

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: 227p130

Luminaire Tested: **SM-154-TBW-EXTRA PAINT**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227p130
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SM-154-TBW-EXTRA PAINT
Description: SM SERIES MICRO STRIP LUMINAIRE WITH WHITE BAFFLED REFLECTOR
Light Source: ONE - PHILIPS F54T5H0/830 - 4400 LUMENS - 54 WATTS
Ballast/Driver: ONE- UNIVERSAL B254PUNV-D

Summary

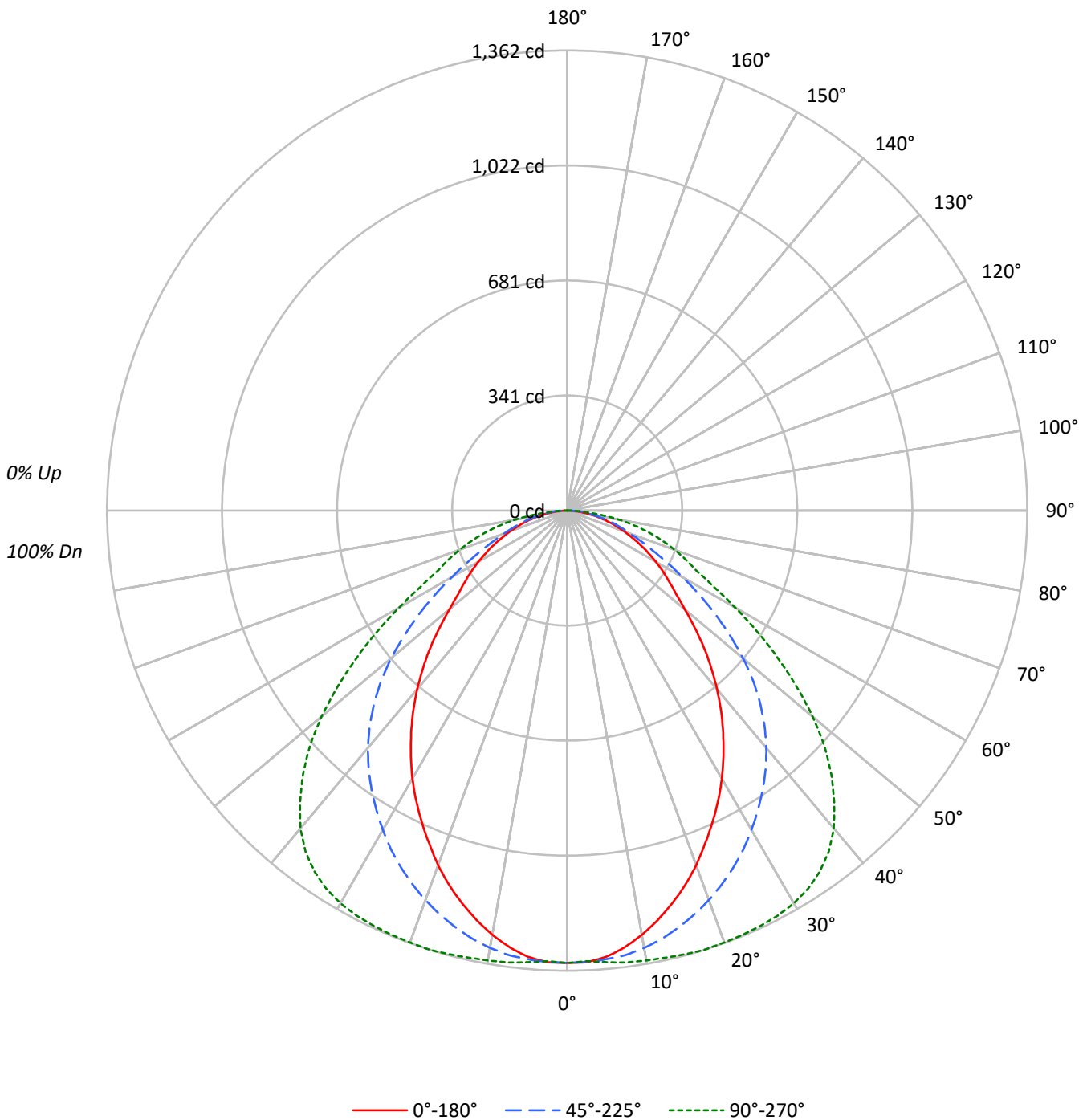
Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 3308.0 lumens
Efficiency: 75.2%
Efficacy: 57.0 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.48 / 1.33
Luminous Opening: Rectangular (W 0.24' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 58
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: 227p130

