

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: 89154

Luminaire Tested: **E2-SH-3T5-DUD-3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89154  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SH-3T5-DUD-3  
Description: CORELITE ELEMENT SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND 38 CELL HI PERFORMANCE LOUVER  
BLADE  
WITH LAMP ISOLATORS  
Light Source: 54 WATT T5 LAMPS  
FP54T5/841HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: -

**Summary**

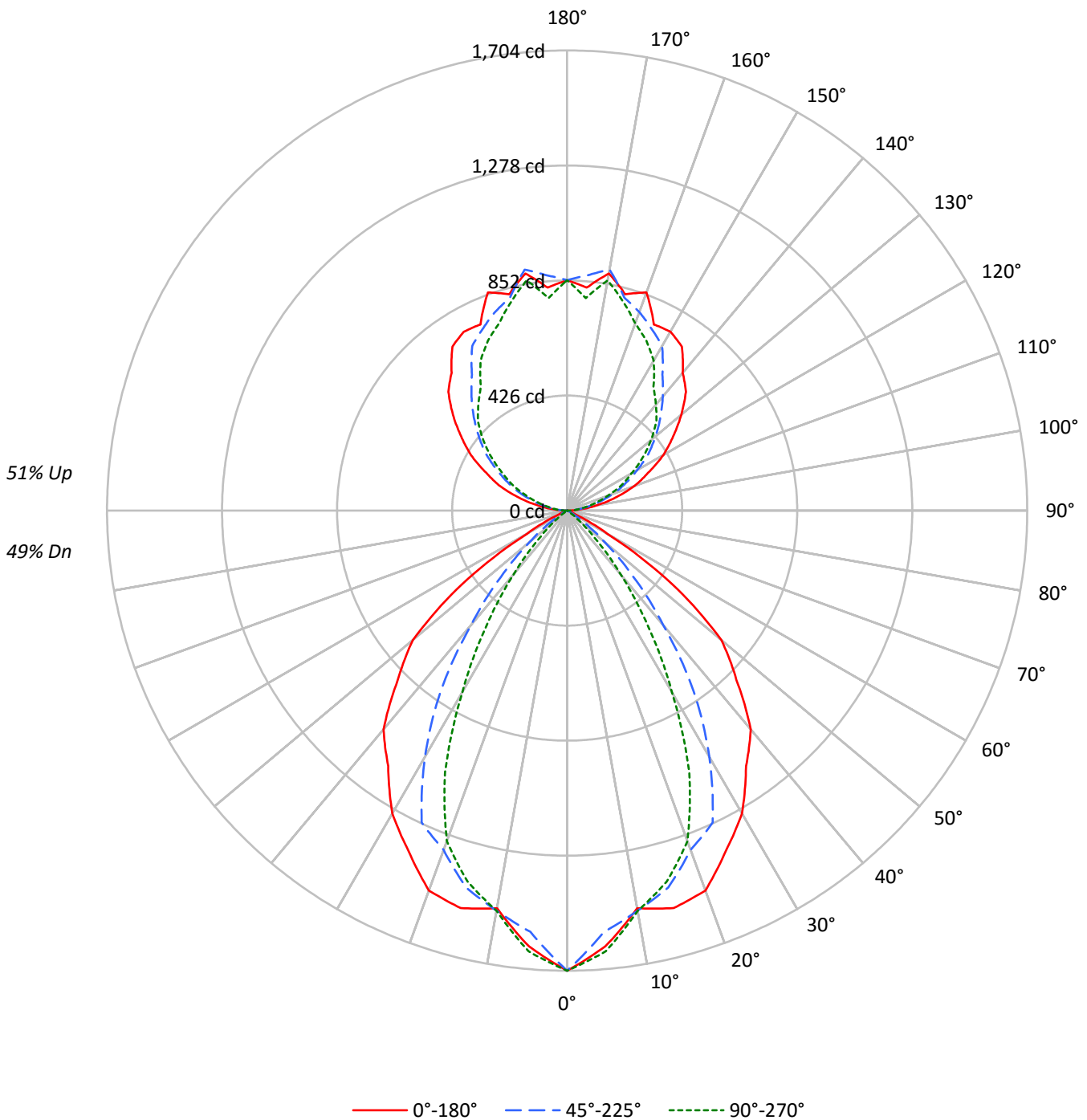
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 4380.2 lumens  
Efficiency: 32.4%  
Efficacy: 24.7 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 0.89 / 1  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 3.98' x H: 0.33')  
CIE Type: General Diffuse

Input Watts (W): 177  
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: 89154  
CATALOG NUMBER: E2-SH-3T5-DUD-3

### Luminous Intensity Polar Plot





TEST NUMBER: 89154

CATALOG NUMBER: E2-SH-3T5-DUD-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	35	35	35	35	32	32	32	32	27	27	27	22	22	22	18	18	18	16
1	32	31	30	29	30	29	28	27	24	24	23	20	20	20	17	17	16	15
2	30	28	26	25	28	26	24	23	22	21	20	19	18	17	16	15	15	13
3	28	25	23	21	26	23	22	20	20	19	18	17	16	15	14	14	13	12
4	26	23	20	19	24	21	19	18	18	17	16	16	15	14	13	13	12	11
5	24	20	18	16	22	19	17	16	17	15	14	14	13	12	12	12	11	10
6	22	19	16	15	21	18	15	14	15	14	13	13	12	11	11	11	10	9
7	21	17	15	13	19	16	14	13	14	13	11	12	11	10	11	10	9	8
8	19	16	13	12	18	15	13	11	13	11	10	11	10	9	10	9	8	8
9	18	14	12	11	17	14	12	10	12	10	9	11	9	9	9	8	8	7
10	17	13	11	10	16	13	11	9	11	10	9	10	9	8	9	8	7	6

