

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: 17877

Luminaire Tested: **NB-SC-1T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 17877  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: NB-SC-1T5  
Description: NAVIGATOR II SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND WHITE LENS OVER CONCAVE PERF  
PANEL  
Light Source: ONE PHILIPS 54 WATT T5 LAMP  
  
F54T5.841HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: -

**Summary**

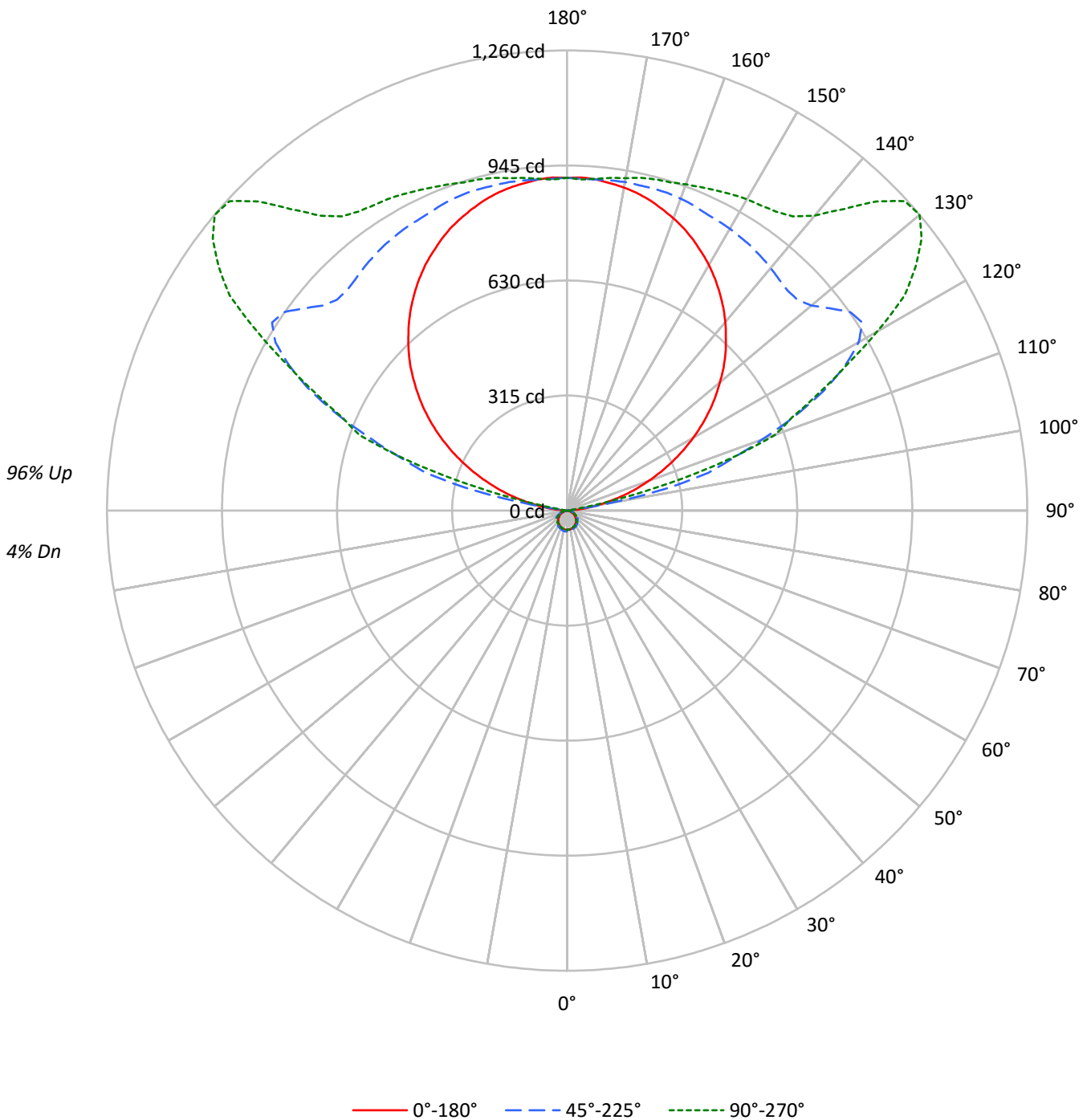
Lumens per Lamp: 4500 (1 lamp)  
Luminaire Lumens: 3943.2 lumens  
Efficiency: 87.6%  
Efficacy: 65.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.44  
Luminous Opening: Rectangular (W 0.33' x L: 3.59' x H: 0')  
CIE Type: Indirect

