

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: 8673.0

Luminaire Tested: **CFA-132**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 8673.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CFA-132
Description: FAIL-SAFE 4' CFA CLEANROOM TEARDROP CEILING MNT LUMINAIRE
WHITE REFLECTOR & EXTRUDED ACRYLIC LENS w/INTERNAL PRISMS
Light Source: 1/32W T8 2850 LUMENS
WATTS=30
F32T8/735/RS
Ballast/Driver: MOTOROLA #M1-RN-T8-1LL-120

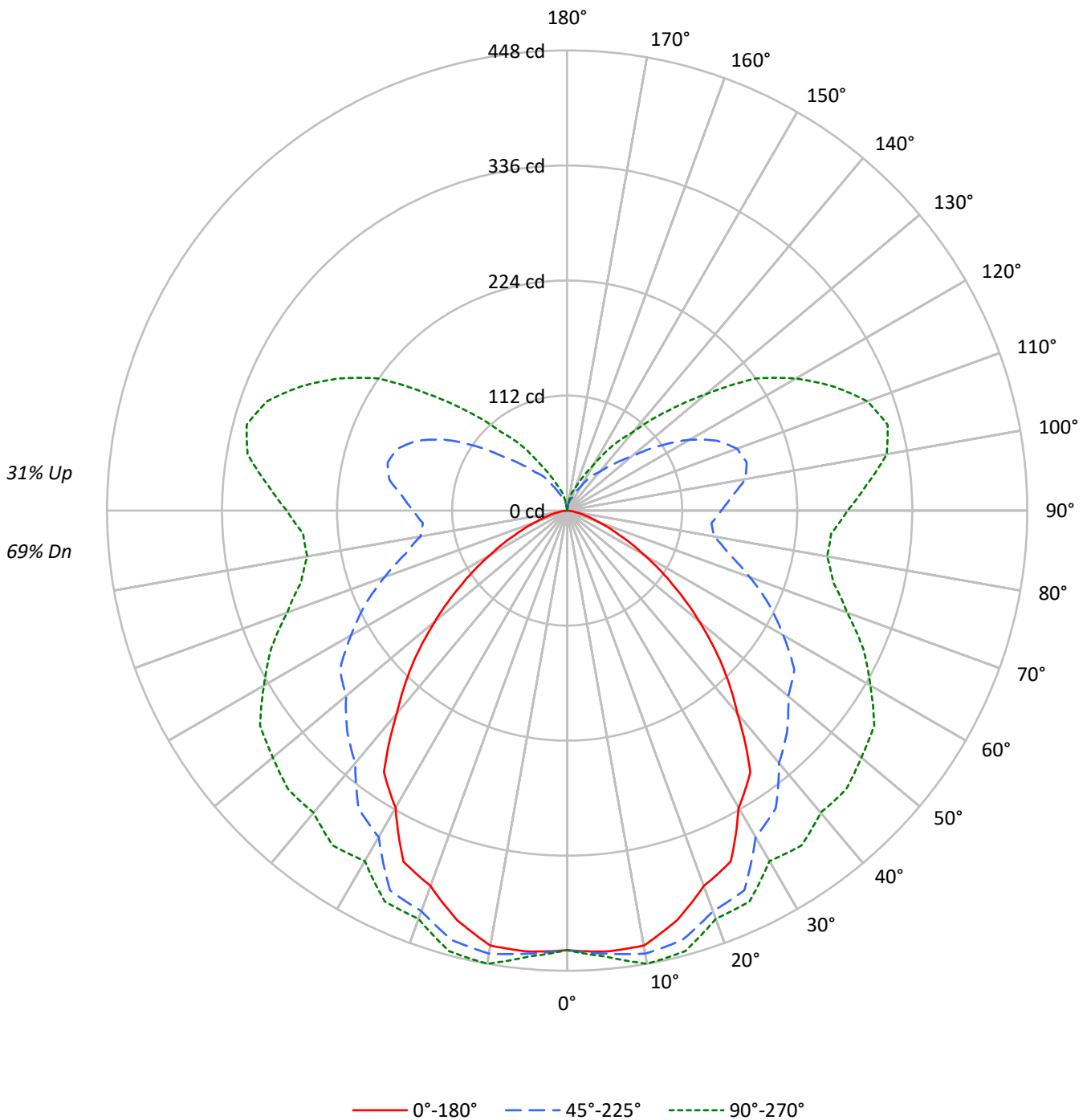
Summary

Lumens per Lamp: 2850 (1 lamp)
Luminaire Lumens: 2221.7 lumens
Efficiency: 78.0%
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.43 / 1.43
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.23')
CIE Type: Semi-Direct

