

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: 147P101

Luminaire Tested: **DIM-232**

Issue Date: 3/3/2020



**Test Information**

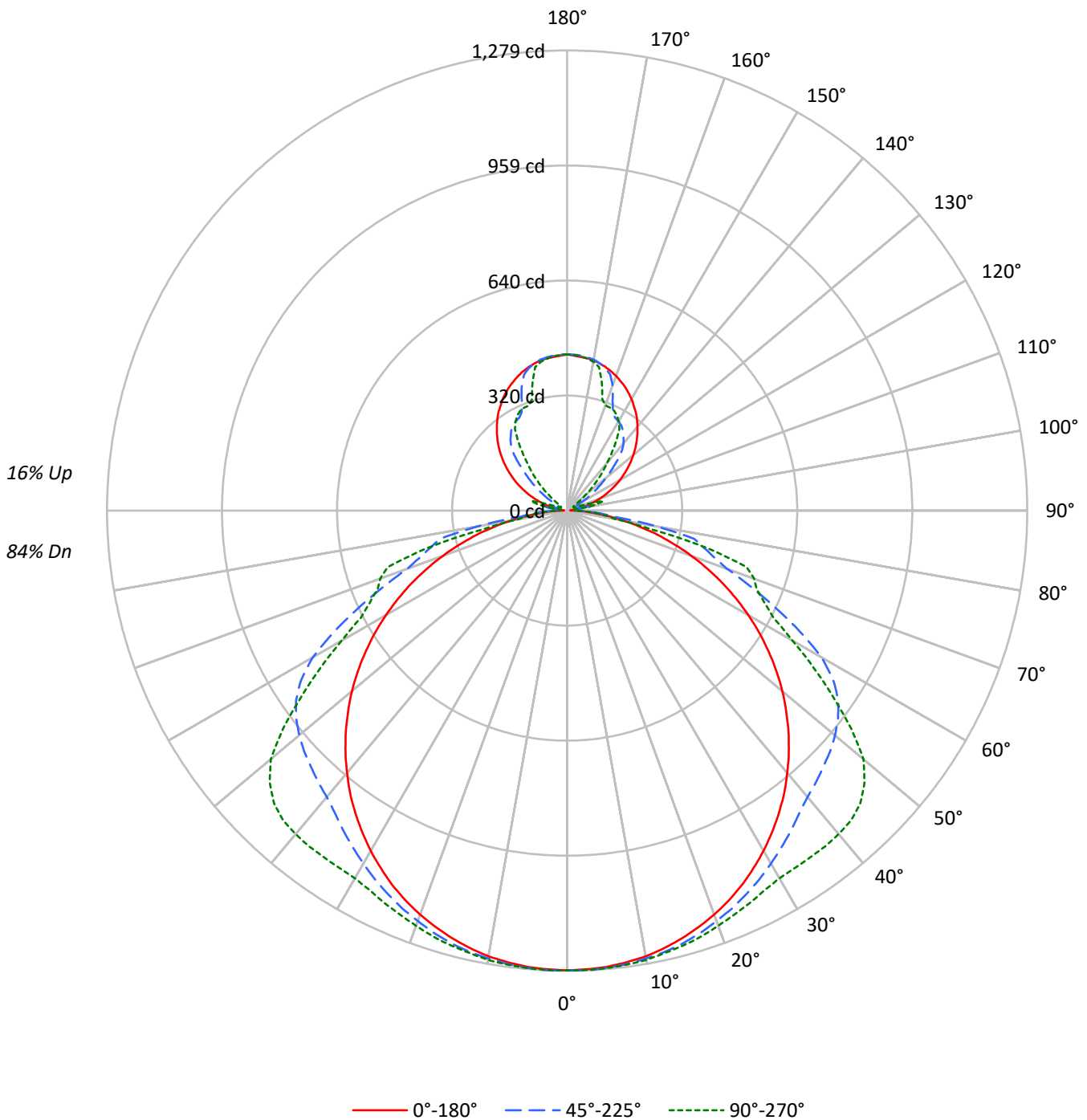
Test Method: LM-41-14  
Report Number: 147P101  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: DIM-232  
Description: DIM Series Heavy Duty Industrial Luminaire  
Light Source: Two-F32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Triad-Utrad B232I120RH Electronic

**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 5175.2 lumens  
Efficiency: 90.8%  
Efficacy: 82.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.42 / 1.52  
Luminous Opening: Rectangular (W 0.88' x L: 3.88' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 62.7  
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

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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	105	105	105	105	100	100	100	100	93	93	93	86	86	86	79	79	79	76
1	95	90	86	83	91	87	83	80	80	77	75	74	72	70	68	67	65	62
2	86	78	72	66	82	75	69	64	69	65	60	64	60	57	59	56	53	51
3	78	68	60	54	74	65	58	53	60	55	50	56	51	47	52	48	45	42
4	71	60	52	45	67	57	50	44	53	47	42	49	44	40	46	41	38	35
5	65	53	45	39	62	51	43	38	47	41	36	44	39	34	41	36	33	30
6	60	47	39	33	57	46	38	33	43	36	31	40	34	30	37	32	28	26
7	55	43	35	29	53	41	34	29	39	32	27	36	30	26	34	29	25	23
8	51	39	31	26	49	38	30	25	35	29	24	33	27	23	31	26	22	20
9	48	35	28	23	46	34	27	23	32	26	22	30	25	21	28	23	20	18
10	45	33	25	21	43	32	25	20	30	24	19	28	23	19	26	21	18	16

