

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: 89175

Luminaire Tested: **E2-SB-3T5-XDX-3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 89175  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: E2-SB-3T5-XDX-3  
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**

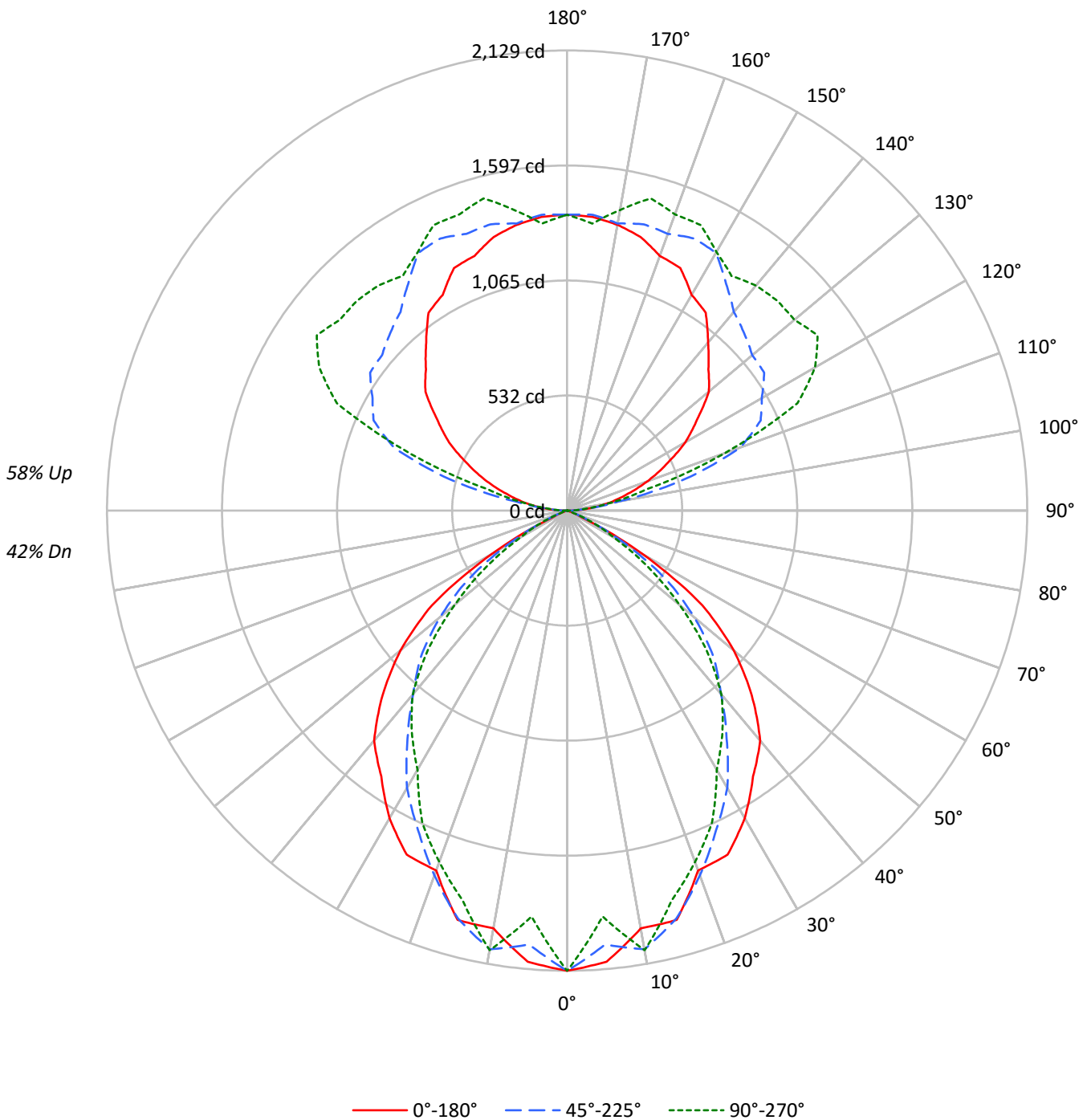
Lumens per Lamp: 4500 (3 lamps)  
Luminaire Lumens: 9092.6 lumens  
Efficiency: 67.4%  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.02 / 1.15  
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')  
CIE Type: General Diffuse

Input Watts (W): 177  
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	71	71	71	71	65	65	65	65	53	53	53		42	42	42		33	33	33	28
1	65	63	60	58	60	57	56	54	48	46	45		38	38	37		30	29	29	25
2	60	56	52	49	55	51	48	45	42	40	38		35	33	32		27	26	25	22
3	55	49	45	41	50	45	42	39	38	35	33		31	29	28		25	23	22	20
4	51	44	39	36	46	41	36	33	34	31	29		28	26	24		22	21	20	17
5	47	40	34	31	43	36	32	29	31	27	25		25	23	21		20	19	18	15
6	43	36	31	27	39	33	28	25	28	25	22		23	21	19		19	17	16	14
7	40	32	27	24	37	30	25	22	25	22	20		21	19	17		17	15	14	12
8	37	29	24	21	34	27	23	20	23	20	17		19	17	15		16	14	13	11
9	35	27	22	19	32	25	21	18	21	18	16		18	15	14		15	13	12	10
10	32	25	20	17	30	23	19	16	20	16	14		17	14	12		14	12	11	9

