

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: ITL44653

Luminaire Tested: **DIM-248HO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44653
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DIM-248HO
Description: FABRICATED METAL STRIP BALLAST HOUSING WITH WHITE PAINTED SOCKET HOUSINGS, WHITE PAINTED FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES, OPEN ENDS AND BOTTOM.
Light Source: TWO 60-WATT F48T12/CW/HO FLUORESCENTS.
Ballast/Driver: VALMONT ELECTRIC 8G388SW (BALLAST FACTOR 96.5%). BALLAST FACTOR SUPPLIED BY CLIENT.

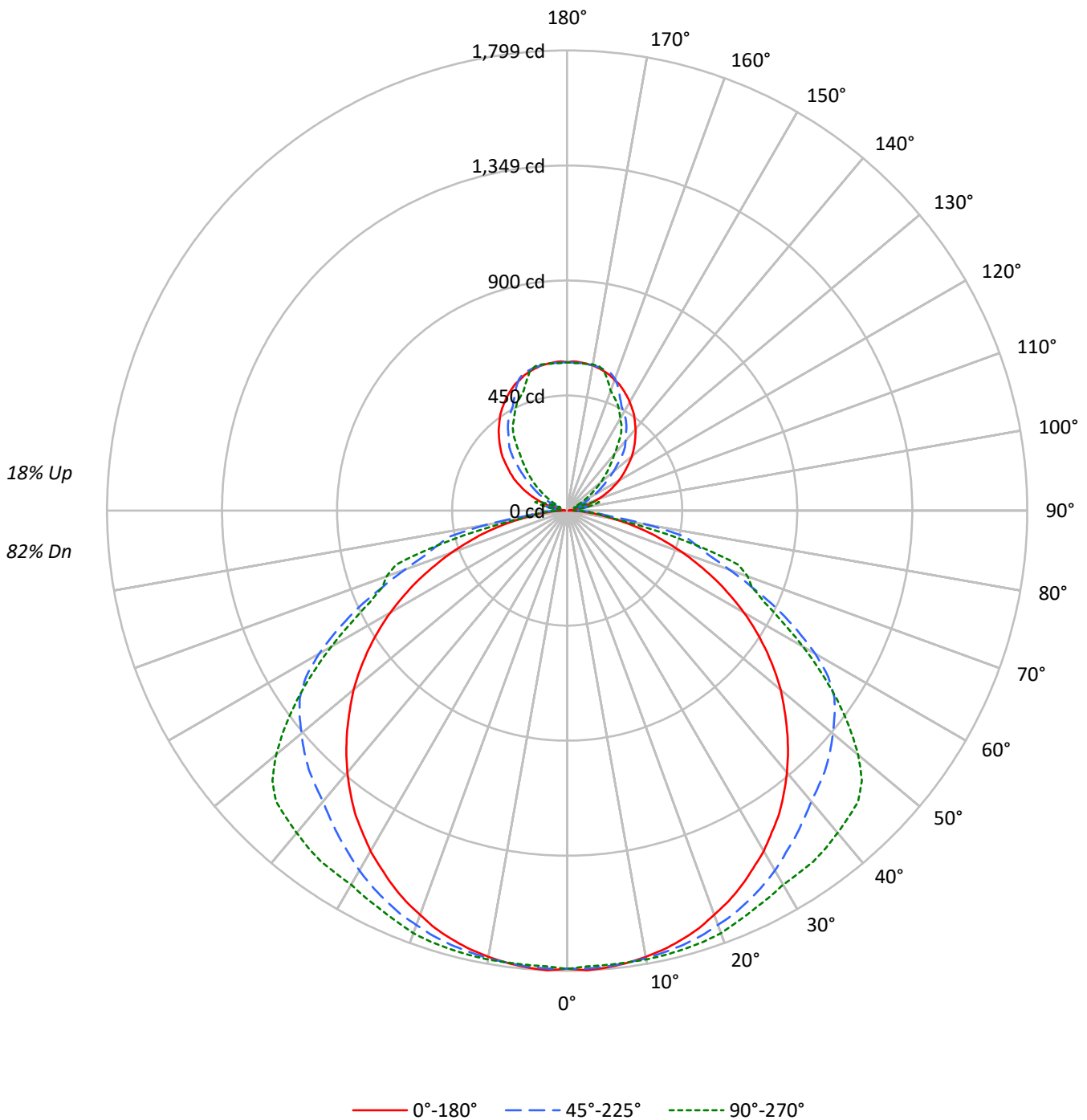
Summary

Lumens per Lamp: 4050 (2 lamps)
Luminaire Lumens: 7409.5 lumens
Efficiency: 91.5%
Efficacy: 48.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.44 / 1.52
Luminous Opening: Rectangular (W 1.08' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 152.9
Input Voltage (V): NR
Input Current (A_{in}): 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	101	101	101	101	93	93	93	85	85	85	78	78	78	75
1	95	91	87	83	91	87	84	80	80	77	75	74	72	70	68	66	65	62
2	86	78	72	67	82	75	70	65	69	65	61	64	60	57	59	56	53	51
3	78	68	61	55	74	66	59	53	61	55	50	56	51	47	52	48	45	42
4	71	60	52	46	68	58	50	45	53	47	42	49	44	40	46	41	38	35
5	65	53	45	39	62	51	44	38	48	41	36	44	39	34	41	36	32	30
6	60	48	40	34	57	46	38	33	43	36	31	40	34	30	37	32	28	26
7	55	43	35	29	53	42	34	29	39	32	27	36	30	26	33	29	25	23
8	51	39	31	26	49	38	30	25	35	29	24	33	27	23	31	26	22	20
9	48	36	28	23	46	35	28	23	32	26	22	30	25	21	28	23	20	18
10	45	33	26	21	43	32	25	20	30	24	20	28	23	19	26	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4449	4449	4449
5°	4471	4461	4446
10°	4470	4482	4495
15°	4464	4518	4562
20°	4444	4557	4647
25°	4429	4607	4720
30°	4409	4661	4845
35°	4385	4719	5082
40°	4335	4815	5334
45°	4272	5020	5652
50°	4212	5240	5739
55°	4106	5526	5578
60°	3970	5564	5291
65°	3768	5302	5014
70°	3486	4902	5454
75°	3158	5020	5029
80°	2618	4621	2732
85°	2309	3278	2907



