

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: 17889

Luminaire Tested: **NB-SC-2T8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 17889  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: NB-SC-2T8  
Description: NAVIGATOR II SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND WHITE LENS OVER CONCAVE PERF  
PANEL  
Light Source: TWO PHILIPS 32 WATT T8 LAMPS  
  
F32T8/TL841. LUMEN RATING = 3000 LMS.  
  
Ballast/Driver: -

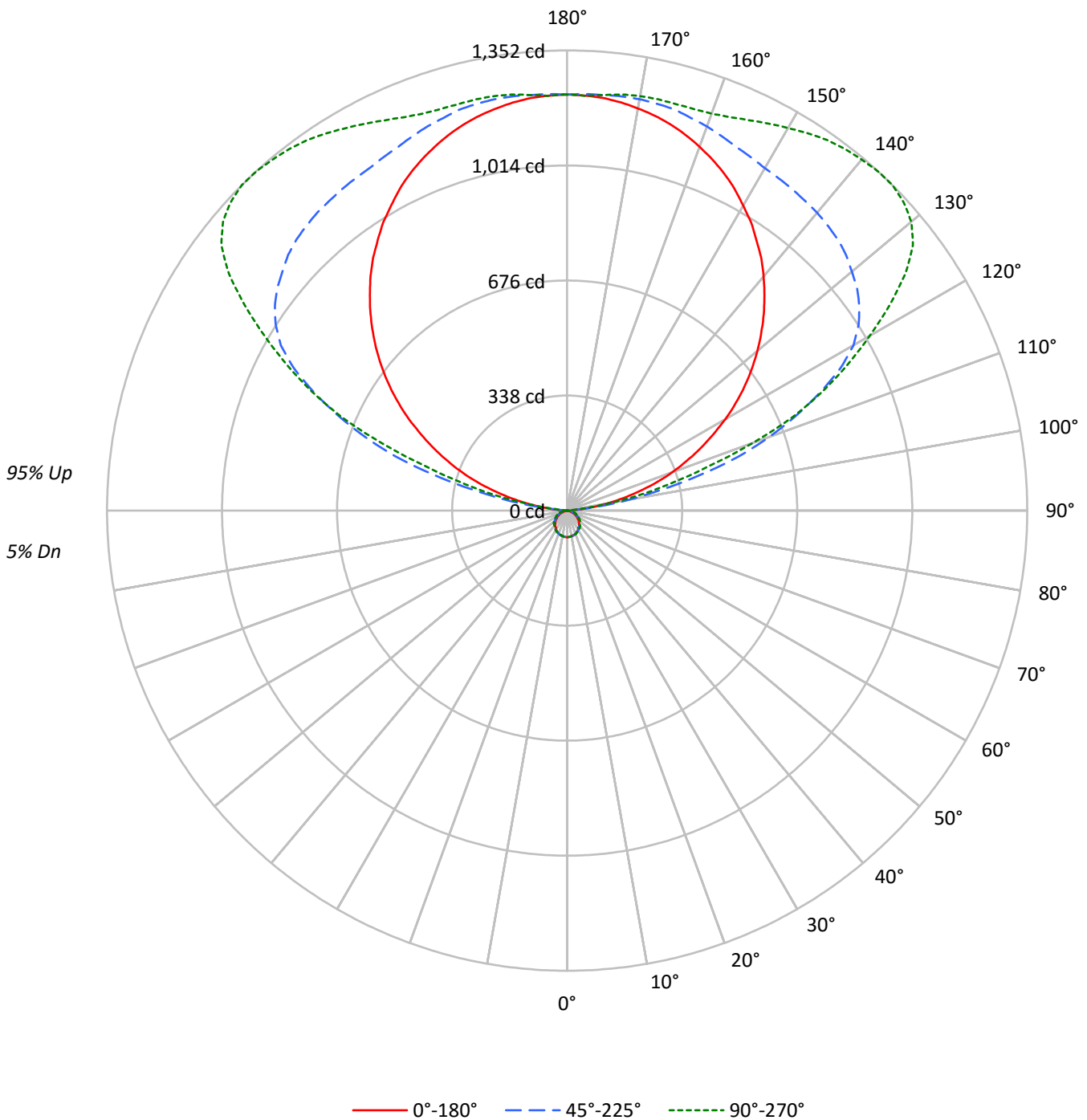
**Summary**

Lumens per Lamp: 3000 (2 lamps)  
Luminaire Lumens: 4840.6 lumens  
Efficiency: 80.7%  
Efficacy: 79.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 0.33' x L: 3.59' x H: 0')  
CIE Type: Indirect  
  
