

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: CORELITE

Report Number: 89167

Luminaire Tested: **E2-SB-3T5-UDU-1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89167  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-3T5-UDU-1  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH LAMP ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

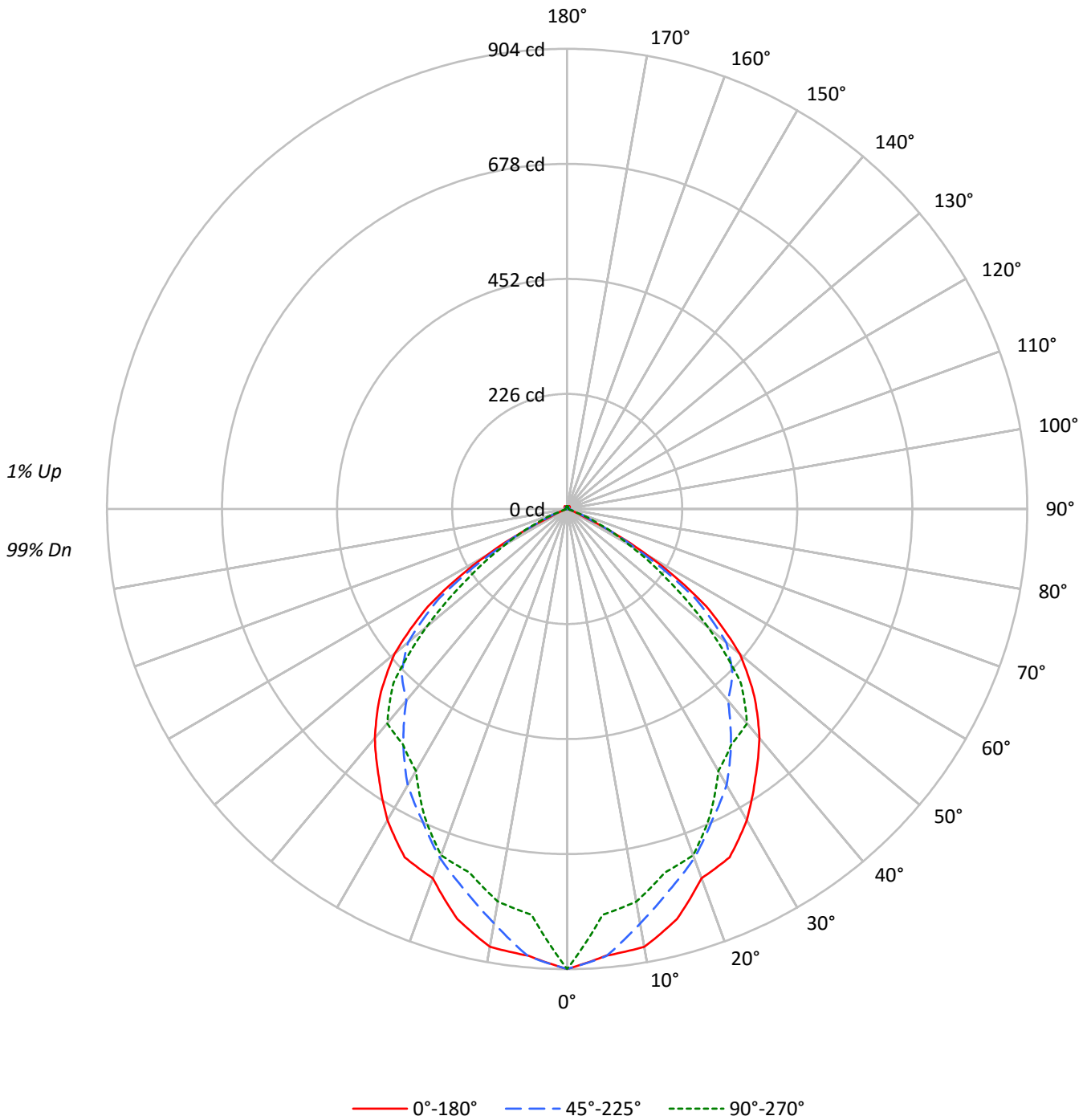
Lumens per Lamp: 4500 (1 lamp)  
Luminaire Lumens: 1708.7 lumens  
Efficiency: 38.0%  
Efficacy: 29.0 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.02 / 1.18  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Direct

Input Watts (W): 59  
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: 89167  
CATALOG NUMBER: E2-SB-3T5-UDU-1

### Luminous Intensity Polar Plot





TEST NUMBER: 89167

CATALOG NUMBER: E2-SB-3T5-UDU-1

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

RF	20									20									20									20									
RC	80									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	45	45	45	45	44	44	44	44	42	42	42	40	40	40	38	38	38	37				37															
1	42	41	40	38	41	40	39	38	38	37	37	37	36	35	35	35	34	33				33															
2	39	37	35	33	38	36	34	32	35	33	32	33	32	31	32	31	30	29				29															
3	36	33	30	28	35	32	30	28	31	29	28	30	28	27	29	28	26	26				26															
4	34	30	27	25	33	29	26	24	28	26	24	27	25	24	26	25	23	23				23															
5	31	27	24	22	30	26	24	21	26	23	21	25	23	21	24	22	21	20				20															
6	29	24	21	19	28	24	21	19	23	21	19	23	20	19	22	20	19	18				18															
7	27	22	19	17	26	22	19	17	21	19	17	21	18	17	20	18	17	16				16															
8	25	20	17	15	24	20	17	15	20	17	15	19	17	15	19	17	15	14				14															
9	23	19	16	14	23	19	16	14	18	16	14	18	15	14	17	15	14	13				13															
10	22	17	15	13	22	17	15	13	17	14	13	16	14	13	16	14	12	12				12															

