

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: P30656

Luminaire Tested: **Z3-WN-2T5-1C-UNV-22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P30656
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: Z3-WN-2T5-1C-UNV-22
Description: CORELITE 2x2 SHALLOW RECESSED FIXTURE WITH A WHITE UPPER REFLECTOR AND A CLEAR FLAT LENS WITH A FROST INLAY OVER LAMP MOUNTING & TWO MICRO ACRYLIC LENS OVER CURVED REFLECTORS
Light Source: (2) PHILIPS DOUBLE ENDED BI-PIN T5 FLUORESCENT LAMPS 4100K PHILIPS F24 T5/841 HO 24W
Ballast/Driver: UNIVERSAL ELECTRONIC BALLAST B224PUNV-C

Summary

Lumens per Lamp: 2000 (2 lamps)
Luminaire Lumens: 3317.9 lumens
Efficiency: 82.9%
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.37 / 1.43
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

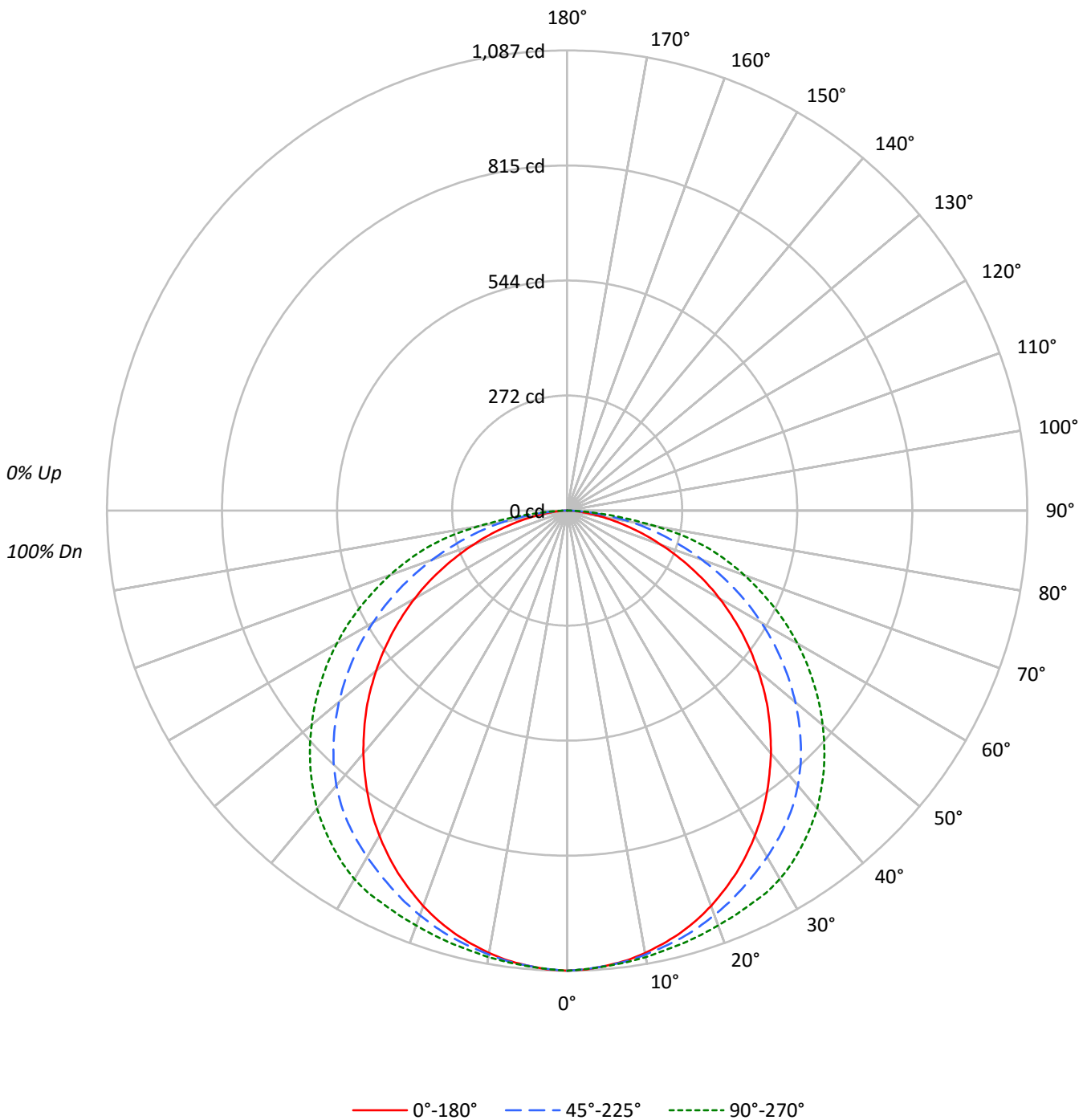
Input Watts (W): 50.7
Input Voltage (V): 120.06
Input Current (Ain): 0.4227
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	99	99	99	96	96	96	96	92	92	92	88	88	88	85	85	85	83						83													
1	90	86	82	79	88	84	81	77	80	78	75	77	75	73	74	72	71	69						69													
2	81	74	69	64	79	73	67	63	70	65	61	67	63	60	65	61	59	57						57													
3	74	65	58	53	72	64	57	52	61	56	51	59	54	50	57	53	49	47						47													
4	68	57	50	44	66	56	49	44	54	48	43	52	47	43	50	46	42	40						40													
5	62	51	44	38	60	50	43	38	48	42	37	47	41	37	45	40	36	35						35													
6	57	46	38	33	56	45	38	33	44	37	32	42	37	32	41	36	32	30						30													
7	53	42	34	29	52	41	34	29	40	33	29	38	33	28	37	32	28	27						27													
8	49	38	31	26	48	37	30	26	36	30	26	35	29	25	34	29	25	24						24													
9	46	35	28	23	45	34	28	23	33	27	23	32	27	23	32	26	23	21						21													
10	43	32	25	21	42	32	25	21	31	25	21	30	24	21	29	24	21	19						19													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2925	2925	2925
5°	2915	2915	2917
10°	2899	2910	2926
15°	2878	2911	2947
20°	2846	2912	2987
25°	2806	2919	3046
30°	2756	2936	3123
35°	2697	2963	3177
40°	2631	2979	3228
45°	2557	2972	3265
50°	2466	2947	3299
55°	2365	2909	3336
60°	2239	2852	3380
65°	2076	2776	3432
70°	1865	2659	3501
75°	1591	2516	3608
80°	1255	2340	3270
85°	895	1791	2161



