

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: 127p122

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 127p122  
Test Lab: AMERICUS RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VT1-154T5-PCR-UNV-EBT1-WL-U  
Description: VAPORTITE, 1 LAMP T5HO WITH CLEAR CONTOURED LINEAL  
RIBBED DROP LENS  
Light Source: ONE 54 WATT T5HO - 4400 LUMENS EA  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 4400 (1 lamp)  
Luminaire Lumens: 3413.3 lumens  
Efficiency: 77.6%  
Efficacy: 65.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.47 / 1.52  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4.21' x H: 0.17')  
CIE Type: Semi-Direct

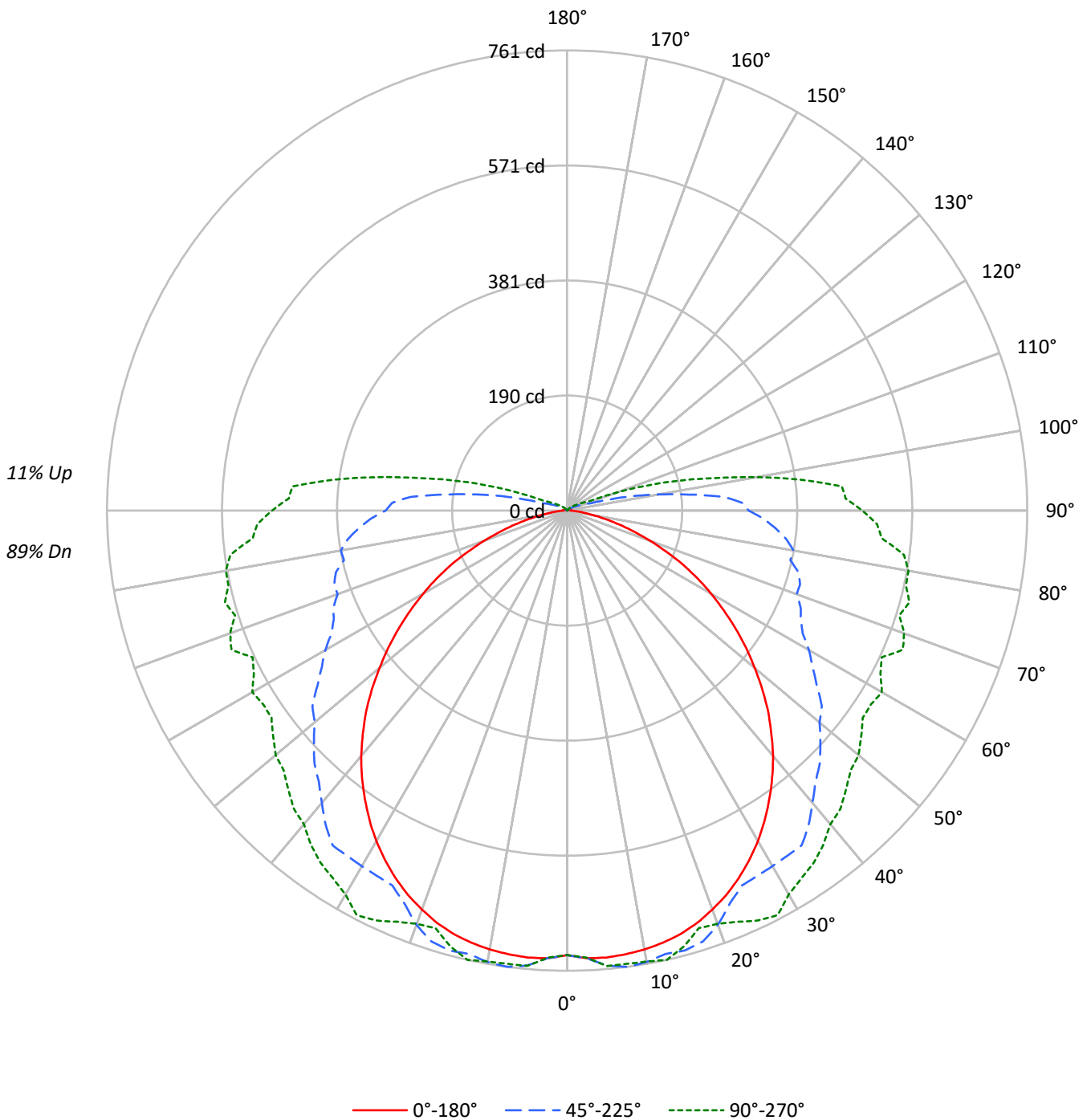
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: 127p122

