

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: 16870

Luminaire Tested: **AB-WR-2T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 16870  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AB-WR-2T5  
Description: CORELITE - SUSPENDED DIRECT/INDIRECT LUMINAIRE  
WHITE LENS WITH RECTANGULAR PERF PRINT OVER TWO ROWS OF RECTANGULAR APERTURES  
Light Source: TWO OSRAM 54 WATT T5 LAMPS  
FP54/841/HO. LUMEN RATING = 4500 LMS.  
Ballast/Driver: ONE SYLVANIA QT2X54/120PHO BALLAST OPERATING AT 120 VAC AND 122 WATTS

**Summary**

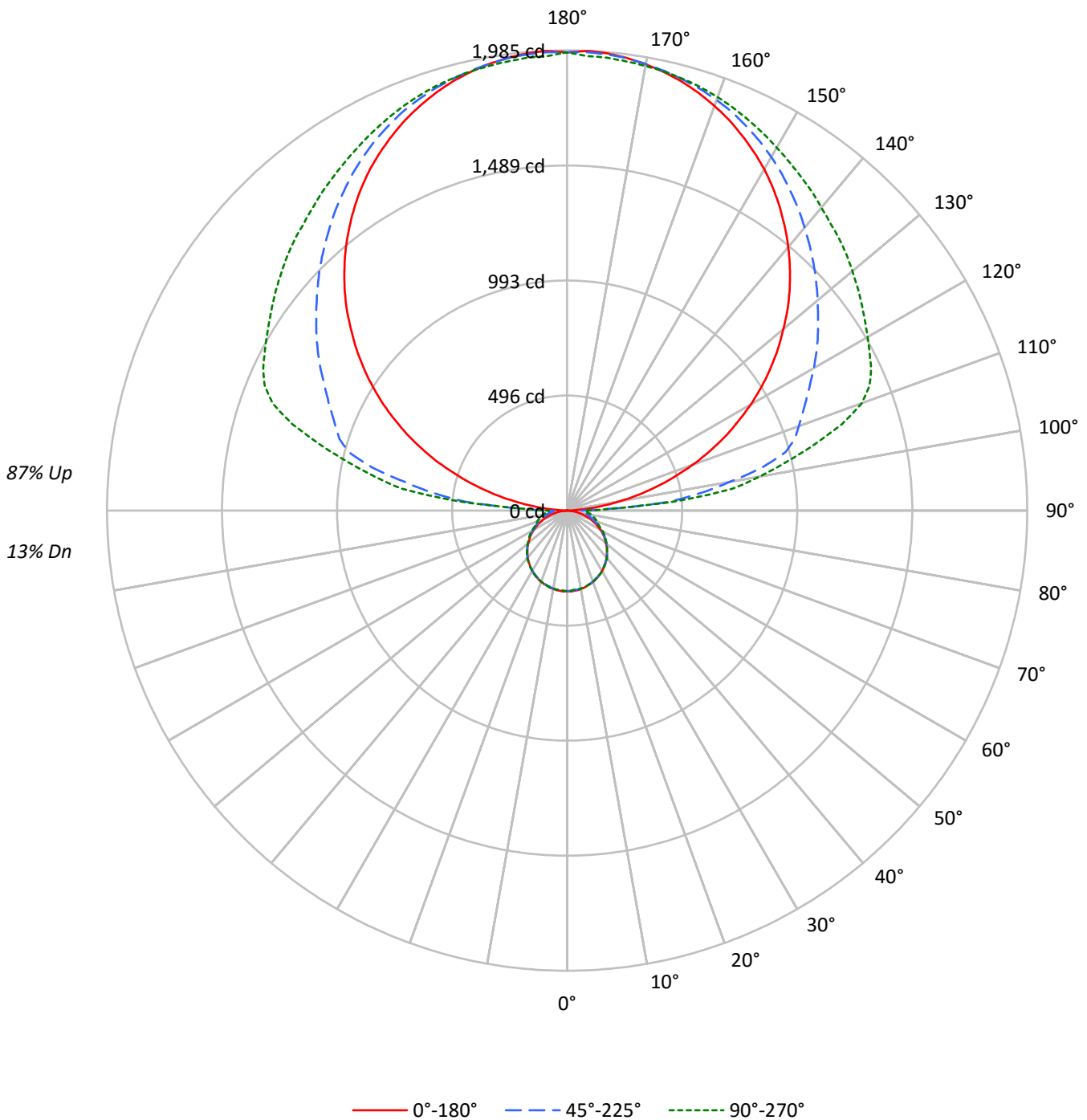
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 8473.2 lumens  
Efficiency: 94.1%  
Efficacy: 69.5 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 4' x H: 0.25')  
CIE Type: Semi-Indirect