Input Watts (W): 61  
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	78	78	78	78	67	67	67	67	47	47	47	29	29	29	12	12	12	4
1	71	67	65	62	61	58	56	54	41	39	38	25	24	23	10	10	10	3
2	64	59	54	50	55	51	47	44	36	33	31	22	21	20	9	9	8	3
3	59	52	46	42	50	45	40	37	31	29	26	19	18	16	8	7	7	2
4	53	45	40	35	46	39	34	31	28	25	22	17	15	14	7	6	6	2
5	49	40	34	30	42	35	30	26	25	21	19	15	13	12	6	6	5	2
6	45	36	30	25	38	31	26	22	22	19	16	14	12	10	6	5	4	1
7	41	32	26	22	35	28	23	19	20	16	14	12	10	9	5	4	4	1
8	38	29	23	19	33	25	20	17	18	15	12	11	9	8	5	4	3	1
9	35	26	21	17	30	23	18	15	16	13	11	10	8	7	4	3	3	1
10	33	24	18	15	28	21	16	13	15	12	10	9	7	6	4	3	3	1

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

	0°	45°	90°
0°	710	710	710
5°	710	710	707
10°	707	702	693
15°	698	706	698
20°	700	695	709
25°	690	694	704
30°	679	688	699
35°	662	667	702
40°	648	674	701
45°	631	659	708
50°	615	654	698
55°	586	668	703
60°	542	658	698
65°	492	651	707
70°	398	584	709
75°	319	611	723
80°	188	596	738
85°	94	521	615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	7.4	0.2	0.1
10°-20°	21.0	0.4	0.4
20°-30°	31.8	0.7	0.5
30°-40°	38.3	0.8	0.6
40°-50°	40.0	0.8	0.7
50°-60°	36.5	0.8	0.6
60°-70°	28.0	0.6	0.5
70°-80°	17.2	0.4	0.3
80°-90°	5.0	0.1	0.1
90°-100°	56.0	1.2	0.9
100°-110°	379.5	7.8	6.3
110°-120°	719.5	14.9	12.0
120°-130°	878.1	18.1	14.6
130°-140°	851.4	17.6	14.2
140°-150°	723.7	15.0	12.1
150°-160°	547.1	11.3	9.1
160°-170°	343.2	7.1	5.7
170°-180°	116.8	2.4	1.9
0°-30°	60.2	1.2	1.0
0°-40°	98.5	2.0	1.6
0°-60°	175.0	3.6	2.9
0°-90°	225.2	4.7	3.8
90°-120°	1155.0	23.9	19.2
90°-150°	3608.1	74.5	60.1
90°-180°	4615.0	95.3	76.9
0°-180°	4840.6	100.0	80.7

