

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: 16022

Luminaire Tested: **S1-WB-2T5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 16022
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: S1-WB-2T5
Description: CORELITE DIRECT/INDIRECT SUSPENDED LUMINAIRE - STELLAR 2T5

WITH WHITE INTERIOR AND WHITE 31 CELL LOUVER AND OPEN TOP
Light Source: TWO SYLVANIA 54 WATT T5 LAMPS

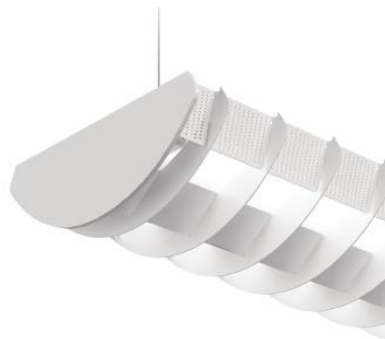
FP54/841/HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: ONE SYLVANIA QT2X54/120PHO BALLAST OPERATING AT 120 VAC AND 123 WATTS

Summary

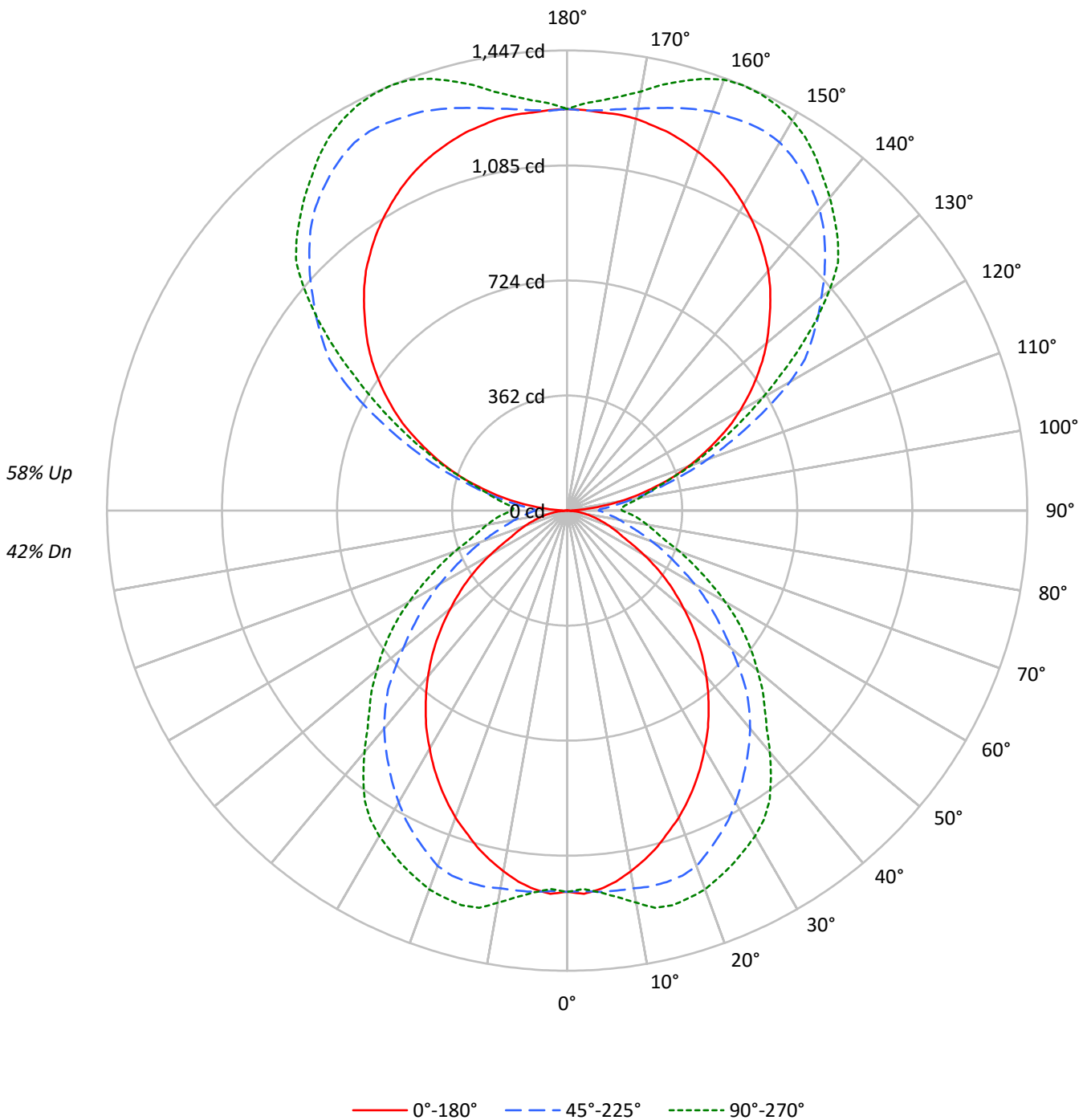
Lumens per Lamp: 4500 (2 lamps)
Luminaire Lumens: 8006.7 lumens
Efficiency: 89.0%
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.42 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4' x H: 0.25')
CIE Type: General Diffuse

