

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: 89087

Luminaire Tested: **E2-SB-2T5-DL-5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89087  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-2T5-DL-5  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 19 CELL SEMI-SPECULAR LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

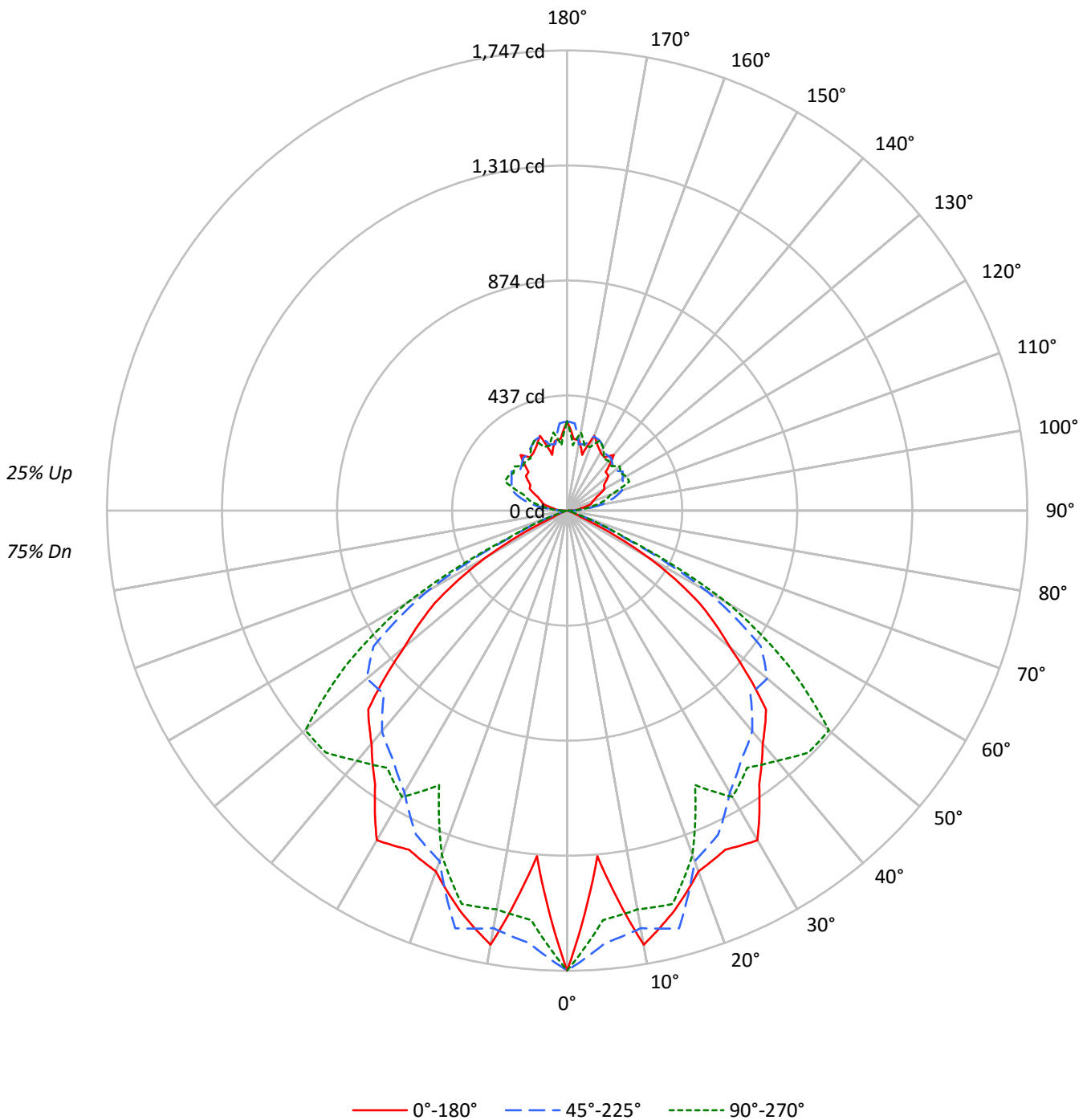
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 5068.4 lumens  
Efficiency: 56.3%  
Efficacy: 43.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 0.92 / 1.27  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 118  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	64	64	64	64	61	61	61	61	55	55	55	50	50	50	45	45	45	42
1	59	57	55	53	56	54	53	51	49	48	47	45	44	43	41	40	39	37
2	54	50	47	45	52	48	45	43	44	42	40	40	39	37	37	35	34	32
3	50	45	41	38	47	43	39	36	39	36	34	36	34	32	33	31	30	28
4	46	40	36	32	44	38	34	31	35	32	29	32	30	28	30	28	26	24
5	42	36	31	28	40	34	30	27	32	28	26	29	26	24	27	24	23	21
6	39	32	28	24	37	31	27	24	29	25	22	26	23	21	24	22	20	19
7	36	29	25	21	34	28	24	21	26	22	20	24	21	19	22	20	18	17
8	34	27	22	19	32	26	21	19	24	20	18	22	19	17	20	18	16	15
9	31	24	20	17	30	23	19	17	22	18	16	20	17	15	19	16	14	13
10	29	22	18	15	28	22	18	15	20	17	14	19	16	14	17	15	13	12