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	78	78	78	78	78	
5°	78	78	78	78	78	7
15°	74	75	75	75	74	21
25°	69	68	69	69	70	32
35°	60	60	60	62	63	37
45°	49	51	51	54	55	38
55°	37	38	42	43	44	33
65°	23	24	30	32	33	23
75°	9	13	17	20	21	10
85°	1	4	5	6	6	1
90°	0	0	0	0	0	1
95°	35	53	16	8	4	46
105°	221	407	407	351	327	234
115°	432	639	820	839	828	427
125°	637	782	1048	1170	1213	568
135°	817	911	1125	1292	1352	630
145°	970	1038	1153	1280	1330	607
155°	1092	1131	1178	1242	1265	503
165°	1175	1194	1220	1234	1236	331
175°	1217	1221	1226	1228	1226	116
180°	1222	1222	1222	1222	1222	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	78.1	78.1	78.1	78.1	78.1
2.5°	78.3	77.3	78.3	77.3	77.8
5°	77.8	77.8	77.8	77.8	77.5
7.5°	77.3	76.6	77.3	76.6	77.0
10°	76.6	76.1	76.1	76.1	75.1
12.5°	75.6	75.1	76.1	76.5	75.2
15°	74.2	74.6	75.1	74.6	74.2
17.5°	73.3	72.8	73.3	73.8	73.8
20°	72.4	71.1	71.9	72.1	73.3
22.5°	70.1	69.7	71.1	70.6	71.1
25°	68.8	68.3	69.2	68.8	70.2
27.5°	66.6	66.4	67.8	67.8	68.8
30°	64.7	64.7	65.6	66.1	66.6
32.5°	60.9	61.9	64.2	64.6	64.6
35°	59.7	60.1	60.1	61.9	63.3
37.5°	58.3	57.3	59.2	60.6	61.4
40°	54.6	55.1	56.8	58.2	59.1
42.5°	51.8	52.7	55.1	55.4	55.9
45°	49.1	50.9	51.3	53.7	55.1
47.5°	46.8	46.7	49.6	51.3	53.6
50°	43.5	43.2	46.3	48.2	49.4
52.5°	39.9	40.8	44.0	45.8	47.2
55°	37.0	38.0	42.2	43.0	44.4
57.5°	33.9	34.9	39.4	40.8	40.8
60°	29.8	32.2	36.2	36.7	38.4
62.5°	26.5	28.4	32.5	34.3	35.3
65°	22.9	24.3	30.3	31.7	32.9
67.5°	19.8	21.1	24.8	28.8	29.3
70°	15.0	18.8	22.0	26.0	26.7
72.5°	12.3	16.5	20.6	22.4	23.4
75°	9.1	13.3	17.4	20.1	20.6
77.5°	6.4	10.9	14.6	16.5	17.4
80°	3.6	7.8	11.4	12.8	14.1
82.5°	1.9	5.5	6.9	8.8	10.0
85°	0.9	4.1	5.0	6.4	5.9
87.5°	0.5	0.9	0.9	2.8	2.8
90°	0.5	0.5	0.5	0.5	0.5
92.5°	7.3	8.1	2.8	2.6	2.3
95°	35.3	52.7	15.5	8.3	4.5
97.5°	73.3	135.6	96.7	54.6	41.3
100°	117.7	250.8	183.8	168.7	132.9
102.5°	168.2	294.7	284.7	216.3	233.4
105°	221.0	406.9	407.0	350.7	326.7
107.5°	274.5	484.0	527.2	474.7	443.2
110°	328.2	542.7	631.2	608.6	580.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	379.0	597.2	727.4	730.1	716.4
115°	431.7	639.4	819.6	838.7	828.2
117.5°	482.6	682.8	905.3	935.1	928.6
120°	536.3	722.4	971.3	1031.3	1026.7
122.5°	587.1	766.3	1015.3	1136.7	1123.4
125°	636.7	781.9	1048.3	1169.7	1213.3
127.5°	683.8	820.8	1073.5	1240.3	1280.6
130°	729.8	852.1	1091.9	1268.7	1320.1
132.5°	773.7	881.4	1111.9	1284.7	1341.1
135°	817.2	911.2	1125.2	1291.6	1352.1
137.5°	858.0	939.6	1134.3	1294.8	1351.6
140°	898.4	970.3	1142.6	1293.5	1346.3
142.5°	936.3	1000.5	1147.2	1291.2	1339.4
145°	969.9	1037.7	1153.2	1279.7	1329.6
147.5°	1005.0	1051.5	1157.3	1275.6	1314.5
150°	1034.4	1084.9	1161.8	1262.7	1298.1
152.5°	1065.7	1109.6	1170.1	1250.9	1281.9
155°	1092.3	1130.8	1178.0	1242.2	1265.4
157.5°	1116.2	1150.9	1189.9	1234.8	1251.3
160°	1137.7	1167.8	1200.9	1231.0	1240.8
162.5°	1157.3	1182.1	1209.6	1232.5	1237.0
165°	1174.7	1194.0	1219.8	1234.4	1236.2
167.5°	1188.5	1206.0	1224.3	1236.7	1237.5
170°	1199.9	1209.6	1227.0	1236.2	1236.7
172.5°	1209.5	1217.4	1227.5	1233.4	1233.0
175°	1216.9	1221.1	1225.6	1228.4	1225.6
177.5°	1220.6	1222.9	1224.8	1224.3	1219.8
180°	1222.3	1222.3	1222.3	1222.3	1222.3

(END OF REPORT)