

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: P30597

Luminaire Tested: **R2-WC-D-2N5-1C-UNV-22-T1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P30597  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: R2-WC-D-2N5-1C-UNV-22-T1  
Description: CORELITE 2X2 SHALLOW RECESSED DIRECT INDIRECT LINEAR  
FLUORESCENT LUMINAIRE WITH A WHITE UPPER REFLECTOR AND CLEAR  
ROUNDED LENS WITH A LUMIEO PERF INLAY OVER LAMP MOUNTING  
Light Source: (2) PHILIPS DOUBLE ENDED BI-PIN T5 FLUORESCENT LAMPS 3500K  
PHILIPS F14T5/835  
Ballast/Driver: UNIVERSAL LIGHTING ELECTRONIC DRIVER  
ULT B228PUNV-C

**Summary**

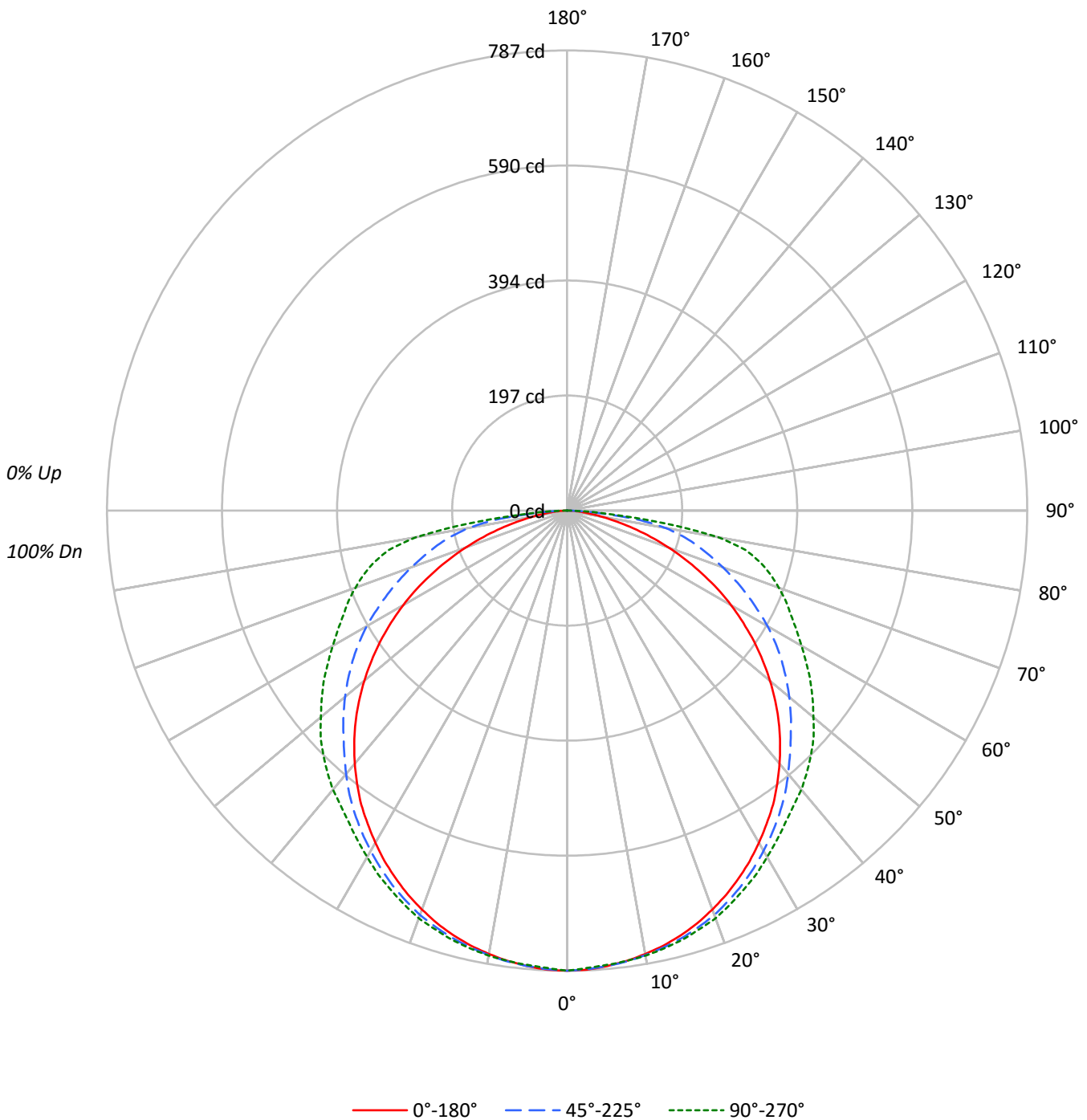
Lumens per Lamp: 1350 (2 lamps)  
Luminaire Lumens: 2483.7 lumens  
Efficiency: 92.0%  
Efficacy: 75.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.8  
Input Voltage (V): 120.06  
Input Current (Ain): 0.2683  
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	110	110	110	110	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	99	94	90	86	96	92	88	84	88	85	82	84	82	79	81	79	77	75
2	89	81	74	69	87	79	73	68	76	71	66	73	69	65	70	67	63	61
3	81	71	63	56	79	69	62	56	66	60	55	64	58	54	61	57	53	51
4	74	62	54	47	72	61	53	47	59	52	46	57	51	46	54	49	45	43
5	68	56	47	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37
6	63	50	41	35	61	49	41	35	47	40	35	46	39	34	44	38	34	32
7	58	45	37	31	56	44	36	31	43	36	31	42	35	30	40	34	30	28
8	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25
9	50	38	30	25	49	37	30	25	36	29	24	35	29	24	34	28	24	22
10	47	35	27	22	46	34	27	22	33	27	22	32	26	22	32	26	22	20