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

	0°	45°	90°
0°	8143	8143	8143
5°	6119	7413	6952
10°	7812	7043	6608
15°	7425	7045	6465
20°	7022	6005	5706
25°	7036	5735	4661
30°	7427	5241	5071
35°	6838	4949	4833
40°	6574	4785	5087
45°	6505	4426	5429
50°	5324	4625	5577
55°	4468	4379	4572
60°	2940	3178	3303
65°	538	1200	1202
70°	187	250	218
75°	127	131	81
80°	71	91	47
85°	107	68	25



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	155.4	3.1	1.7
10°-20°	442.7	8.7	4.9
20°-30°	633.1	12.5	7.0
30°-40°	756.3	14.9	8.4
40°-50°	827.5	16.3	9.2
50°-60°	736.9	14.5	8.2
60°-70°	240.3	4.7	2.7
70°-80°	21.6	0.4	0.2
80°-90°	10.5	0.2	0.1
90°-100°	68.9	1.4	0.8
100°-110°	161.0	3.2	1.8
110°-120°	210.9	4.2	2.3
120°-130°	210.3	4.1	2.3
130°-140°	191.3	3.8	2.1
140°-150°	162.2	3.2	1.8
150°-160°	131.5	2.6	1.5
160°-170°	79.2	1.6	0.9
170°-180°	28.6	0.6	0.3
0°-30°	1231.2	24.3	13.7
0°-40°	1987.5	39.2	22.1
0°-60°	3551.9	70.1	39.5
0°-90°	3824.4	75.5	42.5
90°-120°	440.8	8.7	4.9
90°-150°	1004.7	19.8	11.2
90°-180°	1244.0	24.5	13.8
0°-180°	5068.4	100.0	56.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1747	1747	1747	1747	1747	
5°	1317	1714	1648	1676	1560	144
15°	1572	1573	1642	1602	1546	442
25°	1420	1434	1357	1333	1150	665
35°	1271	1258	1153	1165	1192	805
45°	1068	953	984	1150	1298	790
55°	614	708	897	988	1026	534
65°	57	108	218	267	244	120
75°	9	14	20	22	14	10
85°	4	5	8	8	4	4
90°	11	16	15	23	14	9
95°	42	73	59	63	55	34
105°	92	129	182	186	149	91
115°	123	197	234	245	260	127
125°	170	213	258	247	248	159
135°	207	249	244	240	238	172
145°	246	234	260	249	242	161
155°	273	302	293	282	293	127
165°	219	349	259	281	255	72
175°	274	351	332	318	249	27
180°	339	339	339	339	339	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1746.6	1746.6	1746.6	1746.6	1746.6
5°	1316.8	1714.4	1648.4	1676.0	1560.4
10°	1674.2	1715.0	1609.9	1465.8	1537.6
15°	1572.4	1573.2	1641.8	1602.3	1546.3
20°	1457.8	1542.2	1415.5	1533.5	1391.4
25°	1420.4	1433.7	1357.1	1333.1	1149.6
30°	1445.4	1369.9	1235.3	1261.4	1255.3
35°	1270.9	1258.0	1153.2	1164.8	1191.8
40°	1154.9	1051.2	1093.6	1135.9	1239.9
45°	1068.0	953.0	984.0	1150.5	1297.8
50°	806.2	800.7	991.6	1250.4	1297.0
55°	614.4	708.1	897.2	988.3	1025.5
60°	360.4	476.5	615.9	649.6	707.9
65°	57.4	107.9	217.5	267.3	243.6
70°	16.8	27.8	41.8	54.9	41.4
75°	9.2	13.9	19.9	22.4	14.2
80°	3.9	9.3	12.3	11.8	7.4
85°	3.9	4.8	8.0	8.0	3.6
90°	10.9	15.5	15.3	22.8	14.2
95°	42.1	73.2	58.6	62.9	55.3
100°	56.0	126.2	134.9	119.7	100.2
105°	92.4	128.6	182.2	186.0	148.8
110°	104.2	169.0	221.2	215.2	174.5
115°	123.2	197.0	233.5	244.9	260.3
120°	164.0	190.0	243.0	279.7	259.3
125°	170.4	213.1	257.9	247.1	248.2
130°	204.4	226.4	234.0	280.4	260.4
135°	206.9	248.8	243.6	239.9	238.4
140°	275.5	270.9	260.0	281.9	245.1
145°	246.2	233.8	259.5	248.9	242.1
150°	254.3	312.3	276.1	234.6	274.4
155°	272.7	302.1	293.2	282.1	293.1
160°	301.9	234.3	298.9	330.0	257.0
165°	219.4	349.2	259.2	280.9	255.1
170°	268.1	258.1	255.8	264.5	301.0
175°	274.2	350.9	332.4	317.5	248.6
180°	338.7	338.7	338.7	338.7	338.7

(END OF REPORT)