CATALOG NUMBER: SM-154-TBW-EXTRA PAINT

Luminous Intensity Polar Plot





TEST NUMBER: 227p130

CATALOG NUMBER: SM-154-TBW-EXTRA PAINT

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	90	90	90	90	87	87	87	87	84	84	84	80	80	80	77	77	77	75
1	82	79	76	73	80	77	75	72	74	72	70	71	69	68	69	67	66	64
2	75	70	65	61	74	68	64	60	66	62	59	63	60	57	61	58	56	55
3	69	62	56	51	67	61	55	51	58	54	50	56	52	49	54	51	48	47
4	64	55	49	44	62	54	48	44	52	47	43	51	46	43	49	45	42	40
5	59	49	43	38	57	49	43	38	47	42	38	46	41	37	44	40	37	35
6	54	45	38	34	53	44	38	33	43	37	33	41	37	33	40	36	33	31
7	50	41	34	30	49	40	34	30	39	34	30	38	33	29	37	32	29	28
8	47	37	31	27	46	37	31	27	36	30	27	35	30	26	34	30	26	25
9	44	34	28	24	43	34	28	24	33	28	24	32	27	24	31	27	24	22
10	41	32	26	22	40	31	26	22	31	25	22	30	25	22	29	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15693	15693	15693
5°	15600	15683	15789
10°	15174	15638	16090
15°	14597	15495	16490
20°	13932	15304	16963
25°	13165	15066	17536
30°	12397	14765	18162
35°	11518	14437	18657
40°	10557	14030	18788
45°	9481	13393	18332
50°	8278	12399	17304
55°	7560	10932	15570
60°	7102	9259	13455
65°	6628	7765	11731
70°	6134	6785	11583
75°	5660	6249	11321
80°	5062	5602	10462
85°	3900	6051	7262



TEST NUMBER: 227p130

CATALOG NUMBER: SM-154-TBW-EXTRA PAINT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	126.7	3.8	2.9	0°	1339	1339	1339	1339	1339	
10°-20°	361.1	10.9	8.2	5°	1326	1325	1333	1345	1342	125
20°-30°	542.0	16.4	12.3	15°	1203	1225	1277	1337	1359	338
30°-40°	643.7	19.5	14.6	25°	1018	1062	1165	1290	1356	468
40°-50°	628.6	19.0	14.3	35°	805	865	1009	1196	1304	503
50°-60°	485.5	14.7	11.0	45°	572	638	808	988	1106	440
60°-70°	304.0	9.2	6.9	55°	370	396	535	667	762	333
70°-80°	166.1	5.0	3.8	65°	239	245	280	348	423	237
80°-90°	50.3	1.5	1.1	75°	125	126	138	176	250	132
90°-100°	0.0	0.0	0.0	85°	29	33	45	55	54	35
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°	1029.8	31.1	23.4							
0°-40°	1673.5	50.6	38.0							
0°-60°	2787.7	84.3	63.4							
0°-90°	3308.0	100.0	75.2							
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°	3308.0	100.0	75.2							



TEST NUMBER: 227p130

CATALOG NUMBER: SM-154-TBW-EXTRA PAINT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1339	1339	1339	1339	1339
2.5°	1338	1336	1337	1342	1335
5°	1326	1325	1333	1345	1342
7.5°	1304	1308	1327	1346	1349
10°	1275	1285	1314	1345	1352
12.5°	1241	1257	1298	1342	1355
15°	1203	1225	1277	1337	1359
17.5°	1162	1190	1253	1330	1362
20°	1117	1151	1227	1318	1360
22.5°	1067	1108	1197	1305	1359
25°	1018	1062	1165	1290	1356
27.5°	968	1016	1130	1273	1351
30°	916	968	1091	1252	1342
32.5°	861	918	1051	1227	1327
35°	805	865	1009	1196	1304
37.5°	749	811	965	1157	1272
40°	690	756	917	1111	1228
42.5°	631	698	865	1054	1170
45°	572	638	808	988	1106
47.5°	511	577	747	917	1033
50°	454	514	680	840	949
52.5°	407	451	607	756	856
55°	370	396	535	667	762
57.5°	337	352	464	582	667
60°	303	314	395	498	574
62.5°	270	279	333	419	489
65°	239	245	280	348	423
67.5°	208	212	235	295	380
70°	179	181	198	254	338
72.5°	151	152	167	214	295
75°	125	126	138	176	250
77.5°	99	101	110	138	204
80°	75	77	83	104	155
82.5°	52	53	62	77	102
85°	29	33	45	55	54
87.5°	9	18	31	38	30
90°	0	0	0	0	0

(END OF REPORT)