

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: BALLABS TEST NO. 9197.0

Luminaire Tested: **FRR-1/32PLT-277-82/86**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: BALLABS TEST NO. 9197.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FRR-1/32PLT-277-82/86
Description: 1/32W PLT COMPACT FLUOR 9"DIA SECURITY RECESSED LUMINAIRE
Light Source: -
CFM32W/GX24q/35
Ballast/Driver: ENERGY SAVINGS BALLAST #ES-1-CFH-32-277-H

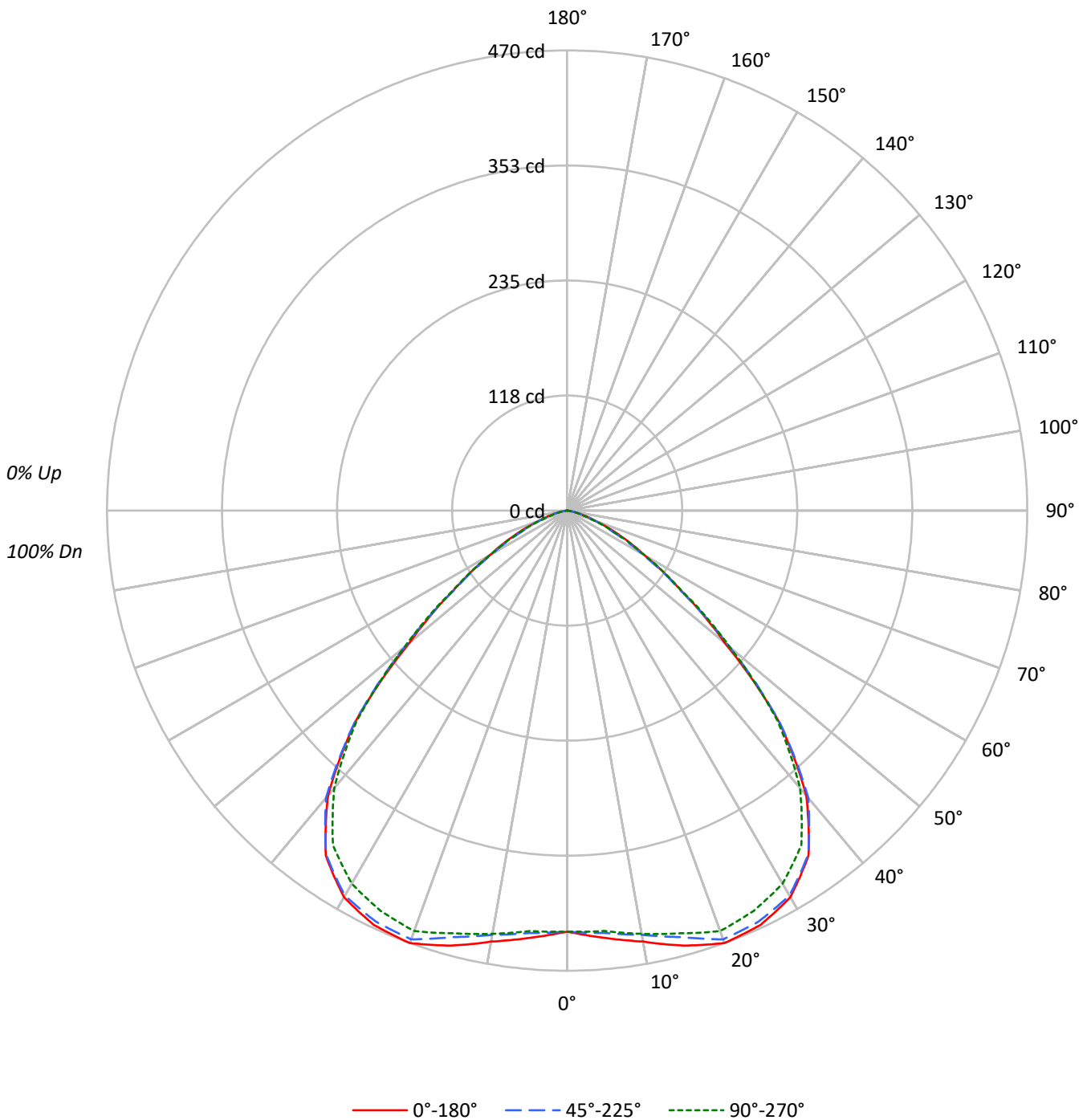
Summary

Lumens per Lamp: 2400 (1 lamp)
Luminaire Lumens: 1081.5 lumens
Efficiency: 45.1%
Efficacy: 29.2 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.46 / 1.42
Luminous Opening: (L: 0.71 ' x W: 0 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 37
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	50	30	10	0			
RCR																								
0	54	54	54	54	52	52	52	52	50	50	50	48	48	48	46	46	46	45	45	45	45			
1	50	48	47	46	49	47	46	45	46	44	43	44	43	42	42	42	41	40	40	40	40			
2	46	43	41	39	45	43	40	38	41	39	38	40	38	37	38	37	36	35	35	35	35			
3	43	39	36	33	42	38	35	33	37	35	33	36	34	32	35	33	31	31	31	31	31			
4	40	35	32	29	39	34	31	29	33	31	28	32	30	28	31	29	28	27	27	27	27			
5	37	32	28	25	36	31	28	25	30	27	25	29	27	25	29	26	25	24	24	24	24			
6	34	29	25	23	33	28	25	22	28	25	22	27	24	22	26	24	22	21	21	21	21			
7	32	26	23	20	31	26	22	20	25	22	20	25	22	20	24	22	20	19	19	19	19			
8	30	24	20	18	29	24	20	18	23	20	18	23	20	18	22	20	18	17	17	17	17			
9	28	22	19	16	27	22	19	16	21	18	16	21	18	16	20	18	16	15	15	15	15			
10	26	20	17	15	25	20	17	15	20	17	15	19	17	15	19	16	15	14	14	14	14			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	41.6	3.8	1.7	0°	430	430	430	430	430	
10°-20°	128.5	11.9	5.4	5°	438	433	433	432	431	42
20°-30°	212.2	19.6	8.8	15°	460	455	451	449	447	130
30°-40°	263.6	24.4	11.0	25°	467	465	463	455	451	215
40°-50°	233.8	21.6	9.7	35°	430	431	429	421	417	266
50°-60°	130.0	12.0	5.4	45°	307	313	308	311	304	232
60°-70°	54.7	5.1	2.3	55°	141	140	139	138	143	130
70°-80°	16.0	1.5	0.7	65°	58	50	52	52	55	59
80°-90°	1.2	0.1	0.0	75°	15	14	16	13	13	17
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0	2
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	382.3	35.3	15.9							
0°-40°	645.9	59.7	26.9							
0°-60°	1009.6	93.4	42.1							
0°-90°	1081.5	100.0	45.1							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	1081.5	100.0	45.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430	430	430	430	430
5°	438	433	433	432	431
10°	447	445	440	438	439
15°	460	455	451	449	447
20°	470	466	466	458	457
25°	467	465	463	455	451
30°	456	456	454	444	440
35°	430	431	429	421	417
40°	380	383	383	380	370
45°	307	313	308	311	304
50°	210	221	216	212	217
55°	141	140	139	138	143
60°	91	85	88	89	91
65°	58	50	52	52	55
70°	30	26	30	28	27
75°	15	14	16	13	13
80°	6	6	3	3	4
85°	0	0	0	0	0
90°	0	0	0	0	0

(END OF REPORT)