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

	0°	45°	90°
0°	8016	8016	8016
5°	7595	7103	7365
10°	7040	6640	6525
15°	7259	6257	6002
20°	7274	5723	5390
25°	6948	5434	4377
30°	6712	4510	3162
35°	6268	3539	2126
40°	6072	2439	1270
45°	5445	1573	615
50°	4966	843	233
55°	3487	360	28
60°	1408	118	7
65°	325	32	1
70°	97	22	1
75°	64	17	1
80°	39	11	0
85°	17	5	0



TEST NUMBER: 89154

CATALOG NUMBER: E2-SH-3T5-DUD-3

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	151.2	3.5	1.1
10°-20°	408.3	9.3	3.0
20°-30°	563.1	12.9	4.2
30°-40°	519.7	11.9	3.8
40°-50°	346.9	7.9	2.6
50°-60°	143.7	3.3	1.1
60°-70°	19.7	0.4	0.1
70°-80°	2.8	0.1	0.0
80°-90°	1.6	0.0	0.0
90°-100°	40.2	0.9	0.3
100°-110°	138.4	3.2	1.0
110°-120°	252.1	5.8	1.9
120°-130°	346.3	7.9	2.6
130°-140°	397.1	9.1	2.9
140°-150°	394.6	9.0	2.9
150°-160°	339.1	7.7	2.5
160°-170°	233.0	5.3	1.7
170°-180°	82.3	1.9	0.6
0°-30°	1122.6	25.6	8.3
0°-40°	1642.3	37.5	12.2
0°-60°	2133.0	48.7	15.8
0°-90°	2157.0	49.2	16.0
90°-120°	430.7	9.8	3.2
90°-150°	1568.7	35.8	11.6
90°-180°	2223.0	50.8	16.5
0°-180°	4380.2	100.0	32.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1704	1704	1704	1704	1704	
5°	1620	1616	1566	1585	1638	151
15°	1524	1462	1445	1377	1423	428
25°	1391	1338	1275	1108	1070	643
35°	1155	1092	818	575	520	730
45°	887	724	347	185	146	690
55°	476	281	73	17	6	415
65°	34	21	6	1	0	61
75°	5	5	2	0	0	5
85°	1	1	1	0	0	1
90°	4	4	3	3	3	8
95°	49	35	31	29	32	56
105°	184	142	120	110	107	195
115°	330	282	238	222	222	331
125°	479	420	367	349	341	430
135°	622	554	488	470	467	476
145°	741	673	615	580	557	456
155°	760	786	742	687	694	363
165°	829	833	816	820	800	241
175°	828	897	874	817	790	82
180°	853	853	853	853	853	



TEST NUMBER: 89154

CATALOG NUMBER: E2-SH-3T5-DUD-3

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1704.1	1704.1	1704.1	1704.1	1704.1
5°	1620.2	1615.8	1565.7	1584.8	1638.3
10°	1495.4	1547.9	1504.3	1544.2	1504.8
15°	1523.9	1461.6	1445.3	1376.6	1422.8
20°	1497.0	1412.3	1337.3	1377.6	1302.5
25°	1390.6	1337.9	1274.7	1107.7	1069.8
30°	1295.1	1237.1	1053.8	838.4	775.8
35°	1155.1	1092.1	817.6	575.2	519.7
40°	1057.9	941.4	552.6	353.0	306.8
45°	886.7	724.5	346.8	184.8	145.7
50°	745.9	499.8	179.3	74.8	53.8
55°	475.8	280.8	73.1	17.3	6.3
60°	171.2	102.5	22.7	2.6	1.4
65°	34.4	20.7	5.7	1.0	0.3
70°	8.7	8.6	3.6	0.5	0.2
75°	4.6	5.0	2.5	0.3	0.1
80°	2.1	2.7	1.5	0.2	0.0
85°	0.6	0.9	0.6	0.1	0.0
90°	4.4	3.5	3.4	3.2	3.2
95°	49.1	35.3	31.0	28.8	31.8
100°	109.9	81.9	70.1	66.2	63.7
105°	183.6	141.8	120.2	110.4	106.9
110°	263.5	202.7	180.3	164.0	159.1
115°	330.3	282.3	238.3	221.8	222.1
120°	411.4	356.1	298.9	280.9	275.3
125°	479.0	419.7	367.1	348.6	341.3
130°	552.0	500.1	426.6	416.2	405.1
135°	621.7	554.2	488.4	469.5	467.0
140°	665.9	625.7	550.7	525.7	511.5
145°	740.8	672.6	614.6	579.8	557.3
150°	765.0	713.3	703.4	636.9	641.0
155°	760.5	785.7	741.5	686.8	693.5
160°	859.4	794.0	781.8	743.2	737.4
165°	829.4	833.2	816.2	819.5	800.5
170°	891.3	906.5	905.9	843.9	865.2
175°	828.5	896.8	874.4	817.2	789.5
180°	852.7	852.7	852.7	852.7	852.7

(END OF REPORT)