

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: ITL44658

Luminaire Tested: **EIVM-232**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL44658
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EIVM-232
Description: FABRICATED METAL STRIP BALLAST HOUSING WITH WHITE PAINTED SOCKET HOUSINGS, WHITE PAINTED FABRICATED METAL REFLECTOR WITH UP-LIGHT APERTURES AND TRIANGULAR RAISED CENTER SECTION, OPEN ENDS AND BOTTOM.
Light Source: TWO 32-WATT F32T8-SPX35 FLUORESCENTS.
Ballast/Driver: MAGNETEK TRIAD B232I120RH (BALLAST FACTOR 88.1%). BALLAST FACTOR SUPPLIED BY CLIENT.

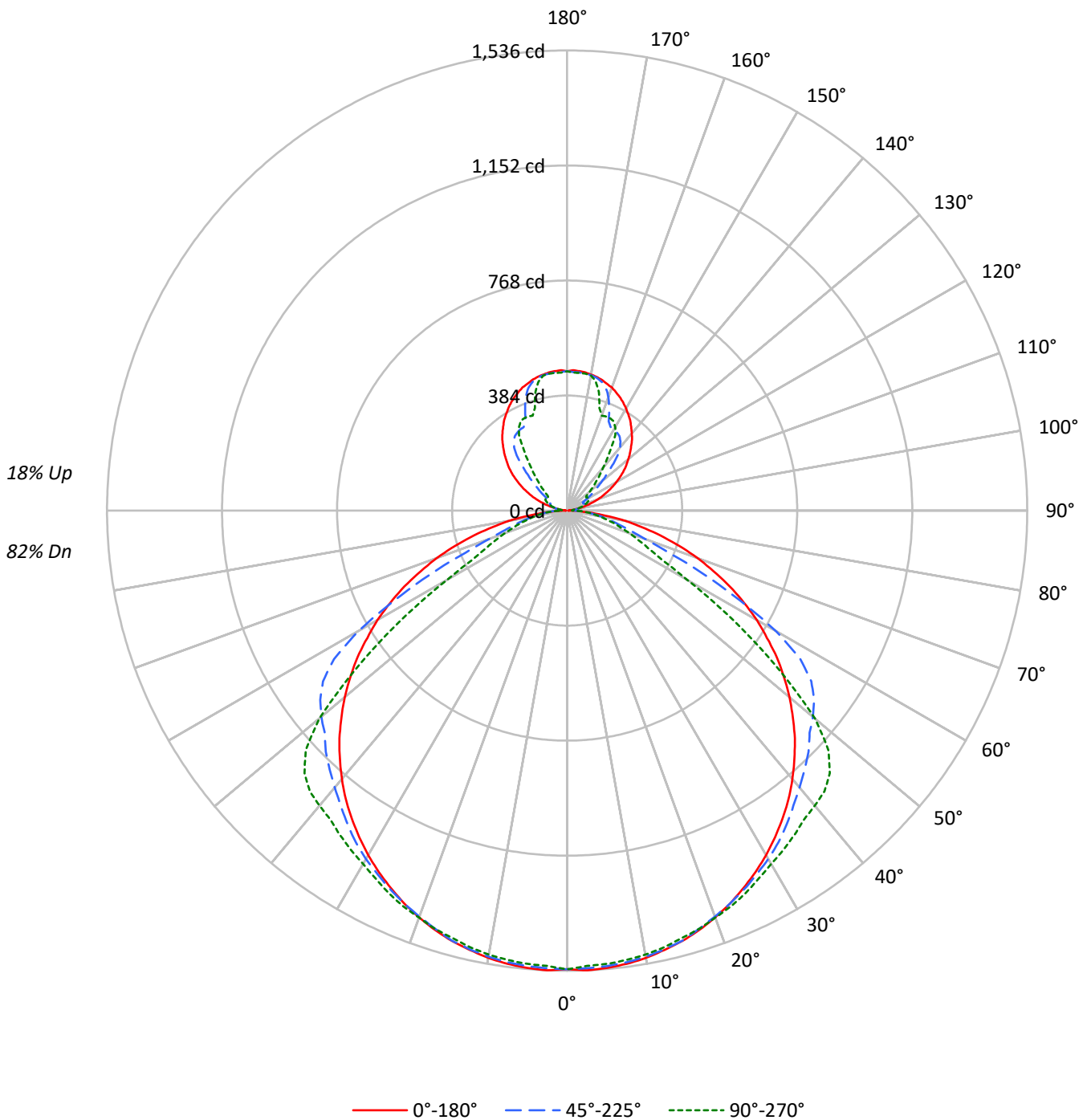
Summary

Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 5503.9 lumens
Efficiency: 93.3%
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.34 / 1.46
Luminous Opening: Rectangular (W 1.09' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 59.8
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	107	107	107	107	103	103	103	103	94	94	94	87	87	87	80	80	80	77
1	98	94	90	86	94	90	87	84	83	80	78	77	75	73	71	69	68	65
2	89	82	76	71	85	79	73	69	73	68	64	67	64	61	62	59	57	54
3	81	72	65	59	78	69	63	57	64	59	54	59	55	51	55	51	48	46
4	74	64	56	50	71	61	54	48	57	51	46	53	48	44	49	45	41	39
5	68	57	49	43	65	55	47	42	51	45	40	47	42	38	44	40	36	34
6	63	51	43	37	60	49	42	36	46	39	35	43	37	33	40	35	31	29
7	58	46	38	32	56	44	37	32	42	35	30	39	33	29	36	31	28	26
8	54	42	34	29	52	40	33	28	38	32	27	35	30	26	33	28	25	23
9	50	38	31	26	48	37	30	25	35	29	24	33	27	23	31	26	22	20
10	47	35	28	23	45	34	27	23	32	26	22	30	25	21	28	24	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3783	3769	3751
10°	3787	3777	3760
15°	3787	3785	3762
20°	3783	3775	3786
25°	3776	3790	3825
30°	3773	3815	3869
35°	3766	3838	3970
40°	3758	3876	4130
45°	3740	3963	4314
50°	3709	4099	4134
55°	3667	4268	3277
60°	3597	3961	2278
65°	3487	2940	1746
70°	3323	1971	1590
75°	3070	1692	1521
80°	2791	1643	1530
85°	2061	1891	1919



