

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: ITL44657

Luminaire Tested: **EIM-248HO**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44657
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EIM-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.

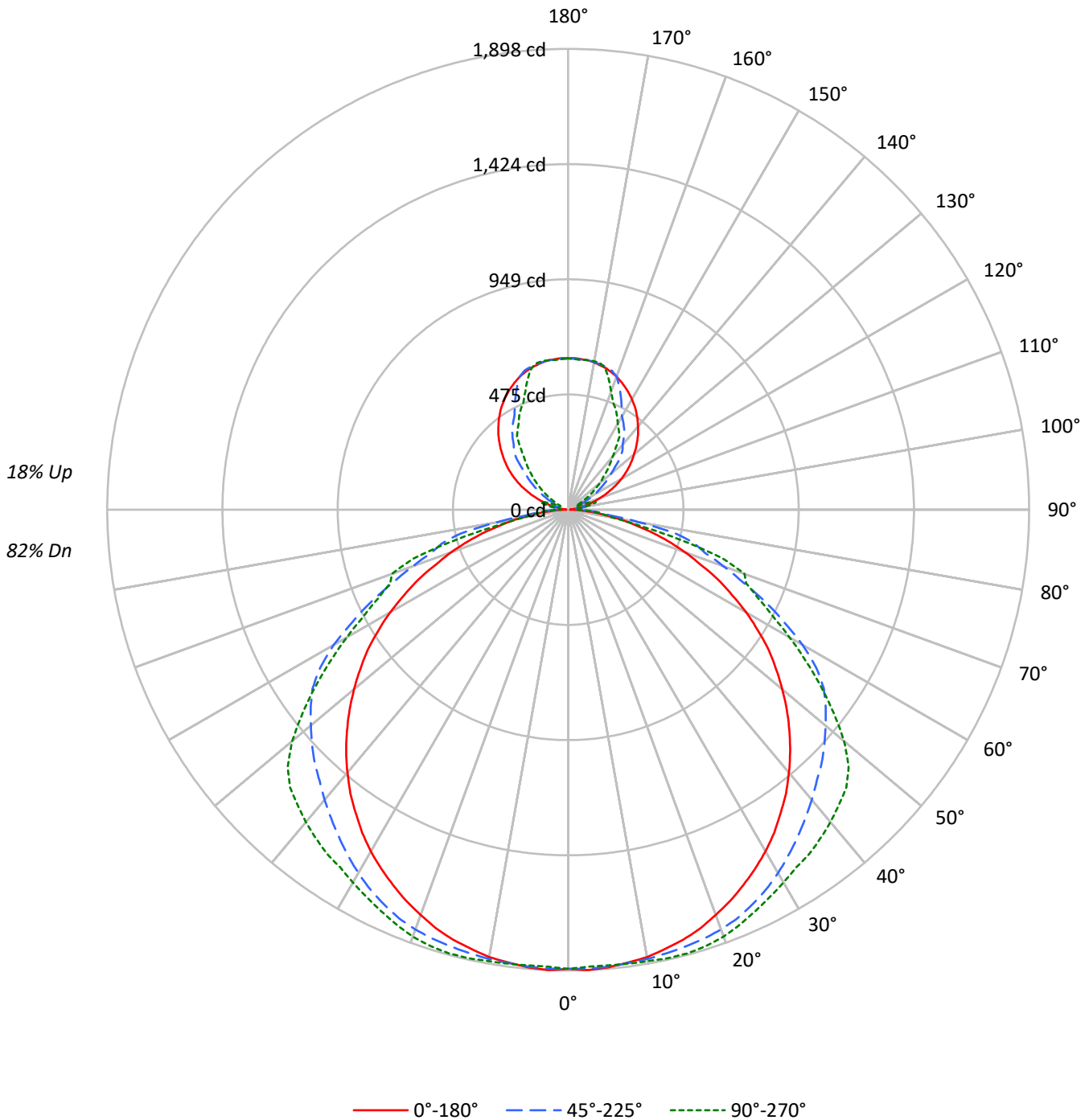
Summary

Lumens per Lamp: 4050 (2 lamps)
Luminaire Lumens: 7661.1 lumens
Efficiency: 94.6%
Efficacy: 49.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.41 / 1.5
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 154
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	109	109	109	109	104	104	104	104	96	96	96	88	88	88	81	81	81	78
1	99	94	90	86	94	90	86	83	83	80	77	77	74	72	71	69	67	64
2	89	81	75	69	85	78	72	67	72	67	63	66	63	59	61	58	55	53
3	81	71	63	57	77	68	61	55	63	57	52	58	53	49	54	50	46	44
4	74	63	54	48	70	60	52	47	56	49	44	51	46	42	48	43	39	37
5	68	56	47	41	65	53	46	40	50	43	38	46	40	36	43	38	34	32
6	62	50	41	35	59	48	40	34	45	38	33	41	36	31	38	33	30	27
7	58	45	37	31	55	43	36	30	40	34	29	38	32	27	35	30	26	24
8	53	41	33	27	51	39	32	27	37	30	26	34	29	24	32	27	23	21
9	50	37	30	24	48	36	29	24	34	27	23	32	26	22	29	25	21	19
10	47	34	27	22	45	33	26	21	31	25	21	29	24	20	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4652	4652	4652
5°	4672	4665	4653
10°	4674	4694	4717
15°	4669	4745	4819
20°	4650	4817	4898
25°	4631	4870	4951
30°	4616	4909	5037
35°	4580	4944	5199
40°	4541	5010	5395
45°	4481	5135	5633
50°	4405	5293	5676
55°	4328	5512	5452
60°	4168	5491	5176
65°	3964	5198	5030
70°	3683	4899	5553
75°	3327	5123	4515
80°	2876	4208	2607
85°	2286	3472	3077