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

	0°	45°	90°
0°	9927	9927	9927
5°	9734	9061	8398
10°	9159	9017	8876
15°	9258	8383	7809
20°	8535	7618	7096
25°	8702	6895	6441
30°	8445	6285	5590
35°	8073	5523	5080
40°	7908	4847	4557
45°	7358	4308	3808
50°	6643	3576	2919
55°	5558	2758	2052
60°	3286	1658	1169
65°	677	610	618
70°	172	182	119
75°	85	107	46
80°	46	72	20
85°	17	29	6



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	194.2	2.1	1.4
10°-20°	537.3	5.9	4.0
20°-30°	759.5	8.4	5.6
30°-40°	840.7	9.2	6.2
40°-50°	775.7	8.5	5.7
50°-60°	514.7	5.7	3.8
60°-70°	136.8	1.5	1.0
70°-80°	15.3	0.2	0.1
80°-90°	4.8	0.1	0.0
90°-100°	114.5	1.3	0.8
100°-110°	494.4	5.4	3.7
110°-120°	886.7	9.8	6.6
120°-130°	973.5	10.7	7.2
130°-140°	906.2	10.0	6.7
140°-150°	791.9	8.7	5.9
150°-160°	626.1	6.9	4.6
160°-170°	389.9	4.3	2.9
170°-180°	130.5	1.4	1.0
0°-30°	1490.9	16.4	11.0
0°-40°	2331.6	25.6	17.3
0°-60°	3622.0	39.8	26.8
0°-90°	3778.9	41.6	28.0
90°-120°	1495.6	16.4	11.1
90°-150°	4167.3	45.8	30.9
90°-180°	5314.0	58.4	39.4
0°-180°	9092.6	100.0	67.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2129	2129	2129	2129	2129	
5°	2095	2083	2015	2107	1885	196
15°	1960	1935	1954	1884	1868	540
25°	1757	1752	1631	1545	1588	800
35°	1500	1465	1287	1241	1253	945
45°	1208	1120	958	924	910	928
55°	764	700	565	484	460	655
65°	72	80	111	127	125	138
75°	6	13	16	12	8	8
85°	1	2	3	2	1	1
90°	6	7	7	7	7	14
95°	87	113	78	72	71	96
105°	281	496	565	435	380	302
115°	505	711	988	1142	1175	504
125°	733	898	1113	1299	1414	661
135°	924	1069	1158	1312	1374	719
145°	1118	1211	1282	1324	1326	690
155°	1238	1290	1389	1420	1458	564
165°	1311	1344	1371	1412	1495	369
175°	1364	1348	1374	1393	1332	129
180°	1368	1368	1368	1368	1368	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2129.2	2129.2	2129.2	2129.2	2129.2
5°	2095.0	2083.4	2015.1	2107.3	1885.0
10°	1962.8	1939.4	2061.1	1914.4	2065.3
15°	1960.4	1934.7	1953.5	1884.4	1867.6
20°	1772.0	1868.6	1795.7	1734.6	1730.2
25°	1756.6	1752.0	1631.4	1545.2	1588.5
30°	1643.4	1600.0	1481.5	1413.1	1383.9
35°	1500.3	1465.2	1286.9	1241.1	1252.6
40°	1389.4	1308.4	1107.7	1077.1	1110.9
45°	1208.0	1120.5	957.7	923.9	910.3
50°	1005.9	923.1	766.8	693.4	678.9
55°	764.3	700.3	565.1	484.5	460.3
60°	402.8	375.2	321.3	265.1	250.4
65°	72.2	80.3	110.6	126.8	125.2
70°	15.5	23.8	30.4	35.5	22.6
75°	6.2	13.3	16.2	12.4	8.0
80°	2.5	6.4	9.8	6.3	3.1
85°	0.6	2.1	3.4	2.4	0.8
90°	6.3	6.8	7.4	7.1	7.1
95°	87.2	112.7	78.5	71.5	71.2
100°	189.0	333.8	243.5	200.6	198.1
105°	280.7	496.5	564.9	435.4	379.7
110°	394.1	604.0	852.2	834.3	773.1
115°	505.2	710.6	987.8	1141.8	1175.4
120°	630.9	785.2	1039.5	1279.7	1323.9
125°	733.2	897.7	1112.7	1299.0	1414.2
130°	855.8	964.5	1118.1	1330.7	1372.5
135°	924.4	1069.3	1158.5	1312.5	1373.6
140°	1014.4	1142.7	1200.0	1300.7	1358.9
145°	1117.7	1210.9	1281.5	1324.4	1325.5
150°	1152.2	1246.0	1376.6	1402.2	1381.4
155°	1237.7	1290.4	1389.2	1419.5	1458.4
160°	1253.9	1315.2	1362.4	1439.5	1458.2
165°	1310.6	1344.3	1371.2	1412.2	1495.2
170°	1342.1	1318.7	1348.8	1428.1	1412.5
175°	1363.5	1347.5	1373.5	1393.0	1332.4
180°	1368.5	1368.5	1368.5	1368.5	1368.5

(END OF REPORT)