

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: 127p123

Luminaire Tested: **VT1-154T5-PC-UNV-EBT1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 127p123
Test Lab: AMERICUS RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VT1-154T5-PC-UNV-EBT1-WL-U
Description: VAPORTITE, 1 LAMP T5HO WITH CLEAR INTERNAL PRISM
POLYCARBONATE TALL DROP LENS
Light Source: ONE 54 WATT T5HO - 4400 LUMENS EA
Ballast/Driver: -

Summary

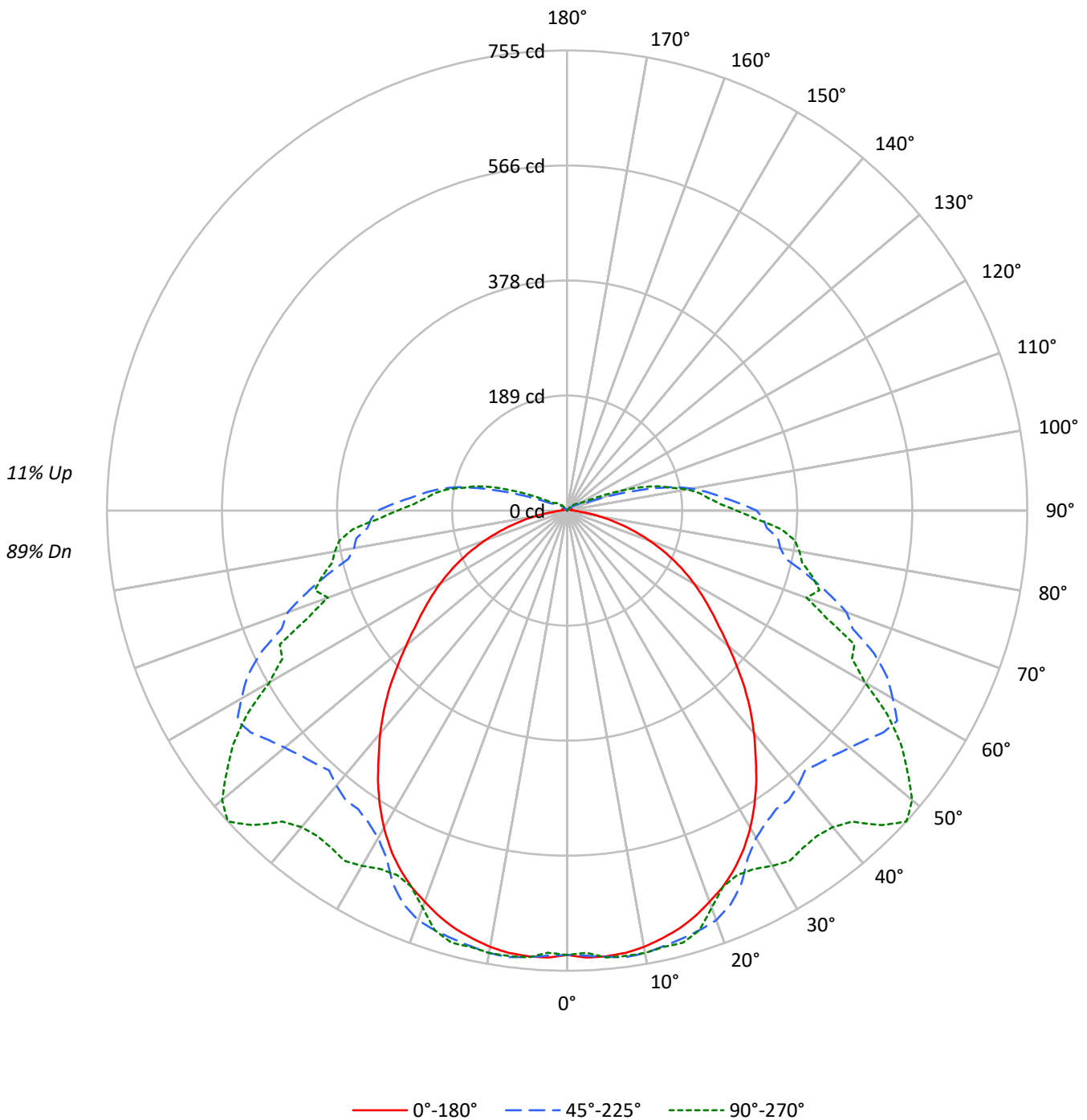
Lumens per Lamp: 4400 (1 lamp)
Luminaire Lumens: 3398.1 lumens
Efficiency: 77.2%
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.42 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4.21' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 52
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	0
RCR																		
0	90	90	90	90	87	87	87	87	81	81	81	76	76	76	71	71	71	69
1	79	74	70	66	76	72	68	64	67	63	60	62	59	57	58	56	54	51
2	71	63	57	51	68	61	55	50	57	52	48	53	49	45	49	46	43	41
3	64	54	47	41	61	53	46	40	49	43	39	46	41	37	42	38	35	33
4	58	48	40	34	55	46	39	33	43	37	32	40	35	31	37	33	29	27
5	53	42	35	29	51	41	34	28	38	32	27	36	30	26	33	29	25	23
6	49	38	30	25	47	36	29	24	34	28	23	32	27	23	30	25	22	20
7	45	34	27	22	43	33	26	21	31	25	20	29	24	20	27	23	19	17
8	42	31	24	19	40	30	23	19	28	22	18	26	21	17	25	20	17	15
9	39	28	21	17	37	27	21	17	26	20	16	24	19	16	23	18	15	14
10	37	26	20	15	35	25	19	15	24	18	15	22	18	14	21	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7458	7458	7458
5°	7512	7233	7142
10°	7500	7037	6851
15°	7441	6792	6596
20°	7331	6587	6072
25°	7194	6190	5684
30°	6941	5685	5741
35°	6575	5534	5748
40°	6166	5543	5807
45°	5734	5655	6337
50°	5244	6037	6555
55°	4879	6601	6113
60°	4615	6769	5356
65°	4307	6499	5181
70°	3885	6154	4416
75°	3272	5632	4715
80°	2550	5458	4769
85°	1778	5757	4807