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	102.6	3.1	2.6
10°-20°	295.2	8.9	7.4
20°-30°	454.2	13.7	11.4
30°-40°	561.3	16.9	14.0
40°-50°	595.3	17.9	14.9
50°-60°	549.5	16.6	13.7
60°-70°	430.7	13.0	10.8
70°-80°	260.6	7.9	6.5
80°-90°	68.2	2.1	1.7
90°-100°	0.3	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°	852.0	25.7	21.3
0°-40°	1413.4	42.6	35.3
0°-60°	2558.1	77.1	64.0
0°-90°	3317.6	100.0	82.9
90°-120°	0.3	0.0	0.0
90°-150°	0.3	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	3317.9	100.0	82.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1079	1079	1079	1080	1080	102
15°	1033	1037	1045	1054	1058	291
25°	945	955	983	1014	1026	435
35°	821	842	902	951	967	513
45°	672	705	781	838	858	518
55°	504	547	620	686	711	450
65°	326	365	436	509	539	323
75°	153	183	242	316	347	164
85°	29	40	58	71	70	35
90°	1	2	2	2	2	2
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°	1087	1087	1087	1087	1087
2.5°	1085	1084	1084	1084	1084
5°	1079	1079	1079	1080	1080
7.5°	1072	1072	1074	1075	1076
10°	1061	1062	1065	1069	1071
12.5°	1048	1050	1055	1061	1064
15°	1033	1037	1045	1054	1058
17.5°	1015	1019	1032	1045	1051
20°	994	1000	1017	1036	1043
22.5°	970	978	1001	1025	1035
25°	945	955	983	1014	1026
27.5°	917	929	964	1003	1018
30°	887	902	945	991	1005
32.5°	855	873	924	973	988
35°	821	842	902	951	967
37.5°	785	810	877	927	944
40°	749	777	848	900	919
42.5°	710	742	816	870	889
45°	672	705	781	838	858
47.5°	631	667	743	802	824
50°	589	629	704	766	788
52.5°	547	589	662	727	751
55°	504	547	620	686	711
57.5°	460	503	576	644	671
60°	416	458	530	601	628
62.5°	372	412	484	555	585
65°	326	365	436	509	539
67.5°	281	318	387	461	492
70°	237	272	338	413	445
72.5°	194	226	289	365	397
75°	153	183	242	316	347
77.5°	115	142	196	264	288
80°	81	104	151	199	211
82.5°	52	70	102	132	135
85°	29	40	58	71	70
87.5°	12	16	23	26	25
90°	1	2	2	2	2
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)