

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: P307507

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-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: P307507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 2569.0 lumens
Efficiency: N/A
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

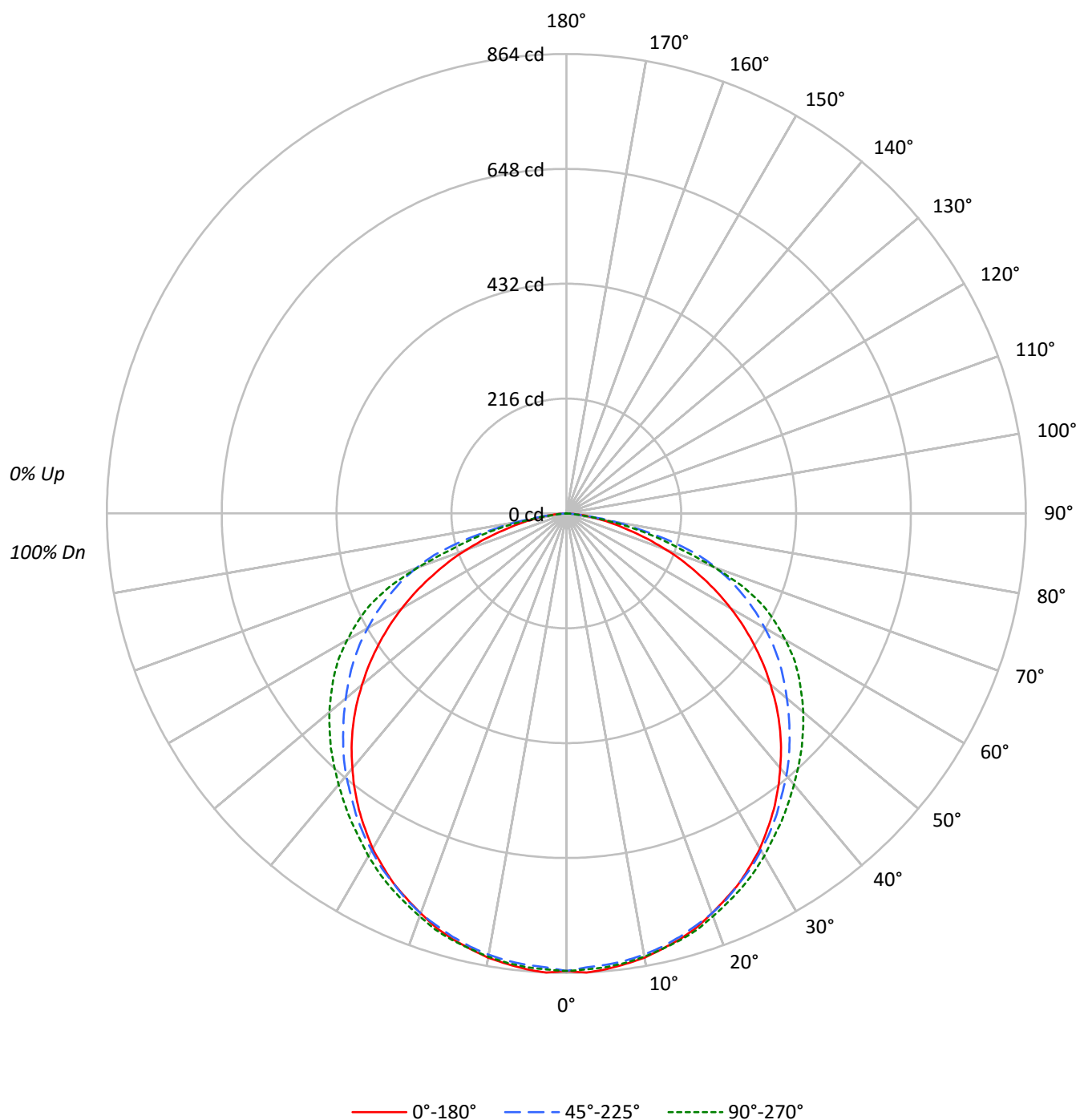
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2315	2315	2315
5°	2324	2303	2313
10°	2318	2302	2313
15°	2308	2296	2313
20°	2292	2292	2309
25°	2281	2281	2311
30°	2262	2275	2312
35°	2234	2266	2319
40°	2198	2262	2339
45°	2160	2259	2382
50°	2099	2267	2435
55°	2023	2296	2503
60°	1921	2321	2558
65°	1775	2350	2592
70°	1578	2367	2319
75°	1272	2127	1856
80°	995	1492	1212
85°	682	432	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	3.2
10°-20°	233.7	9.1
20°-30°	355.8	13.8
30°-40°	433.3	16.9
40°-50°	459.7	17.9
50°-60°	433.9	16.9
60°-70°	350.3	13.6
70°-80°	190.0	7.4
80°-90°	30.7	1.2
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°	670.9	26.1
0°-40°	1104.2	43.0
0°-60°	1997.9	77.8
0°-90°	2569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	860	860	860	860	860	
5°	860	858	852	858	856	82
15°	828	826	824	830	830	234
25°	768	766	768	776	778	354
35°	680	684	690	704	706	425
45°	568	576	594	616	626	437
55°	431	449	489	522	534	385
65°	279	313	369	399	407	276
75°	122	178	205	184	178	134
85°	22	24	14	12	10	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	860.4	860.4	860.4	860.4	860.4
2.5°	864.4	860.4	854.4	860.4	858.4
5°	860.4	858.4	852.4	858.4	856.4
7.5°	854.4	854.4	848.4	852.4	852.4
10°	848.4	846.4	842.4	848.4	846.4
12.5°	838.4	836.4	834.4	840.4	838.4
15°	828.3	826.3	824.3	830.3	830.3
17.5°	816.3	814.3	812.3	820.3	820.3
20°	800.3	800.3	800.3	808.3	806.3
22.5°	784.2	784.2	786.2	794.2	792.2
25°	768.2	766.2	768.2	776.2	778.2
27.5°	748.1	750.1	752.1	760.1	762.1
30°	728.1	730.1	732.1	742.1	744.1
32.5°	704.0	708.0	712.0	724.0	724.0
35°	679.9	683.9	689.9	704.0	706.0
37.5°	653.8	657.9	665.9	681.9	685.9
40°	625.8	631.8	643.8	659.9	665.9
42.5°	597.7	605.7	619.7	637.8	645.8
45°	567.6	575.6	593.7	615.7	625.8
47.5°	535.5	545.5	567.6	595.7	603.7
50°	501.4	515.5	541.5	571.6	581.6
52.5°	467.3	483.4	515.5	547.5	557.6
55°	431.2	449.3	489.4	521.5	533.5
57.5°	395.1	415.2	461.3	495.4	507.4
60°	357.0	381.1	431.2	465.3	475.3
62.5°	318.9	347.0	401.1	435.2	443.2
65°	278.8	312.9	369.0	399.1	407.1
67.5°	240.7	280.8	336.9	359.0	359.0
70°	200.6	244.7	300.8	306.9	294.8
72.5°	160.5	210.6	260.7	238.7	228.6
75°	122.3	178.5	204.6	184.5	178.5
77.5°	92.3	144.4	144.4	132.4	128.4
80°	64.2	110.3	96.3	84.2	78.2
82.5°	42.1	62.2	50.1	40.1	34.1
85°	22.1	24.1	14.0	12.0	10.0
87.5°	8.0	4.0	2.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)