

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: P307192

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5000K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P307192
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 5000K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2717.0 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

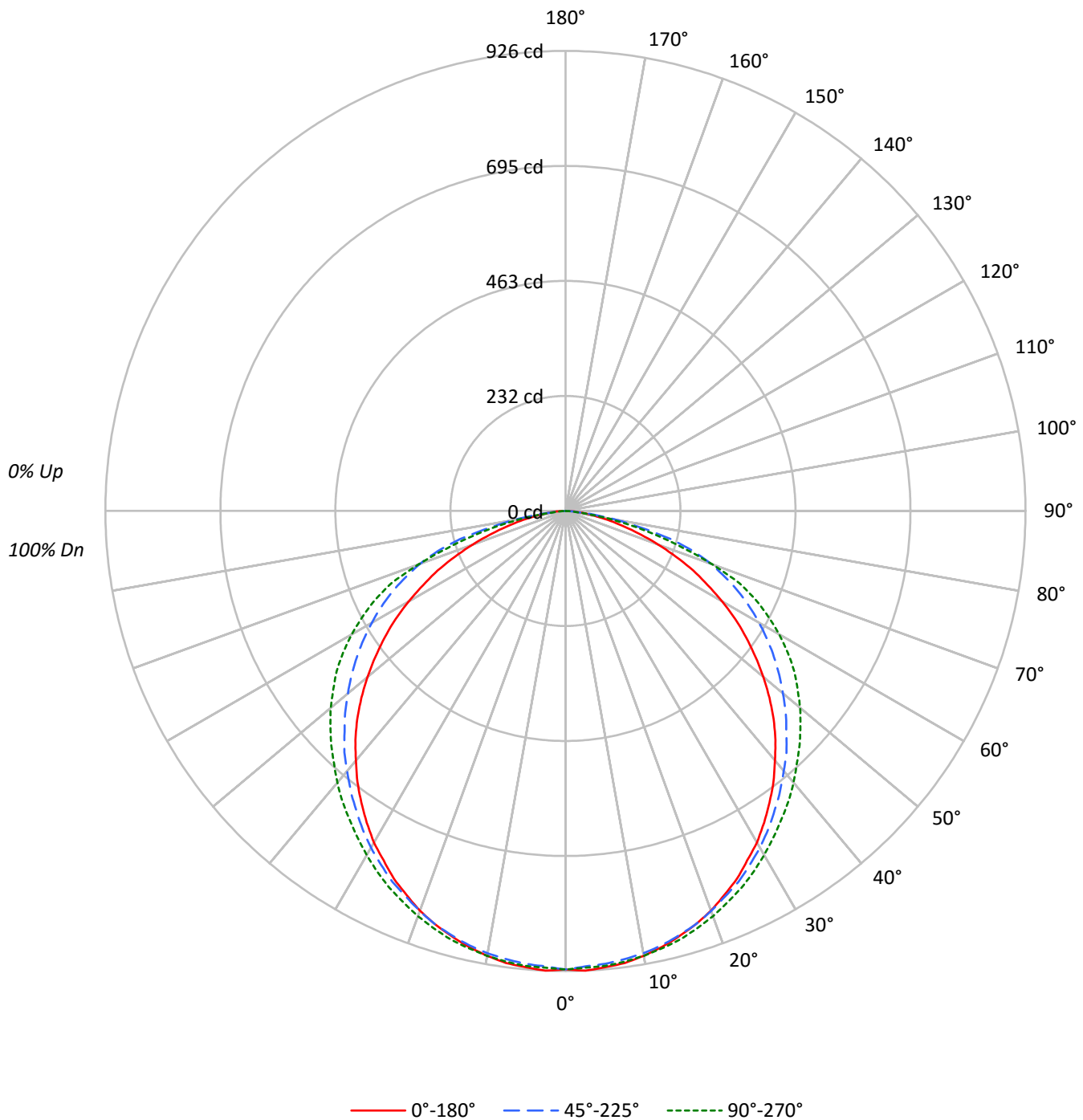
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2483	2483	2483
5°	2490	2472	2483
10°	2484	2470	2484
15°	2468	2464	2487
20°	2452	2454	2486
25°	2425	2445	2486
30°	2394	2432	2485
35°	2352	2414	2489
40°	2305	2401	2509
45°	2256	2393	2536
50°	2178	2393	2582
55°	2084	2405	2638
60°	1959	2423	2672
65°	1806	2448	2688
70°	1573	2453	2474
75°	1297	2283	1998
80°	1020	1641	1337
85°	790	633	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	3.2
10°-20°	250.7	9.2
20°-30°	380.7	14.0
30°-40°	461.2	17.0
40°-50°	486.0	17.9
50°-60°	453.7	16.7
60°-70°	362.6	13.3
70°-80°	199.5	7.3
80°-90°	35.2	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	718.7	26.5
0°-40°	1179.9	43.4
0°-60°	2119.6	78.0
0°-90°	2717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2717.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	923	923	923	923	923	
5°	922	919	915	921	919	88
15°	886	886	884	893	893	250
25°	817	818	824	836	837	376
35°	716	723	735	754	758	448
45°	593	604	629	657	666	456
55°	444	466	513	548	562	397
65°	284	320	384	416	422	279
75°	125	179	220	197	192	134
85°	26	32	20	13	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922.7	922.7	922.7	922.7	922.7
2.5°	926.1	923.6	917.6	922.7	920.1
5°	921.9	919.3	915.0	921.0	919.3
7.5°	917.6	914.2	909.9	916.7	915.0
10°	909.0	906.5	903.9	909.9	909.0
12.5°	898.8	897.9	895.4	902.2	901.3
15°	886.0	886.0	884.3	892.8	892.8
17.5°	872.3	871.4	872.3	881.7	880.8
20°	856.1	856.1	856.9	868.0	868.0
22.5°	836.4	837.3	839.8	853.5	852.6
25°	816.8	818.5	823.6	835.6	837.3
27.5°	792.8	797.1	803.1	817.6	819.3
30°	770.6	773.2	782.6	796.3	799.7
32.5°	744.1	749.3	759.5	774.9	779.2
35°	716.0	722.8	734.7	753.5	757.8
37.5°	687.8	693.7	710.0	729.6	737.3
40°	656.1	666.4	683.5	705.7	714.2
42.5°	625.4	635.6	658.7	681.8	689.5
45°	592.9	604.0	628.8	657.0	666.4
47.5°	557.0	569.9	601.5	631.4	641.6
50°	520.3	536.5	571.6	604.9	616.8
52.5°	481.9	502.4	542.5	577.5	588.7
55°	444.3	466.5	512.6	548.5	562.2
57.5°	405.8	429.7	481.9	522.9	530.6
60°	364.0	393.0	450.2	486.1	496.4
62.5°	322.9	356.3	417.8	452.0	460.5
65°	283.6	319.5	384.5	416.1	422.1
67.5°	240.9	283.6	347.7	376.8	378.5
70°	199.9	249.5	311.8	325.5	314.4
72.5°	159.8	212.7	270.0	258.9	249.5
75°	124.7	178.6	219.6	197.4	192.2
77.5°	92.3	146.1	157.2	145.2	135.8
80°	65.8	115.3	105.9	90.6	86.3
82.5°	45.3	72.6	58.1	45.3	39.3
85°	25.6	32.5	20.5	12.8	10.3
87.5°	11.1	7.7	4.3	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)