

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: 112P112

Luminaire Tested: **DI-148PG**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 112P112
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DI-148PG
Description: Heavy-duty Industrial with Tombstone Sockets and Uplight Apertures.
Light Source: One - F48PG17/CW, 6900 Lumens ea., 110 Watts ea.
Ballast/Driver: -

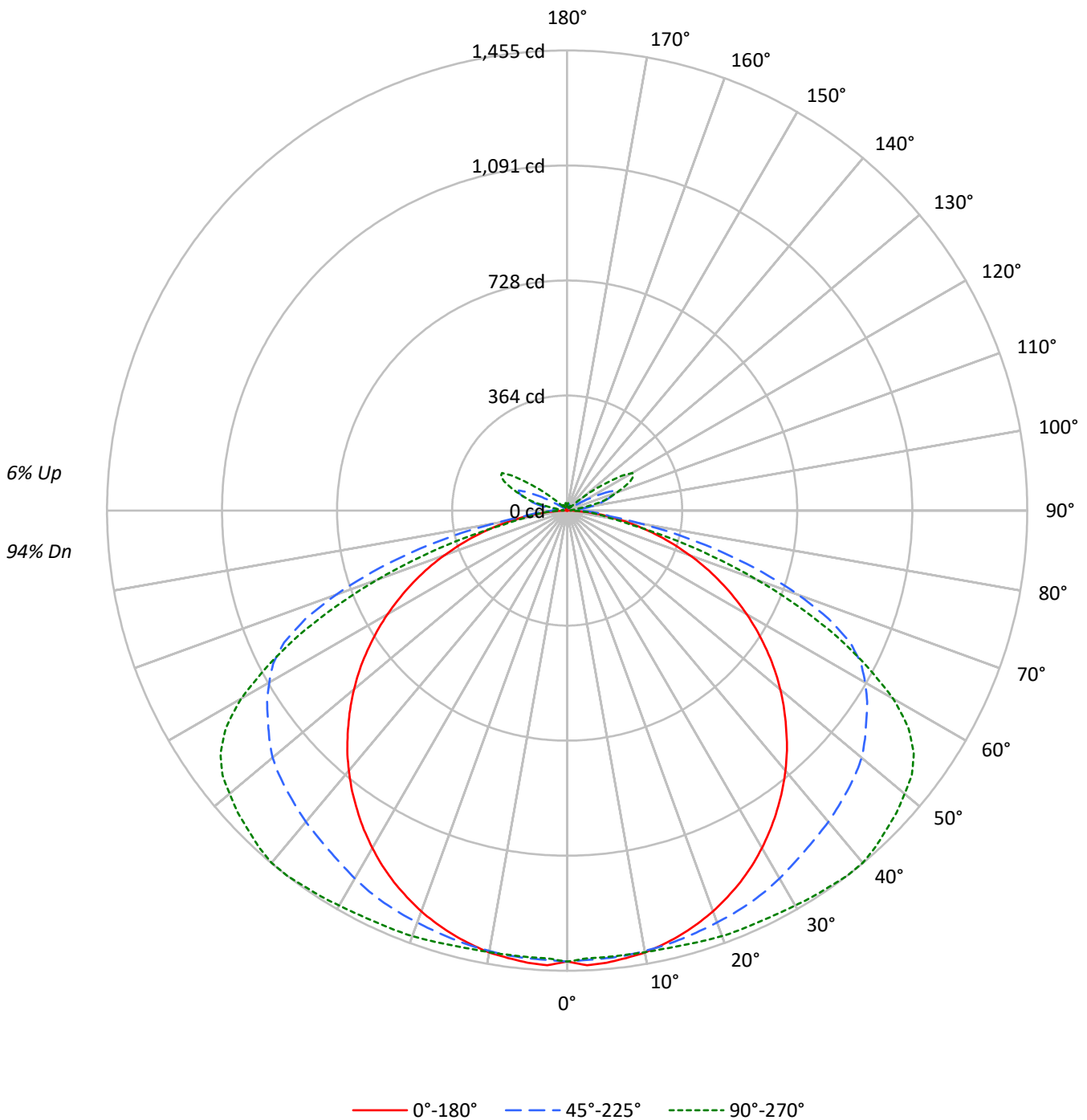
Summary

Lumens per Lamp: 6900 (1 lamp)
Luminaire Lumens: 5693.7 lumens
Efficiency: 82.5%
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.56 / 1.61
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 126.1
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

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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	97	97	97	97	94	94	94	94	89	89	89	84	84	84	80	80	80	78
1	88	84	80	76	85	81	78	75	77	74	71	73	71	68	69	67	66	63
2	79	72	66	61	76	70	64	60	66	61	57	63	59	55	59	56	54	51
3	72	62	55	49	69	61	54	49	57	52	47	54	50	46	52	48	44	42
4	65	55	47	41	63	53	46	40	50	44	39	48	43	38	46	41	37	35
5	59	48	40	35	57	47	40	34	45	38	33	43	37	33	41	36	32	30
6	55	43	35	30	53	42	35	29	40	34	29	38	32	28	36	31	28	26
7	50	39	31	26	49	38	31	26	36	30	25	35	29	25	33	28	24	22
8	47	35	28	23	45	34	27	23	33	27	22	31	26	22	30	25	21	20
9	44	32	25	20	42	31	25	20	30	24	20	29	23	19	28	23	19	17
10	41	30	23	18	39	29	22	18	28	22	18	27	21	18	26	21	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3508	3508	3508
5°	3544	3509	3499
10°	3545	3532	3542
15°	3538	3571	3622
20°	3532	3629	3749
25°	3518	3716	3895
30°	3500	3815	4096
35°	3475	3940	4355
40°	3449	4127	4670
45°	3410	4360	4965
50°	3368	4654	5332
55°	3307	4954	5739
60°	3228	5353	5860
65°	3120	5746	5472
70°	2971	5589	4589
75°	2747	4810	3203
80°	2437	3329	1983
85°	2061	2879	2089



