

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: 236P108

Luminaire Tested: **I5-354T5-UNV-EBT2-UPL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P108
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I5-354T5-UNV-EBT2-UPL
Description: I5 SERIES LUMINAIRE WITH SPECULAR ALUMINUM MEDIUM
DISTRIBUTION REFLECTOR AND UPLIGHT
Light Source: THREE 54-WATT T5HO - 4400 LUMENS EA
Ballast/Driver: TWO UNIVERSAL B254PUNV-D

Summary

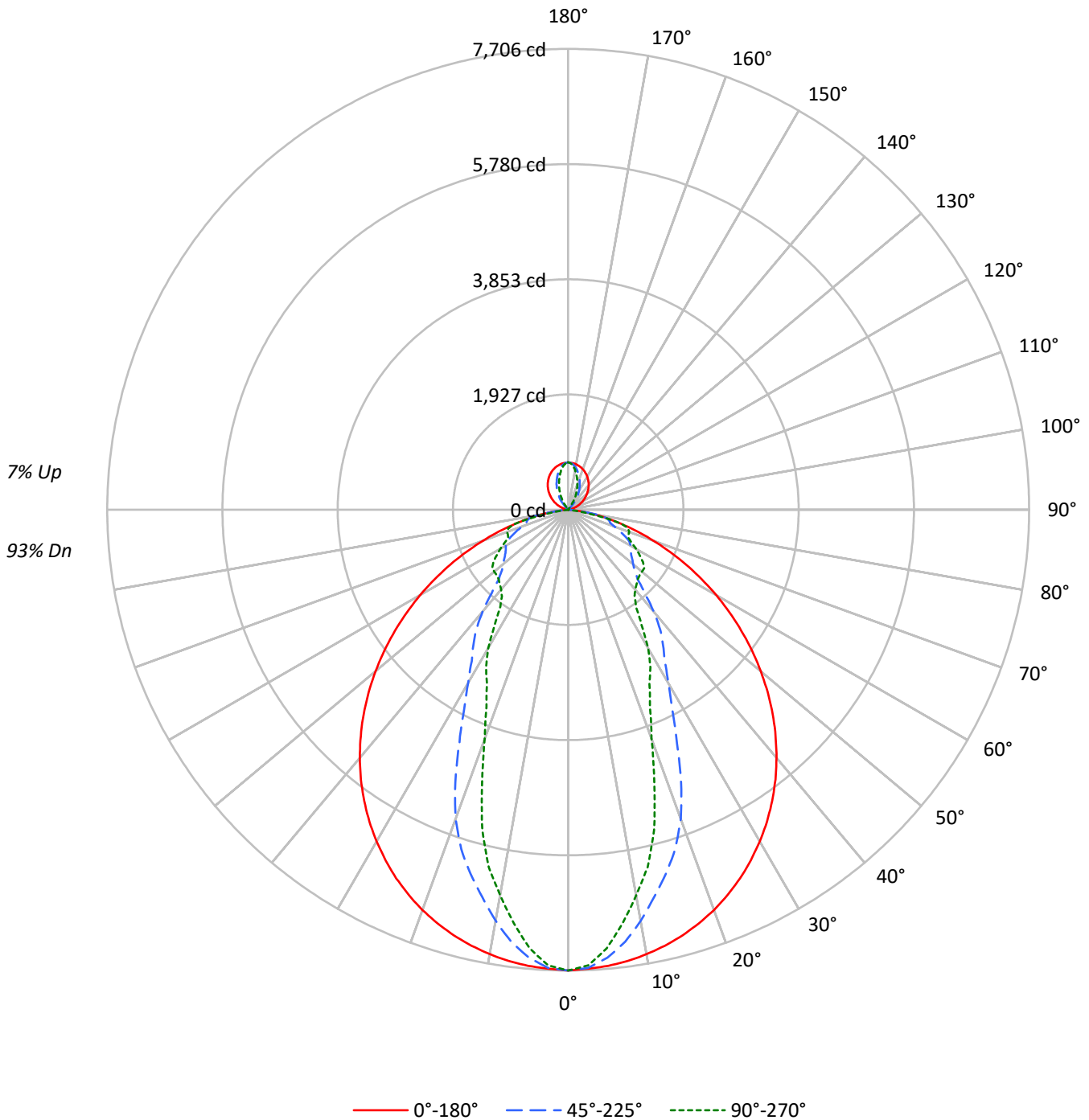
Lumens per Lamp: 4400 (3 lamps)
Luminaire Lumens: 12970.5 lumens
Efficiency: 98.3%
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.67 / 0.86
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 3.83' x H: 0.05')
CIE Type: Direct

Input Watts (W): 175
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	50	30	10	0	
RCR																						
0	115	115	115	115	112	112	112	112	105	105	105	99	99	99	94	94	94	94	94	94	91	
1	106	102	98	95	103	99	96	93	94	91	89	89	87	85	84	83	81	81	81	81	79	
2	98	90	84	79	95	88	82	78	83	79	75	79	76	72	75	72	70	70	70	70	67	
3	90	81	73	67	87	78	72	66	75	69	64	71	66	63	68	64	61	61	61	61	58	
4	83	72	64	59	80	71	63	58	67	61	56	64	59	55	62	57	53	53	53	53	51	
5	77	65	57	51	75	64	57	51	61	55	50	59	53	49	56	51	48	48	48	48	45	
6	72	60	52	46	69	58	51	45	56	49	45	54	48	44	52	47	43	43	43	43	41	
7	67	55	47	41	65	54	46	41	52	45	40	50	44	39	48	43	39	39	39	39	37	
8	63	50	43	37	61	50	42	37	48	41	37	46	40	36	44	39	35	35	35	35	34	
9	59	47	39	34	57	46	39	34	44	38	34	43	37	33	41	36	33	33	33	33	31	
10	56	44	36	32	54	43	36	31	41	35	31	40	34	30	39	34	30	30	30	30	28	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26093	26093	26093
5°	25996	25445	24896
10°	25889	23789	22267
15°	25749	21799	19143
20°	25549	19452	14372
25°	25255	15704	11676
30°	24852	12691	10085
35°	24352	11033	7826
40°	23689	9425	7338
45°	22864	7475	7430
50°	21796	7030	7923
55°	20487	7047	8290
60°	18920	7476	8021
65°	16959	7550	7862
70°	14498	7106	9225
75°	11464	7794	10040
80°	7843	7625	3793
85°	3178	756	598