Input Watts (W): 123
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	94	94	94	94	85	85	85	85	70	70	70	56	56	56	43	43	43	37																			
1	85	81	78	74	78	74	71	68	61	59	57	49	48	46	38	37	36	31																			
2	77	71	65	61	70	65	60	56	53	50	47	43	41	39	33	32	30	26																			
3	71	62	56	51	64	57	51	47	47	43	40	38	35	33	30	28	26	22																			
4	65	55	48	43	59	50	44	40	42	37	34	34	31	28	26	24	22	19																			
5	59	49	42	37	54	45	39	34	37	33	29	30	27	24	24	21	19	16																			
6	55	44	37	32	50	40	34	29	34	29	25	27	24	21	22	19	17	14																			
7	50	40	33	28	46	36	30	26	31	26	22	25	21	19	20	17	15	13																			
8	47	36	29	24	43	33	27	23	28	23	20	23	19	17	18	16	14	11																			
9	43	33	26	22	40	30	24	20	25	21	18	21	17	15	17	14	12	10																			
10	41	30	24	19	37	28	22	18	23	19	16	19	16	13	15	13	11	9																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6451	6451	6451
5°	6420	6285	6238
10°	6228	6160	6288
15°	5998	6088	6311
20°	5752	5952	6143
25°	5482	5659	5917
30°	5184	5355	5699
35°	4881	5030	5403
40°	4543	4716	4908
45°	4167	4337	4458
50°	3729	3821	4097
55°	3284	3379	3731
60°	2725	2960	3308
65°	2162	2513	2869
70°	1883	2132	2492
75°	1597	1795	2178
80°	1240	1582	2058
85°	684	1418	1983



