

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: P307063

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP250-W2A-U-3500K**

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: P307063
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-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 3500K 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: 1612.0 lumens
Efficiency: N/A
Efficacy: 81.8 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

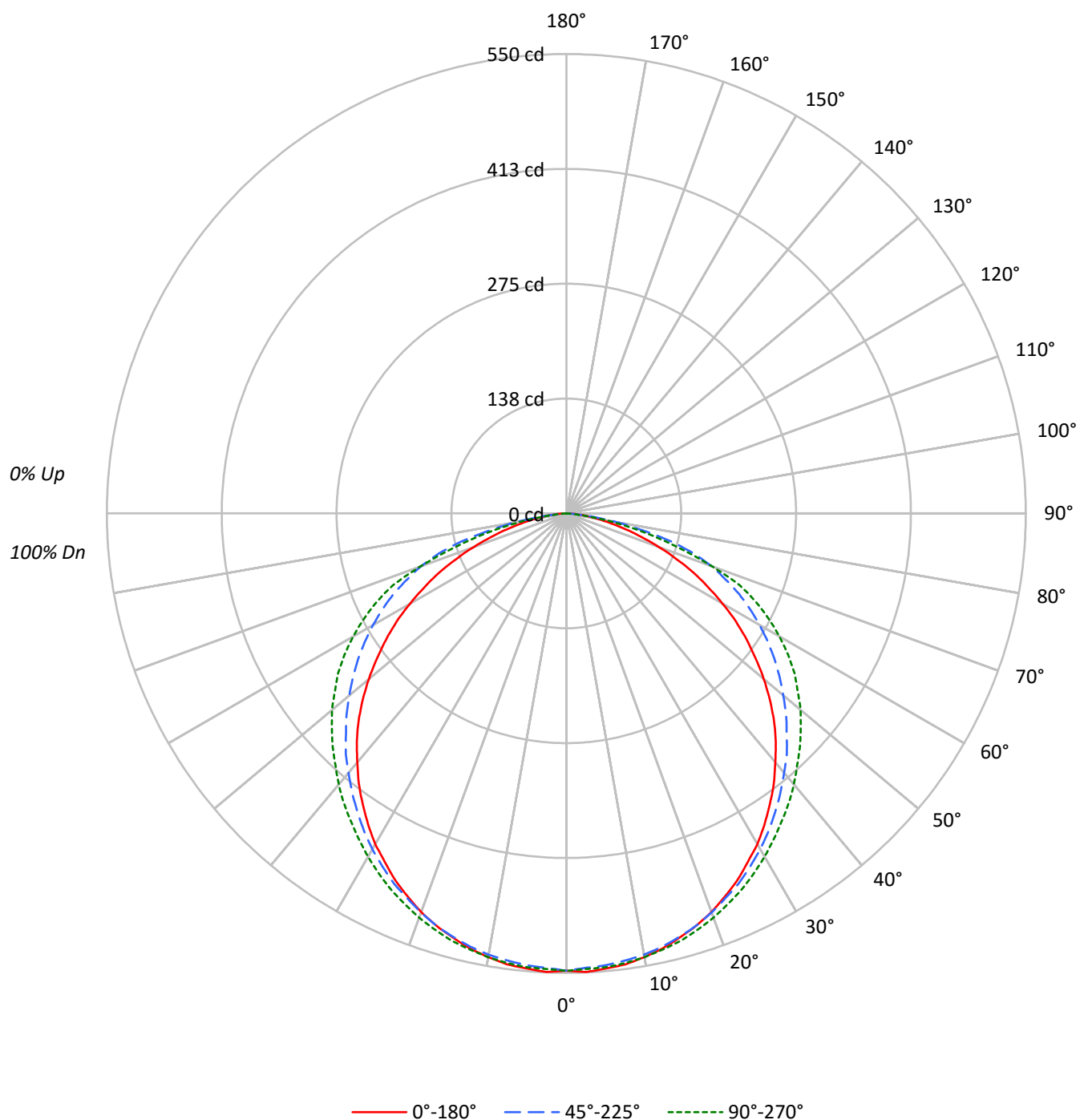
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1473	1473	1473
5°	1477	1467	1473
10°	1474	1465	1474
15°	1464	1461	1476
20°	1454	1456	1475
25°	1439	1451	1475
30°	1421	1443	1474
35°	1396	1432	1477
40°	1368	1424	1489
45°	1339	1420	1505
50°	1292	1420	1532
55°	1237	1427	1565
60°	1162	1438	1585
65°	1072	1452	1594
70°	933	1456	1467
75°	769	1355	1186
80°	604	975	793
85°	469	377	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	3.2
10°-20°	148.7	9.2
20°-30°	225.8	14.0
30°-40°	273.6	17.0
40°-50°	288.4	17.9
50°-60°	269.2	16.7
60°-70°	215.1	13.3
70°-80°	118.4	7.3
80°-90°	20.9	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°	426.4	26.5
0°-40°	700.0	43.4
0°-60°	1257.6	78.0
0°-90°	1612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1612.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	547	545	543	546	545	52
15°	526	526	525	530	530	148
25°	485	486	489	496	497	223
35°	425	429	436	447	450	266
45°	352	358	373	390	395	271
55°	264	277	304	325	334	235
65°	168	190	228	247	250	166
75°	74	106	130	117	114	80
85°	15	19	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°	547.4	547.4	547.4	547.4	547.4
2.5°	549.5	548.0	544.4	547.4	545.9
5°	546.9	545.4	542.9	546.4	545.4
7.5°	544.4	542.4	539.8	543.9	542.9
10°	539.3	537.8	536.3	539.8	539.3
12.5°	533.3	532.7	531.2	535.3	534.8
15°	525.6	525.6	524.6	529.7	529.7
17.5°	517.5	517.0	517.5	523.1	522.6
20°	507.9	507.9	508.4	515.0	515.0
22.5°	496.2	496.8	498.3	506.4	505.9
25°	484.6	485.6	488.6	495.7	496.8
27.5°	470.4	472.9	476.5	485.1	486.1
30°	457.2	458.7	464.3	472.4	474.5
32.5°	441.5	444.5	450.6	459.8	462.3
35°	424.8	428.8	435.9	447.1	449.6
37.5°	408.0	411.6	421.2	432.9	437.4
40°	389.3	395.4	405.5	418.7	423.8
42.5°	371.0	377.1	390.8	404.5	409.1
45°	351.8	358.4	373.1	389.8	395.4
47.5°	330.5	338.1	356.9	374.6	380.7
50°	308.7	318.3	339.1	358.9	366.0
52.5°	285.9	298.1	321.9	342.7	349.2
55°	263.6	276.8	304.1	325.4	333.5
57.5°	240.8	255.0	285.9	310.2	314.8
60°	215.9	233.2	267.1	288.4	294.5
62.5°	191.6	211.4	247.9	268.1	273.2
65°	168.3	189.6	228.1	246.9	250.4
67.5°	142.9	168.3	206.3	223.5	224.6
70°	118.6	148.0	185.0	193.1	186.5
72.5°	94.8	126.2	160.2	153.6	148.0
75°	74.0	105.9	130.3	117.1	114.1
77.5°	54.7	86.7	93.3	86.2	80.6
80°	39.0	68.4	62.9	53.7	51.2
82.5°	26.9	43.1	34.5	26.9	23.3
85°	15.2	19.3	12.2	7.6	6.1
87.5°	6.6	4.6	2.5	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)