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	701.4	5.4	5.3	0°	7706	7706	7706	7706	7706	
10°-20°	1773.7	13.7	13.4	5°	7657	7623	7520	7419	7363	727
20°-30°	2150.1	16.6	16.3	15°	7371	6982	6305	5807	5549	2079
30°-40°	2095.1	16.2	15.9	25°	6801	5882	4305	3388	3213	3131
40°-50°	1793.8	13.8	13.6	35°	5945	4479	2766	2166	1973	3715
50°-60°	1535.2	11.8	11.6	45°	4837	2679	1642	1620	1645	3724
60°-70°	1144.2	8.8	8.7	55°	3535	1603	1282	1507	1525	3159
70°-80°	757.6	5.8	5.7	65°	2176	788	1047	1090	1108	2155
80°-90°	123.7	1.0	0.9	75°	919	496	711	932	940	990
90°-100°	7.9	0.1	0.1	85°	94	153	31	30	26	154
100°-110°	16.9	0.1	0.1	90°	1	12	13	10	7	4
110°-120°	33.7	0.3	0.3	95°	9	5	6	6	5	14
120°-130°	71.4	0.6	0.5	105°	84	6	6	6	6	91
130°-140°	114.4	0.9	0.9	115°	206	8	7	8	8	205
140°-150°	179.3	1.4	1.4	125°	343	128	8	9	9	306
150°-160°	219.3	1.7	1.7	135°	471	284	37	13	10	363
160°-170°	180.8	1.4	1.4	145°	587	441	262	113	49	367
170°-180°	71.9	0.6	0.5	155°	681	590	458	366	331	314
0°-30°	4625.3	35.7	35.0	165°	748	711	639	583	562	211
0°-40°	6720.4	51.8	50.9	175°	783	780	771	763	755	74
0°-60°	10049.4	77.5	76.1	180°	792	792	792	792	792	
0°-90°	12074.8	93.1	91.5							
90°-120°	58.5	0.5	0.4							
90°-150°	423.6	3.3	3.2							
90°-180°	896.0	6.9	6.8							
0°-180°	12970.5	100.0	98.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7706	7706	7706	7706	7706
2.5°	7682	7683	7669	7645	7626
5°	7657	7623	7520	7419	7363
7.5°	7613	7522	7287	7073	6974
10°	7547	7379	6982	6657	6545
12.5°	7468	7197	6635	6279	6124
15°	7371	6982	6305	5807	5549
17.5°	7255	6734	5951	5165	4781
20°	7124	6464	5500	4422	4076
22.5°	6970	6173	4932	3831	3567
25°	6801	5882	4305	3388	3213
27.5°	6610	5586	3767	3097	2973
30°	6404	5265	3343	2857	2669
32.5°	6184	4895	3001	2538	2282
35°	5945	4479	2766	2166	1973
37.5°	5690	4004	2527	1887	1820
40°	5418	3516	2225	1751	1744
42.5°	5132	3062	1895	1686	1693
45°	4837	2679	1642	1620	1645
47.5°	4523	2343	1504	1570	1621
50°	4202	2065	1417	1549	1612
52.5°	3873	1838	1347	1527	1603
55°	3535	1603	1282	1507	1525
57.5°	3197	1329	1237	1417	1418
60°	2857	1070	1203	1313	1308
62.5°	2514	894	1154	1198	1199
65°	2176	788	1047	1090	1108
67.5°	1840	700	932	1015	1090
70°	1517	625	820	1007	1086
72.5°	1209	565	736	989	1051
75°	919	496	711	932	940
77.5°	656	394	666	683	610
80°	432	303	506	340	261
82.5°	245	258	213	68	33
85°	94	153	31	30	26
87.5°	25	24	25	27	25
90°	1	12	13	10	7
92.5°	2	6	7	6	4
95°	9	5	6	6	5
97.5°	22	5	6	6	5
100°	40	5	6	6	5
102.5°	60	5	6	6	6
105°	84	6	6	6	6
107.5°	112	5	6	6	6
110°	142	6	7	7	7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174	7	7	8	8
115°	206	8	7	8	8
117.5°	241	18	7	8	9
120°	275	38	8	8	9
122.5°	309	92	8	9	9
125°	343	128	8	9	9
127.5°	375	166	11	9	9
130°	408	205	10	9	10
132.5°	441	245	18	10	10
135°	471	284	37	13	10
137.5°	502	324	93	11	15
140°	531	363	164	19	12
142.5°	560	402	213	43	23
145°	587	441	262	113	49
147.5°	612	479	312	193	136
150°	638	517	362	250	211
152.5°	660	554	410	308	271
155°	681	590	458	366	331
157.5°	700	625	504	423	391
160°	718	657	550	478	450
162.5°	734	685	595	530	507
165°	748	711	639	583	562
167.5°	759	734	680	635	617
170°	770	753	718	685	671
172.5°	778	769	748	729	718
175°	783	780	771	763	755
177.5°	787	788	786	785	781
180°	792	792	792	792	792

(END OF REPORT)