

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: 20543

Luminaire Tested: **IQ-WO-4T8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 20543
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: IQ-WO-4T8
Description: DIRECT/INDIRECT SUSPENDED LUMINAIRE WITH WHITE INTERIOR WITH WHITE PLASTIC LENS
Light Source: FOUR PHILIPS 32 WATT T8 LAMPS

F32T8/TL841. LUMEN RATING = 3000 LMS.

Ballast/Driver: -

Summary

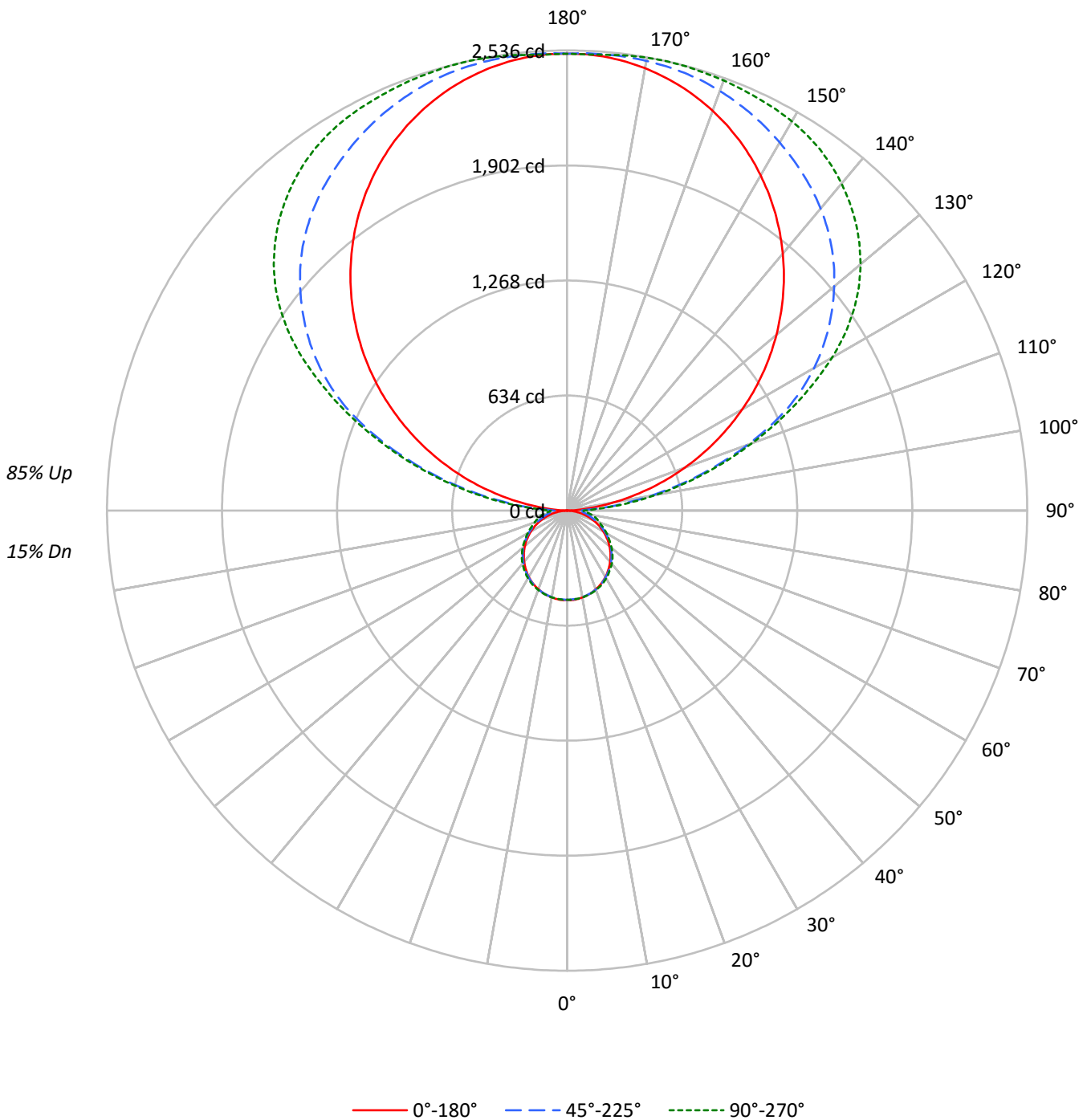
Lumens per Lamp: 3000 (4 lamps)
Luminaire Lumens: 10330.7 lumens
Efficiency: 86.1%
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.3 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.32' x L: 3.67' x H: 0.06')
CIE Type: Semi-Indirect

