

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: ITL58816

Luminaire Tested: **NB-SW-2T8-DL5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: ITL58816  
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: NB-SW-2T8-DL5  
Description: NAVIGATOR II SUSPENDED LUMINAIRE  
EXTRUDED METAL HOUSING WITH UNFINISHED METAL END PLATES, FORMED  
WHITE PAINTED METAL REFLECTORS, ONE SEMI-SPECULAR METAL INSERT  
ON EACH SIDE, ONE U-SHAPED WHITE PAINTED METAL REFLECTOR OVER  
LAMPS WITH 36 ADJUSTABLE SLOTS ON TOP AND SIDES, ADJUSTABLE  
REFLECTOR SET TO "DL5" FOR THIS TEST, FABRICATED WHITE PAINTED  
METAL 18-CELL LOUVER.  
Light Source: TWO 32-WATT T-8 FO32/835 LINEAR FLUORESCENTS.  
Ballast/Driver: UNIVERSAL B232IUNVHP-B

**Summary**

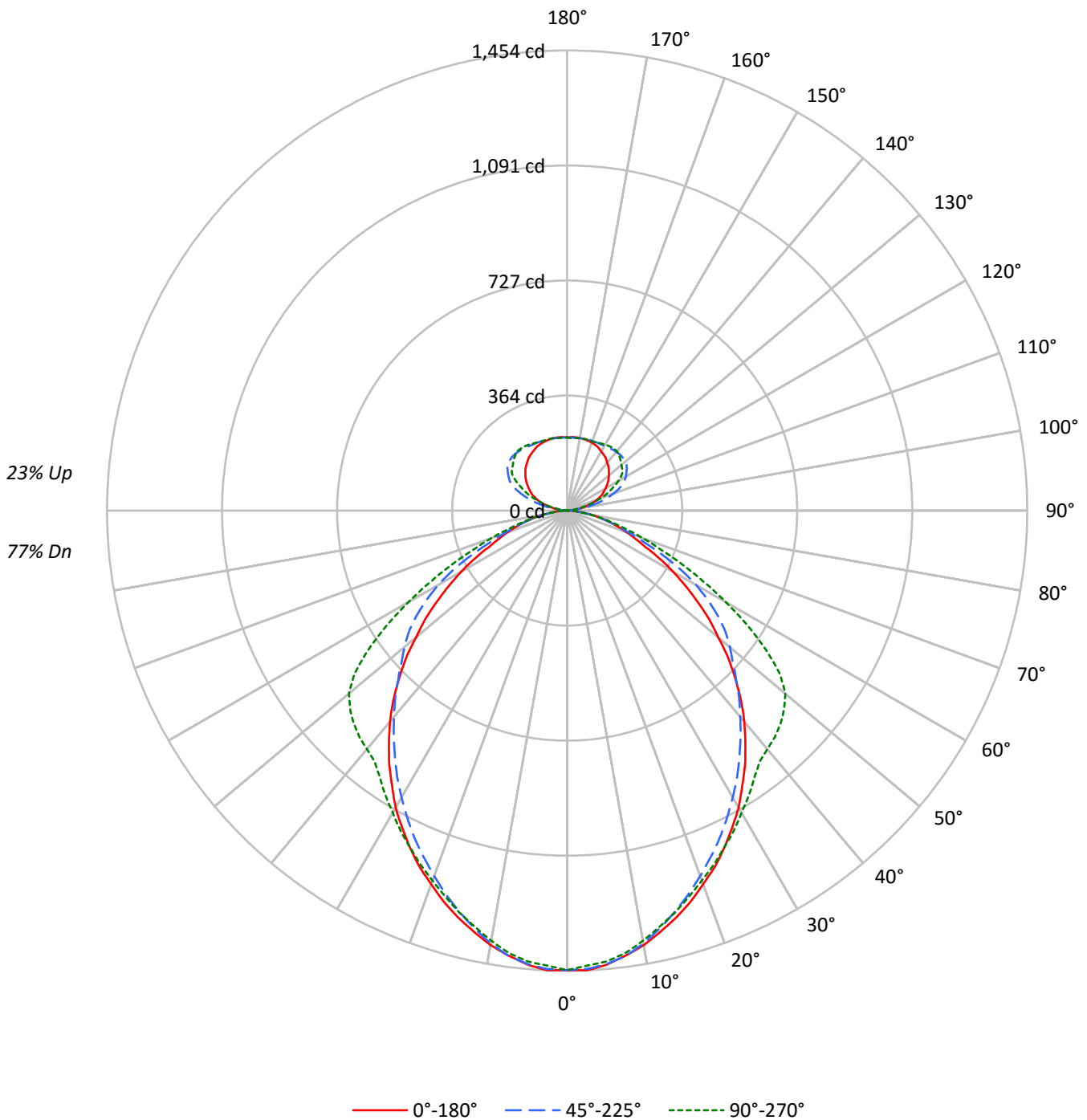
Lumens per Lamp: 2950 (2 lamps)  
Luminaire Lumens: 4322.6 lumens  
Efficiency: 73.3%  
Efficacy: 77.9 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.14 / 1.23  
Luminous Opening: Rectangular (W 0.34' x L: 3.59' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 55.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: NB-SW-2T8-DL5

