

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: P307055

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-4000K**

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: P307055
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-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 4000K 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: 1661.0 lumens
Efficiency: N/A
Efficacy: 83.9 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

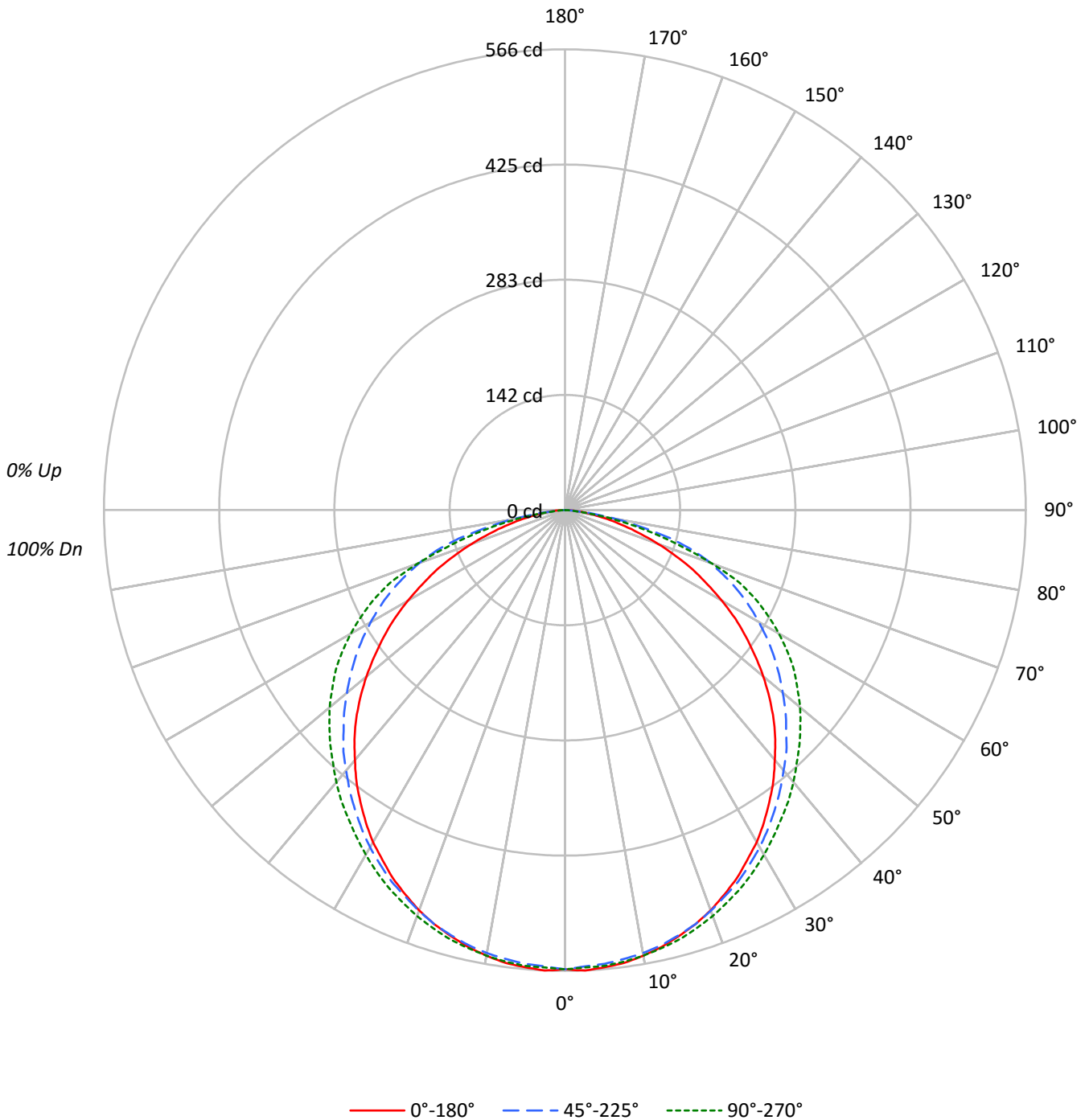
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1518	1518	1518
5°	1522	1511	1518
10°	1518	1510	1518
15°	1509	1506	1521
20°	1499	1500	1520
25°	1483	1495	1520
30°	1464	1487	1519
35°	1438	1476	1522
40°	1409	1468	1534
45°	1380	1463	1550
50°	1332	1463	1579
55°	1274	1470	1612
60°	1197	1482	1633
65°	1104	1496	1643
70°	961	1500	1512
75°	793	1395	1222
80°	623	1004	818
85°	485	386	195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	3.2
10°-20°	153.2	9.2
20°-30°	232.7	14.0
30°-40°	282.0	17.0
40°-50°	297.1	17.9
50°-60°	277.4	16.7
60°-70°	221.7	13.3
70°-80°	122.0	7.3
80°-90°	21.5	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°	439.4	26.5
0°-40°	721.3	43.4
0°-60°	1295.8	78.0
0°-90°	1661.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1661.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	564	562	559	563	562	54
15°	542	542	541	546	546	153
25°	499	500	504	511	512	230
35°	438	442	449	461	463	274
45°	362	369	384	402	407	279
55°	272	285	313	335	344	242
65°	173	195	235	254	258	171
75°	76	109	134	121	118	82
85°	16	20	12	8	6	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	564.1	564.1	564.1	564.1	564.1
2.5°	566.2	564.6	561.0	564.1	562.5
5°	563.6	562.0	559.4	563.0	562.0
7.5°	561.0	558.9	556.2	560.4	559.4
10°	555.7	554.2	552.6	556.2	555.7
12.5°	549.5	548.9	547.4	551.5	551.0
15°	541.6	541.6	540.6	545.8	545.8
17.5°	533.3	532.7	533.3	539.0	538.5
20°	523.3	523.3	523.9	530.7	530.7
22.5°	511.3	511.9	513.4	521.8	521.3
25°	499.3	500.4	503.5	510.8	511.9
27.5°	484.7	487.3	491.0	499.8	500.9
30°	471.1	472.7	478.4	486.8	488.9
32.5°	454.9	458.1	464.3	473.7	476.3
35°	437.7	441.9	449.2	460.7	463.3
37.5°	420.5	424.1	434.0	446.0	450.7
40°	401.1	407.4	417.8	431.4	436.6
42.5°	382.3	388.6	402.7	416.8	421.5
45°	362.5	369.3	384.4	401.6	407.4
47.5°	340.5	348.4	367.7	386.0	392.2
50°	318.1	328.0	349.4	369.8	377.1
52.5°	294.6	307.1	331.7	353.1	359.9
55°	271.6	285.2	313.4	335.3	343.7
57.5°	248.1	262.7	294.6	319.6	324.3
60°	222.5	240.3	275.3	297.2	303.5
62.5°	197.4	217.8	255.4	276.3	281.5
65°	173.4	195.3	235.0	254.4	258.0
67.5°	147.3	173.4	212.6	230.3	231.4
70°	122.2	152.5	190.6	199.0	192.2
72.5°	97.7	130.1	165.0	158.3	152.5
75°	76.3	109.2	134.2	120.7	117.5
77.5°	56.4	89.3	96.1	88.8	83.0
80°	40.2	70.5	64.8	55.4	52.8
82.5°	27.7	44.4	35.5	27.7	24.0
85°	15.7	19.8	12.5	7.8	6.3
87.5°	6.8	4.7	2.6	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)