Input Watts (W): 119
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



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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									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	85	85	85	85	75	75	75	75	55	55	55	37	37	37	21	21	21	13																				
1	77	74	70	67	68	65	62	59	48	46	44	32	31	30	18	18	17	11																				
2	70	64	59	55	61	56	52	48	42	39	36	28	26	25	16	15	14	9																				
3	64	56	50	45	56	49	44	40	37	33	30	25	23	21	14	13	12	7																				
4	58	49	43	38	51	43	38	34	32	29	26	22	20	18	12	11	10	6																				
5	53	44	37	32	46	39	33	29	29	25	22	19	17	15	11	10	9	5																				
6	49	39	32	28	43	34	29	25	26	22	19	17	15	13	10	9	8	5																				
7	45	35	29	24	39	31	25	21	23	19	16	16	13	11	9	8	7	4																				
8	42	32	25	21	36	28	22	19	21	17	14	14	12	10	8	7	6	4																				
9	39	29	23	18	34	25	20	16	19	15	13	13	11	9	7	6	5	3																				
10	36	26	20	16	31	23	18	15	17	14	11	12	10	8	7	6	5	3																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4508	4508	4508
5°	4526	4444	4438
10°	4513	4393	4374
15°	4498	4342	4317
20°	4477	4285	4256
25°	4460	4222	4192
30°	4430	4149	4117
35°	4382	4085	4027
40°	4343	4006	3952
45°	4306	3927	3855
50°	4252	3827	3738
55°	4180	3706	3590
60°	4102	3566	3480
65°	3998	3401	3394
70°	3842	3250	3362
75°	3641	3136	3467
80°	3256	3209	3579
85°	2463	3313	3707



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	46.6	0.5	0.4
10°-20°	134.3	1.3	1.1
20°-30°	205.6	2.0	1.7
30°-40°	251.5	2.4	2.1
40°-50°	266.8	2.6	2.2
50°-60°	248.6	2.4	2.1
60°-70°	203.4	2.0	1.7
70°-80°	145.0	1.4	1.2
80°-90°	84.6	0.8	0.7
90°-100°	234.3	2.3	2.0
100°-110°	753.1	7.3	6.3
110°-120°	1236.7	12.0	10.3
120°-130°	1514.4	14.7	12.6
130°-140°	1553.9	15.0	12.9
140°-150°	1404.2	13.6	11.7
150°-160°	1104.9	10.7	9.2
160°-170°	702.7	6.8	5.9
170°-180°	240.0	2.3	2.0
0°-30°	386.6	3.7	3.2
0°-40°	638.0	6.2	5.3
0°-60°	1153.5	11.2	9.6
0°-90°	1586.5	15.4	13.2
90°-120°	2224.1	21.5	18.5
90°-150°	6696.6	64.8	55.8
90°-180°	8744.0	84.6	72.9
0°-180°	10330.7	100.0	86.1

