

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: P30650

Luminaire Tested: **I5-454T5-UNV-EBT1-UPL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P30650
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I5-454T5-UNV-EBT1-UPL
Description: METALUX F-BAY I5 SERIES HIGH BAY 4' OPEN LINEAR FLUORESCENT
LUMINAIRE WITH A SPECULAR ALUMINUM NARROW DISTRIBUTION
REFLECTOR & UPLIGHT
Light Source: (4) BIPIN T5 LINEAR FLUORESCENT LAMP 5000K - 4400 LUMENS EA
GE F54W-T5-850-ECO
Ballast/Driver: -
GE454MVPS90-E

Summary

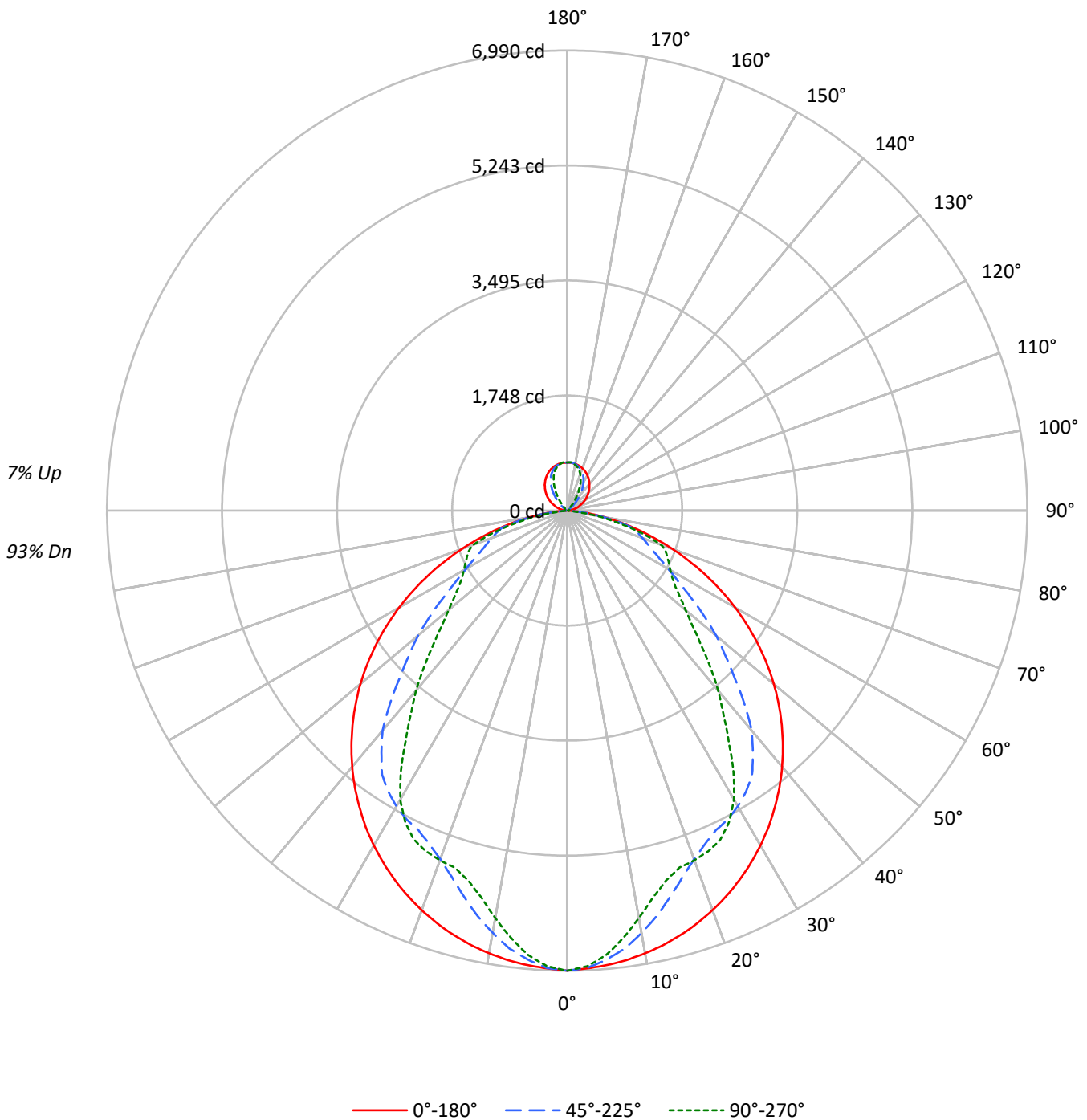
Lumens per Lamp: 4400 (4 lamps)
Luminaire Lumens: 17097.4 lumens
Efficiency: 97.1%
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.1 / 1.24
Luminous Opening: Rectangular (W 1.23' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 227
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: P30650

