	87	87	87	85	85	85	85	81	81	81	78	78	78	75	75	75	73
1	79	76	73	70	77	74	71	69	71	69	66	68	66	64	66	64	62	61
2	72	66	61	56	70	64	60	56	62	58	54	59	56	53	57	54	52	50
3	65	58	51	47	64	56	51	46	54	49	45	52	48	45	50	47	44	42
4	60	51	44	39	58	50	44	39	48	43	38	46	42	38	45	41	37	36
5	55	45	39	34	53	44	38	33	43	37	33	41	37	33	40	36	32	31
6	51	41	34	29	49	40	34	29	39	33	29	37	32	29	36	32	28	27
7	47	37	30	26	46	36	30	26	35	29	25	34	29	25	33	28	25	24
8	44	34	27	23	42	33	27	23	32	27	23	31	26	23	30	26	22	21
9	41	31	25	21	40	30	24	20	29	24	20	29	24	20	28	23	20	19
10	38	28	22	19	37	28	22	19	27	22	18	27	22	18	26	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1846	1846	1846
5°	1865	1865	1871
10°	1875	1881	1890
15°	1876	1891	1909
20°	1866	1894	1925
25°	1849	1900	1948
30°	1824	1901	1971
35°	1790	1900	1996
40°	1752	1899	2021
45°	1705	1898	2045
50°	1646	1898	2070
55°	1577	1895	2082
60°	1496	1884	2081
65°	1392	1838	2085
70°	1288	1788	1915
75°	1187	1624	1769
80°	1052	1402	1569
85°	865	1131	1297



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	61.1	3.1	2.3	0°	637	637	637	637	637	
10°-20°	177.9	9.0	6.6	5°	641	641	641	642	643	61
20°-30°	273.5	13.8	10.1	15°	625	626	630	633	636	176
30°-40°	335.5	17.0	12.4	25°	578	582	594	604	609	266
40°-50°	355.2	18.0	13.2	35°	506	516	537	557	564	316
50°-60°	329.5	16.7	12.2	45°	416	431	463	490	499	321
60°-70°	258.6	13.1	9.6	55°	312	335	375	404	412	279
70°-80°	146.8	7.4	5.4	65°	203	230	268	297	304	202
80°-90°	39.3	2.0	1.5	75°	106	121	145	155	158	112
90°-100°	0.0	0.0	0.0	85°	26	29	34	38	39	31
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°	512.5	25.9	19.0							
0°-40°	848.0	42.9	31.4							
0°-60°	1532.6	77.5	56.8							
0°-90°	1977.3	100.0	73.2							
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°	1977.3	100.0	73.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	637	637	637	637	637
2.5°	640	640	640	640	641
5°	641	641	641	642	643
7.5°	640	640	641	642	643
10°	637	638	639	641	642
12.5°	632	633	635	638	640
15°	625	626	630	633	636
17.5°	616	617	623	628	630
20°	605	607	614	621	624
22.5°	592	595	604	613	617
25°	578	582	594	604	609
27.5°	562	568	581	594	599
30°	545	552	568	583	589
32.5°	526	534	553	570	577
35°	506	516	537	557	564
37.5°	485	496	520	542	550
40°	463	475	502	526	534
42.5°	440	454	483	508	517
45°	416	431	463	490	499
47.5°	391	408	442	471	480
50°	365	384	421	450	459
52.5°	339	360	398	428	437
55°	312	335	375	404	412
57.5°	285	310	351	378	385
60°	258	284	325	349	359
62.5°	231	257	298	323	334
65°	203	230	268	297	304
67.5°	177	203	238	266	279
70°	152	176	211	231	226
72.5°	128	148	179	188	191
75°	106	121	145	155	158
77.5°	85	94	112	123	125
80°	63	69	84	92	94
82.5°	43	48	58	64	65
85°	26	29	34	38	39
87.5°	12	14	15	16	16
90°	0	0	0	0	0

(END OF REPORT)