

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: P307053

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-3000K**

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: P307053
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: 14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 3000K 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: 1571.0 lumens
Efficiency: N/A
Efficacy: 80.6 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

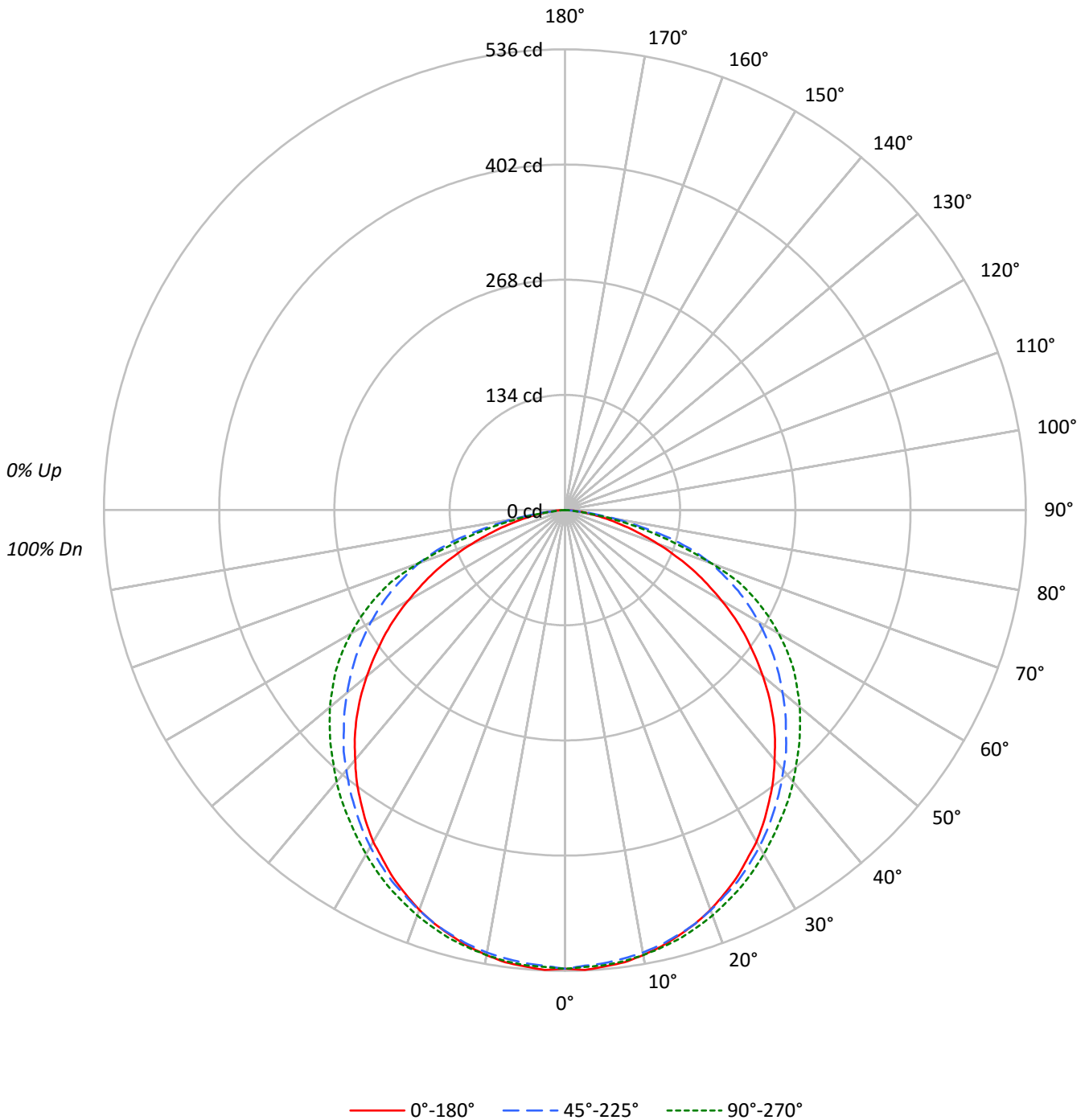
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1436	1436	1436
5°	1440	1429	1436
10°	1436	1428	1436
15°	1427	1424	1438
20°	1418	1419	1437
25°	1402	1414	1437
30°	1385	1406	1437
35°	1360	1396	1440
40°	1333	1388	1451
45°	1305	1384	1466
50°	1259	1384	1493
55°	1205	1391	1525
60°	1132	1401	1545
65°	1044	1415	1554
70°	910	1419	1430
75°	750	1320	1155
80°	589	950	773
85°	457	367	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.5	3.2
10°-20°	144.9	9.2
20°-30°	220.1	14.0
30°-40°	266.7	17.0
40°-50°	281.0	17.9
50°-60°	262.3	16.7
60°-70°	209.7	13.3
70°-80°	115.4	7.3
80°-90°	20.4	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°	415.5	26.5
0°-40°	682.2	43.4
0°-60°	1225.6	78.0
0°-90°	1571.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	533	532	529	532	532	51
15°	512	512	511	516	516	145
25°	472	473	476	483	484	217
35°	414	418	425	436	438	259
45°	343	349	364	380	385	264
55°	257	270	296	317	325	229
65°	164	185	222	241	244	161
75°	72	103	127	114	111	78
85°	15	19	12	7	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	533.5	533.5	533.5	533.5	533.5
2.5°	535.5	534.0	530.6	533.5	532.0
5°	533.0	531.5	529.1	532.5	531.5
7.5°	530.6	528.6	526.1	530.1	529.1
10°	525.6	524.1	522.7	526.1	525.6
12.5°	519.7	519.2	517.7	521.7	521.2
15°	512.3	512.3	511.3	516.2	516.2
17.5°	504.4	503.9	504.4	509.8	509.3
20°	495.0	495.0	495.5	501.9	501.9
22.5°	483.6	484.1	485.6	493.5	493.0
25°	472.3	473.3	476.2	483.1	484.1
27.5°	458.4	460.9	464.4	472.8	473.7
30°	445.6	447.1	452.5	460.4	462.4
32.5°	430.3	433.2	439.2	448.1	450.5
35°	414.0	417.9	424.8	435.7	438.2
37.5°	397.7	401.1	410.5	421.9	426.3
40°	379.4	385.3	395.2	408.0	413.0
42.5°	361.6	367.5	380.9	394.2	398.7
45°	342.8	349.3	363.6	379.9	385.3
47.5°	322.1	329.5	347.8	365.1	371.0
50°	300.8	310.2	330.5	349.8	356.7
52.5°	278.6	290.5	313.7	333.9	340.4
55°	256.9	269.7	296.4	317.1	325.1
57.5°	234.6	248.5	278.6	302.3	306.8
60°	210.4	227.2	260.3	281.1	287.0
62.5°	186.7	206.0	241.6	261.3	266.3
65°	164.0	184.8	222.3	240.6	244.0
67.5°	139.3	164.0	201.1	217.9	218.8
70°	115.6	144.2	180.3	188.2	181.8
72.5°	92.4	123.0	156.1	149.7	144.2
75°	72.1	103.2	127.0	114.1	111.1
77.5°	53.4	84.5	90.9	84.0	78.5
80°	38.0	66.7	61.3	52.4	49.9
82.5°	26.2	42.0	33.6	26.2	22.7
85°	14.8	18.8	11.9	7.4	5.9
87.5°	6.4	4.4	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)