CATALOG NUMBER: I5-454T5-UNV-EBT1-UPL

Luminous Intensity Polar Plot





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CATALOG NUMBER: I5-454T5-UNV-EBT1-UPL

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	114	114	114	114	111	111	111	111	104	104	104	98	98	98	93	93	93	90
1	105	100	97	93	101	98	94	91	92	89	87	87	85	83	83	81	79	77
2	96	88	82	77	93	86	80	75	81	76	72	77	73	70	73	70	67	65
3	88	78	70	64	85	76	69	63	72	66	61	68	64	59	65	61	58	55
4	80	69	61	55	78	68	60	54	64	58	53	61	56	51	58	54	50	48
5	74	62	54	48	72	61	53	47	58	51	46	55	49	45	53	48	44	42
6	69	56	48	42	66	55	47	41	53	46	41	50	44	40	48	43	39	37
7	64	51	43	37	62	50	42	37	48	41	36	46	40	35	44	39	35	33
8	59	47	39	33	58	46	38	33	44	37	32	42	36	32	41	35	31	29
9	56	43	35	30	54	42	35	30	41	34	29	39	33	29	38	32	28	27
10	52	40	32	27	51	39	32	27	38	31	27	36	30	26	35	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15968	15968	15968
5°	15896	15704	15545
10°	15841	15108	14577
15°	15780	14339	13750
20°	15702	13699	13743
25°	15610	13495	13894
30°	15492	13680	13369
35°	15338	13662	11925
40°	15149	13008	10646
45°	14894	11637	9272
50°	14571	10506	8341
55°	14107	9097	7986
60°	13474	8110	8274
65°	12579	7757	9087
70°	11348	8135	10179
75°	9709	9109	8500
80°	7420	7117	5867
85°	4037	1468	157



TEST NUMBER: P30650

CATALOG NUMBER: I5-454T5-UNV-EBT1-UPL

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	644.1	3.8	3.7	0°	6990	6990	6990	6990	6990	
10°-20°	1737.9	10.2	9.9	5°	6932	6908	6848	6803	6779	658
20°-30°	2572.6	15.0	14.6	15°	6672	6444	6063	5855	5814	1883
30°-40°	2971.6	17.4	16.9	25°	6193	5650	5354	5488	5512	2854
40°-50°	2796.7	16.4	15.9	35°	5500	4770	4899	4515	4276	3441
50°-60°	2292.5	13.4	13.0	45°	4610	4060	3602	3069	2870	3554
60°-70°	1695.9	9.9	9.6	55°	3542	3116	2284	2038	2005	3162
70°-80°	995.6	5.8	5.7	65°	2327	1771	1435	1614	1681	2300
80°-90°	173.0	1.0	1.0	75°	1100	737	1032	1014	963	1170
90°-100°	24.3	0.1	0.1	85°	154	187	56	14	6	216
100°-110°	43.1	0.3	0.2	90°	10	14	15	13	10	12
110°-120°	73.8	0.4	0.4	95°	45	19	18	20	19	47
120°-130°	120.1	0.7	0.7	105°	140	25	27	28	27	149
130°-140°	181.5	1.1	1.0	115°	249	82	35	37	39	247
140°-150°	251.3	1.5	1.4	125°	366	237	40	46	45	327
150°-160°	262.1	1.5	1.5	135°	476	397	195	68	48	367
160°-170°	192.2	1.1	1.1	145°	574	534	402	278	232	359
170°-180°	69.2	0.4	0.4	155°	653	635	579	512	484	301
0°-30°	4954.5	29.0	28.2	165°	704	702	685	671	659	199
0°-40°	7926.1	46.4	45.0	175°	728	730	731	729	734	69
0°-60°	13015.3	76.1	74.0	180°	730	730	730	730	730	
0°-90°	15879.9	92.9	90.2							
90°-120°	141.2	0.8	0.8							
90°-150°	694.1	4.1	3.9							
90°-180°	1218.0	7.1	6.9							
0°-180°	17097.4	100.0	97.1							



