

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: 89174

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 89174
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: E2-SB-3T5-XDX-2
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

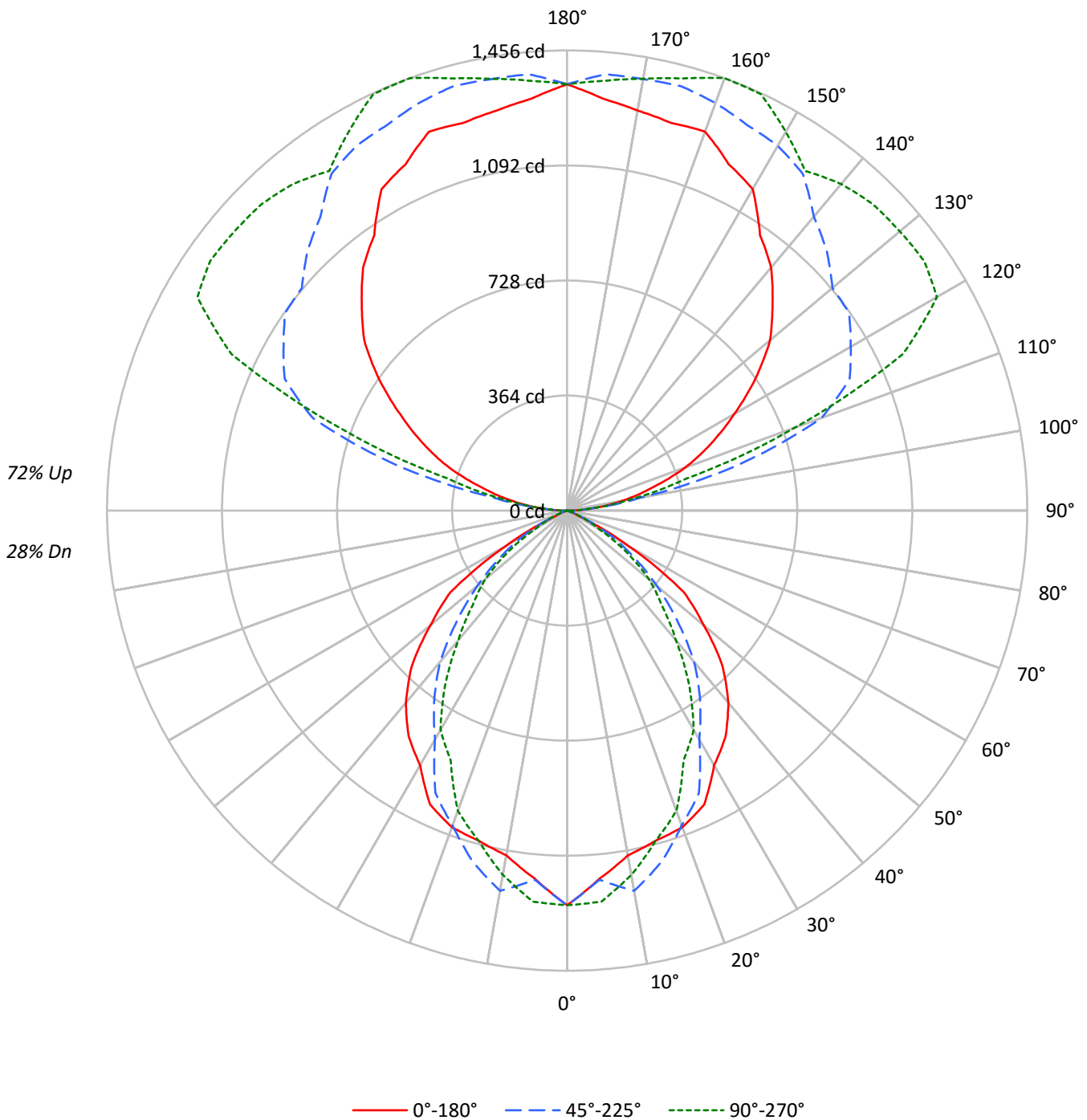
Lumens per Lamp: 4500 (2 lamps)
Luminaire Lumens: 7368.9 lumens
Efficiency: 81.9%
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.97 / 1.12
Luminous Opening: Rectangular w/ Sides (W: 0.57' x L: 4.02' x H: 0.33')
CIE Type: Semi-Indirect

Input Watts (W): 118
Input Voltage (V): NR
Input Current (A_{in}): 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	84	84	84	84	75	75	75	75	58	58	58	43	43	43	30	30	30	23
1	77	74	71	68	69	66	64	62	52	51	49	39	38	37	27	27	26	21
2	70	65	61	57	63	59	55	52	46	44	42	35	34	32	25	24	23	19
3	65	58	52	48	58	52	47	44	41	38	36	32	30	28	22	21	20	16
4	59	51	45	41	53	46	41	37	37	34	31	28	26	24	20	19	18	15
5	55	46	40	35	49	42	36	32	33	30	27	26	23	21	19	17	16	13
6	50	41	35	31	45	37	32	28	30	26	24	23	21	19	17	16	14	12
7	47	37	31	27	42	34	29	25	27	24	21	21	19	17	16	14	13	11
8	43	34	28	24	39	31	26	22	25	21	19	20	17	15	14	13	12	10
9	40	31	25	21	36	28	23	20	23	19	17	18	15	14	13	12	11	9
10	37	28	23	19	34	26	21	18	21	17	15	17	14	12	12	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5820	5820	5820
5°	5435	5272	5533
10°	5169	5344	5029
15°	5106	4940	4523
20°	5135	4497	4146
25°	5083	4169	3534
30°	4779	3547	3235
35°	4701	3148	2726
40°	4516	2734	2198
45°	4236	2215	1769
50°	3726	1724	1454
55°	3281	1258	1022
60°	1851	834	536
65°	358	329	279
70°	94	88	46
75°	47	45	13
80°	27	29	6
85°	8	13	3



