

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: P312016

Luminaire Tested: **14FCZ2-25-UNV-L83050-RDP-CA08-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: P312016
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: 14FCZ2-25-UNV-L83050-RDP-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 1504.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

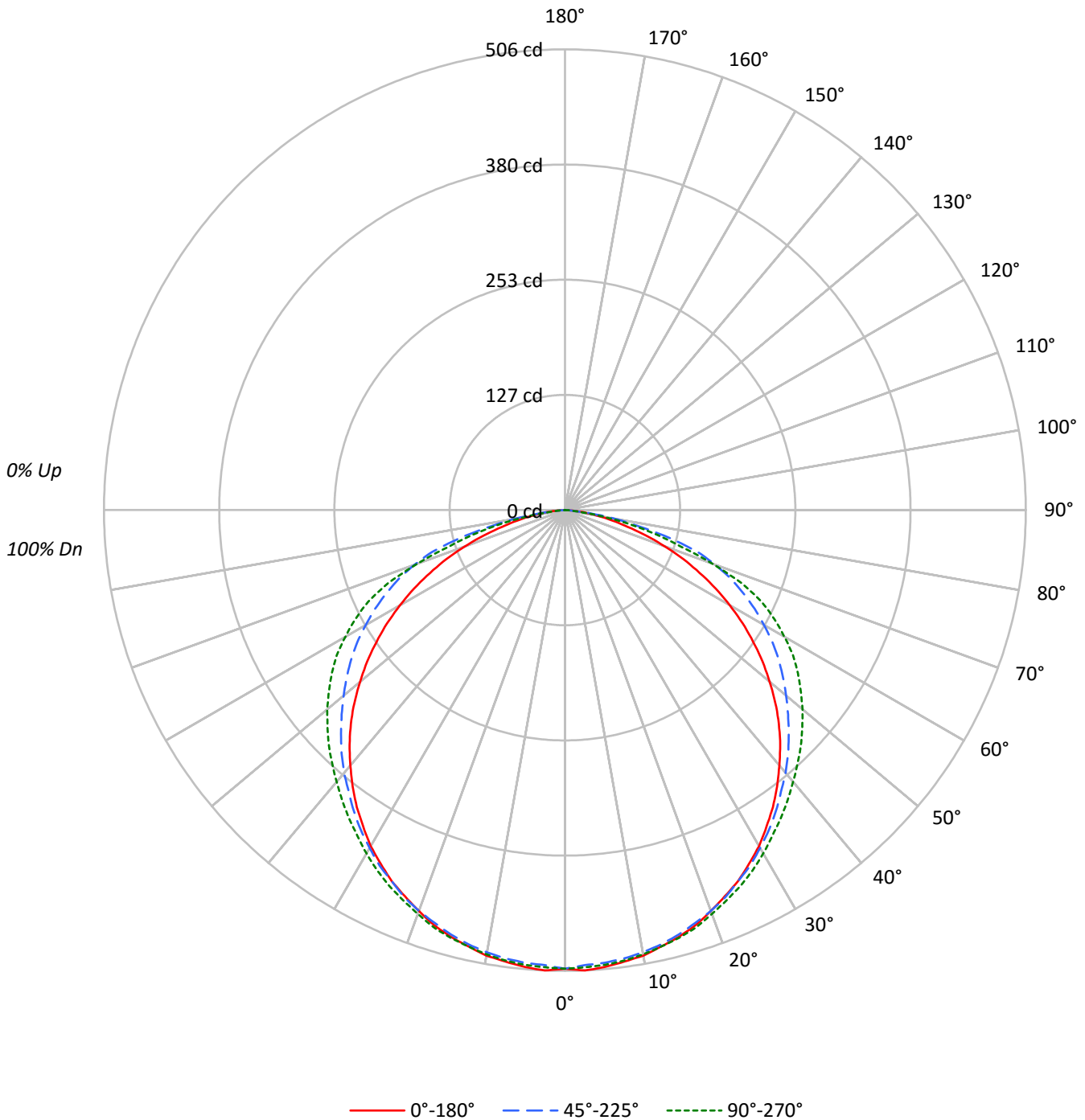
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1355	1355	1355
5°	1361	1348	1354
10°	1357	1348	1354
15°	1351	1344	1354
20°	1342	1342	1352
25°	1335	1335	1353
30°	1324	1332	1354
35°	1308	1327	1358
40°	1287	1324	1369
45°	1265	1323	1394
50°	1229	1327	1425
55°	1185	1344	1465
60°	1125	1359	1498
65°	1039	1376	1518
70°	924	1386	1358
75°	744	1246	1087
80°	583	874	710
85°	398	253	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	3.2
10°-20°	136.8	9.1
20°-30°	208.3	13.8
30°-40°	253.7	16.9
40°-50°	269.2	17.9
50°-60°	254.0	16.9
60°-70°	205.1	13.6
70°-80°	111.3	7.4
80°-90°	18.0	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°	392.8	26.1
0°-40°	646.4	43.0
0°-60°	1169.6	77.8
0°-90°	1504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1504.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	504	503	499	503	501	48
15°	485	484	483	486	486	137
25°	450	448	450	454	456	207
35°	398	400	404	412	413	249
45°	332	337	348	360	366	256
55°	252	263	286	305	312	226
65°	163	183	216	234	238	162
75°	72	104	120	108	104	78
85°	13	14	8	7	6	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	503.7	503.7	503.7	503.7	503.7
2.5°	506.1	503.7	500.2	503.7	502.6
5°	503.7	502.6	499.0	502.6	501.4
7.5°	500.2	500.2	496.7	499.0	499.0
10°	496.7	495.5	493.2	496.7	495.5
12.5°	490.8	489.6	488.5	492.0	490.8
15°	484.9	483.8	482.6	486.1	486.1
17.5°	477.9	476.7	475.5	480.2	480.2
20°	468.5	468.5	468.5	473.2	472.0
22.5°	459.1	459.1	460.3	465.0	463.8
25°	449.7	448.5	449.7	454.4	455.6
27.5°	438.0	439.1	440.3	445.0	446.2
30°	426.2	427.4	428.6	434.5	435.6
32.5°	412.1	414.5	416.8	423.9	423.9
35°	398.1	400.4	403.9	412.1	413.3
37.5°	382.8	385.1	389.8	399.2	401.6
40°	366.3	369.9	376.9	386.3	389.8
42.5°	349.9	354.6	362.8	373.4	378.1
45°	332.3	337.0	347.6	360.5	366.3
47.5°	313.5	319.4	332.3	348.7	353.4
50°	293.5	301.8	317.0	334.6	340.5
52.5°	273.6	283.0	301.8	320.6	326.4
55°	252.5	263.0	286.5	305.3	312.3
57.5°	231.3	243.1	270.1	290.0	297.1
60°	209.0	223.1	252.5	272.4	278.3
62.5°	186.7	203.1	234.8	254.8	259.5
65°	163.2	183.2	216.1	233.7	238.4
67.5°	140.9	164.4	197.3	210.2	210.2
70°	117.4	143.3	176.1	179.7	172.6
72.5°	93.9	123.3	152.6	139.7	133.9
75°	71.6	104.5	119.8	108.0	104.5
77.5°	54.0	84.5	84.5	77.5	75.1
80°	37.6	64.6	56.4	49.3	45.8
82.5°	24.7	36.4	29.4	23.5	20.0
85°	12.9	14.1	8.2	7.0	5.9
87.5°	4.7	2.3	1.2	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)