CATALOG NUMBER: VT1-154T5-PCR-UNV-EBT1-WL-U

### Luminous Intensity Polar Plot





TEST NUMBER: 127p122

CATALOG NUMBER: VT1-154T5-PCR-UNV-EBT1-WL-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	50	30	10	0														
RCR																																						
0	90	90	90	90	87	87	87	87	82	82	82	76	76	76	71	71	71	69																				
1	79	74	70	65	76	71	67	64	66	63	60	62	59	57	58	56	53	51																				
2	71	63	57	51	68	61	55	50	56	52	47	53	48	45	49	46	43	40																				
3	64	54	47	41	61	53	46	40	49	43	38	46	41	37	42	38	35	33																				
4	58	48	40	34	56	46	39	34	43	37	32	40	35	31	37	33	29	27																				
5	53	42	35	29	51	41	34	29	38	32	27	36	31	26	34	29	25	23																				
6	49	38	30	25	47	37	30	25	34	28	24	32	27	23	30	26	22	20																				
7	45	34	27	22	44	33	26	22	31	25	21	29	24	20	28	23	19	18																				
8	42	31	24	19	41	30	24	19	28	23	18	27	22	18	25	21	17	16																				
9	39	29	22	17	38	28	21	17	26	20	17	25	20	16	23	19	15	14																				
10	37	26	20	16	35	26	19	15	24	19	15	23	18	14	22	17	14	13																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7520	7520	7520
5°	7594	7429	7336
10°	7604	7237	7037
15°	7599	7034	6704
20°	7535	6716	6370
25°	7437	6263	6441
30°	7288	6226	6253
35°	7085	6256	6054
40°	6851	5939	5798
45°	6541	5703	5660
50°	6156	5438	5579
55°	5740	5247	5455
60°	5266	5069	5707
65°	4708	4980	5719
70°	3939	5095	6264
75°	3065	5466	6641
80°	2117	5842	7062
85°	1374	6072	7109



TEST NUMBER: 127p122

CATALOG NUMBER: VT1-154T5-PCR-UNV-EBT1-WL-U

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	71.8	2.1	1.6	0°	735	735	735	735	735	
10°-20°	210.1	6.2	4.8	5°	742	746	755	760	756	71
20°-30°	326.5	9.6	7.4	15°	725	744	753	758	746	204
30°-40°	409.7	12.0	9.3	25°	671	696	684	731	748	309
40°-50°	441.8	12.9	10.0	35°	583	602	676	699	711	364
50°-60°	439.8	12.9	10.0	45°	470	500	591	640	652	362
60°-70°	414.7	12.2	9.4	55°	340	413	504	572	597	304
70°-80°	387.4	11.4	8.8	65°	211	296	426	534	574	208
80°-90°	341.9	10.0	7.8	75°	89	199	396	533	586	96
90°-100°	249.0	7.3	5.7	85°	17	150	347	480	522	20
100°-110°	93.0	2.7	2.1	90°	6	105	300	441	488	4
110°-120°	18.7	0.5	0.4	95°	7	72	260	406	456	5
120°-130°	6.6	0.2	0.2	105°	3	14	67	156	191	4
130°-140°	2.1	0.1	0.0	115°	1	2	19	29	34	1
140°-150°	0.1	0.0	0.0	125°	1	1	7	13	14	1
150°-160°	0.0	0.0	0.0	135°	1	1	1	5	6	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°	608.5	17.8	13.8	165°	0	0	0	0	0	0
0°-40°	1018.2	29.8	23.1	175°	0	0	0	0	0	0
0°-60°	1899.8	55.7	43.2	180°	0	0	0	0	0	0
0°-90°	3043.8	89.2	69.2							
90°-120°	360.6	10.6	8.2							
90°-150°	369.5	10.8	8.4							
90°-180°	369.0	10.8	8.4							
0°-180°	3413.3	100.0	77.6							



TEST NUMBER: 127p122

CATALOG NUMBER: VT1-154T5-PCR-UNV-EBT1-WL-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735	735	735	735	735
2.5°	741	739	741	743	740
5°	742	746	755	760	756
7.5°	740	752	761	762	756
10°	737	755	758	758	757
12.5°	732	752	751	766	761
15°	725	744	753	758	746
17.5°	715	734	747	734	724
20°	702	721	729	719	727
22.5°	688	707	703	725	736
25°	671	696	684	731	748
27.5°	652	684	681	742	754
30°	631	663	679	737	733
32.5°	608	637	677	714	721
35°	583	602	676	699	711
37.5°	557	569	656	688	696
40°	530	542	631	669	677
42.5°	500	520	608	650	669
45°	470	500	591	640	652
47.5°	438	479	568	620	636
50°	405	460	545	604	629
52.5°	373	439	531	593	613
55°	340	413	504	572	597
57.5°	307	384	481	558	596
60°	275	353	462	558	601
62.5°	243	324	439	558	584
65°	211	296	426	534	574
67.5°	177	269	418	541	601
70°	146	243	404	555	593
72.5°	116	219	404	532	576
75°	89	199	396	533	586
77.5°	65	185	378	533	574
80°	44	176	380	524	573
82.5°	28	163	366	518	562
85°	17	150	347	480	522
87.5°	10	131	326	467	513
90°	6	105	300	441	488
92.5°	7	96	290	415	461
95°	7	72	260	406	456
97.5°	7	48	203	341	390
100°	5	27	153	272	319
102.5°	4	20	109	210	247
105°	3	14	67	156	191
107.5°	3	9	40	106	136
110°	2	6	31	57	87



TEST NUMBER: 127p122

CATALOG NUMBER: VT1-154T5-PCR-UNV-EBT1-WL-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	2	4	24	36	43
115°	1	2	19	29	34
117.5°	1	1	15	24	27
120°	1	1	12	19	21
122.5°	1	1	9	16	17
125°	1	1	7	13	14
127.5°	1	1	5	11	12
130°	1	1	3	8	10
132.5°	1	1	2	7	7
135°	1	1	1	5	6
137.5°	1	1	1	3	4
140°	1	1	1	2	2
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)