

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: 227P156

Luminaire Tested: **MBF-132NB-UNV-EB81-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 227P156
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: MBF-132NB-UNV-EB81-U
Description: MICROBAY, 1 LAMP T8, WITH SPECULAR NORMAL BEAM REFLECTOR
Light Source: ONE T8 LINEAR FLUORESCENT LAMP
F32T8 32 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 3100 (1 lamp)
Luminaire Lumens: 2973.2 lumens
Efficiency: 95.9%
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.54' x L: 4' x H: 0')
CIE Type: Direct

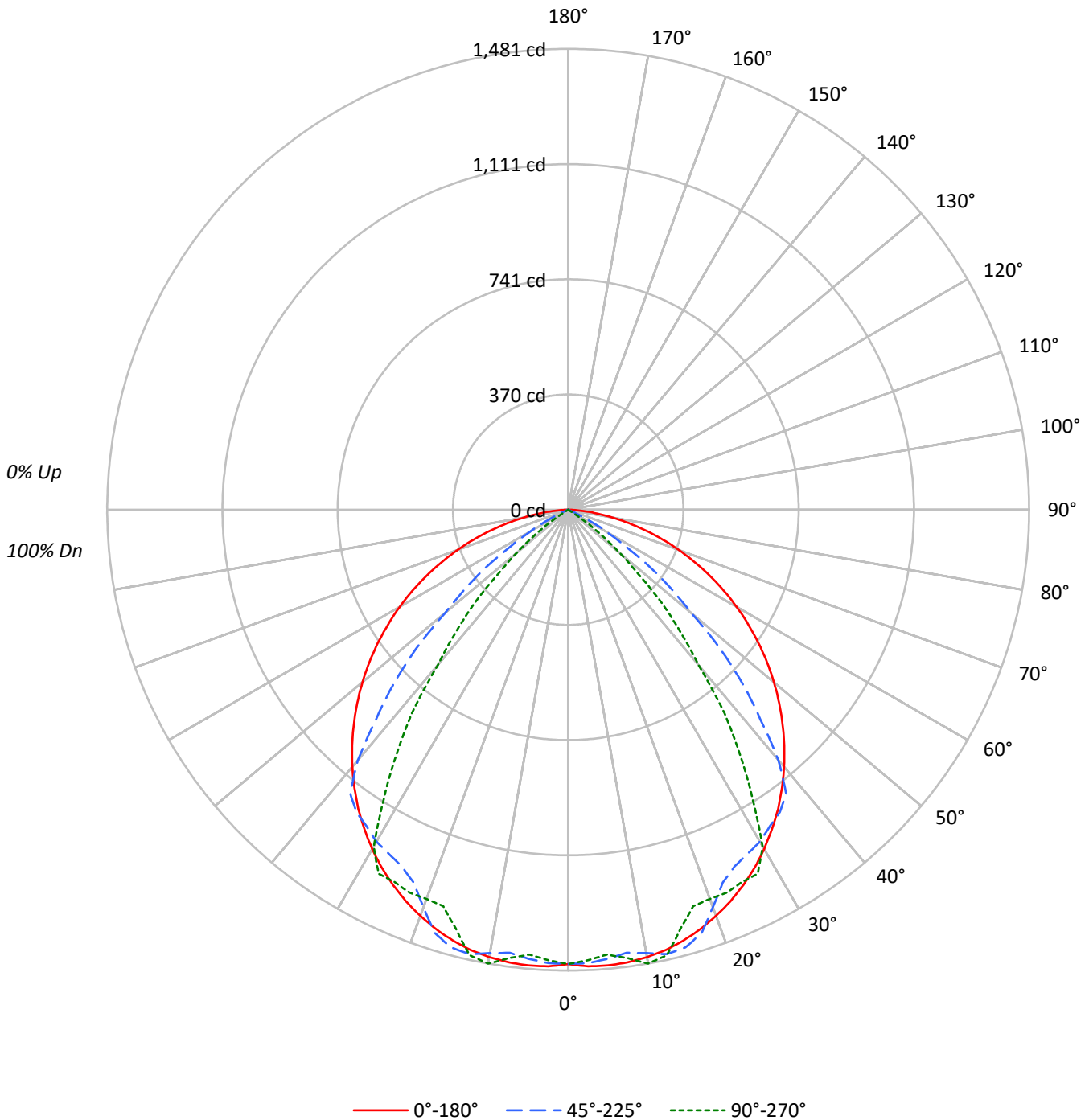
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: 227P156

