

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: 24562

Luminaire Tested: **IB-SM-2T8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 24562
Test Lab: LIGHTING SCIENCES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: IB-SM-2T8
Description: WITH SPECULAR REFLECTORS AND MICRO PRISMATIC FLAT PLASTIC LENS
PRISMS DOWN
Light Source: TWO PHILIPS 32 WATT T8 LAMP

F32T8/TL841. LUMEN RATING = 2850 LMS.

Ballast/Driver: -

Summary

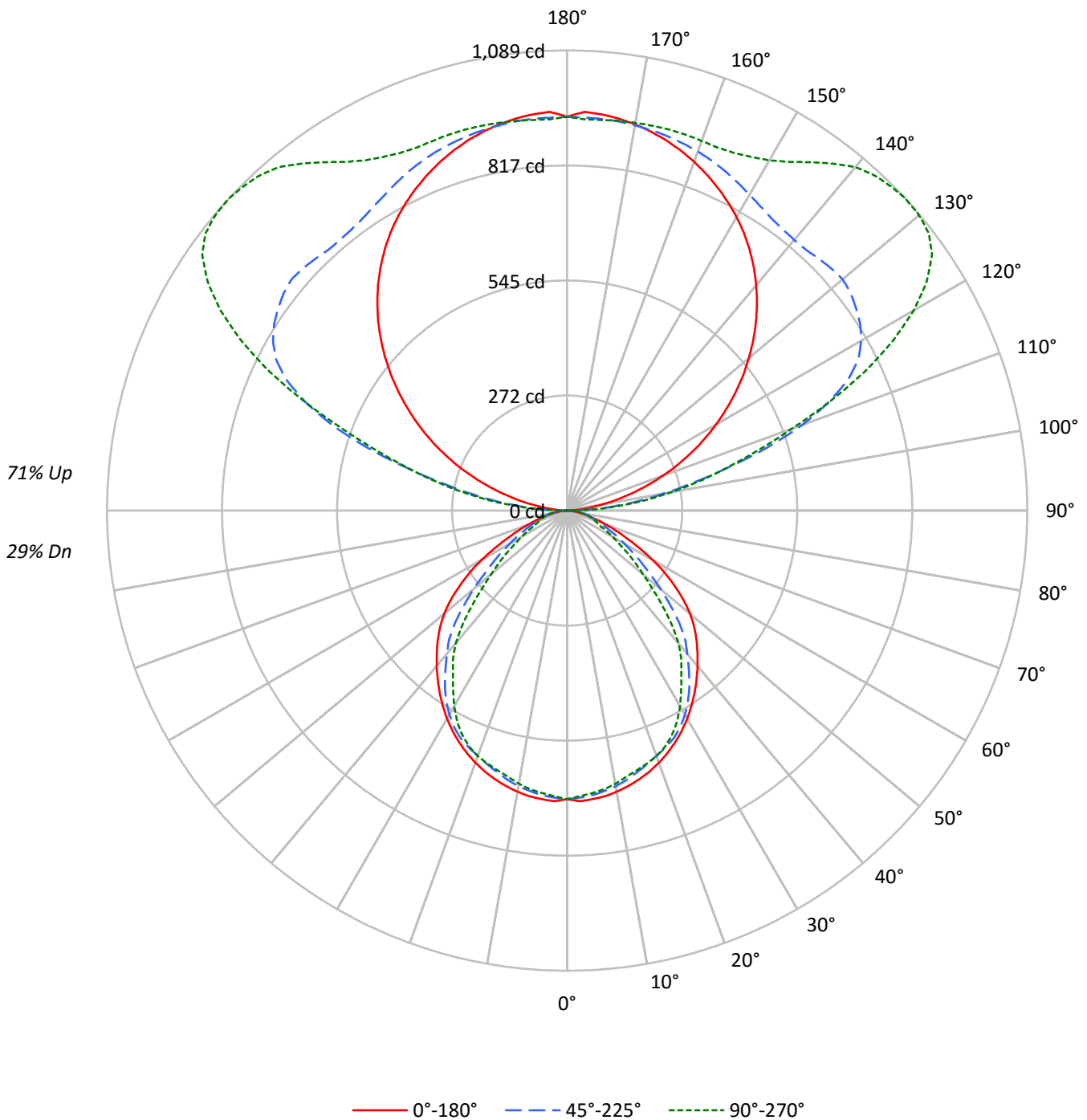
Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 5297.8 lumens
Efficiency: 92.9%
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.17 / 1.27
Luminous Opening: Rectangular (W 0.23' x L: 3.58' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 57
Input Voltage (V): NR
Input Current (A_{in}): 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: IB-SM-2T8