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

	0°	45°	90°
0°	4006	4006	4006
5°	4006	4015	4015
10°	4004	4023	4036
15°	3995	4040	4060
20°	3986	4050	4096
25°	3974	4071	4161
30°	3953	4101	4271
35°	3926	4152	4504
40°	3896	4252	4804
45°	3857	4464	5107
50°	3809	4740	5242
55°	3738	5028	4930
60°	3649	5122	4539
65°	3531	4740	4487
70°	3364	4326	5068
75°	3149	4736	4905
80°	2834	4531	2491
85°	2590	3381	2805



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	121.4	2.3	2.1	0°	1278	1278	1278	1278	1278	
10°-20°	351.1	6.8	6.2	5°	1273	1274	1276	1277	1276	121
20°-30°	543.1	10.5	9.5	15°	1231	1235	1245	1249	1251	348
30°-40°	686.5	13.3	12.0	25°	1149	1160	1177	1195	1203	529
40°-50°	778.4	15.0	13.7	35°	1026	1044	1085	1148	1177	642
50°-60°	753.2	14.6	13.2	45°	870	901	1007	1120	1152	671
60°-70°	594.5	11.5	10.4	55°	684	738	920	933	902	611
70°-80°	390.0	7.5	6.8	65°	476	606	639	593	605	471
80°-90°	108.5	2.1	1.9	75°	260	387	391	443	405	275
90°-100°	29.9	0.6	0.5	85°	72	128	94	81	78	76
100°-110°	51.8	1.0	0.9	90°	15	39	30	24	21	10
110°-120°	52.0	1.0	0.9	95°	11	34	22	20	20	13
120°-130°	93.6	1.8	1.6	105°	61	21	28	86	104	65
130°-140°	143.6	2.8	2.5	115°	132	86	19	20	20	131
140°-150°	171.7	3.3	3.0	125°	205	169	90	37	25	183
150°-160°	153.5	3.0	2.7	135°	273	218	197	137	118	211
160°-170°	111.5	2.2	2.0	145°	333	297	271	258	239	208
170°-180°	41.0	0.8	0.7	155°	380	376	300	306	307	175
0°-30°	1015.5	19.6	17.8	165°	413	413	410	392	371	116
0°-40°	1702.1	32.9	29.9	175°	429	430	432	433	431	41
0°-60°	3233.7	62.5	56.7	180°	434	434	434	434	434	
0°-90°	4326.7	83.6	75.9							
90°-120°	133.7	2.6	2.3							
90°-150°	542.5	10.5	9.5							
90°-180°	848.0	16.4	14.9							
0°-180°	5175.2	100.0	90.8							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1278	1278	1278	1278	1278
2.5°	1276	1277	1279	1279	1278
5°	1273	1274	1276	1277	1276
7.5°	1266	1268	1271	1273	1273
10°	1258	1260	1264	1268	1268
12.5°	1246	1249	1256	1260	1259
15°	1231	1235	1245	1249	1251
17.5°	1214	1219	1231	1238	1241
20°	1195	1202	1214	1225	1228
22.5°	1173	1182	1197	1210	1215
25°	1149	1160	1177	1195	1203
27.5°	1121	1134	1156	1179	1189
30°	1092	1106	1133	1164	1180
32.5°	1060	1076	1109	1152	1178
35°	1026	1044	1085	1148	1177
37.5°	991	1011	1060	1143	1177
40°	952	976	1039	1139	1174
42.5°	912	940	1024	1132	1168
45°	870	901	1007	1120	1152
47.5°	826	862	991	1101	1121
50°	781	821	972	1066	1075
52.5°	733	779	949	1015	995
55°	684	738	920	933	902
57.5°	634	700	877	840	812
60°	582	667	817	750	724
62.5°	529	638	731	663	647
65°	476	606	639	593	605
67.5°	422	571	552	555	570
70°	367	529	472	519	553
72.5°	313	470	426	503	523
75°	260	387	391	443	405
77.5°	207	302	362	282	237
80°	157	232	251	146	138
82.5°	111	194	131	111	109
85°	72	128	94	81	78
87.5°	38	73	60	51	48
90°	15	39	30	24	21
92.5°	8	28	23	20	19
95°	11	34	22	20	20
97.5°	19	29	40	24	23
100°	31	21	65	59	50
102.5°	45	19	51	89	87
105°	61	21	28	86	104
107.5°	78	31	19	45	65
110°	96	48	18	28	38



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	114	66	18	20	22
115°	132	86	19	20	20
117.5°	151	109	28	20	20
120°	169	133	45	20	20
122.5°	187	153	67	24	20
125°	205	169	90	37	25
127.5°	223	183	115	59	41
130°	240	196	140	84	64
132.5°	257	207	167	110	91
135°	273	218	197	137	118
137.5°	289	228	225	164	145
140°	304	243	244	194	173
142.5°	319	267	258	227	205
145°	333	297	271	258	239
147.5°	345	327	280	276	270
150°	358	348	286	289	286
152.5°	369	363	290	300	299
155°	380	376	300	306	307
157.5°	389	387	330	308	310
160°	398	397	369	313	311
162.5°	406	406	397	345	325
165°	413	413	410	392	371
167.5°	419	419	419	414	409
170°	424	424	426	424	420
172.5°	427	428	430	430	426
175°	429	430	432	433	431
177.5°	431	432	434	435	433
180°	434	434	434	434	434

(END OF REPORT)