

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: 147P105

Luminaire Tested: **DIM-432**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 147P105
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIM-432
Description: DIM Series Heavy Duty Industrial Luminaire
Light Source: Four - FO32T8/35K - 2800 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B4321120RH Electronic - L.O.B.F. = 89.7

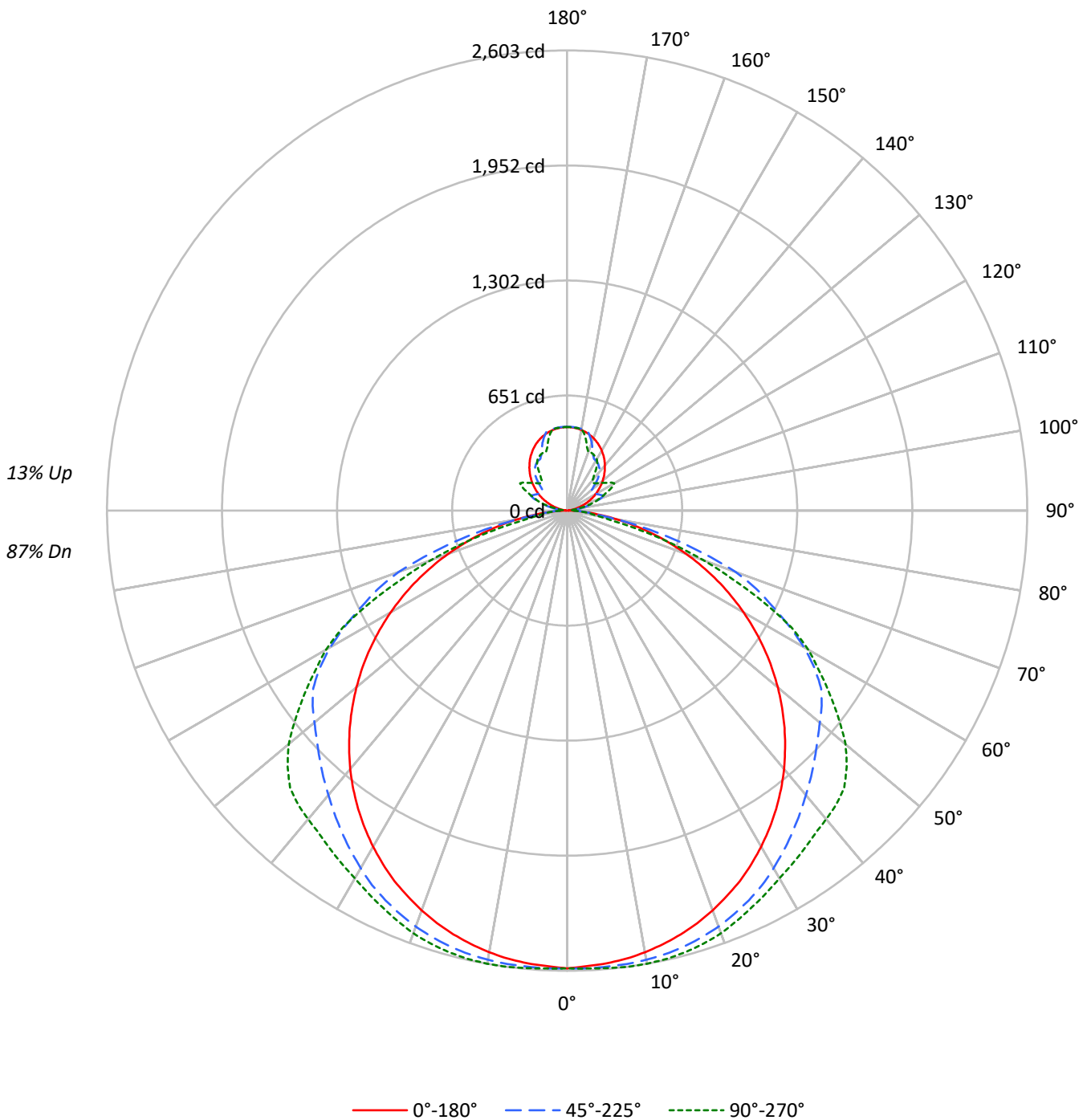
Summary

Lumens per Lamp: 2800 (4 lamps)
Luminaire Lumens: 9688.9 lumens
Efficiency: 86.5%
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.39 / 1.48
Luminous Opening: Rectangular (W 1.08' x L: 4.15' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.7
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: 147P105
CATALOG NUMBER: DIM-432

Luminous Intensity Polar Plot





TEST NUMBER: 147P105
 CATALOG NUMBER: DIM-432

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	100	100	100	100	97	97	97	97	90	90	90	84	84	84	78	78	78	75
1	91	87	83	80	88	84	81	78	78	76	73	73	71	69	68	67	65	62
2	83	76	70	65	79	73	68	63	68	64	60	64	60	57	59	56	54	51
3	75	66	59	53	72	64	57	52	60	54	50	56	51	47	52	48	45	43
4	69	58	50	45	66	56	49	44	53	47	42	49	44	40	46	42	38	36
5	63	52	44	38	60	50	43	37	47	41	36	44	39	34	41	37	33	31
6	58	46	39	33	55	45	38	32	42	36	31	40	34	30	37	33	29	27
7	53	42	34	29	51	41	33	28	38	32	27	36	30	26	34	29	25	24
8	50	38	31	26	48	37	30	25	35	29	24	33	27	23	31	26	23	21
9	46	35	28	23	44	34	27	22	32	26	22	30	25	21	29	24	20	19
10	43	32	25	21	42	31	25	20	29	24	20	28	23	19	26	22	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6209	6209	6209
5°	6187	6233	6252
10°	6176	6280	6336
15°	6160	6339	6418
20°	6140	6388	6493
25°	6115	6433	6547
30°	6076	6466	6649
35°	6032	6503	6839
40°	5974	6575	7132
45°	5896	6716	7516
50°	5803	6959	7668
55°	5684	7331	7586
60°	5528	7422	7561
65°	5321	7266	6949
70°	5018	7093	5747
75°	4585	5761	3983
80°	3921	3769	2347
85°	3026	3053	2723



