

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: P307915

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP187-W2A-U-6500K**

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: P307915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-S-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 6500K 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: 2769.0 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

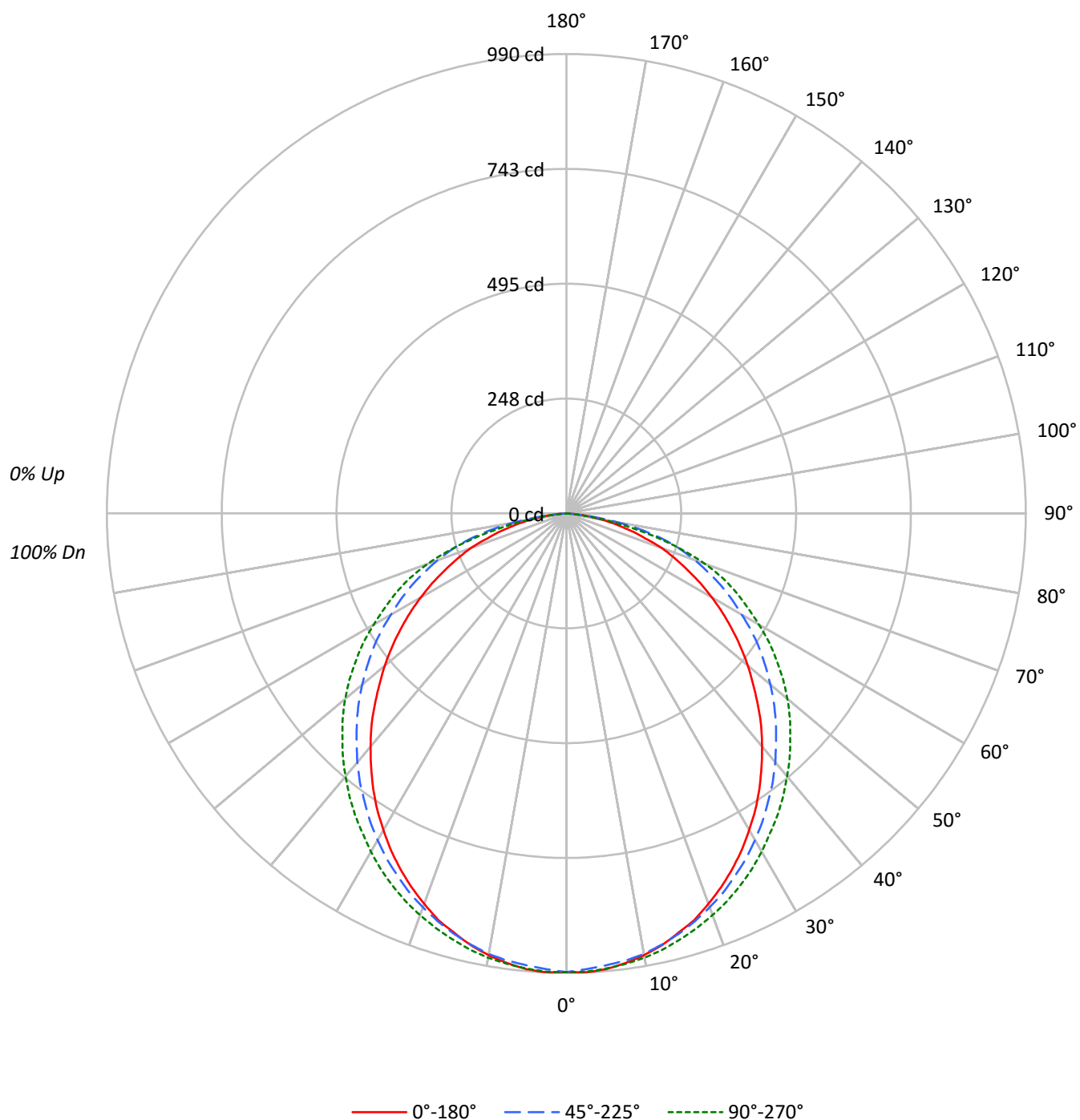
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2660	2660	2660
5°	2663	2640	2659
10°	2641	2634	2656
15°	2605	2612	2647
20°	2563	2587	2638
25°	2511	2556	2629
30°	2449	2526	2615
35°	2381	2489	2607
40°	2305	2460	2599
45°	2221	2430	2597
50°	2138	2403	2604
55°	2048	2383	2596
60°	1950	2350	2578
65°	1836	2343	2579
70°	1729	2323	2506
75°	1499	2270	2141
80°	1213	1830	1426
85°	806	636	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.3	3.4
10°-20°	265.6	9.6
20°-30°	398.4	14.4
30°-40°	475.3	17.2
40°-50°	491.3	17.7
50°-60°	448.6	16.2
60°-70°	353.0	12.7
70°-80°	205.5	7.4
80°-90°	37.9	1.4
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°	757.4	27.4
0°-40°	1232.7	44.5
0°-60°	2172.6	78.5
0°-90°	2769.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2769.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	986	983	978	986	984	93
15°	935	936	938	950	950	264
25°	846	850	861	881	886	389
35°	725	734	758	787	794	453
45°	584	603	638	674	682	451
55°	437	460	508	545	553	390
65°	288	318	368	397	405	286
75°	144	178	218	214	206	153
85°	26	37	21	16	14	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.5	988.5	988.5	988.5	988.5
2.5°	989.9	987.1	983.0	989.9	988.5
5°	985.7	983.0	977.5	985.7	984.4
7.5°	977.5	974.8	972.0	980.2	978.9
10°	966.5	965.1	963.8	973.4	972.0
12.5°	952.8	952.8	951.4	962.4	962.4
15°	934.9	936.3	937.7	950.0	950.0
17.5°	918.5	917.1	921.2	934.9	936.3
20°	895.1	897.9	903.4	919.8	921.2
22.5°	871.8	874.5	884.1	900.6	904.7
25°	845.7	849.8	860.8	881.4	885.5
27.5°	818.2	823.7	838.8	860.8	864.9
30°	788.0	796.3	812.8	837.5	841.6
32.5°	757.8	766.1	786.7	811.4	816.9
35°	724.9	734.5	757.8	786.7	793.5
37.5°	690.6	702.9	730.4	759.2	767.5
40°	656.2	670.0	700.2	730.4	740.0
42.5°	621.9	635.7	668.6	702.9	712.5
45°	583.5	602.7	638.4	674.1	682.3
47.5°	546.4	567.0	606.8	642.5	653.5
50°	510.7	531.3	573.9	610.9	621.9
52.5°	473.7	495.6	540.9	579.4	589.0
55°	436.6	459.9	508.0	545.0	553.3
57.5°	399.5	424.2	473.7	509.3	519.0
60°	362.4	388.5	436.6	472.3	479.1
62.5°	325.4	352.8	402.3	433.8	440.7
65°	288.3	318.5	367.9	396.8	405.0
67.5°	252.6	282.8	330.9	358.3	365.2
70°	219.7	247.1	295.2	315.8	318.5
72.5°	178.5	212.8	259.5	270.5	263.6
75°	144.2	178.5	218.3	214.2	205.9
77.5°	109.8	144.2	170.2	156.5	145.5
80°	78.3	112.6	118.1	97.5	92.0
82.5°	50.8	78.3	65.9	50.8	41.2
85°	26.1	37.1	20.6	16.5	13.7
87.5°	8.2	5.5	2.7	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)