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	114.9	1.4	1.3
10°-20°	338.4	4.2	3.8
20°-30°	512.0	6.4	5.7
30°-40°	603.2	7.5	6.7
40°-50°	587.6	7.3	6.5
50°-60°	494.8	6.2	5.5
60°-70°	354.9	4.4	3.9
70°-80°	226.4	2.8	2.5
80°-90°	139.6	1.7	1.6
90°-100°	152.4	1.9	1.7
100°-110°	344.7	4.3	3.8
110°-120°	592.7	7.4	6.6
120°-130°	795.3	9.9	8.8
130°-140°	858.8	10.7	9.5
140°-150°	785.5	9.8	8.7
150°-160°	611.4	7.6	6.8
160°-170°	372.1	4.6	4.1
170°-180°	121.8	1.5	1.4
0°-30°	965.3	12.1	10.7
0°-40°	1568.6	19.6	17.4
0°-60°	2651.0	33.1	29.5
0°-90°	3371.9	42.1	37.5
90°-120°	1089.8	13.6	12.1
90°-150°	3529.4	44.1	39.2
90°-180°	4635.0	57.9	51.5
0°-180°	8006.7	100.0	89.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1195	1200	1204	1209	1205	113
15°	1095	1139	1209	1266	1284	308
25°	950	1034	1130	1194	1229	437
35°	775	884	979	1066	1110	484
45°	582	688	796	830	878	448
55°	381	486	565	631	682	339
65°	192	295	366	431	467	197
75°	95	142	214	292	300	101
85°	19	63	127	198	216	23
90°	0	40	99	160	172	3
95°	63	94	132	170	182	75
105°	286	368	324	306	298	303
115°	517	648	631	572	549	512
125°	726	878	941	899	894	649
135°	903	1071	1147	1185	1204	697
145°	1052	1182	1295	1352	1360	658
155°	1162	1234	1344	1423	1444	536
165°	1231	1255	1311	1366	1398	348
175°	1256	1260	1264	1280	1295	120
180°	1263	1263	1263	1263	1263	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.7	1198.7	1198.7	1198.7	1198.7
2.5°	1206.3	1206.6	1197.4	1197.4	1191.0
5°	1194.9	1200.2	1203.8	1209.1	1205.2
7.5°	1176.4	1190.6	1205.2	1224.7	1226.2
10°	1152.2	1173.9	1206.3	1242.9	1252.1
12.5°	1124.5	1159.7	1210.5	1259.9	1279.5
15°	1094.6	1138.7	1209.1	1266.3	1284.5
17.5°	1059.5	1118.1	1203.8	1258.5	1277.0
20°	1027.1	1087.9	1189.6	1244.3	1267.8
22.5°	989.1	1064.4	1159.7	1219.8	1248.2
25°	950.0	1033.5	1129.8	1193.5	1228.7
27.5°	908.4	999.7	1097.5	1163.6	1205.2
30°	864.3	967.0	1059.5	1140.1	1181.7
32.5°	822.4	924.0	1020.4	1103.5	1151.9
35°	775.4	883.5	978.8	1066.2	1110.3
37.5°	728.9	836.6	938.2	1014.0	1052.7
40°	680.5	786.1	895.2	959.2	991.6
42.5°	632.2	739.2	847.2	893.8	929.0
45°	581.7	688.3	796.4	830.2	878.5
47.5°	530.9	637.5	733.8	780.8	833.0
50°	478.6	585.6	672.7	729.9	780.8
52.5°	429.6	535.8	616.5	683.4	732.8
55°	381.2	486.4	564.6	631.1	681.6
57.5°	330.0	439.5	515.2	581.3	630.0
60°	280.6	382.3	464.4	525.5	573.5
62.5°	229.8	339.6	411.1	480.0	519.1
65°	192.5	295.2	365.6	430.6	466.9
67.5°	166.2	253.6	323.6	390.1	420.3
70°	140.2	211.7	283.5	351.0	375.9
72.5°	116.7	174.3	246.8	321.1	331.4
75°	94.7	141.6	214.5	292.3	300.2
77.5°	75.1	111.8	187.1	265.0	276.7
80°	54.2	90.8	166.2	242.9	254.7
82.5°	38.5	75.1	148.0	220.9	235.1
85°	19.0	63.1	127.4	198.5	215.6
87.5°	3.3	51.7	113.9	178.2	192.5
90°	0.5	40.3	99.0	160.5	172.2
92.5°	20.1	54.2	103.6	158.7	169.0
95°	63.1	94.3	132.4	170.1	182.1
97.5°	115.3	145.5	170.1	198.9	204.2
100°	171.5	231.2	211.7	235.1	232.6
102.5°	228.7	265.3	263.9	249.7	258.6
105°	285.9	368.1	323.6	305.5	297.7
107.5°	347.1	451.6	394.0	365.6	349.9
110°	405.7	523.0	468.3	431.7	413.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	461.5	582.8	546.5	502.1	474.7
115°	516.6	648.2	630.8	572.5	549.0
117.5°	575.3	711.8	720.7	653.5	625.8
120°	627.2	776.9	809.2	739.2	709.3
122.5°	677.7	851.1	886.3	855.1	797.8
125°	726.0	878.5	940.7	899.1	894.2
127.5°	774.0	945.0	993.0	1014.0	988.0
130°	818.8	989.1	1043.8	1089.3	1076.5
132.5°	860.4	1034.9	1097.1	1140.1	1155.8
135°	903.0	1071.2	1146.9	1184.6	1204.1
137.5°	945.0	1105.0	1194.9	1227.2	1244.3
140°	984.1	1133.7	1235.1	1270.2	1284.8
142.5°	1017.5	1157.2	1266.3	1309.4	1321.1
145°	1051.6	1181.7	1295.1	1352.4	1360.2
147.5°	1081.8	1192.4	1318.6	1364.1	1392.9
150°	1110.3	1210.5	1336.7	1397.9	1416.3
152.5°	1137.7	1220.8	1344.9	1412.4	1434.1
155°	1162.2	1233.6	1344.5	1422.7	1443.7
157.5°	1183.2	1241.8	1339.2	1421.3	1447.3
160°	1201.3	1248.2	1335.3	1413.5	1441.9
162.5°	1216.9	1253.5	1323.9	1391.5	1423.8
165°	1231.1	1255.0	1310.8	1365.5	1397.9
167.5°	1240.4	1258.5	1296.6	1334.2	1370.8
170°	1250.7	1261.4	1283.4	1321.4	1338.1
172.5°	1256.0	1259.9	1273.1	1295.1	1314.7
175°	1256.0	1259.9	1263.8	1279.5	1295.1
177.5°	1261.0	1257.5	1258.5	1265.3	1282.0
180°	1262.7	1262.7	1262.7	1262.7	1262.7

(END OF REPORT)