

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: 227p132

Luminaire Tested: **MBF-154-FB-UNV-EBT1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 227p132
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: MBF-154-FB-UNV-EBT1
Description: MICROBAY, 2 LAMP T5, WITH SPECULAR ALUMINUM
CONCENTRATED FOCUS BEAM REFLECTOR

Light Source: ONE T5 HIGH OUTPUT LINEAR FLUORESCENT LAMP
F54T5 54 WATTS
Ballast/Driver: -

Summary

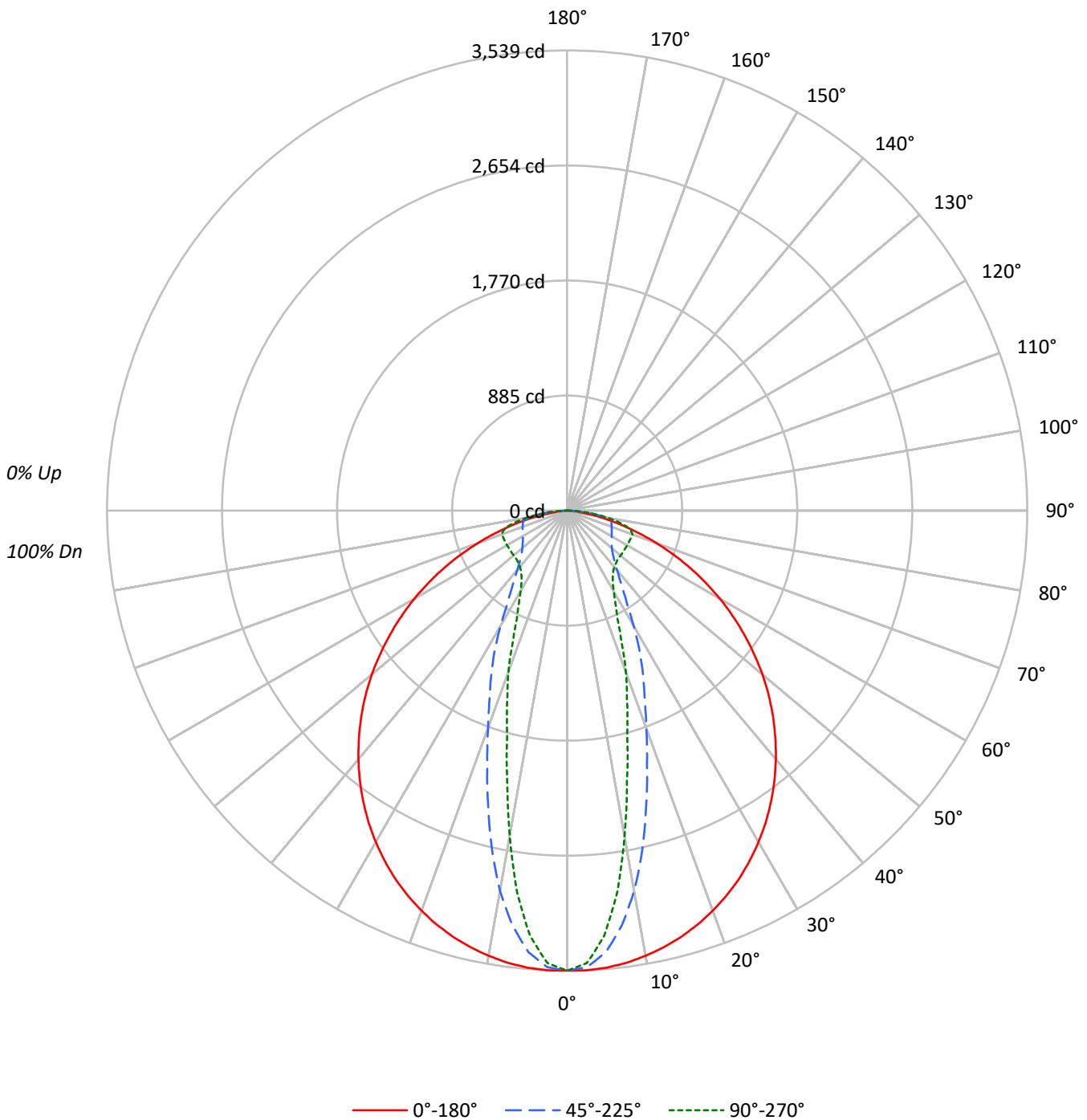
Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 4628.9 lumens
Efficiency: 105.2%
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.5 / 0.7
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61
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	125	125	125	125	122	122	122	122	117	117	117	112	112	112	107	107	107	105
1	115	110	105	101	112	107	103	99	103	99	96	99	96	93	95	93	91	88
2	105	97	90	84	102	95	88	83	91	86	81	87	83	79	84	81	77	75
3	97	86	78	71	94	84	77	71	81	75	69	78	73	68	76	71	67	65
4	89	77	69	62	87	76	68	62	73	66	61	71	65	60	69	64	59	57
5	83	70	61	55	81	69	61	55	67	60	54	65	58	53	63	57	53	51
6	77	64	55	49	75	63	55	49	61	54	48	60	53	48	58	52	48	46
7	72	59	51	44	71	58	50	44	57	49	44	55	49	44	54	48	43	41
8	68	55	46	41	66	54	46	41	53	45	40	51	45	40	50	44	40	38
9	64	51	43	37	63	50	43	37	49	42	37	48	42	37	47	41	37	35
10	61	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25388	25388	25388
5°	25413	24556	23634
10°	25336	21641	18523
15°	25207	17451	13268
20°	25009	13570	10095
25°	24751	10895	7245
30°	24394	8452	5916
35°	23950	6588	5370
40°	23400	5583	5283
45°	22722	5115	5511
50°	21892	5013	5995
55°	20806	5205	6681
60°	19476	5683	7664
65°	17710	6418	9067
70°	15295	7637	11225
75°	12144	9787	13114
80°	8141	11943	12893
85°	3211	10786	11115