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	95	95	95	95	85	85	85	85	66	66	66	50	50	50	34	34	34	27
1	87	83	80	77	78	75	72	69	59	57	55	44	43	42	31	30	29	23
2	79	73	67	63	71	65	61	57	52	49	46	39	37	35	27	26	25	20
3	72	64	58	53	65	58	52	48	46	42	39	35	32	30	24	23	22	17
4	66	57	50	45	59	51	45	41	41	37	33	31	28	26	22	20	19	15
5	61	51	44	38	54	46	40	35	37	32	29	28	25	23	20	18	17	13
6	56	45	38	33	50	41	35	30	33	28	25	25	22	20	18	16	15	12
7	52	41	34	29	46	37	31	27	30	25	22	23	20	18	17	15	13	10
8	48	37	30	26	43	34	28	24	27	23	20	21	18	16	15	13	12	9
9	45	34	27	23	40	31	25	21	25	20	17	19	16	14	14	12	11	9
10	42	31	24	20	37	28	22	19	23	19	16	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8925	8925	8925
5°	8998	8877	8808
10°	8968	8791	8712
15°	8912	8671	8611
20°	8832	8595	8603
25°	8726	8585	8461
30°	8580	8415	8067
35°	8393	8050	7520
40°	8193	7551	6995
45°	7999	6922	5892
50°	7722	5863	4793
55°	7079	4886	3963
60°	6113	4079	3273
65°	4856	3455	2663
70°	3837	2962	2695
75°	2914	2919	2778
80°	2130	2989	2793
85°	1665	2700	2520



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	64.3	1.2	1.1
10°-20°	181.9	3.4	3.2
20°-30°	273.2	5.2	4.8
30°-40°	314.1	5.9	5.5
40°-50°	287.9	5.4	5.1
50°-60°	203.4	3.8	3.6
60°-70°	118.8	2.2	2.1
70°-80°	62.0	1.2	1.1
80°-90°	19.1	0.4	0.3
90°-100°	110.0	2.1	1.9
100°-110°	377.2	7.1	6.6
110°-120°	624.3	11.8	11.0
120°-130°	708.0	13.4	12.4
130°-140°	655.4	12.4	11.5
140°-150°	541.2	10.2	9.5
150°-160°	409.2	7.7	7.2
160°-170°	259.2	4.9	4.5
170°-180°	88.7	1.7	1.6
0°-30°	519.4	9.8	9.1
0°-40°	833.5	15.7	14.6
0°-60°	1324.8	25.0	23.2
0°-90°	1524.7	28.8	26.7
90°-120°	1111.5	21.0	19.5
90°-150°	3016.0	56.9	52.9
90°-180°	3773.0	71.2	66.2
0°-180°	5297.8	100.0	92.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	686	679	676	676	671	65
15°	658	649	641	640	636	186
25°	605	595	595	592	587	279
35°	526	527	504	482	471	329
45°	433	415	374	334	319	333
55°	311	262	214	184	174	276
65°	157	141	112	94	86	159
75°	58	62	58	57	55	64
85°	11	18	18	17	17	13
90°	0	0	0	0	0	2
95°	29	85	106	117	119	36
105°	160	361	396	390	390	170
115°	325	487	734	783	776	321
125°	486	562	835	1013	1054	434
135°	632	666	843	1026	1084	487
145°	753	768	844	950	1006	471
155°	843	849	886	914	934	389
165°	907	904	917	925	933	256
175°	941	930	930	926	928	89
180°	932	932	932	932	932	



