

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: 89099

Luminaire Tested: **E2-SB-2T5-DL-3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89099  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-2T5-DL-3  
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**

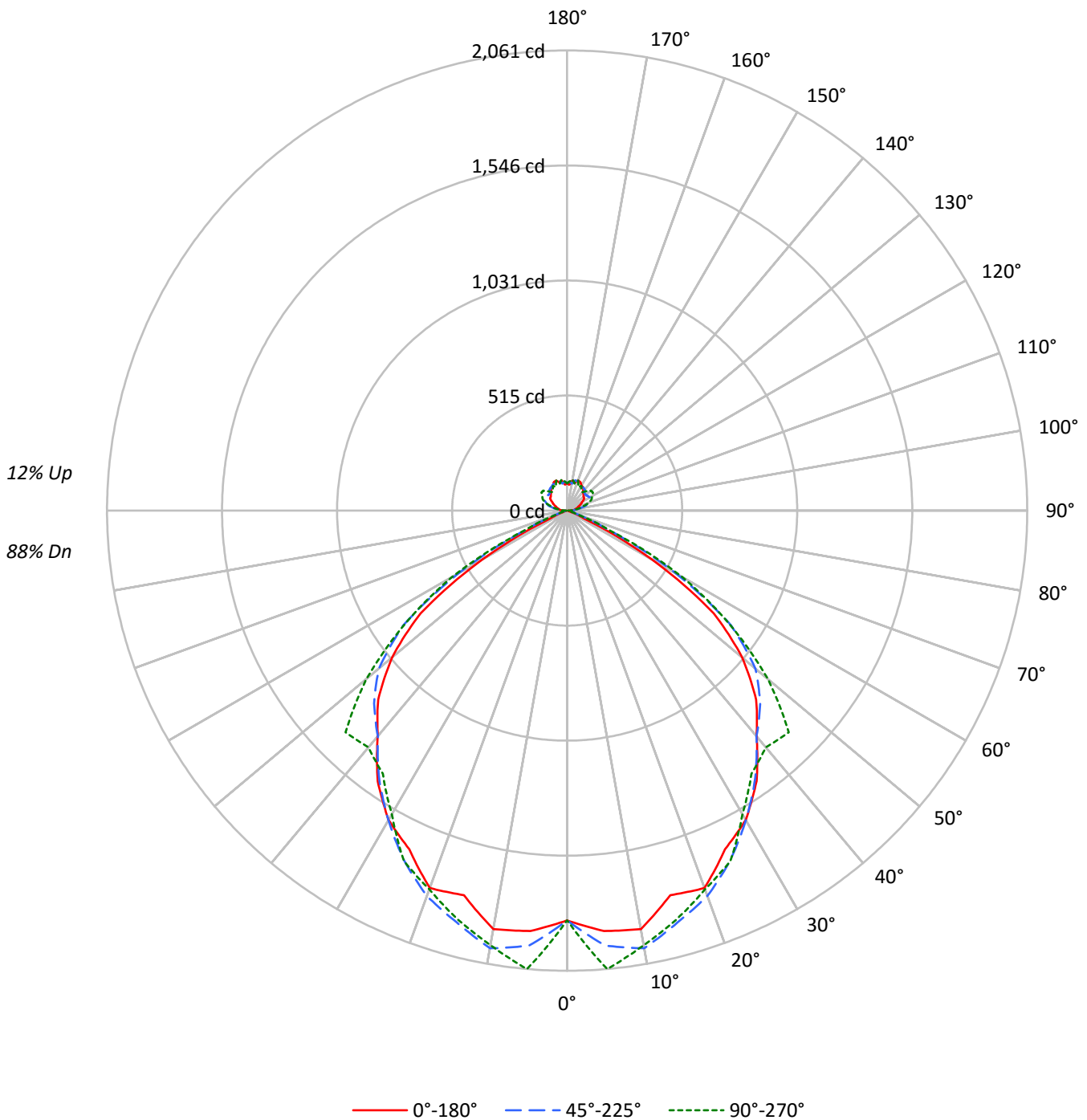
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 5004.5 lumens  
Efficiency: 55.6%  
Efficacy: 42.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: Semi-Direct

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



TEST NUMBER: 89099  
CATALOG NUMBER: E2-SB-2T5-DL-3

### Luminous Intensity Polar Plot





TEST NUMBER: 89099

CATALOG NUMBER: E2-SB-2T5-DL-3

**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	65	65	65	65	62	62	62	62	58	58	58	54	54	54	51	51	51	49
1	60	58	56	55	58	56	55	53	53	51	50	50	49	48	47	46	45	44
2	56	52	49	46	54	50	47	45	47	45	43	45	43	41	42	41	39	38
3	51	46	42	39	49	45	41	39	42	40	37	40	38	36	38	36	34	33
4	47	41	37	34	46	40	36	33	38	35	32	36	33	31	34	32	30	29
5	44	37	33	30	42	36	32	29	34	31	28	33	30	27	31	29	26	25
6	40	34	29	26	39	33	29	26	31	28	25	30	27	24	28	26	24	22
7	37	31	26	23	36	30	26	23	28	25	22	27	24	22	26	23	21	20
8	35	28	24	21	34	27	23	20	26	22	20	25	22	19	24	21	19	18
9	33	26	21	19	32	25	21	18	24	20	18	23	20	18	22	19	17	16
10	31	24	20	17	30	23	19	17	22	19	16	21	18	16	20	18	16	15