CATALOG NUMBER: MBF-132NB-UNV-EB81-U

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	50	30	10	0	
RCR																						
0	114	114	114	114	112	112	112	112	107	107	107	102	102	102	98	98	98	96				
1	107	103	100	97	104	101	98	95	97	95	93	93	91	90	90	88	87	85				
2	99	93	87	83	97	91	86	82	88	84	80	85	81	78	82	79	77	75				
3	92	83	77	72	89	82	76	71	79	74	70	77	72	69	74	71	67	66				
4	85	75	68	63	83	74	67	62	72	66	61	70	65	61	68	63	60	58				
5	79	68	61	55	77	67	60	55	65	59	54	63	58	54	62	57	53	51				
6	73	62	54	49	72	61	54	49	60	53	48	58	52	48	57	52	48	46				
7	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41				
8	64	52	45	40	63	52	45	40	50	44	39	49	43	39	48	43	39	37				
9	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	39	36	34				
10	56	45	38	33	55	44	37	33	43	37	33	42	37	33	42	36	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7253	7253	7253
5°	7331	7226	7156
10°	7365	7300	7471
15°	7370	7489	7170
20°	7343	7185	7037
25°	7296	6934	7236
30°	7222	7067	7165
35°	7126	7193	5846
40°	6998	6816	4228
45°	6843	5585	3000
50°	6670	3996	1662
55°	6461	2763	641
60°	6210	1441	0
65°	5901	341	0
70°	5491	44	0
75°	4952	38	0
80°	4177	57	0
85°	2793	114	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	138.6	4.7	4.5	0°	1460	1460	1460	1460	1460	
10°-20°	400.5	13.5	12.9	5°	1470	1456	1449	1442	1435	140
20°-30°	606.3	20.4	19.6	15°	1433	1408	1456	1418	1394	404
30°-40°	690.9	23.2	22.3	25°	1331	1354	1265	1307	1320	613
40°-50°	565.0	19.0	18.2	35°	1175	1139	1186	1046	964	734
50°-60°	356.2	12.0	11.5	45°	974	944	795	501	427	751
60°-70°	155.8	5.2	5.0	55°	746	761	319	123	74	667
70°-80°	49.4	1.7	1.6	65°	502	319	29	0	0	497
80°-90°	10.6	0.4	0.3	75°	258	41	2	0	0	274
90°-100°	0.0	0.0	0.0	85°	49	9	2	0	0	63
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°	1145.4	38.5	36.9							
0°-40°	1836.3	61.8	59.2							
0°-60°	2757.4	92.7	88.9							
0°-90°	2973.2	100.0	95.9							
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°	2973.2	100.0	95.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1460	1460	1460	1460	1460
2.5°	1469	1464	1458	1455	1449
5°	1470	1456	1449	1442	1435
7.5°	1467	1448	1436	1448	1453
10°	1460	1435	1447	1478	1481
12.5°	1449	1418	1463	1474	1466
15°	1433	1408	1456	1418	1394
17.5°	1413	1401	1426	1351	1336
20°	1389	1397	1359	1323	1331
22.5°	1362	1381	1297	1317	1332
25°	1331	1354	1265	1307	1320
27.5°	1297	1317	1247	1296	1319
30°	1259	1269	1232	1285	1249
32.5°	1218	1202	1206	1195	1103
35°	1175	1139	1186	1046	964
37.5°	1128	1073	1150	917	825
40°	1079	1027	1051	773	652
42.5°	1027	984	914	609	536
45°	974	944	795	501	427
47.5°	919	903	664	392	305
50°	863	859	517	275	215
52.5°	805	817	416	192	142
55°	746	761	319	123	74
57.5°	686	663	216	58	15
60°	625	543	145	8	0
62.5°	564	438	83	0	0
65°	502	319	29	0	0
67.5°	440	227	4	0	0
70°	378	151	3	0	0
72.5°	318	87	3	0	0
75°	258	41	2	0	0
77.5°	200	13	2	0	0
80°	146	12	2	0	0
82.5°	95	10	2	0	0
85°	49	9	2	0	0
87.5°	15	8	2	0	0
90°	0	0	0	0	0

(END OF REPORT)