

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: P307384

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CP250-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: P307384
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: 14FCZ2-29-UNV-L82765-RDP-CP250-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 1744.0 lumens
Efficiency: N/A
Efficacy: 70.0 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

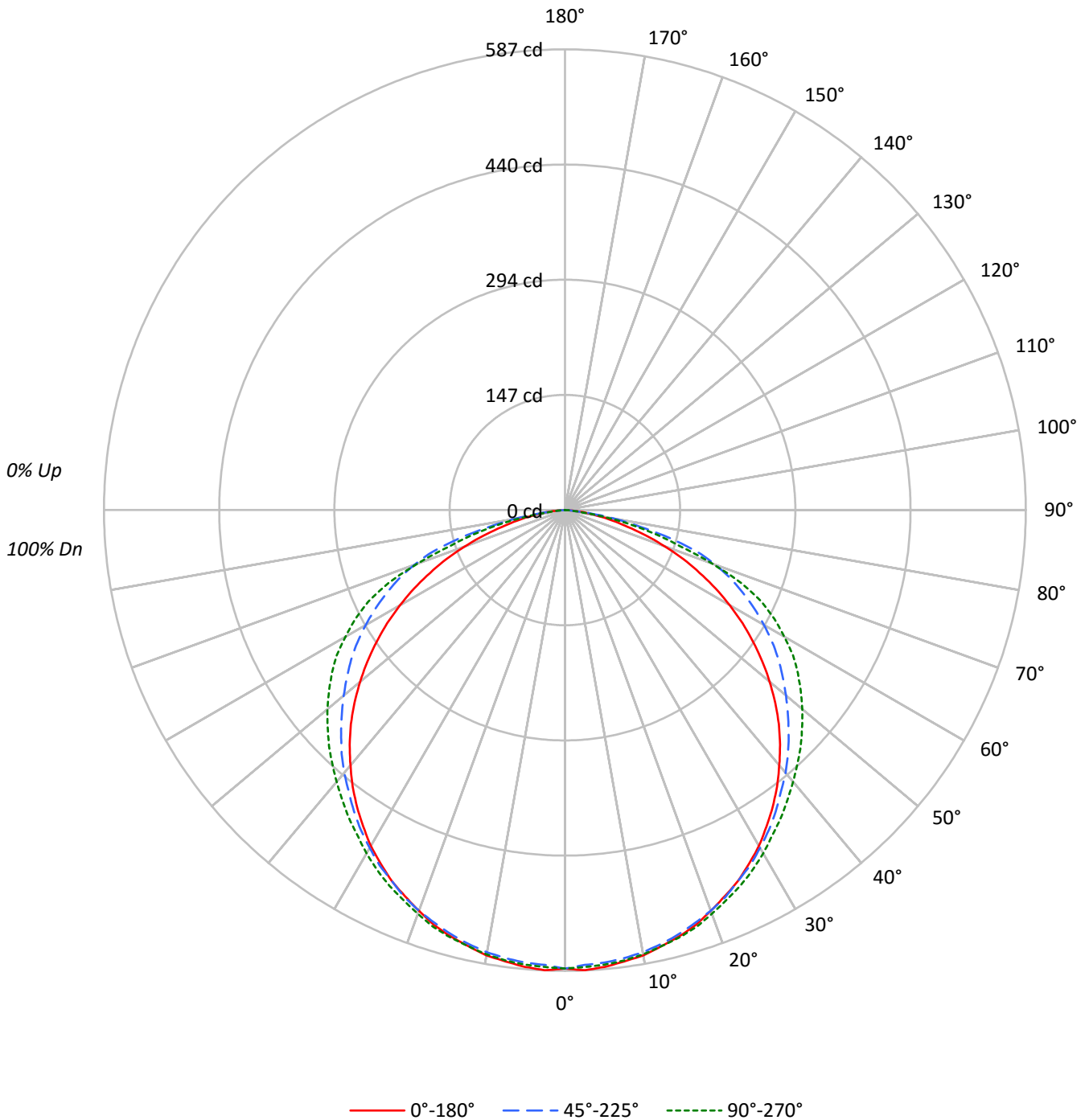
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1572	1572	1572
5°	1578	1563	1571
10°	1574	1563	1570
15°	1567	1559	1570
20°	1556	1556	1567
25°	1548	1548	1569
30°	1536	1544	1569
35°	1516	1539	1575
40°	1492	1535	1588
45°	1466	1534	1617
50°	1425	1539	1653
55°	1373	1559	1699
60°	1305	1575	1737
65°	1205	1595	1760
70°	1072	1607	1574
75°	864	1444	1260
80°	676	1013	823
85°	463	293	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	3.2
10°-20°	158.6	9.1
20°-30°	241.5	13.8
30°-40°	294.2	16.9
40°-50°	312.1	17.9
50°-60°	294.6	16.9
60°-70°	237.8	13.6
70°-80°	129.0	7.4
80°-90°	20.9	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°	455.4	26.1
0°-40°	749.6	43.0
0°-60°	1356.3	77.8
0°-90°	1744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1744.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	584	583	579	583	581	55
15°	562	561	560	564	564	159
25°	522	520	522	527	528	240
35°	462	464	468	478	479	289
45°	385	391	403	418	425	297
55°	293	305	332	354	362	261
65°	189	212	250	271	276	188
75°	83	121	139	125	121	91
85°	15	16	10	8	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	584.1	584.1	584.1	584.1	584.1
2.5°	586.8	584.1	580.0	584.1	582.7
5°	584.1	582.7	578.7	582.7	581.4
7.5°	580.0	580.0	575.9	578.7	578.7
10°	575.9	574.6	571.9	575.9	574.6
12.5°	569.1	567.8	566.4	570.5	569.1
15°	562.3	561.0	559.6	563.7	563.7
17.5°	554.2	552.8	551.4	556.9	556.9
20°	543.3	543.3	543.3	548.7	547.3
22.5°	532.4	532.4	533.7	539.2	537.8
25°	521.5	520.1	521.5	526.9	528.3
27.5°	507.9	509.2	510.6	516.0	517.4
30°	494.2	495.6	497.0	503.8	505.1
32.5°	477.9	480.6	483.4	491.5	491.5
35°	461.6	464.3	468.4	477.9	479.3
37.5°	443.9	446.6	452.0	462.9	465.7
40°	424.8	428.9	437.1	448.0	452.0
42.5°	405.7	411.2	420.7	433.0	438.4
45°	385.3	390.8	403.0	418.0	424.8
47.5°	363.5	370.3	385.3	404.4	409.8
50°	340.4	349.9	367.6	388.0	394.9
52.5°	317.2	328.1	349.9	371.7	378.5
55°	292.7	305.0	332.2	354.0	362.2
57.5°	268.2	281.8	313.2	336.3	344.5
60°	242.4	258.7	292.7	315.9	322.7
62.5°	216.5	235.6	272.3	295.5	300.9
65°	189.3	212.4	250.5	271.0	276.4
67.5°	163.4	190.6	228.7	243.7	243.7
70°	136.2	166.1	204.2	208.3	200.1
72.5°	108.9	143.0	177.0	162.0	155.2
75°	83.1	121.2	138.9	125.3	121.2
77.5°	62.6	98.0	98.0	89.9	87.1
80°	43.6	74.9	65.4	57.2	53.1
82.5°	28.6	42.2	34.0	27.2	23.1
85°	15.0	16.3	9.5	8.2	6.8
87.5°	5.4	2.7	1.4	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)