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	493	490	489	490	490	47
15°	476	474	475	477	478	134
25°	444	443	446	449	451	205
35°	396	398	402	406	407	248
45°	338	340	347	352	353	260
55°	268	271	280	285	285	239
65°	191	196	205	216	219	189
75°	109	114	136	159	166	115
85°	28	50	83	104	111	31
90°	0	29	61	81	90	5
95°	86	177	216	232	241	109
105°	472	700	756	775	781	500
115°	903	1141	1344	1386	1392	893
125°	1315	1511	1760	1897	1929	1175
135°	1684	1826	2060	2204	2249	1298
145°	2000	2098	2265	2392	2430	1251
155°	2249	2305	2409	2482	2503	1036
165°	2420	2438	2497	2528	2534	683
175°	2509	2504	2523	2524	2521	238
180°	2518	2518	2518	2518	2518	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.8	491.8	491.8	491.8	491.8
2.5°	494.4	490.3	490.6	491.3	492.1
5°	492.6	490.0	489.1	490.1	490.3
7.5°	489.6	487.5	487.0	488.4	488.6
10°	486.3	484.1	484.0	484.7	485.5
12.5°	481.0	479.5	480.4	481.7	482.0
15°	476.1	474.0	475.3	477.0	477.8
17.5°	469.6	467.6	469.2	470.7	472.2
20°	461.7	460.6	462.4	464.0	466.1
22.5°	453.4	451.9	454.3	456.6	458.4
25°	444.4	443.0	445.5	448.7	450.8
27.5°	433.6	433.0	435.4	439.4	441.3
30°	422.5	421.9	424.7	428.8	431.1
32.5°	410.1	410.1	413.0	417.2	420.0
35°	396.1	397.7	401.9	406.2	407.2
37.5°	382.9	384.0	388.4	394.3	395.3
40°	368.0	370.2	375.3	380.4	382.3
42.5°	353.4	355.7	361.3	367.1	368.7
45°	337.6	340.0	346.6	352.5	353.2
47.5°	320.9	324.0	330.6	336.1	336.9
50°	304.0	306.8	314.5	319.8	320.7
52.5°	286.2	289.3	297.4	302.8	302.4
55°	267.7	271.0	279.7	284.6	284.8
57.5°	249.4	252.8	261.6	266.1	268.0
60°	230.1	233.8	243.1	249.1	251.5
62.5°	210.6	214.8	224.6	232.2	235.6
65°	190.8	195.6	205.3	215.7	219.4
67.5°	170.8	175.6	186.7	199.1	201.8
70°	149.8	156.0	169.3	183.2	190.1
72.5°	129.5	135.1	152.0	171.1	178.7
75°	109.1	114.3	136.2	159.3	166.4
77.5°	88.4	95.5	123.4	146.3	153.1
80°	67.4	77.4	110.5	132.3	139.9
82.5°	47.7	62.6	96.7	118.5	125.4
85°	27.8	50.0	83.4	104.3	110.8
87.5°	7.9	37.5	70.8	90.4	95.9
90°	0.0	29.2	60.7	80.7	89.6
92.5°	26.0	81.8	115.7	131.6	140.7
95°	85.9	177.4	215.5	232.3	241.0
97.5°	170.4	296.3	335.1	354.6	363.1
100°	265.4	429.1	467.6	487.1	495.3
102.5°	366.9	565.1	608.2	625.5	632.9
105°	472.3	700.0	755.6	774.8	780.7
107.5°	580.5	820.2	906.8	926.7	931.1
110°	688.5	930.0	1058.2	1077.0	1081.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	796.7	1036.6	1205.3	1234.1	1237.3
115°	903.4	1141.2	1344.0	1386.1	1391.5
117.5°	1009.2	1241.5	1464.9	1529.5	1540.3
120°	1113.1	1335.5	1572.1	1668.6	1686.7
122.5°	1215.6	1424.1	1670.3	1794.4	1816.2
125°	1315.2	1510.8	1760.4	1897.1	1928.6
127.5°	1411.8	1593.1	1843.7	1988.6	2026.9
130°	1505.5	1672.9	1922.2	2070.1	2111.3
132.5°	1595.6	1750.6	1994.2	2140.7	2184.0
135°	1683.6	1826.5	2060.5	2204.0	2248.8
137.5°	1768.2	1898.1	2119.9	2261.9	2304.2
140°	1848.5	1968.2	2173.9	2312.3	2352.7
142.5°	1926.5	2035.2	2222.0	2356.1	2395.2
145°	1999.9	2098.3	2265.1	2392.5	2429.8
147.5°	2069.1	2157.4	2305.2	2421.5	2456.5
150°	2133.0	2211.9	2342.6	2446.1	2477.4
152.5°	2193.8	2261.0	2377.5	2465.9	2492.6
155°	2248.9	2304.9	2408.9	2481.8	2503.4
157.5°	2299.8	2345.1	2436.5	2496.1	2513.3
160°	2345.0	2379.9	2461.1	2509.2	2522.5
162.5°	2385.0	2411.4	2482.7	2520.2	2527.9
165°	2420.5	2438.0	2497.3	2527.8	2534.0
167.5°	2450.2	2461.2	2508.9	2532.6	2536.5
170°	2475.5	2479.8	2516.6	2533.9	2534.3
172.5°	2495.3	2494.3	2521.1	2529.3	2529.7
175°	2508.9	2503.5	2522.8	2524.0	2520.9
177.5°	2516.8	2509.6	2522.8	2520.5	2515.8
180°	2517.5	2517.5	2517.5	2517.5	2517.5

(END OF REPORT)