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	112.6	1.5	1.3
10°-20°	316.4	4.3	3.5
20°-30°	443.9	6.0	4.9
30°-40°	476.2	6.5	5.3
40°-50°	410.5	5.6	4.6
50°-60°	259.4	3.5	2.9
60°-70°	67.7	0.9	0.8
70°-80°	6.7	0.1	0.1
80°-90°	3.3	0.0	0.0
90°-100°	112.7	1.5	1.3
100°-110°	491.2	6.7	5.5
110°-120°	881.4	12.0	9.8
120°-130°	959.3	13.0	10.7
130°-140°	899.3	12.2	10.0
140°-150°	786.7	10.7	8.7
150°-160°	624.1	8.5	6.9
160°-170°	388.4	5.3	4.3
170°-180°	129.2	1.8	1.4
0°-30°	872.9	11.8	9.7
0°-40°	1349.1	18.3	15.0
0°-60°	2019.1	27.4	22.4
0°-90°	2096.8	28.5	23.3
90°-120°	1485.2	20.2	16.5
90°-150°	4130.6	56.1	45.9
90°-180°	5272.0	71.5	58.6
0°-180°	7368.9	100.0	81.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1170	1166	1172	1160	1242	110
15°	1081	1146	1151	1144	1082	307
25°	1026	1017	986	913	872	467
35°	874	864	733	694	672	544
45°	695	630	492	448	423	530
55°	451	346	258	234	229	378
65°	38	41	60	61	56	76
75°	3	7	7	4	2	4
85°	0	1	2	1	0	1
90°	6	8	8	7	7	13
95°	81	114	75	71	69	90
105°	276	491	563	434	389	297
115°	503	696	986	1144	1172	498
125°	727	863	1089	1293	1378	649
135°	919	1057	1162	1298	1370	711
145°	1064	1204	1300	1311	1312	675
155°	1210	1301	1346	1448	1453	562
165°	1270	1334	1390	1411	1416	361
175°	1308	1289	1386	1345	1365	125
180°	1349	1349	1349	1349	1349	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1248.4	1248.4	1248.4	1248.4	1248.4
5°	1169.6	1166.4	1172.3	1160.0	1241.8
10°	1107.7	1125.9	1221.5	1163.4	1170.3
15°	1081.3	1145.9	1151.3	1144.5	1081.8
20°	1066.0	1089.6	1060.1	1042.3	1010.9
25°	1026.2	1017.3	986.4	913.0	871.5
30°	930.0	962.3	836.0	791.9	800.9
35°	873.7	864.4	733.4	693.8	672.1
40°	793.4	748.3	624.8	559.3	535.8
45°	695.4	630.3	492.4	448.1	422.9
50°	564.2	508.0	369.6	336.7	338.1
55°	451.2	346.2	257.8	233.6	229.3
60°	226.9	175.4	161.7	129.2	114.8
65°	38.2	40.8	59.6	60.8	56.5
70°	8.5	12.5	14.7	13.7	8.8
75°	3.4	6.8	6.8	4.0	2.2
80°	1.5	3.7	4.0	2.1	0.9
85°	0.3	1.0	1.5	1.0	0.4
90°	6.1	7.5	7.6	7.4	7.4
95°	81.0	114.2	74.8	71.1	68.8
100°	176.6	323.5	237.5	205.4	204.4
105°	276.1	490.9	562.9	434.2	388.9
110°	396.8	588.1	856.0	826.9	767.3
115°	502.9	696.4	986.5	1143.8	1172.1
120°	610.1	775.1	1036.2	1257.6	1351.1
125°	727.1	863.3	1089.2	1293.2	1378.4
130°	838.2	954.0	1095.7	1319.5	1374.2
135°	919.0	1056.8	1161.5	1297.9	1369.6
140°	1004.2	1137.1	1214.2	1269.1	1349.0
145°	1064.2	1203.7	1300.3	1310.7	1312.3
150°	1174.4	1265.9	1332.7	1385.8	1383.4
155°	1209.5	1301.1	1346.5	1448.3	1452.9
160°	1276.4	1322.2	1372.1	1413.7	1456.0
165°	1269.9	1334.3	1390.1	1411.4	1415.5
170°	1285.3	1370.3	1386.1	1400.6	1387.2
175°	1307.7	1289.1	1385.6	1345.3	1365.2
180°	1348.7	1348.7	1348.7	1348.7	1348.7

(END OF REPORT)