

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: 145P100

Luminaire Tested: **WBI-232IMA**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 145P100
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: WBI-232IMA
Description: 1 X 4 Surface Mount Wraparound with an injected molded acrylic refractor.
Light Source: Two - FO32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Magnetek B232I120RH Electronic - L.O.B.F. = 87.6

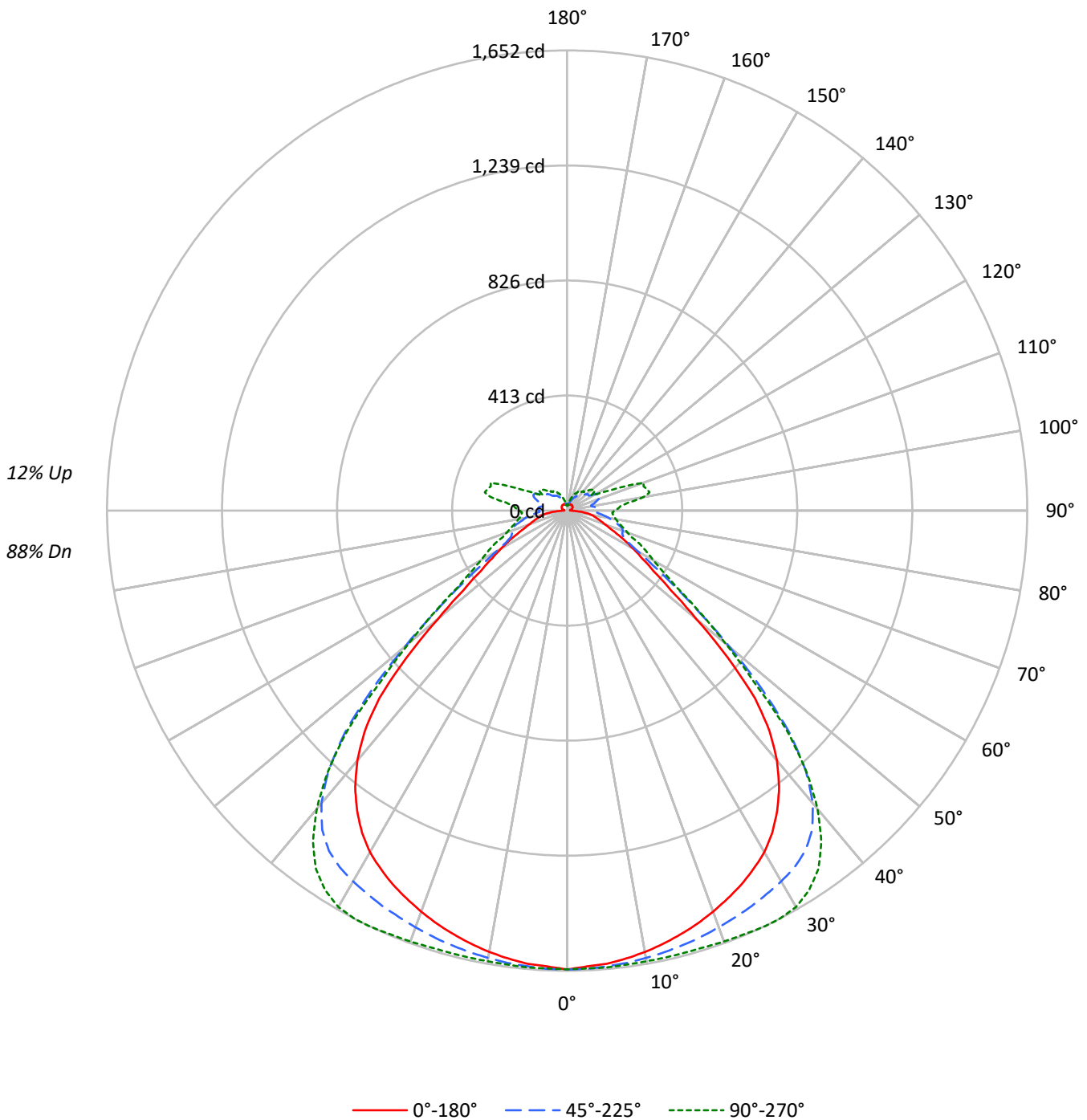
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 4649.5 lumens
Efficiency: 81.6%
Efficacy: 81.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.45 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 3.99' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 57.3
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	95	95	95	95	91	91	91	91	85	85	85		79	79	79		74	74	74	71
1	87	83	80	77	84	81	78	75	75	73	71		70	69	67		66	64	63	61
2	80	74	69	65	77	71	67	63	67	63	60		63	60	57		59	57	54	52
3	74	66	60	55	71	64	58	54	60	55	52		56	53	49		53	50	47	45
4	68	59	52	47	65	57	51	47	54	49	45		51	47	43		48	45	42	40
5	63	53	46	41	60	52	45	41	49	43	39		46	42	38		44	40	37	35
6	58	48	41	37	56	47	41	36	44	39	35		42	37	34		40	36	33	31
7	54	44	37	32	52	43	36	32	41	35	31		39	34	30		37	33	29	28
8	50	40	34	29	49	39	33	29	37	32	28		35	31	27		34	30	26	25
9	47	37	31	26	45	36	30	26	34	29	25		33	28	25		31	27	24	23
10	44	34	28	24	43	33	27	24	32	27	23		30	26	22		29	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4444	4444	4444
5°	4407	4390	4394
10°	4376	4355	4373
15°	4351	4337	4390
20°	4333	4338	4456
25°	4325	4365	4563
30°	4307	4413	4669
35°	4208	4451	4636
40°	3985	4300	4323
45°	3494	3754	3646
50°	2419	2713	2595
55°	1682	1795	1820
60°	1379	1255	1495
65°	1148	1077	1369
70°	1019	1196	1244
75°	1010	1257	1272
80°	1118	1278	1414
85°	1006	1303	1758