Input Watts (W): 122  
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: 16870  
CATALOG NUMBER: AB-WR-2T5

### Luminous Intensity Polar Plot





TEST NUMBER: 16870  
 CATALOG NUMBER: AB-WR-2T5

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	50	30	10	50	30	10	0														
RCR																																						
0	93	93	93	93	81	81	81	81	59	59	59	39	39	39	21	21	21	13																				
1	84	80	77	73	73	70	67	64	51	49	48	34	33	32	18	18	17	10																				
2	76	70	64	60	66	61	56	53	45	42	39	30	28	26	16	15	14	8																				
3	69	61	55	49	60	53	48	44	39	36	33	26	24	22	14	13	12	7																				
4	63	54	47	41	55	47	41	37	35	31	28	23	21	19	12	11	10	6																				
5	58	48	40	35	50	42	36	31	31	27	24	21	18	16	11	10	9	5																				
6	53	42	35	30	46	37	31	27	28	23	20	18	16	14	10	9	8	4																				
7	49	38	31	26	43	34	27	23	25	21	18	17	14	12	9	8	7	4																				
8	45	34	27	23	39	30	24	20	22	18	15	15	13	11	8	7	6	3																				
9	42	31	24	20	37	27	22	18	20	16	14	14	11	9	8	6	5	3																				
10	39	28	22	18	34	25	19	16	19	15	12	13	10	8	7	6	5	3																				

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

	0°	45°	90°
0°	1245	1245	1245
5°	1245	1212	1199
10°	1238	1187	1172
15°	1226	1157	1141
20°	1222	1128	1111
25°	1214	1099	1077
30°	1204	1069	1047
35°	1188	1040	1013
40°	1178	1007	980
45°	1155	969	930
50°	1133	927	886
55°	1114	884	845
60°	1081	820	807
65°	1028	779	744
70°	956	723	750
75°	835	694	751
80°	682	680	758
85°	387	656	757



TEST NUMBER: 16870  
 CATALOG NUMBER: AB-WR-2T5

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	32.8	0.4	0.4
10°-20°	94.5	1.1	1.1
20°-30°	144.7	1.7	1.6
30°-40°	177.5	2.1	2.0
40°-50°	188.1	2.2	2.1
50°-60°	175.8	2.1	2.0
60°-70°	144.4	1.7	1.6
70°-80°	106.2	1.3	1.2
80°-90°	67.3	0.8	0.7
90°-100°	382.7	4.5	4.3
100°-110°	889.5	10.5	9.9
110°-120°	1105.8	13.1	12.3
120°-130°	1176.9	13.9	13.1
130°-140°	1163.6	13.7	12.9
140°-150°	1051.9	12.4	11.7
150°-160°	841.0	9.9	9.3
160°-170°	543.0	6.4	6.0
170°-180°	187.4	2.2	2.1
0°-30°	272.1	3.2	3.0
0°-40°	449.6	5.3	5.0
0°-60°	813.4	9.6	9.0
0°-90°	1131.4	13.4	12.6
90°-120°	2378.0	28.1	26.4
90°-150°	5770.3	68.1	64.1
90°-180°	7342.0	86.7	81.6
0°-180°	8473.2	100.0	94.1

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	347	347	347	347	347	
5°	348	346	345	344	343	33
15°	336	334	335	334	335	95
25°	316	313	314	314	314	145
35°	283	282	284	285	285	177
45°	242	242	244	245	244	187
55°	194	194	198	198	199	173
65°	137	140	147	149	150	135
75°	74	86	102	116	122	79
85°	16	41	67	84	88	19
90°	0	34	58	73	78	4
95°	79	293	444	461	475	97
105°	401	613	976	1069	1105	423
115°	749	862	1140	1364	1447	739
125°	1071	1119	1320	1480	1551	957
135°	1358	1400	1504	1612	1659	1047
145°	1599	1636	1680	1740	1758	1000
155°	1786	1793	1829	1846	1856	823
165°	1915	1911	1925	1926	1928	540
175°	1980	1971	1975	1963	1961	188
180°	1976	1976	1976	1976	1976	