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	70.2	2.1	1.6	0°	729	729	729	729	729	
10°-20°	204.4	6.0	4.6	5°	734	732	735	740	736	70
20°-30°	308.1	9.1	7.0	15°	710	718	727	736	734	200
30°-40°	387.6	11.4	8.8	25°	649	677	676	657	660	298
40°-50°	454.1	13.4	10.3	35°	541	605	598	662	675	338
50°-60°	494.5	14.6	11.2	45°	412	494	586	687	730	317
60°-70°	442.7	13.0	10.1	55°	289	399	634	707	669	260
70°-80°	361.1	10.6	8.2	65°	193	339	556	547	520	191
80°-90°	297.8	8.8	6.8	75°	95	226	408	475	416	102
90°-100°	219.0	6.4	5.0	85°	22	167	329	415	353	25
100°-110°	113.2	3.3	2.6	90°	11	146	311	363	278	6
110°-120°	28.7	0.8	0.7	95°	8	130	254	298	233	6
120°-130°	11.5	0.3	0.3	105°	8	40	136	175	154	8
130°-140°	4.9	0.1	0.1	115°	5	11	27	37	44	5
140°-150°	0.3	0.0	0.0	125°	3	3	15	20	22	2
150°-160°	0.0	0.0	0.0	135°	1	1	6	11	12	1
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	582.7	17.1	13.2	165°	0	0	0	0	0	0
0°-40°	970.3	28.6	22.1	175°	0	0	0	0	0	0
0°-60°	1918.9	56.5	43.6	180°	0	0	0	0	0	0
0°-90°	3020.5	88.9	68.6							
90°-120°	360.9	10.6	8.2							
90°-150°	377.6	11.1	8.6							
90°-180°	378.0	11.1	8.6							
0°-180°	3398.1	100.0	77.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729	729	729	729	729
2.5°	734	732	731	731	726
5°	734	732	735	740	736
7.5°	732	732	739	741	737
10°	727	731	737	740	737
12.5°	719	726	732	735	733
15°	710	718	727	736	734
17.5°	698	708	722	728	722
20°	683	698	715	707	693
22.5°	668	688	700	675	668
25°	649	677	676	657	660
27.5°	627	663	642	650	663
30°	601	648	620	655	673
32.5°	572	629	607	660	681
35°	541	605	598	662	675
37.5°	508	579	598	656	673
40°	477	554	589	655	678
42.5°	445	524	578	668	692
45°	412	494	586	687	730
47.5°	377	465	594	725	755
50°	345	439	605	751	739
52.5°	315	419	618	741	704
55°	289	399	634	707	669
57.5°	265	383	642	676	623
60°	241	370	617	631	564
62.5°	217	355	592	578	527
65°	193	339	556	547	520
67.5°	168	322	507	526	460
70°	144	290	488	486	418
72.5°	119	254	448	480	434
75°	95	226	408	475	416
77.5°	74	205	368	465	395
80°	53	181	355	442	387
82.5°	36	170	349	428	377
85°	22	167	329	415	353
87.5°	14	156	322	395	309
90°	11	146	311	363	278
92.5°	9	142	282	325	251
95°	8	130	254	298	233
97.5°	6	107	232	276	219
100°	7	83	208	244	200
102.5°	7	60	178	204	173
105°	8	40	136	175	154
107.5°	7	23	95	129	128
110°	7	16	61	87	96



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6	13	35	57	68
115°	5	11	27	37	44
117.5°	4	8	24	28	29
120°	4	6	21	24	24
122.5°	3	4	18	25	23
125°	3	3	15	20	22
127.5°	2	2	13	18	17
130°	2	2	10	16	16
132.5°	2	2	8	13	13
135°	1	1	6	11	12
137.5°	1	1	4	9	9
140°	1	1	3	7	8
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)