

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: 89114

Luminaire Tested: **E2-SH-2T5-DL-2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89114  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SH-2T5-DL-2  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER  
BLADE  
WITH DOWNLIGHT ISOLATORS  
Light Source: 54 WATT T5 LAMP  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

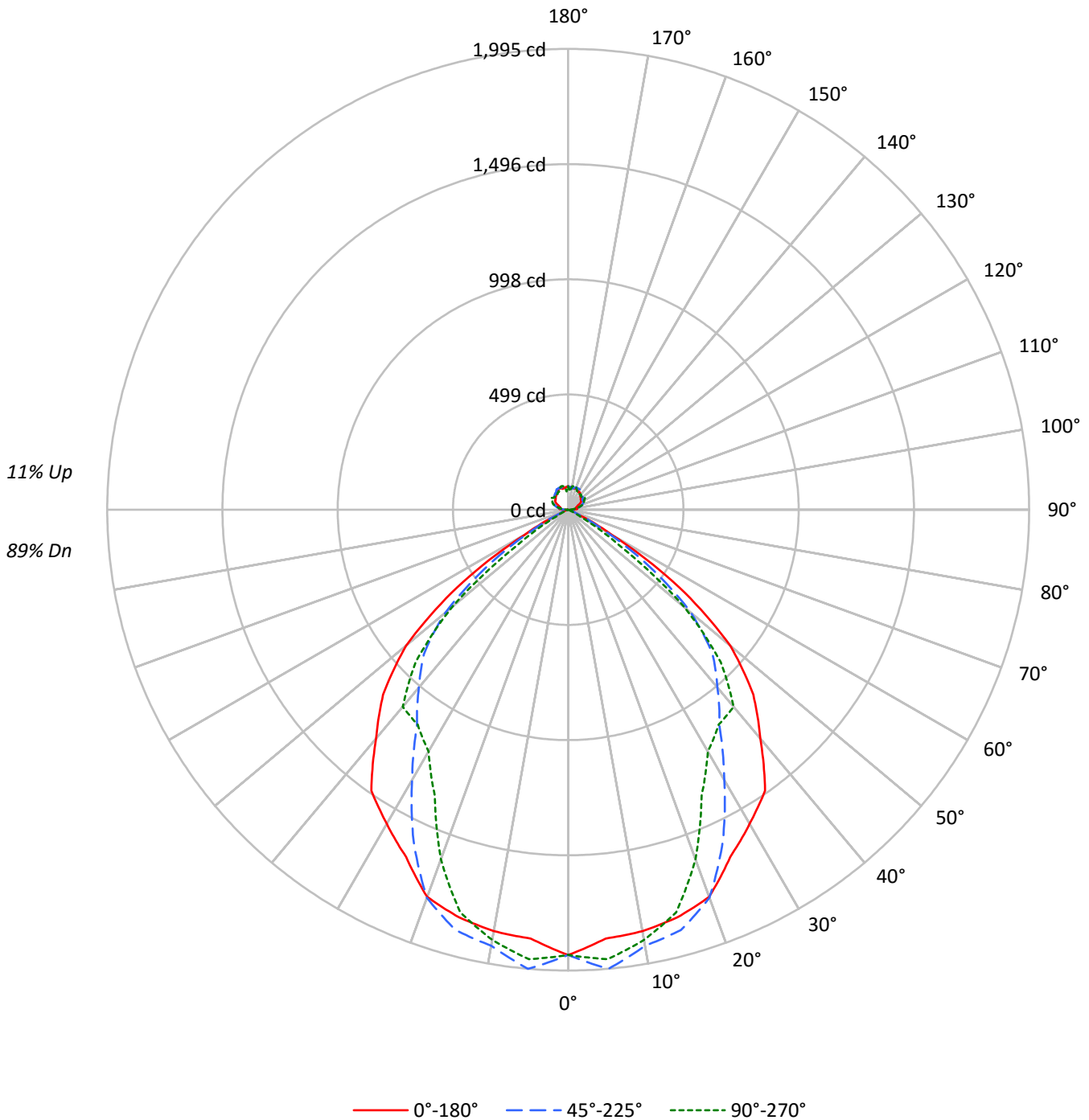
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 3812.1 lumens  
Efficiency: 42.4%  
Efficacy: 32.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 0.98 / 1.15  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')  
CIE Type: Semi-Direct

Input Watts (W): 118  
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	49	49	49	49	48	48	48	48	44	44	44	42	42	42	39	39	39	38
1	46	45	43	42	45	43	42	41	41	40	39	38	38	37	36	36	35	34
2	43	40	38	36	42	39	37	36	37	35	34	35	34	33	33	32	31	30
3	40	36	34	32	39	36	33	31	34	32	30	32	30	29	30	29	28	27
4	37	33	30	28	36	32	29	27	31	28	26	29	27	26	28	26	25	24
5	35	30	27	25	33	29	26	24	28	25	24	27	25	23	26	24	22	21
6	32	27	24	22	31	27	24	22	26	23	21	24	22	21	23	22	20	19
7	30	25	22	20	29	25	22	19	24	21	19	23	20	19	22	20	18	17
8	28	23	20	18	27	23	20	18	22	19	17	21	19	17	20	18	17	16
9	26	21	18	16	26	21	18	16	20	18	16	19	17	15	19	17	15	14
10	25	20	17	15	24	19	17	15	19	16	14	18	16	14	17	15	14	13