Input Watts (W): 60  
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				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	84	84	84	84	73	73	73	73	51	51	51	31	31	31	12	12	12	4
1	77	73	70	67	66	63	60	58	44	43	41	27	26	25	11	10	10	3
2	70	64	59	55	60	55	51	48	39	36	34	23	22	21	9	9	8	2
3	63	56	50	45	54	48	43	40	34	31	28	21	19	18	8	8	7	2
4	58	49	43	38	50	43	37	33	30	27	24	18	16	15	7	7	6	2
5	53	44	37	32	45	38	32	28	27	23	20	16	14	13	7	6	5	1
6	49	39	32	28	42	34	28	24	24	20	17	14	12	11	6	5	5	1
7	45	35	28	24	38	30	25	21	21	18	15	13	11	10	5	5	4	1
8	41	31	25	21	35	27	22	18	19	16	13	12	10	8	5	4	3	1
9	38	28	22	18	33	25	19	16	17	14	12	11	9	7	4	4	3	1
10	35	26	20	16	30	22	17	14	16	13	10	10	8	6	4	3	3	1

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

	0°	45°	90°
0°	488	488	488
5°	480	519	476
10°	477	520	473
15°	483	518	473
20°	471	496	471
25°	466	505	471
30°	466	514	447
35°	464	507	477
40°	454	516	504
45°	436	509	436
50°	424	517	505
55°	415	550	504
60°	394	578	500
65°	365	507	471
70°	327	542	534
75°	249	506	537
80°	194	534	549
85°	250	521	657



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	5.1	0.1	0.1
10°-20°	14.4	0.4	0.3
20°-30°	21.8	0.6	0.5
30°-40°	26.5	0.7	0.6
40°-50°	28.0	0.7	0.6
50°-60°	26.9	0.7	0.6
60°-70°	21.4	0.5	0.5
70°-80°	13.7	0.3	0.3
80°-90°	4.9	0.1	0.1
90°-100°	34.3	0.9	0.8
100°-110°	334.7	8.5	7.4
110°-120°	642.3	16.3	14.3
120°-130°	774.7	19.6	17.2
130°-140°	684.8	17.4	15.2
140°-150°	549.1	13.9	12.2
150°-160°	415.2	10.5	9.2
160°-170°	258.2	6.5	5.7
170°-180°	87.1	2.2	1.9
0°-30°	41.3	1.0	0.9
0°-40°	67.8	1.7	1.5
0°-60°	122.8	3.1	2.7
0°-90°	162.8	4.1	3.6
90°-120°	1011.3	25.6	22.5
90°-150°	3019.8	76.6	67.1
90°-180°	3780.0	95.9	84.0
0°-180°	3943.2	100.0	87.6