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	156.2	3.4	2.7	0°	1647	1647	1647	1647	1647	
10°-20°	456.1	9.8	8.0	5°	1633	1634	1642	1647	1646	155
20°-30°	723.5	15.6	12.7	15°	1575	1588	1614	1636	1642	445
30°-40°	910.7	19.6	16.0	25°	1481	1507	1567	1626	1652	683
40°-50°	808.3	17.4	14.2	35°	1315	1383	1491	1553	1572	818
50°-60°	441.5	9.5	7.7	45°	954	1007	1129	1134	1115	711
60°-70°	264.7	5.7	4.6	55°	379	465	462	540	479	358
70°-80°	179.8	3.9	3.2	65°	196	266	222	324	291	199
80°-90°	128.9	2.8	2.3	75°	112	137	187	190	198	121
90°-100°	118.5	2.5	2.1	85°	48	87	113	162	165	48
100°-110°	141.8	3.0	2.5	90°	11	54	99	157	170	8
110°-120°	118.3	2.5	2.1	95°	11	53	104	170	193	9
120°-130°	75.4	1.6	1.3	105°	16	45	101	238	296	17
130°-140°	55.8	1.2	1.0	115°	21	55	134	187	174	21
140°-150°	37.9	0.8	0.7	125°	24	56	94	115	122	22
150°-160°	21.7	0.5	0.4	135°	25	47	76	95	99	19
160°-170°	8.5	0.2	0.1	145°	25	41	65	82	86	16
170°-180°	2.0	0.0	0.0	155°	25	31	47	62	67	11
0°-30°	1335.8	28.7	23.4	165°	23	23	28	34	38	6
0°-40°	2246.4	48.3	39.4	175°	22	21	20	18	18	2
0°-60°	3496.2	75.2	61.3	180°	21	21	21	21	21	
0°-90°	4069.7	87.5	71.4							
90°-120°	378.5	8.1	6.6							
90°-150°	547.6	11.8	9.6							
90°-180°	580.0	12.5	10.2							
0°-180°	4649.5	100.0	81.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1647	1647	1647	1647	1647
2.5°	1638	1641	1647	1647	1645
5°	1633	1634	1642	1647	1646
7.5°	1622	1625	1638	1644	1644
10°	1609	1615	1631	1641	1643
12.5°	1593	1603	1623	1639	1643
15°	1575	1588	1614	1636	1642
17.5°	1555	1571	1604	1632	1643
20°	1532	1551	1592	1631	1646
22.5°	1507	1529	1579	1628	1648
25°	1481	1507	1567	1626	1652
27.5°	1450	1482	1552	1622	1652
30°	1416	1455	1537	1611	1643
32.5°	1371	1424	1519	1590	1616
35°	1315	1383	1491	1553	1572
37.5°	1250	1327	1445	1492	1499
40°	1171	1252	1372	1401	1399
42.5°	1077	1150	1269	1284	1272
45°	954	1007	1129	1134	1115
47.5°	784	828	948	942	908
50°	605	659	760	778	741
52.5°	469	543	594	647	602
55°	379	465	462	540	479
57.5°	319	404	363	466	406
60°	274	352	292	411	357
62.5°	234	307	246	368	322
65°	196	266	222	324	291
67.5°	166	226	214	278	252
70°	144	188	213	240	230
72.5°	128	158	206	210	214
75°	112	137	187	190	198
77.5°	101	124	166	177	186
80°	89	115	151	171	177
82.5°	71	105	133	167	169
85°	48	87	113	162	165
87.5°	25	65	99	155	162
90°	11	54	99	157	170
92.5°	10	55	105	167	184
95°	11	53	104	170	193
97.5°	12	49	100	178	223
100°	13	45	88	201	279
102.5°	14	44	88	219	303
105°	16	45	101	238	296
107.5°	17	47	109	256	288
110°	18	49	120	260	292



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	20	51	130	234	231
115°	21	55	134	187	174
117.5°	22	57	132	145	138
120°	23	58	119	116	112
122.5°	24	57	102	103	103
125°	24	56	94	115	122
127.5°	24	55	94	115	120
130°	25	53	93	112	116
132.5°	25	51	86	106	111
135°	25	47	76	95	99
137.5°	25	45	71	91	90
140°	26	44	70	83	91
142.5°	25	43	67	85	84
145°	25	41	65	82	86
147.5°	25	39	61	80	81
150°	25	36	56	74	79
152.5°	25	34	53	70	70
155°	25	31	47	62	67
157.5°	24	29	42	55	59
160°	24	27	37	48	53
162.5°	23	25	32	40	45
165°	23	23	28	34	38
167.5°	22	22	25	28	31
170°	22	21	22	23	25
172.5°	22	21	21	19	19
175°	22	21	20	18	18
177.5°	22	21	21	19	23
180°	21	21	21	21	21

(END OF REPORT)