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	170.3	2.3	2.1	0°	1791	1791	1791	1791	1791	
10°-20°	496.5	6.7	6.1	5°	1793	1793	1789	1782	1783	170
20°-30°	774.4	10.5	9.6	15°	1736	1747	1757	1767	1774	490
30°-40°	979.6	13.2	12.1	25°	1616	1647	1681	1713	1722	745
40°-50°	1099.7	14.8	13.6	35°	1446	1500	1556	1637	1676	903
50°-60°	1063.9	14.4	13.1	45°	1216	1303	1429	1563	1609	938
60°-70°	837.8	11.3	10.3	55°	948	1062	1276	1324	1288	847
70°-80°	531.6	7.2	6.6	65°	641	838	902	887	853	632
80°-90°	141.4	1.9	1.7	75°	329	540	523	600	524	347
90°-100°	40.3	0.5	0.5	85°	81	174	115	113	102	86
100°-110°	76.6	1.0	0.9	90°	8	45	35	30	27	8
110°-120°	94.1	1.3	1.2	95°	11	45	30	28	27	14
120°-130°	172.0	2.3	2.1	105°	77	52	41	121	129	83
130°-140°	231.7	3.1	2.9	115°	180	148	74	39	29	178
140°-150°	257.6	3.5	3.2	125°	280	257	175	137	116	251
150°-160°	228.0	3.1	2.8	135°	374	345	303	250	227	288
160°-170°	158.9	2.1	2.0	145°	456	463	404	385	367	284
170°-180°	55.2	0.7	0.7	155°	520	530	488	468	464	239
0°-30°	1441.1	19.4	17.8	165°	563	566	569	572	563	159
0°-40°	2420.7	32.7	29.9	175°	582	582	579	577	578	55
0°-60°	4584.3	61.9	56.6	180°	580	580	580	580	580	
0°-90°	6095.2	82.3	75.2							
90°-120°	210.9	2.8	2.6							
90°-150°	872.2	11.8	10.8							
90°-180°	1314.0	17.7	16.2							
0°-180°	7409.5	100.0	91.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791	1791	1791	1791	1791
2.5°	1799	1798	1792	1782	1784
5°	1793	1793	1789	1782	1783
7.5°	1784	1786	1783	1780	1782
10°	1772	1777	1777	1777	1782
12.5°	1756	1762	1768	1773	1779
15°	1736	1747	1757	1767	1774
17.5°	1713	1726	1743	1758	1768
20°	1681	1704	1724	1749	1758
22.5°	1652	1677	1706	1733	1740
25°	1616	1647	1681	1713	1722
27.5°	1576	1615	1655	1691	1706
30°	1537	1580	1625	1669	1689
32.5°	1490	1541	1589	1650	1682
35°	1446	1500	1556	1637	1676
37.5°	1392	1455	1520	1626	1662
40°	1337	1408	1485	1607	1645
42.5°	1278	1357	1457	1586	1627
45°	1216	1303	1429	1563	1609
47.5°	1152	1246	1394	1541	1563
50°	1090	1185	1356	1493	1485
52.5°	1020	1124	1318	1418	1391
55°	948	1062	1276	1324	1288
57.5°	874	1002	1211	1221	1177
60°	799	949	1120	1109	1065
62.5°	718	894	1014	993	953
65°	641	838	902	887	853
67.5°	558	778	781	785	781
70°	480	720	675	712	751
72.5°	403	640	582	691	700
75°	329	540	523	600	524
77.5°	253	423	473	418	342
80°	183	317	323	249	191
82.5°	127	252	168	152	138
85°	81	174	115	113	102
87.5°	37	91	70	71	57
90°	8	45	35	30	27
92.5°	7	34	30	28	27
95°	11	45	30	28	27
97.5°	20	33	55	54	40
100°	36	27	80	86	76
102.5°	55	35	80	111	107
105°	77	52	41	121	129
107.5°	101	73	26	74	119
110°	126	94	32	33	62



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	153	119	50	27	31
115°	180	148	74	39	29
117.5°	206	179	99	61	42
120°	233	207	123	85	64
122.5°	257	233	149	112	90
125°	280	257	175	137	116
127.5°	304	284	203	163	142
130°	331	307	235	194	172
132.5°	352	326	267	222	198
135°	374	345	303	250	227
137.5°	395	373	334	283	256
140°	416	402	355	317	287
142.5°	435	434	377	357	326
145°	456	463	404	385	367
147.5°	473	487	426	405	396
150°	490	505	442	430	415
152.5°	505	518	460	454	440
155°	520	530	488	468	464
157.5°	534	541	521	485	480
160°	543	551	548	513	498
162.5°	555	560	564	549	530
165°	563	566	569	572	563
167.5°	570	573	574	577	578
170°	576	577	577	578	580
172.5°	579	579	577	577	578
175°	582	582	579	577	578
177.5°	584	583	579	577	577
180°	580	580	580	580	580

(END OF REPORT)