### 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	83	83	83	83	79	79	79	79	72	72	72		65	65	65		59	59	59	56
1	76	73	71	68	73	70	68	65	64	62	60		58	57	55		53	52	51	48
2	70	64	60	56	67	62	58	54	56	53	50		52	49	47		47	45	43	41
3	64	57	52	47	61	55	50	46	50	46	43		46	43	40		42	39	37	35
4	59	51	45	40	56	49	43	39	45	40	37		41	37	34		38	35	32	30
5	54	45	39	35	51	44	38	34	40	35	32		37	33	30		34	31	28	26
6	50	41	35	30	48	39	34	30	36	32	28		34	30	27		31	28	25	23
7	46	37	31	27	44	36	30	26	33	28	25		31	27	24		28	25	22	21
8	43	34	28	24	41	33	27	23	30	26	22		28	24	21		26	23	20	19
9	40	31	25	22	38	30	25	21	28	23	20		26	22	19		24	21	18	17
10	38	29	23	19	36	28	23	19	26	21	18		24	20	17		22	19	17	15

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

	0°	45°	90°
0°	12846	12846	12846
5°	12789	12771	12700
10°	12523	12479	12398
15°	12191	12026	12045
20°	11825	11571	11712
25°	11470	11138	11461
30°	11074	10686	11258
35°	10585	10250	11135
40°	10060	9829	11365
45°	9397	9447	11924
50°	8575	9236	12388
55°	7759	8977	11846
60°	6848	8316	10263
65°	5736	6971	8332
70°	5174	5458	6570
75°	4683	4649	5128
80°	4076	3872	3872
85°	3045	2639	2335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	135.6	3.1	2.3
10°-20°	371.2	8.6	6.3
20°-30°	532.7	12.3	9.0
30°-40°	610.0	14.1	10.3
40°-50°	618.4	14.3	10.5
50°-60°	536.5	12.4	9.1
60°-70°	332.8	7.7	5.6
70°-80°	151.4	3.5	2.6
80°-90°	33.4	0.8	0.6
90°-100°	24.2	0.6	0.4
100°-110°	104.8	2.4	1.8
110°-120°	166.4	3.8	2.8
120°-130°	187.2	4.3	3.2
130°-140°	175.9	4.1	3.0
140°-150°	146.4	3.4	2.5
150°-160°	107.8	2.5	1.8
160°-170°	66.0	1.5	1.1
170°-180°	22.1	0.5	0.4
0°-30°	1039.5	24.0	17.6
0°-40°	1649.5	38.2	28.0
0°-60°	2804.4	64.9	47.5
0°-90°	3322.0	76.9	56.3
90°-120°	295.4	6.8	5.0
90°-150°	804.8	18.6	13.6
90°-180°	1001.0	23.2	17.0
0°-180°	4322.6	100.0	73.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1440	1440	1438	1433	1430	136
15°	1331	1332	1313	1311	1315	375
25°	1175	1160	1141	1153	1174	541
35°	980	954	949	988	1031	612
45°	751	735	755	863	953	579
55°	503	503	582	701	768	450
65°	274	285	333	375	398	279
75°	137	137	136	146	150	146
85°	30	31	26	25	23	35
90°	0	0	0	0	0	2
95°	18	33	16	15	5	19
105°	74	131	109	91	69	77
115°	123	179	193	169	151	120
125°	157	197	230	228	214	140
135°	186	209	243	249	236	143
145°	208	220	239	248	244	130
155°	224	230	235	238	236	103
165°	231	233	234	233	233	65
175°	233	232	231	230	231	22
180°	231	231	231	231	231	