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	54	54	54	54	54	
5°	53	53	57	52	52	5
15°	51	49	55	49	50	14
25°	46	46	50	46	47	21
35°	42	40	46	41	43	26
45°	34	35	40	36	34	26
55°	26	27	35	30	32	23
65°	17	19	24	23	22	17
75°	7	11	14	15	15	8
85°	2	3	5	5	6	2
90°	0	0	0	0	0	1
95°	27	35	7	6	7	34
105°	158	362	401	322	290	168
115°	318	517	775	763	760	315
125°	475	596	947	1118	1165	424
135°	614	699	853	1078	1196	473
145°	728	789	881	966	999	456
155°	817	850	898	950	967	377
165°	879	892	912	934	938	248
175°	910	912	910	916	912	86
180°	911	911	911	911	911	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	53.7	53.7	53.7	53.7	53.7
2.5°	53.0	52.6	57.7	52.6	51.7
5°	52.6	52.6	56.9	52.2	52.2
7.5°	52.6	51.7	57.7	51.7	51.7
10°	51.7	51.7	56.4	51.3	51.3
12.5°	51.3	52.2	55.1	51.7	51.3
15°	51.3	49.1	55.1	49.1	50.3
17.5°	48.7	48.7	53.4	48.7	49.1
20°	48.7	47.7	51.3	48.7	48.7
22.5°	48.2	47.0	51.6	47.0	47.7
25°	46.5	45.6	50.4	46.5	47.0
27.5°	44.8	44.8	50.0	44.4	46.5
30°	44.4	43.0	49.0	43.5	42.6
32.5°	42.5	41.3	47.4	42.2	43.9
35°	41.8	40.4	45.7	40.9	43.0
37.5°	39.9	39.1	44.8	38.7	41.7
40°	38.3	37.9	43.5	38.7	42.5
42.5°	36.6	35.3	40.9	37.4	36.1
45°	33.9	35.2	39.6	36.1	33.9
47.5°	32.6	32.3	38.7	33.9	35.7
50°	30.0	30.8	36.6	32.7	35.7
52.5°	27.9	28.2	35.7	32.3	33.1
55°	26.2	26.6	34.7	29.7	31.8
57.5°	24.8	24.8	35.7	28.2	29.2
60°	21.7	22.7	31.8	26.1	27.5
62.5°	20.1	20.4	27.9	24.5	26.6
65°	17.0	19.3	23.6	22.7	21.9
67.5°	14.4	16.7	22.7	20.6	21.4
70°	12.3	14.4	20.4	18.3	20.1
72.5°	9.7	12.8	17.5	16.7	17.5
75°	7.1	10.7	14.4	14.9	15.3
77.5°	6.2	9.2	13.2	11.9	13.6
80°	3.7	7.1	10.2	9.7	10.5
82.5°	3.2	5.0	7.6	7.5	7.9
85°	2.4	2.9	5.0	5.3	6.3
87.5°	1.2	1.2	2.4	4.2	4.2
90°	0.5	0.5	0.5	0.5	0.5
92.5°	7.1	4.5	2.9	3.2	6.6
95°	26.6	34.7	6.8	6.3	7.1
97.5°	53.5	119.5	16.2	9.7	7.9
100°	84.9	230.2	124.0	85.8	16.6
102.5°	119.9	264.4	276.1	128.1	123.8
105°	158.4	362.0	400.6	322.3	290.4
107.5°	198.7	442.5	474.5	468.0	458.1
110°	237.6	486.6	567.1	580.9	605.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	278.2	509.9	673.1	661.7	666.9
115°	318.4	516.9	774.6	763.3	759.5
117.5°	358.6	528.9	857.2	874.1	863.6
120°	398.4	551.0	922.0	980.4	979.5
122.5°	437.3	583.0	958.2	1085.9	1095.7
125°	475.3	595.6	947.1	1117.5	1164.7
127.5°	511.3	627.5	909.0	1178.4	1223.0
130°	546.3	651.3	873.1	1182.7	1259.7
132.5°	581.2	675.1	854.6	1141.2	1254.0
135°	613.8	698.9	852.8	1078.0	1196.5
137.5°	643.5	721.0	858.4	1020.2	1119.6
140°	673.9	742.1	867.1	985.1	1053.8
142.5°	701.9	763.3	874.4	970.4	1015.0
145°	728.3	788.8	881.3	966.1	998.9
147.5°	753.0	798.3	886.1	963.9	989.9
150°	776.7	821.3	891.3	960.5	984.3
152.5°	797.0	836.9	894.2	955.3	976.4
155°	817.4	850.3	897.8	949.6	967.0
157.5°	836.4	863.6	904.3	944.1	958.3
160°	851.5	875.7	909.1	941.0	950.4
162.5°	865.7	883.9	912.1	937.9	942.3
165°	879.1	891.8	912.5	934.1	938.5
167.5°	890.0	900.9	912.5	929.3	933.3
170°	898.1	903.0	913.4	927.7	924.2
172.5°	904.3	908.5	911.6	921.2	918.6
175°	909.9	912.1	909.9	915.5	912.1
177.5°	912.9	913.4	909.0	913.4	907.4
180°	911.0	911.0	911.0	911.0	911.0

(END OF REPORT)