

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: 147P104

Luminaire Tested: **DIMN-232**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 147P104
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIMN-232
Description: DIMN Series Heavy Duty Industrial Luminaire
with narrow lamp spacing.
Light Source: Two - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 88.22

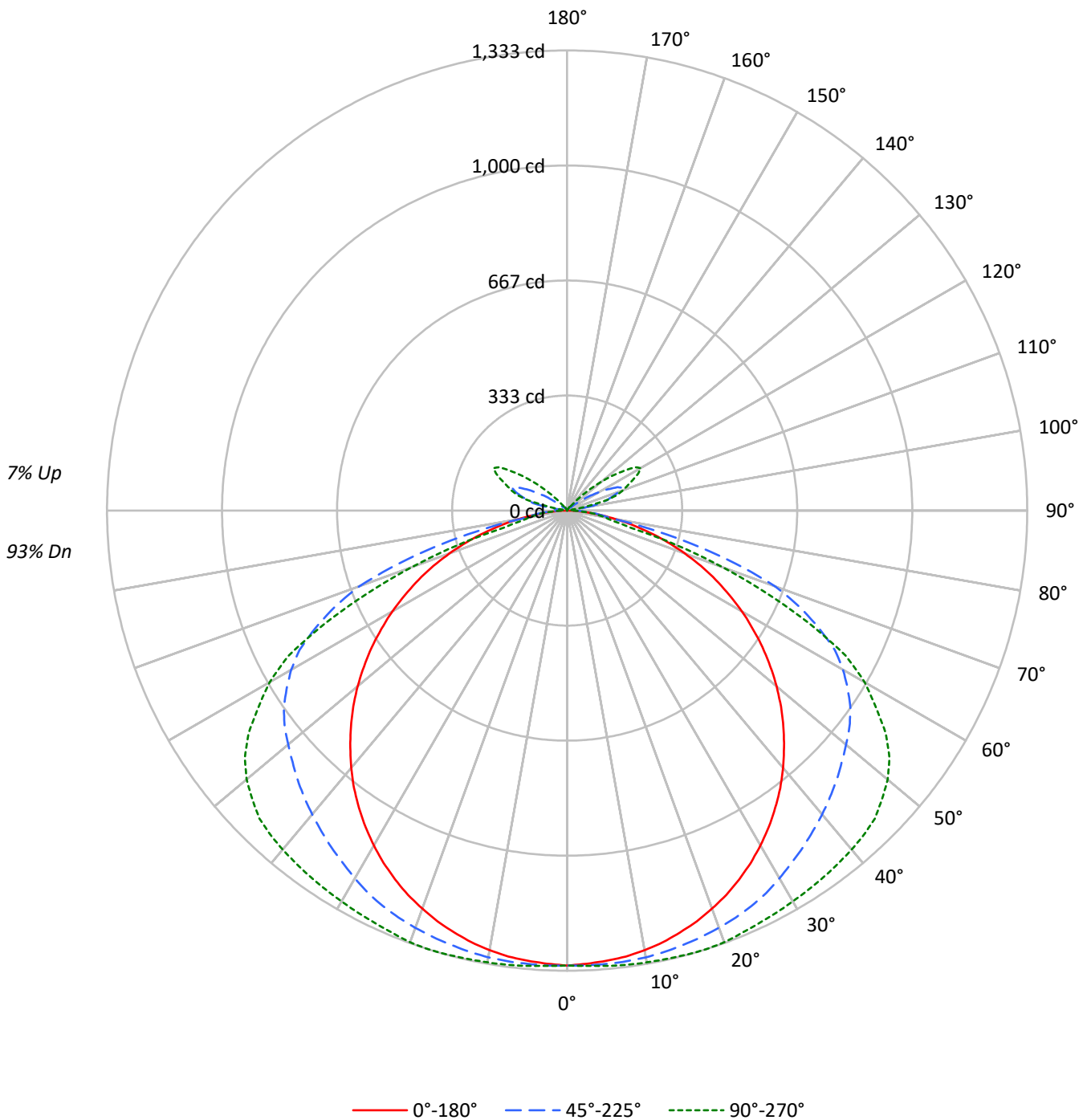
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 4983.9 lumens
Efficiency: 87.4%
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.5 / 1.56
Luminous Opening: Rectangular (W 1.06' x L: 4.15' x H: 0')
CIE Type: Direct

Input Watts (W): 59.1
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: 147P104
CATALOG NUMBER: DIMN-232

Luminous Intensity Polar Plot





TEST NUMBER: 147P104
 CATALOG NUMBER: DIMN-232

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	50	30	10	0	
RCR																						
0	103	103	103	103	100	100	100	100	94	94	94	89	89	89	84	84	84	82				
1	93	89	85	82	90	86	83	80	82	79	76	77	75	73	73	71	70	67				
2	84	77	71	65	81	75	69	64	71	66	62	67	63	60	63	60	57	55				
3	76	67	59	54	74	65	58	53	62	56	51	58	53	49	55	51	48	46				
4	70	59	51	45	67	57	50	44	54	48	43	51	46	42	49	44	40	38				
5	64	52	44	38	61	51	43	37	48	42	36	46	40	36	44	39	35	33				
6	59	47	38	33	56	45	38	32	43	36	32	41	35	31	39	34	30	28				
7	54	42	34	29	52	41	33	28	39	32	28	37	31	27	36	30	26	25				
8	50	38	30	25	48	37	30	25	36	29	24	34	28	24	33	27	23	22				
9	47	35	27	22	45	34	27	22	33	26	22	31	25	21	30	25	21	19				
10	44	32	25	20	42	31	25	20	30	24	20	29	23	19	28	23	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3221	3221	3221
5°	3211	3233	3248
10°	3208	3260	3298
15°	3200	3294	3370
20°	3191	3344	3461
25°	3179	3408	3554
30°	3160	3471	3688
35°	3135	3553	3866
40°	3104	3665	4089
45°	3062	3815	4358
50°	3011	4011	4608
55°	2944	4269	4801
60°	2859	4511	4868
65°	2746	4649	4481
70°	2586	4580	3422
75°	2351	3541	1766
80°	1998	1843	1534
85°	1542	2019	1682