Input Watts (W): 30
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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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	87	87	87	87	82	82	82	82	73	73	73	65	65	65	58	58	58	54
1	77	73	69	65	73	69	65	62	61	58	56	54	52	50	47	46	44	41
2	70	63	57	52	65	59	54	50	53	48	45	46	43	40	41	38	36	33
3	63	55	48	43	59	52	46	41	46	41	37	41	37	33	36	33	30	27
4	58	48	41	36	54	45	39	34	40	35	31	36	32	28	32	28	25	23
5	53	43	36	30	50	40	34	29	36	31	27	32	28	24	28	25	22	20
6	49	38	31	26	46	36	30	25	32	27	23	29	24	21	26	22	19	17
7	45	35	28	23	42	33	27	22	29	24	20	26	22	19	23	20	17	15
8	42	31	25	20	39	30	24	20	27	22	18	24	20	17	21	18	15	13
9	39	29	22	18	37	27	21	17	25	20	16	22	18	15	20	16	14	12
10	36	26	20	16	34	25	19	16	23	18	15	20	16	13	18	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6897	6897	6897
5°	6937	6435	6297
10°	6965	6083	5903
15°	6786	5685	5417
20°	6534	5203	4839
25°	6529	4931	4555
30°	6016	4313	4092
35°	5882	4079	3994
40°	5178	3655	3756
45°	4613	3435	3690
50°	3942	3196	3559
55°	3246	3105	3466
60°	2551	2848	3256
65°	1902	2613	3077
70°	1303	2359	2866
75°	923	2128	2727
80°	560	2000	2717
85°	112	2078	2861



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	41.5	1.9	1.5	0°	428	428	428	428	428	
10°-20°	120.9	5.4	4.2	5°	431	431	433	435	436	41
20°-30°	182.8	8.2	6.4	15°	413	420	433	441	444	116
30°-40°	219.4	9.9	7.7	25°	377	392	408	415	420	170
40°-50°	232.2	10.5	8.1	35°	311	329	354	384	398	190
50°-60°	227.9	10.3	8.0	45°	214	242	303	361	384	165
60°-70°	199.7	9.0	7.0	55°	125	169	270	342	365	113
70°-80°	165.3	7.4	5.8	65°	56	110	217	291	318	57
80°-90°	152.6	6.9	5.4	75°	18	74	163	239	268	20
90°-100°	168.0	7.6	5.9	85°	1	56	141	224	258	3
100°-110°	175.9	7.9	6.2	90°	0	52	150	237	273	0
110°-120°	147.6	6.6	5.2	95°	0	49	161	257	293	0
120°-130°	99.6	4.5	3.5	105°	0	44	181	288	323	0
130°-140°	52.4	2.4	1.8	115°	0	39	161	255	286	0
140°-150°	24.6	1.1	0.9	125°	0	34	110	191	224	0
150°-160°	8.8	0.4	0.3	135°	0	21	64	112	136	0
160°-170°	2.4	0.1	0.1	145°	0	14	41	64	77	0
170°-180°	0.2	0.0	0.0	155°	0	8	19	31	36	0
0°-30°	345.1	15.5	12.1	165°	0	0	11	16	18	0
0°-40°	564.5	25.4	19.8	175°	0	0	0	0	0	0
0°-60°	1024.6	46.1	35.9	180°	0	0	0	0	0	0
0°-90°	1542.2	69.4	54.1							
90°-120°	491.5	22.1	17.2							
90°-150°	668.1	30.1	23.4							
90°-180°	680.0	30.6	23.9							
0°-180°	2221.7	100.0	78.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	428	428	428	428	428
5°	431	431	433	435	436
10°	430	433	438	445	448
15°	413	420	433	441	444
20°	389	398	415	422	423
25°	377	392	408	415	420
30°	334	351	367	385	394
35°	311	329	354	384	398
40°	258	281	321	365	384
45°	214	242	303	361	384
50°	168	204	281	351	374
55°	125	169	270	342	365
60°	87	138	243	316	341
65°	56	110	217	291	318
70°	32	90	189	262	290
75°	18	74	163	239	268
80°	8	60	145	224	257
85°	1	56	141	224	258
90°	0	52	150	237	273
95°	0	49	161	257	293
100°	0	47	176	280	316
105°	0	44	181	288	323
110°	0	41	176	278	311
115°	0	39	161	255	286
120°	0	39	138	225	257
125°	0	34	110	191	224
130°	0	28	82	148	176
135°	0	21	64	112	136
140°	0	18	49	84	100
145°	0	14	41	64	77
150°	0	9	28	42	51
155°	0	8	19	31	36
160°	0	0	13	19	23
165°	0	0	11	16	18
170°	0	0	6	8	8
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)