TEST NUMBER: 16870  
 CATALOG NUMBER: AB-WR-2T5

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	347.0	347.0	347.0	347.0	347.0
2.5°	349.7	346.5	346.9	344.7	346.0
5°	347.6	346.0	344.7	344.4	342.7
7.5°	346.3	344.4	343.5	343.0	343.9
10°	343.5	341.9	341.8	340.1	340.7
12.5°	340.7	338.5	337.7	337.2	341.4
15°	335.5	334.3	334.7	334.4	334.7
17.5°	331.9	330.2	330.5	330.5	330.2
20°	327.2	325.2	325.5	325.1	326.3
22.5°	321.4	318.8	319.3	320.1	320.2
25°	315.5	313.1	313.8	313.5	314.3
27.5°	308.0	307.2	306.4	306.3	309.3
30°	301.0	298.8	299.7	300.1	301.3
32.5°	293.0	290.2	292.2	292.5	292.7
35°	283.1	281.9	283.9	285.3	285.2
37.5°	274.0	272.8	275.3	275.6	275.9
40°	264.8	262.7	265.6	266.0	267.8
42.5°	253.1	253.1	254.8	256.4	256.0
45°	241.8	242.3	244.3	244.7	244.3
47.5°	231.5	231.0	233.4	234.3	233.9
50°	218.1	218.1	221.4	220.6	221.8
52.5°	206.0	207.7	209.4	209.8	210.1
55°	193.9	193.9	197.7	198.2	199.3
57.5°	180.2	181.8	183.9	187.7	188.9
60°	166.9	168.9	169.7	175.2	177.3
62.5°	150.6	155.2	158.0	164.4	163.0
65°	137.3	139.7	146.9	148.9	150.2
67.5°	120.7	126.4	135.2	138.9	143.6
70°	106.8	113.2	122.0	130.6	136.9
72.5°	90.6	98.5	109.8	123.9	129.4
75°	74.3	85.7	102.3	116.0	121.5
77.5°	60.2	71.9	93.5	107.6	114.0
80°	44.7	61.0	85.2	100.6	106.0
82.5°	29.7	48.5	75.6	91.0	98.1
85°	16.1	40.6	66.9	83.5	88.5
87.5°	3.1	29.8	56.9	73.5	79.4
90°	0.5	34.5	58.5	72.6	78.5
92.5°	24.4	144.8	191.4	191.8	181.9
95°	78.9	293.1	444.3	461.4	474.7
97.5°	150.6	422.6	582.5	668.1	718.0
100°	229.8	528.9	712.2	838.0	842.5
102.5°	314.3	550.9	862.5	904.2	968.3
105°	400.9	613.4	975.5	1069.1	1105.0
107.5°	486.8	670.5	1029.6	1205.0	1243.6
110°	575.5	733.0	1063.4	1292.9	1352.0



TEST NUMBER: 16870  
 CATALOG NUMBER: AB-WR-2T5

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	662.6	796.3	1099.1	1339.0	1412.8
115°	748.8	861.6	1139.6	1363.7	1446.6
117.5°	830.5	929.2	1181.5	1394.1	1471.2
120°	914.2	998.3	1228.7	1423.2	1496.9
122.5°	994.1	1087.5	1274.9	1464.8	1523.2
125°	1071.2	1118.8	1320.4	1479.9	1551.1
127.5°	1146.3	1201.7	1364.2	1521.5	1579.5
130°	1217.5	1272.4	1410.3	1554.1	1606.5
132.5°	1290.3	1337.9	1457.3	1583.5	1634.5
135°	1357.8	1400.3	1504.1	1612.0	1659.1
137.5°	1422.1	1457.0	1549.0	1642.0	1681.1
140°	1484.5	1516.9	1593.6	1672.7	1706.5
142.5°	1542.7	1571.0	1639.0	1702.4	1734.0
145°	1598.7	1636.5	1680.2	1739.8	1758.2
147.5°	1651.6	1658.6	1722.7	1755.2	1783.1
150°	1700.3	1714.9	1761.4	1790.6	1808.2
152.5°	1744.5	1754.4	1797.4	1820.2	1833.2
155°	1785.6	1792.8	1829.0	1846.5	1856.5
157.5°	1824.0	1829.0	1859.8	1872.0	1878.6
160°	1857.7	1859.8	1884.5	1893.4	1898.1
162.5°	1888.4	1886.9	1906.9	1911.5	1914.8
165°	1914.8	1911.4	1925.2	1926.4	1928.1
167.5°	1936.6	1938.1	1941.9	1941.1	1939.4
170°	1955.2	1946.0	1956.0	1945.6	1947.4
172.5°	1969.3	1962.3	1967.7	1956.5	1954.4
175°	1979.8	1971.4	1975.2	1963.2	1961.0
177.5°	1984.8	1977.3	1979.0	1967.3	1962.7
180°	1976.1	1976.1	1976.1	1976.1	1976.1

(END OF REPORT)