TEST NUMBER: 147P105
 CATALOG NUMBER: DIM-432

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	246.7	2.5	2.2	0°	2590	2590	2590	2590	2590	
10°-20°	719.0	7.4	6.4	5°	2571	2579	2590	2600	2598	244
20°-30°	1114.0	11.5	9.9	15°	2482	2510	2554	2581	2586	701
30°-40°	1389.3	14.3	12.4	25°	2312	2367	2432	2466	2475	1065
40°-50°	1535.2	15.8	13.7	35°	2061	2145	2222	2303	2337	1289
50°-60°	1481.4	15.3	13.2	45°	1739	1852	1981	2159	2217	1341
60°-70°	1175.4	12.1	10.5	55°	1360	1491	1754	1814	1815	1215
70°-80°	611.0	6.3	5.5	65°	938	1132	1281	1281	1225	927
80°-90°	142.0	1.5	1.3	75°	495	722	622	474	430	524
90°-100°	38.3	0.4	0.3	85°	110	149	111	101	99	127
100°-110°	125.0	1.3	1.1	90°	12	44	33	24	21	10
110°-120°	191.7	2.0	1.7	95°	7	41	26	25	24	11
120°-130°	195.6	2.0	1.7	105°	66	103	140	142	134	70
130°-140°	185.5	1.9	1.7	115°	145	111	209	260	252	144
140°-150°	197.1	2.0	1.8	125°	224	199	174	246	273	201
150°-160°	173.2	1.8	1.5	135°	298	249	235	205	218	230
160°-170°	123.5	1.3	1.1	145°	364	334	311	305	284	227
170°-180°	44.9	0.5	0.4	155°	416	422	347	350	351	191
0°-30°	2079.7	21.5	18.6	165°	452	455	459	428	412	127
0°-40°	3468.9	35.8	31.0	175°	470	471	473	473	471	45
0°-60°	6485.5	66.9	57.9	180°	473	473	473	473	473	
0°-90°	8414.0	86.8	75.1							
90°-120°	355.1	3.7	3.2							
90°-150°	933.3	9.6	8.3							
90°-180°	1275.0	13.2	11.4							
0°-180°	9688.9	100.0	86.5							



TEST NUMBER: 147P105
 CATALOG NUMBER: DIM-432

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2590	2590	2590	2590	2590
2.5°	2579	2585	2592	2597	2593
5°	2571	2579	2590	2600	2598
7.5°	2557	2568	2587	2602	2603
10°	2537	2553	2580	2601	2603
12.5°	2512	2534	2570	2593	2597
15°	2482	2510	2554	2581	2586
17.5°	2447	2482	2531	2563	2568
20°	2407	2449	2504	2539	2545
22.5°	2360	2411	2470	2507	2511
25°	2312	2367	2432	2466	2475
27.5°	2256	2319	2389	2425	2439
30°	2195	2266	2336	2383	2402
32.5°	2130	2208	2280	2341	2370
35°	2061	2145	2222	2303	2337
37.5°	1987	2078	2162	2263	2304
40°	1909	2007	2101	2223	2279
42.5°	1825	1933	2042	2191	2254
45°	1739	1852	1981	2159	2217
47.5°	1649	1764	1920	2114	2145
50°	1556	1675	1866	2033	2056
52.5°	1460	1583	1815	1936	1938
55°	1360	1491	1754	1814	1815
57.5°	1258	1397	1660	1687	1692
60°	1153	1307	1548	1565	1577
62.5°	1047	1215	1416	1444	1430
65°	938	1132	1281	1281	1225
67.5°	827	1060	1159	1070	1013
70°	716	979	1012	864	820
72.5°	604	860	813	680	620
75°	495	722	622	474	430
77.5°	387	593	442	306	256
80°	284	443	273	174	170
82.5°	190	284	153	136	135
85°	110	149	111	101	99
87.5°	47	83	72	62	58
90°	12	44	33	24	21
92.5°	4	32	27	23	21
95°	7	41	26	25	24
97.5°	17	64	47	28	27
100°	31	87	78	70	62
102.5°	48	108	113	100	90
105°	66	103	140	142	134
107.5°	85	100	168	167	165
110°	105	97	203	193	191



TEST NUMBER: 147P105
CATALOG NUMBER: DIM-432

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125	99	222	223	218
115°	145	111	209	260	252
117.5°	166	133	198	285	287
120°	186	160	189	284	308
122.5°	205	184	180	260	296
125°	224	199	174	246	273
127.5°	244	212	172	232	257
130°	262	227	182	219	243
132.5°	281	240	205	209	229
135°	298	249	235	205	218
137.5°	316	260	266	214	214
140°	332	280	288	238	223
142.5°	348	304	300	270	250
145°	364	334	311	305	284
147.5°	378	360	321	325	317
150°	392	384	327	335	335
152.5°	404	407	329	344	344
155°	416	422	347	350	351
157.5°	426	432	373	350	355
160°	436	441	408	361	352
162.5°	444	449	435	388	374
165°	452	455	459	428	412
167.5°	458	460	466	459	445
170°	463	465	469	471	468
172.5°	467	469	471	473	470
175°	470	471	473	473	471
177.5°	472	472	474	474	472
180°	473	473	473	473	473

(END OF REPORT)