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	179.9	2.3	2.2	0°	1891	1891	1891	1891	1891	
10°-20°	526.7	6.9	6.5	5°	1892	1893	1889	1883	1884	180
20°-30°	821.9	10.7	10.1	15°	1833	1846	1863	1882	1892	517
30°-40°	1031.0	13.5	12.7	25°	1706	1747	1794	1819	1824	787
40°-50°	1138.8	14.9	14.1	35°	1525	1604	1646	1703	1731	955
50°-60°	1084.3	14.2	13.4	45°	1288	1397	1476	1586	1619	993
60°-70°	846.8	11.1	10.5	55°	1009	1133	1285	1316	1271	898
70°-80°	526.0	6.9	6.5	65°	681	856	893	888	864	670
80°-90°	147.6	1.9	1.8	75°	350	531	539	577	475	372
90°-100°	43.2	0.6	0.5	85°	81	179	123	120	109	92
100°-110°	77.5	1.0	1.0	90°	11	54	43	37	32	9
110°-120°	98.2	1.3	1.2	95°	12	47	34	33	32	17
120°-130°	174.7	2.3	2.2	105°	86	57	53	112	118	92
130°-140°	234.9	3.1	2.9	115°	194	147	72	42	34	193
140°-150°	263.7	3.4	3.3	125°	305	260	174	136	116	272
150°-160°	237.4	3.1	2.9	135°	402	357	304	246	224	310
160°-170°	169.4	2.2	2.1	145°	489	493	402	377	368	306
170°-180°	59.2	0.8	0.7	155°	556	568	513	467	460	256
0°-30°	1528.5	20.0	18.9	165°	603	606	608	610	597	170
0°-40°	2559.5	33.4	31.6	175°	622	623	621	618	619	59
0°-60°	4782.6	62.4	59.0	180°	623	623	623	623	623	
0°-90°	6303.0	82.3	77.8							
90°-120°	218.9	2.9	2.7							
90°-150°	892.2	11.6	11.0							
90°-180°	1358.0	17.7	16.8							
0°-180°	7661.1	100.0	94.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1891	1891	1891	1891	1891
2.5°	1898	1898	1892	1883	1884
5°	1892	1893	1889	1883	1884
7.5°	1881	1884	1883	1881	1886
10°	1871	1876	1879	1882	1888
12.5°	1852	1862	1871	1883	1892
15°	1833	1846	1863	1882	1892
17.5°	1808	1826	1853	1877	1885
20°	1776	1803	1840	1864	1871
22.5°	1744	1776	1821	1846	1849
25°	1706	1747	1794	1819	1824
27.5°	1667	1714	1764	1790	1798
30°	1625	1682	1728	1761	1773
32.5°	1578	1646	1688	1732	1747
35°	1525	1604	1646	1703	1731
37.5°	1473	1557	1603	1679	1706
40°	1414	1507	1560	1650	1680
42.5°	1353	1450	1515	1619	1649
45°	1288	1397	1476	1586	1619
47.5°	1221	1332	1431	1553	1566
50°	1151	1265	1383	1499	1483
52.5°	1079	1200	1336	1414	1379
55°	1009	1133	1285	1316	1271
57.5°	927	1062	1211	1207	1161
60°	847	992	1116	1100	1052
62.5°	761	923	1002	986	949
65°	681	856	893	888	864
67.5°	589	784	777	797	793
70°	512	712	681	728	772
72.5°	431	633	591	705	666
75°	350	531	539	577	475
77.5°	271	425	454	380	291
80°	203	331	297	224	184
82.5°	137	264	169	158	145
85°	81	179	123	120	109
87.5°	37	101	79	86	70
90°	11	54	43	37	32
92.5°	8	41	37	34	31
95°	12	47	34	33	32
97.5°	25	40	52	48	38
100°	40	31	75	76	64
102.5°	61	39	77	103	94
105°	86	57	53	112	118
107.5°	112	76	34	75	106
110°	138	99	35	41	75



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	167	122	52	34	39
115°	194	147	72	42	34
117.5°	224	181	98	61	44
120°	252	212	124	86	66
122.5°	278	234	148	112	90
125°	305	260	174	136	116
127.5°	330	286	203	163	142
130°	353	308	230	190	169
132.5°	379	329	263	217	194
135°	402	357	304	246	224
137.5°	426	393	331	277	254
140°	447	427	349	314	285
142.5°	469	460	376	359	322
145°	489	493	402	377	368
147.5°	508	522	423	398	388
150°	525	540	443	425	408
152.5°	541	554	476	450	436
155°	556	568	513	467	460
157.5°	570	580	549	502	481
160°	583	589	583	542	517
162.5°	593	598	600	581	559
165°	603	606	608	610	597
167.5°	609	612	613	616	617
170°	616	617	617	619	621
172.5°	621	622	620	620	621
175°	622	623	621	618	619
177.5°	625	626	622	620	621
180°	623	623	623	623	623

(END OF REPORT)