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	135.7	2.4	2.0	0°	1426	1426	1426	1426	1426	
10°-20°	397.5	7.0	5.8	5°	1435	1427	1421	1422	1417	136
20°-30°	631.6	11.1	9.2	15°	1389	1390	1402	1419	1422	392
30°-40°	821.2	14.4	11.9	25°	1296	1314	1369	1420	1435	597
40°-50°	950.5	16.7	13.8	35°	1157	1204	1312	1415	1450	724
50°-60°	988.8	17.4	14.3	45°	980	1075	1253	1388	1427	756
60°-70°	848.3	14.9	12.3	55°	771	926	1155	1301	1338	689
70°-80°	468.7	8.2	6.8	65°	536	778	987	966	940	530
80°-90°	127.6	2.2	1.8	75°	289	579	506	381	337	307
90°-100°	40.6	0.7	0.6	85°	73	175	102	77	74	80
100°-110°	92.7	1.6	1.3	90°	8	90	40	16	11	7
110°-120°	112.2	2.0	1.6	95°	1	73	31	15	12	1
120°-130°	50.8	0.9	0.7	105°	2	59	124	119	118	2
130°-140°	10.2	0.2	0.1	115°	3	11	134	215	221	3
140°-150°	6.3	0.1	0.1	125°	4	6	15	110	155	4
150°-160°	4.3	0.1	0.1	135°	5	6	19	13	14	4
160°-170°	5.1	0.1	0.1	145°	6	6	9	12	22	4
170°-180°	1.8	0.0	0.0	155°	7	8	8	12	11	3
0°-30°	1164.7	20.5	16.9	165°	16	18	20	21	21	4
0°-40°	1985.9	34.9	28.8	175°	14	15	17	20	20	1
0°-60°	3925.3	68.9	56.9	180°	12	12	12	12	12	
0°-90°	5369.9	94.3	77.8							
90°-120°	245.4	4.3	3.6							
90°-150°	312.7	5.5	4.5							
90°-180°	324.0	5.7	4.7							
0°-180°	5693.7	100.0	82.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1426	1426	1426	1426	1426
2.5°	1439	1430	1422	1422	1417
5°	1435	1427	1421	1422	1417
7.5°	1427	1421	1419	1421	1417
10°	1419	1413	1414	1420	1418
12.5°	1405	1403	1409	1419	1419
15°	1389	1390	1402	1419	1422
17.5°	1370	1375	1394	1421	1427
20°	1349	1357	1386	1423	1432
22.5°	1323	1336	1378	1423	1434
25°	1296	1314	1369	1420	1435
27.5°	1266	1288	1357	1417	1438
30°	1232	1262	1343	1415	1442
32.5°	1196	1234	1327	1415	1447
35°	1157	1204	1312	1415	1450
37.5°	1117	1174	1298	1414	1455
40°	1074	1143	1285	1412	1454
42.5°	1029	1110	1269	1406	1443
45°	980	1075	1253	1388	1427
47.5°	931	1038	1236	1369	1413
50°	880	1001	1216	1351	1393
52.5°	827	964	1187	1326	1374
55°	771	926	1155	1301	1338
57.5°	714	888	1125	1256	1280
60°	656	851	1088	1192	1191
62.5°	596	815	1048	1091	1070
65°	536	778	987	966	940
67.5°	475	735	896	829	790
70°	413	687	777	678	638
72.5°	351	636	646	527	483
75°	289	579	506	381	337
77.5°	230	492	368	238	206
80°	172	384	235	146	140
82.5°	119	280	136	110	106
85°	73	175	102	77	74
87.5°	32	119	70	45	40
90°	8	90	40	16	11
92.5°	2	73	35	15	11
95°	1	73	31	15	12
97.5°	0	77	46	19	14
100°	1	81	84	45	36
102.5°	1	82	104	91	78
105°	2	59	124	119	118
107.5°	2	34	146	143	141
110°	2	17	163	169	167



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3	12	166	196	195
115°	3	11	134	215	221
117.5°	3	10	96	223	236
120°	4	10	62	200	238
122.5°	4	6	32	154	204
125°	4	6	15	110	155
127.5°	5	6	13	70	109
130°	5	7	14	34	67
132.5°	5	7	14	15	32
135°	5	6	19	13	14
137.5°	5	6	12	14	13
140°	5	6	9	15	14
142.5°	6	6	9	21	15
145°	6	6	9	12	22
147.5°	6	7	10	10	10
150°	6	7	8	10	9
152.5°	6	7	8	11	10
155°	7	8	8	12	11
157.5°	9	9	9	11	12
160°	11	12	13	13	13
162.5°	14	15	16	17	18
165°	16	18	20	21	21
167.5°	16	20	22	23	23
170°	17	19	21	23	24
172.5°	14	17	21	22	24
175°	14	15	17	20	20
177.5°	13	14	14	15	14
180°	12	12	12	12	12

(END OF REPORT)