TEST NUMBER: ITL58816

CATALOG NUMBER: NB-SW-2T8-DL5

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1452	1452	1452	1452	1452
2.5°	1454	1451	1450	1441	1439
5°	1440	1440	1438	1433	1430
7.5°	1418	1419	1419	1413	1410
10°	1394	1394	1389	1382	1380
12.5°	1363	1364	1352	1346	1347
15°	1331	1332	1313	1311	1315
17.5°	1296	1293	1272	1270	1279
20°	1256	1250	1229	1232	1244
22.5°	1219	1206	1185	1193	1211
25°	1175	1160	1141	1153	1174
27.5°	1129	1111	1094	1112	1140
30°	1084	1061	1046	1070	1102
32.5°	1030	1008	999	1029	1068
35°	980	954	949	988	1031
37.5°	925	899	900	948	999
40°	871	847	851	911	984
42.5°	813	792	804	888	971
45°	751	735	755	863	953
47.5°	691	679	710	837	930
50°	623	619	671	803	900
52.5°	566	562	631	764	847
55°	503	503	582	701	768
57.5°	443	445	528	620	676
60°	387	391	470	538	580
62.5°	330	337	406	451	485
65°	274	285	333	375	398
67.5°	233	235	267	301	318
70°	200	202	211	240	254
72.5°	169	168	171	190	195
75°	137	137	136	146	150
77.5°	107	107	104	109	110
80°	80	79	76	78	76
82.5°	53	54	51	50	47
85°	30	31	26	25	23
87.5°	9	9	4	4	3
90°	0	0	0	0	0
92.5°	5	12	4	5	5
95°	18	33	16	15	5
97.5°	29	55	34	31	11
100°	44	82	59	52	30
102.5°	58	109	83	71	49
105°	74	131	109	91	69
107.5°	88	146	132	112	89
110°	101	161	154	132	111



TEST NUMBER: ITL58816

CATALOG NUMBER: NB-SW-2T8-DL5

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	112	172	175	150	133
115°	123	179	193	169	151
117.5°	131	184	205	188	168
120°	140	189	214	207	187
122.5°	149	193	222	221	203
125°	157	197	230	228	214
127.5°	165	200	237	233	219
130°	172	203	241	240	224
132.5°	179	206	242	245	230
135°	186	209	243	249	236
137.5°	192	211	243	252	241
140°	197	215	242	251	245
142.5°	203	217	241	250	245
145°	208	220	239	248	244
147.5°	212	222	238	245	243
150°	216	225	236	242	241
152.5°	220	228	235	240	238
155°	224	230	235	238	236
157.5°	226	231	234	235	234
160°	228	232	234	234	232
162.5°	230	232	234	233	233
165°	231	233	234	233	233
167.5°	232	233	233	232	233
170°	233	233	232	232	233
172.5°	233	232	231	230	231
175°	233	232	231	230	231
177.5°	232	232	231	230	229
180°	231	231	231	231	231

(END OF REPORT)