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

	0°	45°	90°
0°	4213	4213	4213
5°	4093	3965	3565
10°	4076	3616	3365
15°	3937	3327	3093
20°	3719	3097	2968
25°	3740	2850	2695
30°	3628	2658	2400
35°	3469	2409	2285
40°	3345	2150	2256
45°	3168	2068	2017
50°	2921	1903	1550
55°	2428	1501	1058
60°	1512	821	647
65°	327	289	339
70°	80	89	75
75°	39	58	27
80°	20	39	11
85°	6	16	4



TEST NUMBER: 89167

CATALOG NUMBER: E2-SB-3T5-UDU-1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	81.8	4.8	1.8
10°-20°	221.7	13.0	4.9
20°-30°	318.9	18.7	7.1
30°-40°	364.1	21.3	8.1
40°-50°	364.9	21.4	8.1
50°-60°	255.7	15.0	5.7
60°-70°	70.0	4.1	1.6
70°-80°	8.3	0.5	0.2
80°-90°	1.6	0.1	0.0
90°-100°	1.1	0.1	0.0
100°-110°	2.4	0.1	0.1
110°-120°	3.6	0.2	0.1
120°-130°	4.0	0.2	0.1
130°-140°	3.6	0.2	0.1
140°-150°	2.9	0.2	0.1
150°-160°	2.1	0.1	0.0
160°-170°	1.3	0.1	0.0
170°-180°	0.5	0.0	0.0
0°-30°	622.4	36.4	13.8
0°-40°	986.5	57.7	21.9
0°-60°	1607.1	94.1	35.7
0°-90°	1687.1	98.7	37.5
90°-120°	7.1	0.4	0.2
90°-150°	17.7	1.0	0.4
90°-180°	22.0	1.3	0.5
0°-180°	1708.7	100.0	38.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	881	843	882	872	800	84
15°	834	805	775	760	740	234
25°	755	727	674	663	665	345
35°	645	607	561	538	564	405
45°	520	466	460	494	482	400
55°	334	335	308	244	237	289
65°	35	41	52	67	69	64
75°	3	6	9	8	5	4
85°	0	1	2	1	1	0
90°	0	0	0	0	0	1
95°	3	2	1	0	0	2
105°	4	3	2	1	0	4
115°	5	5	4	3	2	5
125°	7	6	4	4	3	6
135°	7	6	4	4	3	5
145°	7	5	4	4	4	4
155°	5	6	4	4	4	2
165°	5	6	5	4	4	1
175°	5	5	5	7	4	0
180°	4	4	4	4	4	



TEST NUMBER: 89167

CATALOG NUMBER: E2-SB-3T5-UDU-1

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	903.6	903.6	903.6	903.6	903.6
5°	880.8	842.6	881.8	871.9	800.1
10°	873.4	846.8	826.5	848.4	783.1
15°	833.8	804.9	775.3	759.8	739.7
20°	772.0	776.5	730.1	717.8	723.8
25°	755.1	726.6	674.3	663.0	664.6
30°	706.0	669.3	626.5	598.7	594.2
35°	644.8	606.7	561.4	537.5	563.5
40°	587.7	542.0	491.4	532.5	549.9
45°	520.1	466.4	459.8	494.4	482.3
50°	442.3	401.9	408.1	373.9	360.5
55°	333.9	335.1	307.5	244.1	237.3
60°	185.3	199.2	159.1	138.4	138.7
65°	34.9	41.1	52.4	67.1	68.8
70°	7.2	11.0	14.9	21.1	14.2
75°	2.8	5.8	8.8	8.5	4.8
80°	1.1	3.0	5.3	4.1	1.8
85°	0.2	1.0	1.9	1.4	0.6
90°	0.4	0.2	0.2	0.1	0.0
95°	3.0	1.5	0.7	0.4	0.2
100°	4.3	2.2	1.6	0.9	0.4
105°	4.1	3.1	2.2	1.4	0.4
110°	4.1	3.5	3.2	2.1	1.3
115°	5.1	4.8	4.0	2.7	1.8
120°	6.2	5.1	4.2	3.2	2.4
125°	6.6	5.8	4.4	3.6	2.7
130°	6.7	5.6	4.5	3.6	2.9
135°	6.8	5.5	4.4	3.6	3.3
140°	7.0	5.8	4.2	4.0	3.4
145°	6.7	5.4	4.3	3.5	3.6
150°	6.0	5.9	4.4	3.9	3.7
155°	5.3	5.7	4.4	3.6	3.5
160°	4.8	5.8	4.3	3.7	4.0
165°	4.6	5.6	4.7	3.7	4.3
170°	3.7	4.8	5.9	4.8	5.0
175°	4.6	5.1	5.1	6.6	4.4
180°	3.6	3.6	3.6	3.6	3.6

(END OF REPORT)