TEST NUMBER: 147P104
 CATALOG NUMBER: DIMN-232

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	125.6	2.5	2.2	0°	1318	1318	1318	1318	1318	
10°-20°	368.1	7.4	6.5	5°	1309	1312	1318	1325	1324	124
20°-30°	580.1	11.6	10.2	15°	1265	1279	1302	1325	1332	357
30°-40°	742.5	14.9	13.0	25°	1179	1208	1264	1304	1318	543
40°-50°	843.4	16.9	14.8	35°	1051	1105	1191	1269	1296	658
50°-60°	852.1	17.1	14.9	45°	886	973	1104	1223	1261	683
60°-70°	704.6	14.1	12.4	55°	691	810	1002	1107	1127	617
70°-80°	349.8	7.0	6.1	65°	475	644	804	814	775	469
80°-90°	84.9	1.7	1.5	75°	249	450	375	235	187	264
90°-100°	21.9	0.4	0.4	85°	55	84	72	62	60	63
100°-110°	91.9	1.8	1.6	90°	7	33	24	14	11	6
110°-120°	118.7	2.4	2.1	95°	2	26	15	12	10	2
120°-130°	73.9	1.5	1.3	105°	2	69	121	128	123	2
130°-140°	20.2	0.4	0.4	115°	2	13	160	210	210	2
140°-150°	5.7	0.1	0.1	125°	3	7	56	161	201	3
150°-160°	0.5	0.0	0.0	135°	4	6	15	39	66	3
160°-170°	0.0	0.0	0.0	145°	4	6	8	15	16	3
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1073.9	21.5	18.8	165°	0	0	0	0	0	0
0°-40°	1816.4	36.4	31.9	175°	0	0	0	0	0	0
0°-60°	3511.8	70.5	61.6	180°	0	0	0	0	0	0
0°-90°	4651.0	93.3	81.6							
90°-120°	232.5	4.7	4.1							
90°-150°	332.3	6.7	5.8							
90°-180°	333.0	6.7	5.8							
0°-180°	4983.9	100.0	87.4							



TEST NUMBER: 147P104
 CATALOG NUMBER: DIMN-232

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1318	1318	1318	1318	1318
2.5°	1314	1315	1319	1323	1320
5°	1309	1312	1318	1325	1324
7.5°	1303	1307	1317	1326	1327
10°	1293	1300	1314	1326	1329
12.5°	1281	1290	1309	1326	1330
15°	1265	1279	1302	1325	1332
17.5°	1248	1264	1295	1324	1333
20°	1227	1247	1286	1321	1331
22.5°	1205	1229	1276	1314	1324
25°	1179	1208	1264	1304	1318
27.5°	1151	1185	1249	1296	1313
30°	1120	1160	1230	1287	1307
32.5°	1087	1133	1210	1278	1302
35°	1051	1105	1191	1269	1296
37.5°	1014	1075	1170	1258	1289
40°	973	1043	1149	1246	1282
42.5°	930	1010	1127	1235	1273
45°	886	973	1104	1223	1261
47.5°	840	933	1079	1205	1237
50°	792	891	1055	1177	1212
52.5°	742	851	1031	1147	1177
55°	691	810	1002	1107	1127
57.5°	638	768	964	1052	1060
60°	585	726	923	982	996
62.5°	530	684	874	914	909
65°	475	644	804	814	775
67.5°	419	605	728	673	625
70°	362	560	641	524	479
72.5°	305	509	512	389	333
75°	249	450	375	235	187
77.5°	194	368	245	136	131
80°	142	278	131	109	109
82.5°	94	171	97	87	86
85°	55	84	72	62	60
87.5°	24	54	46	36	34
90°	7	33	24	14	11
92.5°	3	24	18	11	9
95°	2	26	15	12	10
97.5°	2	50	16	13	12
100°	2	64	63	20	15
102.5°	2	76	101	80	60
105°	2	69	121	128	123
107.5°	2	53	139	152	152
110°	2	37	160	170	172



TEST NUMBER: 147P104
CATALOG NUMBER: DIMN-232

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2	22	173	188	189
115°	2	13	160	210	210
117.5°	2	10	133	227	232
120°	3	10	107	222	246
122.5°	3	8	81	194	234
125°	3	7	56	161	201
127.5°	3	7	34	128	166
130°	3	7	20	96	131
132.5°	3	6	13	66	98
135°	4	6	15	39	66
137.5°	4	6	14	22	38
140°	4	6	9	14	21
142.5°	4	5	8	16	13
145°	4	6	8	15	16
147.5°	4	6	8	9	14
150°	5	6	8	9	9
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)