

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: P307298

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA08-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: P307298
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-L82765-RDP-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 1502.0 lumens
Efficiency: N/A
Efficacy: 75.9 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

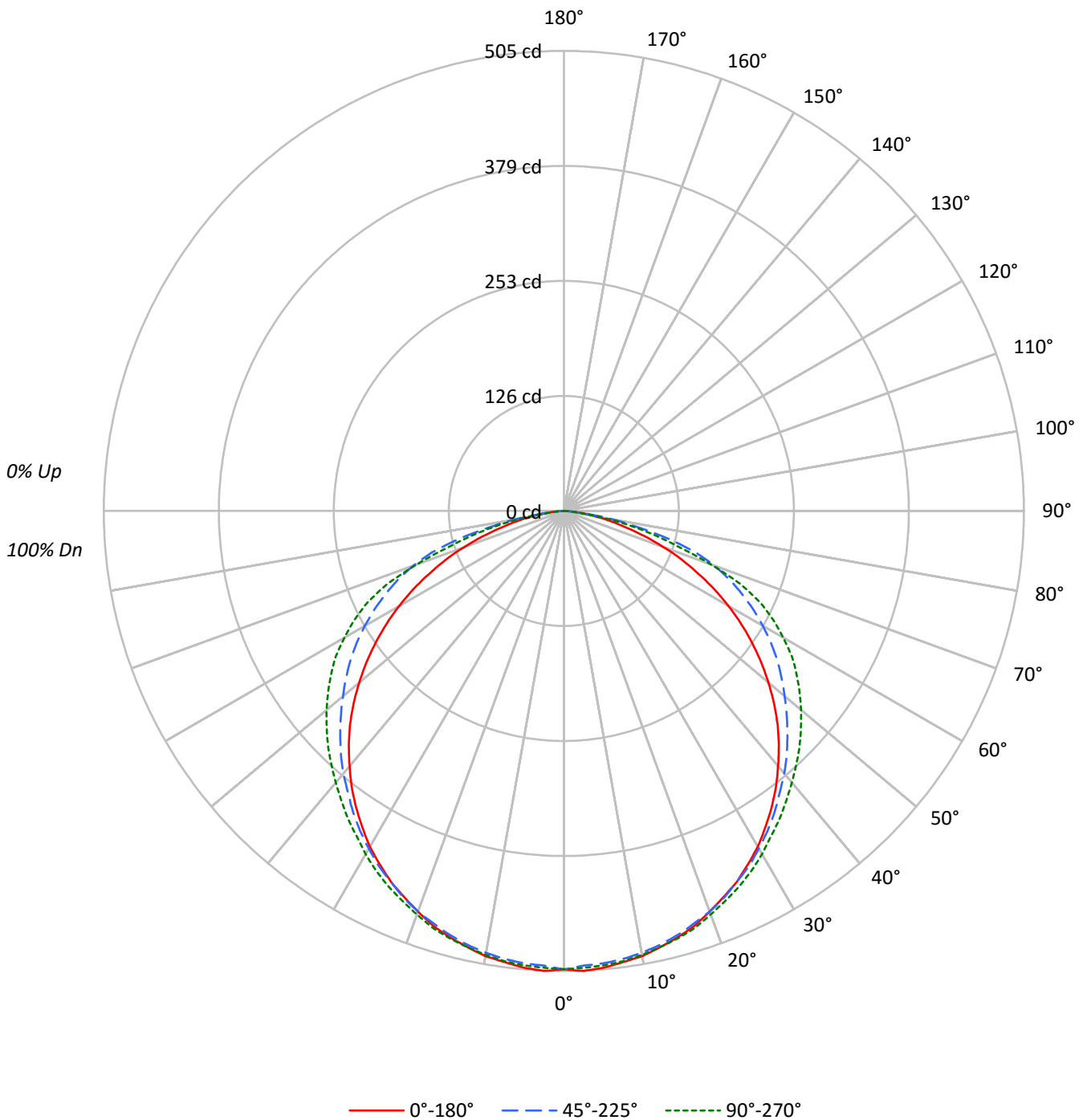
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1354	1354	1354
5°	1359	1346	1353
10°	1355	1346	1352
15°	1349	1343	1353
20°	1340	1340	1350
25°	1333	1333	1351
30°	1323	1330	1352
35°	1306	1325	1356
40°	1285	1322	1368
45°	1263	1321	1392
50°	1227	1325	1424
55°	1183	1342	1463
60°	1123	1357	1496
65°	1038	1374	1515
70°	923	1384	1356
75°	743	1243	1085
80°	581	872	708
85°	398	253	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	3.2
10°-20°	136.6	9.1
20°-30°	208.0	13.8
30°-40°	253.4	16.9
40°-50°	268.8	17.9
50°-60°	253.7	16.9
60°-70°	204.8	13.6
70°-80°	111.1	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°	392.2	26.1
0°-40°	645.6	43.0
0°-60°	1168.1	77.8
0°-90°	1502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	503	502	498	502	501	48
15°	484	483	482	486	486	137
25°	449	448	449	454	455	207
35°	398	400	403	412	413	249
45°	332	336	347	360	366	256
55°	252	263	286	305	312	225
65°	163	183	216	233	238	161
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°	503.1	503.1	503.1	503.1	503.1
2.5°	505.4	503.1	499.5	503.1	501.9
5°	503.1	501.9	498.4	501.9	500.7
7.5°	499.5	499.5	496.0	498.4	498.4
10°	496.0	494.8	492.5	496.0	494.8
12.5°	490.2	489.0	487.8	491.3	490.2
15°	484.3	483.1	482.0	485.5	485.5
17.5°	477.3	476.1	474.9	479.6	479.6
20°	467.9	467.9	467.9	472.6	471.4
22.5°	458.5	458.5	459.7	464.4	463.2
25°	449.1	447.9	449.1	453.8	455.0
27.5°	437.4	438.6	439.7	444.4	445.6
30°	425.7	426.8	428.0	433.9	435.0
32.5°	411.6	413.9	416.3	423.3	423.3
35°	397.5	399.9	403.4	411.6	412.8
37.5°	382.3	384.6	389.3	398.7	401.0
40°	365.9	369.4	376.4	385.8	389.3
42.5°	349.4	354.1	362.3	372.9	377.6
45°	331.9	336.5	347.1	360.0	365.9
47.5°	313.1	319.0	331.9	348.3	353.0
50°	293.2	301.4	316.6	334.2	340.1
52.5°	273.2	282.6	301.4	320.1	326.0
55°	252.1	262.7	286.1	304.9	311.9
57.5°	231.0	242.7	269.7	289.6	296.7
60°	208.7	222.8	252.1	272.1	277.9
62.5°	186.4	202.9	234.5	254.5	259.2
65°	163.0	182.9	215.8	233.4	238.0
67.5°	140.7	164.2	197.0	209.9	209.9
70°	117.3	143.1	175.9	179.4	172.4
72.5°	93.8	123.1	152.4	139.5	133.7
75°	71.5	104.4	119.6	107.9	104.4
77.5°	53.9	84.4	84.4	77.4	75.0
80°	37.5	64.5	56.3	49.3	45.7
82.5°	24.6	36.4	29.3	23.5	19.9
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)