TEST NUMBER: P30650

CATALOG NUMBER: I5-454T5-UNV-EBT1-UPL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6990	6990	6990	6990	6990
2.5°	6961	6961	6956	6943	6929
5°	6932	6908	6848	6803	6779
7.5°	6888	6821	6710	6599	6547
10°	6829	6715	6513	6355	6284
12.5°	6760	6593	6304	6094	6021
15°	6672	6444	6063	5855	5814
17.5°	6574	6268	5833	5698	5685
20°	6459	6078	5635	5598	5653
22.5°	6332	5876	5477	5564	5602
25°	6193	5650	5354	5488	5512
27.5°	6039	5431	5285	5378	5328
30°	5873	5198	5186	5158	5068
32.5°	5695	4976	5058	4890	4705
35°	5500	4770	4899	4515	4276
37.5°	5298	4573	4635	4104	3900
40°	5080	4386	4362	3740	3570
42.5°	4851	4227	3989	3426	3214
45°	4610	4060	3602	3069	2870
47.5°	4361	3870	3259	2736	2575
50°	4100	3660	2956	2451	2347
52.5°	3827	3416	2616	2229	2160
55°	3542	3116	2284	2038	2005
57.5°	3247	2792	1999	1892	1890
60°	2949	2417	1775	1774	1811
62.5°	2639	2072	1588	1690	1744
65°	2327	1771	1435	1614	1681
67.5°	2010	1464	1317	1542	1620
70°	1699	1166	1218	1470	1524
72.5°	1391	923	1127	1295	1252
75°	1100	737	1032	1014	963
77.5°	819	596	804	731	683
80°	564	490	541	490	446
82.5°	340	381	320	171	97
85°	154	187	56	14	6
87.5°	38	32	15	12	6
90°	10	14	15	13	10
92.5°	31	16	16	18	18
95°	45	19	18	20	19
97.5°	67	21	20	21	21
100°	91	21	23	22	22
102.5°	117	24	25	25	25
105°	140	25	27	28	27
107.5°	168	25	30	30	31
110°	192	28	29	30	31



TEST NUMBER: P30650

CATALOG NUMBER: I5-454T5-UNV-EBT1-UPL

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	219	51	31	35	35
115°	249	82	35	37	39
117.5°	278	117	37	37	40
120°	309	157	36	40	40
122.5°	336	195	34	41	41
125°	366	237	40	46	45
127.5°	396	279	65	46	48
130°	422	318	104	43	47
132.5°	449	358	148	44	45
135°	476	397	195	68	48
137.5°	502	436	246	114	74
140°	528	469	297	164	123
142.5°	551	501	348	217	175
145°	574	534	402	278	232
147.5°	596	562	452	338	297
150°	616	588	497	397	359
152.5°	635	612	539	457	423
155°	653	635	579	512	484
157.5°	668	656	612	563	537
160°	682	675	643	609	586
162.5°	694	690	665	642	626
165°	704	702	685	671	659
167.5°	712	712	701	691	682
170°	721	721	717	709	705
172.5°	724	726	726	721	721
175°	728	730	731	729	734
177.5°	727	730	732	732	735
180°	730	730	730	730	730

(END OF REPORT)