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	312.0	6.7	7.1	0°	3538	3538	3538	3538	3538	
10°-20°	692.6	15.0	15.7	5°	3528	3494	3409	3334	3281	335
20°-30°	766.1	16.6	17.4	15°	3393	3038	2349	1923	1786	957
30°-40°	705.4	15.2	16.0	25°	3126	2233	1376	1012	915	1439
40°-50°	630.9	13.6	14.3	35°	2734	1423	752	625	613	1709
50°-60°	548.5	11.8	12.5	45°	2239	835	504	527	543	1726
60°-70°	473.3	10.2	10.8	55°	1663	423	416	501	534	1485
70°-80°	370.1	8.0	8.4	65°	1043	247	378	490	534	1031
80°-90°	130.0	2.8	3.0	75°	438	175	353	449	473	472
90°-100°	0.0	0.0	0.0	85°	39	109	131	135	135	68
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1770.8	38.3	40.2							
0°-40°	2476.2	53.5	56.3							
0°-60°	3655.6	79.0	83.1							
0°-90°	4628.9	100.0	105.2							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	4628.9	100.0	105.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3538	3538	3538	3538	3538
2.5°	3539	3530	3514	3507	3483
5°	3528	3494	3409	3334	3281
7.5°	3507	3425	3219	3041	2956
10°	3477	3325	2970	2672	2542
12.5°	3439	3193	2672	2274	2127
15°	3393	3038	2349	1923	1786
17.5°	3338	2861	2042	1644	1531
20°	3275	2666	1777	1430	1322
22.5°	3204	2454	1555	1222	1092
25°	3126	2233	1376	1012	915
27.5°	3038	2012	1201	863	801
30°	2944	1799	1020	762	714
32.5°	2843	1602	863	681	651
35°	2734	1423	752	625	613
37.5°	2619	1261	665	590	583
40°	2498	1116	596	559	564
42.5°	2370	975	543	542	553
45°	2239	835	504	527	543
47.5°	2103	703	472	517	538
50°	1961	589	449	509	537
52.5°	1813	496	432	505	535
55°	1663	423	416	501	534
57.5°	1511	364	404	497	533
60°	1357	315	396	495	534
62.5°	1201	277	386	493	533
65°	1043	247	378	490	534
67.5°	885	224	371	489	534
70°	729	205	364	489	535
72.5°	580	188	358	483	515
75°	438	175	353	449	473
77.5°	311	164	334	396	401
80°	197	154	289	309	312
82.5°	106	145	212	221	223
85°	39	109	131	135	135
87.5°	7	50	57	61	63
90°	0	0	0	0	0

(END OF REPORT)