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	145.2	2.6	2.5	0°	1531	1531	1531	1531	1531	
10°-20°	419.3	7.6	7.1	5°	1532	1531	1526	1518	1519	146
20°-30°	646.0	11.7	10.9	15°	1487	1492	1486	1479	1477	420
30°-40°	804.9	14.6	13.6	25°	1391	1400	1396	1408	1409	642
40°-50°	887.1	16.1	15.0	35°	1254	1264	1278	1309	1322	785
50°-60°	792.6	14.4	13.4	45°	1075	1098	1139	1225	1240	828
60°-70°	496.8	9.0	8.4	55°	855	892	995	884	764	762
70°-80°	251.3	4.6	4.3	65°	599	678	505	332	300	591
80°-90°	81.3	1.5	1.4	75°	323	358	178	168	160	342
90°-100°	26.1	0.5	0.4	85°	73	82	67	70	68	86
100°-110°	54.7	1.0	0.9	90°	7	34	23	20	16	7
110°-120°	87.1	1.6	1.5	95°	9	30	20	19	18	13
120°-130°	122.3	2.2	2.1	105°	68	36	53	55	51	73
130°-140°	161.6	2.9	2.7	115°	147	100	59	76	79	147
140°-150°	192.2	3.5	3.3	125°	230	202	107	80	77	205
150°-160°	169.2	3.1	2.9	135°	302	242	213	157	137	233
160°-170°	122.1	2.2	2.1	145°	367	340	304	293	256	229
170°-180°	44.1	0.8	0.7	155°	417	418	328	334	340	192
0°-30°	1210.5	22.0	20.5	165°	451	451	445	431	409	127
0°-40°	2015.4	36.6	34.2	175°	467	466	463	462	461	44
0°-60°	3695.0	67.1	62.6	180°	465	465	465	465	465	
0°-90°	4524.5	82.2	76.7							
90°-120°	167.9	3.0	2.8							
90°-150°	644.0	11.7	10.9							
90°-180°	979.0	17.8	16.6							
0°-180°	5503.9	100.0	93.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1531	1531	1531	1531	1531
2.5°	1536	1534	1529	1521	1521
5°	1532	1531	1526	1518	1519
7.5°	1526	1527	1521	1514	1513
10°	1516	1518	1512	1506	1505
12.5°	1502	1505	1500	1495	1493
15°	1487	1492	1486	1479	1477
17.5°	1468	1472	1464	1463	1464
20°	1445	1452	1442	1447	1446
22.5°	1420	1426	1420	1427	1430
25°	1391	1400	1396	1408	1409
27.5°	1361	1369	1369	1383	1385
30°	1328	1336	1343	1357	1362
32.5°	1292	1300	1313	1332	1343
35°	1254	1264	1278	1309	1322
37.5°	1214	1226	1241	1286	1299
40°	1170	1183	1207	1257	1286
42.5°	1123	1142	1173	1241	1271
45°	1075	1098	1139	1225	1240
47.5°	1022	1048	1098	1188	1183
50°	969	1000	1071	1137	1080
52.5°	912	946	1039	1031	923
55°	855	892	995	884	764
57.5°	791	836	923	723	607
60°	731	785	805	573	463
62.5°	665	728	652	431	357
65°	599	678	505	332	300
67.5°	529	629	367	275	259
70°	462	571	274	235	221
72.5°	392	478	217	200	187
75°	323	358	178	168	160
77.5°	254	232	144	138	131
80°	197	153	116	113	108
82.5°	129	113	89	90	87
85°	73	82	67	70	68
87.5°	30	56	48	51	46
90°	7	34	23	20	16
92.5°	4	27	19	18	16
95°	9	30	20	19	18
97.5°	20	34	28	27	22
100°	33	38	37	37	32
102.5°	49	37	45	46	43
105°	68	36	53	55	51
107.5°	88	45	58	63	59
110°	108	60	62	69	68



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128	78	61	74	73
115°	147	100	59	76	79
117.5°	169	126	59	77	82
120°	190	157	71	75	82
122.5°	210	184	89	72	81
125°	230	202	107	80	77
127.5°	249	214	126	97	82
130°	266	223	151	115	98
132.5°	285	234	180	134	117
135°	302	242	213	157	137
137.5°	320	255	250	184	161
140°	336	276	275	215	186
142.5°	351	307	292	254	221
145°	367	340	304	293	256
147.5°	380	367	309	314	299
150°	393	387	313	328	321
152.5°	406	404	314	333	336
155°	417	418	328	334	340
157.5°	427	429	367	332	340
160°	437	438	403	347	337
162.5°	443	446	430	394	359
165°	451	451	445	431	409
167.5°	457	457	454	450	441
170°	461	461	459	459	458
172.5°	465	464	461	461	461
175°	467	466	463	462	461
177.5°	469	467	463	463	461
180°	465	465	465	465	465

(END OF REPORT)