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

	0°	45°	90°
0°	2118	2118	2118
5°	2112	2112	2107
10°	2104	2109	2112
15°	2095	2109	2117
20°	2079	2108	2125
25°	2061	2099	2123
30°	2038	2088	2125
35°	2017	2079	2139
40°	1985	2066	2188
45°	1948	2059	2245
50°	1896	2076	2303
55°	1830	2102	2383
60°	1744	2131	2492
65°	1617	2159	2687
70°	1448	2227	3029
75°	1216	2391	3556
80°	930	2650	4076
85°	648	1976	2377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	74.3	3.0	2.8
10°-20°	213.6	8.6	7.9
20°-30°	325.5	13.1	12.1
30°-40°	396.1	15.9	14.7
40°-50°	422.2	17.0	15.6
50°-60°	400.2	16.1	14.8
60°-70°	335.3	13.5	12.4
70°-80°	242.0	9.7	9.0
80°-90°	74.4	3.0	2.8
90°-100°	0.1	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	613.4	24.7	22.7
0°-40°	1009.5	40.6	37.4
0°-60°	1831.9	73.8	67.8
0°-90°	2483.6	100.0	92.0
90°-120°	0.1	0.0	0.0
90°-150°	0.1	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	2483.7	100.0	92.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	782	783	782	781	780	74
15°	752	754	757	759	760	212
25°	694	700	707	713	715	320
35°	614	620	633	645	651	384
45°	512	519	541	576	590	394
55°	390	403	448	490	508	348
65°	254	278	339	397	422	251
75°	117	153	230	311	342	125
85°	21	41	64	73	77	26
90°	0	1	1	1	1	1
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	787	787	787	787	787
2.5°	786	786	785	784	783
5°	782	783	782	781	780
7.5°	777	778	778	777	777
10°	770	771	772	773	773
12.5°	762	763	765	767	767
15°	752	754	757	759	760
17.5°	740	743	747	750	751
20°	726	730	736	740	742
22.5°	711	716	722	727	729
25°	694	700	707	713	715
27.5°	676	682	690	697	701
30°	656	663	672	682	684
32.5°	635	642	653	663	668
35°	614	620	633	645	651
37.5°	590	597	612	626	636
40°	565	573	588	610	623
42.5°	539	547	564	594	607
45°	512	519	541	576	590
47.5°	483	492	519	558	572
50°	453	462	496	537	550
52.5°	422	433	472	514	529
55°	390	403	448	490	508
57.5°	357	372	423	468	485
60°	324	340	396	444	463
62.5°	290	309	367	421	442
65°	254	278	339	397	422
67.5°	219	246	311	376	405
70°	184	215	283	356	385
72.5°	150	183	256	334	365
75°	117	153	230	311	342
77.5°	87	124	202	282	313
80°	60	96	171	242	263
82.5°	39	69	126	157	169
85°	21	41	64	73	77
87.5°	9	14	20	24	25
90°	0	1	1	1	1
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)