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

	0°	45°	90°
0°	9068	9068	9068
5°	8737	9053	8781
10°	8722	8461	8201
15°	8701	8156	7613
20°	8668	7651	6665
25°	8291	6751	5587
30°	8137	5779	4926
35°	8059	4941	4648
40°	7422	4436	4611
45°	6957	4009	3939
50°	6096	3265	2853
55°	4304	2109	1233
60°	1796	933	299
65°	418	257	77
70°	184	128	34
75°	128	89	17
80°	96	56	6
85°	105	41	13



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	183.9	4.8	2.0
10°-20°	521.0	13.7	5.8
20°-30°	718.0	18.8	8.0
30°-40°	778.7	20.4	8.7
40°-50°	727.4	19.1	8.1
50°-60°	383.8	10.1	4.3
60°-70°	59.3	1.6	0.7
70°-80°	10.6	0.3	0.1
80°-90°	6.9	0.2	0.1
90°-100°	30.0	0.8	0.3
100°-110°	53.9	1.4	0.6
110°-120°	67.1	1.8	0.7
120°-130°	69.4	1.8	0.8
130°-140°	64.1	1.7	0.7
140°-150°	56.2	1.5	0.6
150°-160°	45.2	1.2	0.5
160°-170°	27.7	0.7	0.3
170°-180°	8.9	0.2	0.1
0°-30°	1423.0	37.3	15.8
0°-40°	2201.7	57.8	24.5
0°-60°	3312.9	86.9	36.8
0°-90°	3389.7	88.9	37.7
90°-120°	151.0	4.0	1.7
90°-150°	340.7	8.9	3.8
90°-180°	422.0	11.1	4.7
0°-180°	3812.1	100.0	42.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1928	1928	1928	1928	1928	
5°	1864	1915	1995	1954	1953	178
15°	1827	1917	1884	1839	1805	516
25°	1659	1718	1584	1408	1366	770
35°	1485	1392	1141	1107	1136	913
45°	1133	999	884	922	933	863
55°	587	485	428	335	274	513
65°	44	45	46	26	15	79
75°	9	12	13	6	3	11
85°	4	5	5	3	2	4
90°	16	14	11	9	7	10
95°	38	40	27	22	18	24
105°	36	51	55	57	53	39
115°	48	58	73	76	75	50
125°	70	68	75	87	89	61
135°	77	81	84	88	80	59
145°	89	89	92	91	81	55
155°	98	104	101	97	89	44
165°	93	95	98	102	106	27
175°	98	85	99	91	80	9
180°	101	101	101	101	101	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1927.6	1927.6	1927.6	1927.6	1927.6
5°	1863.7	1915.0	1995.4	1954.1	1953.3
10°	1852.8	1891.7	1916.9	1939.8	1891.4
15°	1826.6	1917.1	1884.1	1838.8	1804.6
20°	1784.1	1814.9	1787.9	1680.8	1610.6
25°	1659.3	1718.1	1583.6	1408.1	1365.6
30°	1570.1	1557.7	1350.4	1233.1	1208.7
35°	1485.2	1392.3	1141.3	1107.4	1135.9
40°	1293.1	1203.9	1005.1	1053.7	1113.9
45°	1132.9	999.1	883.6	921.6	933.3
50°	915.6	788.5	694.2	682.8	657.7
55°	587.2	485.0	428.4	334.6	274.1
60°	218.4	185.5	179.2	102.1	63.5
65°	44.3	45.1	46.1	26.1	15.4
70°	16.4	19.7	21.3	11.9	6.4
75°	9.2	11.6	13.4	6.4	2.9
80°	5.2	8.1	7.6	3.5	1.0
85°	3.8	5.0	4.8	3.3	1.8
90°	16.2	14.5	11.4	9.3	6.6
95°	38.5	40.1	26.9	21.8	18.3
100°	32.3	43.5	41.7	39.8	35.9
105°	36.0	50.6	55.4	57.0	52.8
110°	42.2	49.6	64.7	73.1	68.3
115°	48.4	57.7	72.9	76.5	75.3
120°	62.8	65.1	75.6	90.2	79.2
125°	69.7	67.6	74.6	87.0	88.7
130°	70.0	73.1	83.1	88.5	80.5
135°	76.8	81.2	83.8	87.6	80.0
140°	80.7	87.9	88.5	84.0	86.1
145°	89.4	88.9	91.5	90.9	81.3
150°	88.5	94.5	100.9	92.1	87.7
155°	97.6	103.6	100.7	96.7	89.2
160°	100.7	95.6	103.2	98.6	102.0
165°	93.1	94.9	97.6	102.4	105.8
170°	94.8	83.2	91.8	94.7	102.5
175°	98.4	84.9	99.3	91.2	79.9
180°	101.4	101.4	101.4	101.4	101.4

(END OF REPORT)