

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: P307340

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-2700K**

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: P307340
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-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 2700K 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: 1650.0 lumens
Efficiency: N/A
Efficacy: 69.3 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

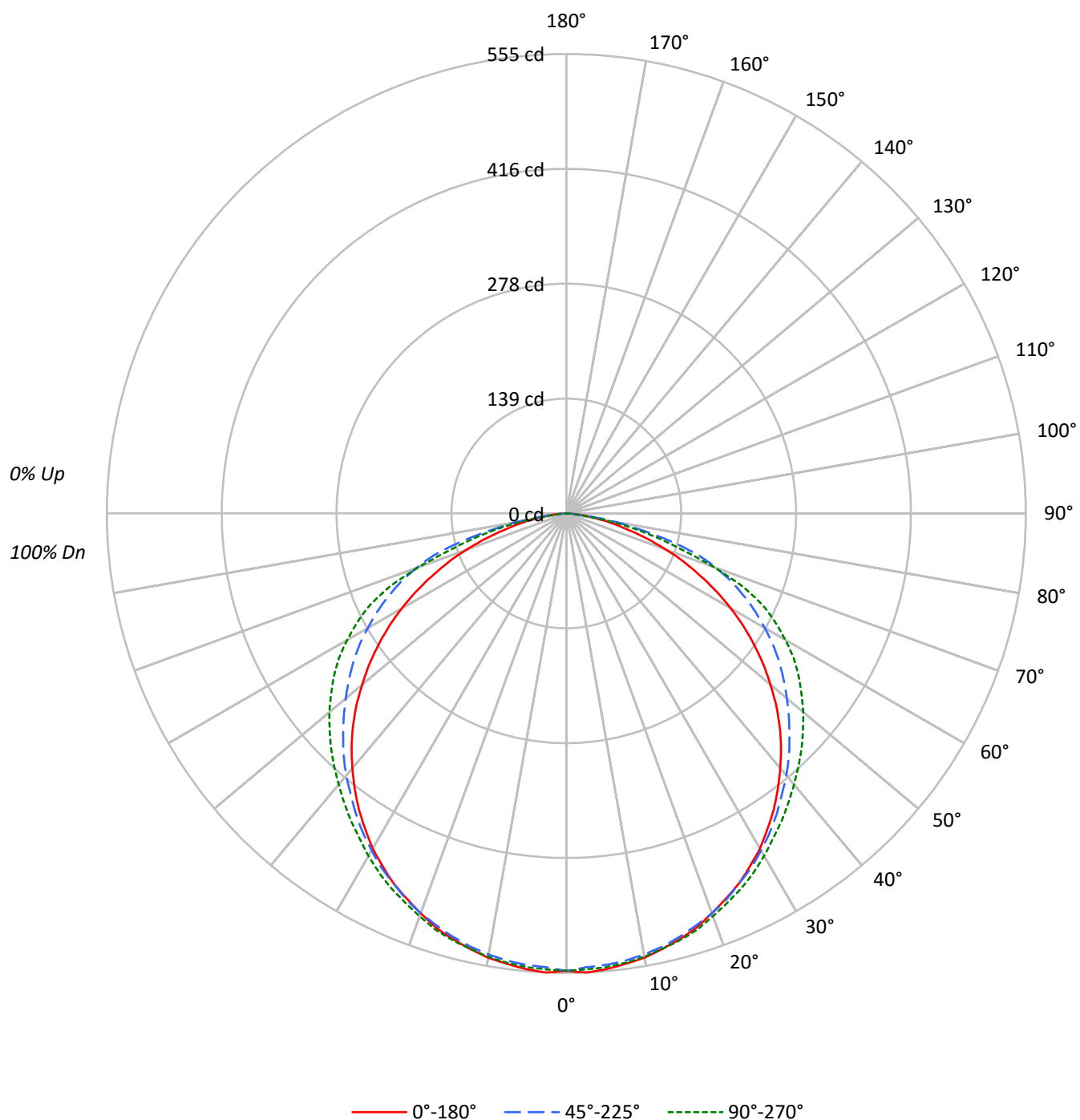
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1487	1487	1487
5°	1493	1479	1486
10°	1489	1478	1485
15°	1482	1475	1486
20°	1472	1472	1483
25°	1465	1465	1484
30°	1453	1461	1485
35°	1435	1456	1489
40°	1412	1453	1502
45°	1388	1451	1529
50°	1348	1456	1564
55°	1300	1475	1608
60°	1234	1491	1643
65°	1140	1509	1665
70°	1013	1520	1490
75°	817	1366	1192
80°	638	958	778
85°	438	278	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	3.2
10°-20°	150.1	9.1
20°-30°	228.5	13.8
30°-40°	278.3	16.9
40°-50°	295.3	17.9
50°-60°	278.7	16.9
60°-70°	225.0	13.6
70°-80°	122.1	7.4
80°-90°	19.8	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°	430.9	26.1
0°-40°	709.2	43.0
0°-60°	1283.2	77.8
0°-90°	1650.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1650.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	553	551	548	551	550	52
15°	532	531	529	533	533	150
25°	493	492	493	498	500	227
35°	437	439	443	452	453	273
45°	365	370	381	396	402	281
55°	277	289	314	335	343	247
65°	179	201	237	256	262	177
75°	79	115	131	118	115	86
85°	14	16	9	8	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.6	552.6	552.6	552.6	552.6
2.5°	555.2	552.6	548.8	552.6	551.3
5°	552.6	551.3	547.5	551.3	550.1
7.5°	548.8	548.8	544.9	547.5	547.5
10°	544.9	543.6	541.0	544.9	543.6
12.5°	538.5	537.2	535.9	539.7	538.5
15°	532.0	530.7	529.4	533.3	533.3
17.5°	524.3	523.0	521.7	526.9	526.9
20°	514.0	514.0	514.0	519.1	517.8
22.5°	503.7	503.7	505.0	510.1	508.8
25°	493.4	492.1	493.4	498.5	499.8
27.5°	480.5	481.8	483.1	488.2	489.5
30°	467.6	468.9	470.2	476.6	477.9
32.5°	452.1	454.7	457.3	465.0	465.0
35°	436.7	439.3	443.1	452.1	453.4
37.5°	419.9	422.5	427.7	438.0	440.6
40°	401.9	405.8	413.5	423.8	427.7
42.5°	383.9	389.0	398.0	409.6	414.8
45°	364.6	369.7	381.3	395.5	401.9
47.5°	343.9	350.4	364.6	382.6	387.7
50°	322.0	331.1	347.8	367.1	373.6
52.5°	300.1	310.5	331.1	351.7	358.1
55°	277.0	288.6	314.3	334.9	342.7
57.5°	253.8	266.7	296.3	318.2	325.9
60°	229.3	244.8	277.0	298.9	305.3
62.5°	204.8	222.9	257.6	279.5	284.7
65°	179.1	201.0	237.0	256.3	261.5
67.5°	154.6	180.3	216.4	230.6	230.6
70°	128.8	157.2	193.2	197.1	189.4
72.5°	103.1	135.3	167.5	153.3	146.9
75°	78.6	114.6	131.4	118.5	114.6
77.5°	59.3	92.7	92.7	85.0	82.4
80°	41.2	70.8	61.8	54.1	50.2
82.5°	27.1	39.9	32.2	25.8	21.9
85°	14.2	15.5	9.0	7.7	6.4
87.5°	5.2	2.6	1.3	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)