TEST NUMBER: 24562
 CATALOG NUMBER: IB-SM-2T8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	682.7	682.7	682.7	682.7	682.7
2.5°	688.4	682.6	680.1	680.5	676.9
5°	685.7	679.2	676.5	676.0	671.2
7.5°	682.0	674.7	669.6	669.6	665.6
10°	675.6	667.9	662.3	660.5	656.3
12.5°	667.9	659.4	652.4	649.9	645.4
15°	658.5	649.4	640.7	639.8	636.3
17.5°	647.5	637.4	629.3	629.8	627.7
20°	634.9	624.6	617.8	620.9	618.4
22.5°	620.8	610.7	607.1	609.3	605.0
25°	605.0	595.2	595.2	592.3	586.6
27.5°	587.4	580.0	578.7	570.8	563.2
30°	568.4	564.0	557.5	543.8	534.4
32.5°	547.7	546.7	532.6	513.2	502.4
35°	525.9	527.3	504.4	481.6	471.2
37.5°	503.3	504.4	472.6	452.4	443.7
40°	480.1	477.1	442.5	422.3	409.9
42.5°	456.5	446.6	413.1	381.6	366.7
45°	432.7	414.8	374.4	333.8	318.7
47.5°	407.7	382.4	330.6	289.1	272.6
50°	379.7	345.2	288.3	248.2	235.7
52.5°	346.8	301.2	247.4	214.4	202.2
55°	310.6	262.0	214.4	183.9	173.9
57.5°	273.5	229.0	184.1	157.5	145.0
60°	233.8	196.6	156.0	131.7	125.2
62.5°	192.8	166.5	134.4	114.3	104.7
65°	157.0	141.2	111.7	94.2	86.1
67.5°	126.9	118.6	94.5	78.4	76.8
70°	100.4	96.2	77.5	72.2	70.5
72.5°	77.7	78.5	64.7	65.5	63.4
75°	57.7	61.6	57.8	57.3	55.0
77.5°	41.6	47.6	49.3	48.2	46.3
80°	28.3	35.8	39.7	38.3	37.1
82.5°	19.0	27.3	29.4	27.4	27.0
85°	11.1	17.7	18.0	17.0	16.8
87.5°	5.2	8.0	8.6	9.3	9.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.3	36.9	50.8	59.2	61.0
95°	28.6	85.4	106.4	116.9	118.6
97.5°	55.4	146.5	168.3	181.1	183.2
100°	87.0	226.2	232.9	248.4	250.3
102.5°	121.9	301.3	306.0	316.5	319.4
105°	159.9	361.1	396.0	390.1	390.5
107.5°	199.8	403.1	496.8	477.5	472.0
110°	241.0	434.7	591.5	578.4	565.5



TEST NUMBER: 24562
 CATALOG NUMBER: IB-SM-2T8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.0	463.0	670.0	685.2	670.8
115°	324.6	486.7	733.7	783.4	775.8
117.5°	365.8	504.7	777.2	866.1	868.6
120°	406.4	521.3	803.8	934.4	946.6
122.5°	446.1	541.2	822.3	984.2	1009.2
125°	485.7	562.3	834.9	1012.6	1054.3
127.5°	524.3	586.4	845.5	1025.0	1078.4
130°	561.3	612.3	851.4	1030.5	1087.2
132.5°	597.3	638.6	848.2	1030.1	1089.4
135°	632.0	666.3	842.7	1026.1	1084.2
137.5°	664.8	693.2	836.8	1016.5	1076.3
140°	696.2	720.0	836.1	997.6	1061.0
142.5°	725.5	745.5	838.5	971.2	1034.6
145°	753.0	768.3	843.8	949.9	1006.2
147.5°	778.7	790.0	852.8	933.3	978.2
150°	802.1	812.0	862.9	923.7	956.9
152.5°	823.4	831.6	874.8	917.0	943.5
155°	843.1	849.1	886.2	914.4	934.0
157.5°	861.5	865.4	895.9	916.2	929.9
160°	878.4	879.1	904.3	921.0	930.7
162.5°	893.5	892.4	910.9	924.3	932.8
165°	906.9	903.8	917.3	925.4	933.4
167.5°	918.4	913.4	922.0	926.5	933.0
170°	928.0	921.0	925.7	927.0	931.5
172.5°	935.7	926.7	929.0	926.2	930.1
175°	941.2	930.5	930.4	925.7	928.0
177.5°	944.5	932.6	930.7	924.5	926.6
180°	931.8	931.8	931.8	931.8	931.8

(END OF REPORT)