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

	0°	45°	90°
0°	8556	8556	8556
5°	8783	8796	9184
10°	8882	8708	8494
15°	8422	8196	7923
20°	8665	7793	7404
25°	8289	7306	7018
30°	8220	6793	6344
35°	7959	6299	5836
40°	7511	5773	5678
45°	7293	5501	5872
50°	6757	5134	5045
55°	5829	4370	3969
60°	3557	2891	2780
65°	762	1105	1071
70°	212	268	201
75°	118	152	74
80°	91	100	32
85°	105	63	20



TEST NUMBER: 89099

CATALOG NUMBER: E2-SB-2T5-DL-3

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	185.0	3.7	2.1
10°-20°	533.6	10.7	5.9
20°-30°	794.0	15.9	8.8
30°-40°	923.4	18.5	10.3
40°-50°	964.4	19.3	10.7
50°-60°	754.7	15.1	8.4
60°-70°	228.2	4.6	2.5
70°-80°	22.5	0.5	0.3
80°-90°	8.7	0.2	0.1
90°-100°	35.1	0.7	0.4
100°-110°	77.0	1.5	0.9
110°-120°	100.3	2.0	1.1
120°-130°	101.1	2.0	1.1
130°-140°	88.2	1.8	1.0
140°-150°	76.0	1.5	0.8
150°-160°	61.3	1.2	0.7
160°-170°	38.2	0.8	0.4
170°-180°	12.6	0.3	0.1
0°-30°	1512.6	30.2	16.8
0°-40°	2436.0	48.7	27.1
0°-60°	4155.0	83.0	46.2
0°-90°	4414.6	88.2	49.1
90°-120°	212.4	4.2	2.4
90°-150°	477.8	9.5	5.3
90°-180°	590.0	11.8	6.6
0°-180°	5004.5	100.0	55.6

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1835	1835	1835	1835	1835	
5°	1890	1955	1956	1932	2061	180
15°	1784	1889	1910	1920	1895	514
25°	1673	1750	1729	1734	1731	778
35°	1479	1524	1468	1448	1439	920
45°	1197	1214	1223	1346	1404	915
55°	802	845	895	895	890	683
65°	81	120	200	240	217	151
75°	9	17	23	21	13	11
85°	4	5	7	6	3	4
90°	13	12	11	11	8	9
95°	32	39	31	29	27	24
105°	47	66	86	86	73	49
115°	67	79	114	125	121	66
125°	94	91	113	134	141	81
135°	104	108	109	118	123	80
145°	126	127	126	110	109	77
155°	141	139	135	130	117	64
165°	129	136	140	132	125	38
175°	116	141	131	142	131	12
180°	122	122	122	122	122	



TEST NUMBER: 89099

CATALOG NUMBER: E2-SB-2T5-DL-3

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1835.2	1835.2	1835.2	1835.2	1835.2
5°	1890.3	1955.4	1956.0	1932.4	2061.4
10°	1903.4	1901.4	1990.5	1966.9	1976.6
15°	1783.5	1888.7	1909.9	1920.5	1895.0
20°	1798.9	1838.6	1837.1	1808.0	1805.4
25°	1673.4	1749.9	1728.8	1734.5	1730.9
30°	1599.7	1646.3	1601.2	1580.3	1570.5
35°	1479.2	1523.9	1467.7	1448.1	1439.1
40°	1319.5	1346.8	1319.3	1355.2	1384.1
45°	1197.3	1213.5	1223.0	1346.1	1403.8
50°	1023.2	1033.1	1100.7	1193.4	1173.3
55°	801.6	844.8	895.4	895.0	890.2
60°	436.0	497.6	560.3	567.2	595.8
65°	81.3	120.2	200.3	239.9	217.1
70°	19.1	30.3	44.9	55.3	38.0
75°	8.6	16.8	23.1	21.2	12.9
80°	5.0	10.0	13.5	11.1	5.1
85°	3.8	5.4	7.4	6.1	2.8
90°	13.2	11.5	10.8	11.0	8.2
95°	32.4	39.3	30.9	29.4	27.2
100°	36.0	55.5	59.6	54.2	52.0
105°	46.6	65.9	86.2	86.0	73.1
110°	54.4	71.7	99.3	106.7	104.1
115°	67.0	78.9	114.0	125.2	121.3
120°	77.7	84.7	117.7	131.6	127.8
125°	93.6	91.1	112.7	134.5	140.7
130°	95.8	106.7	109.6	122.5	138.8
135°	103.6	108.3	109.3	118.5	123.3
140°	110.0	123.6	122.5	113.5	107.5
145°	126.3	127.3	126.0	110.4	108.6
150°	128.2	125.1	130.8	123.8	127.0
155°	140.7	138.9	135.4	130.2	117.1
160°	143.0	137.0	138.8	130.9	142.8
165°	128.9	136.0	140.3	131.9	125.4
170°	136.7	134.7	122.1	135.7	142.1
175°	116.2	141.1	130.7	141.8	131.1
180°	122.1	122.1	122.1	122.1	122.1

(END OF REPORT)