

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: P307301

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5500K**

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: P307301
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-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 1564.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

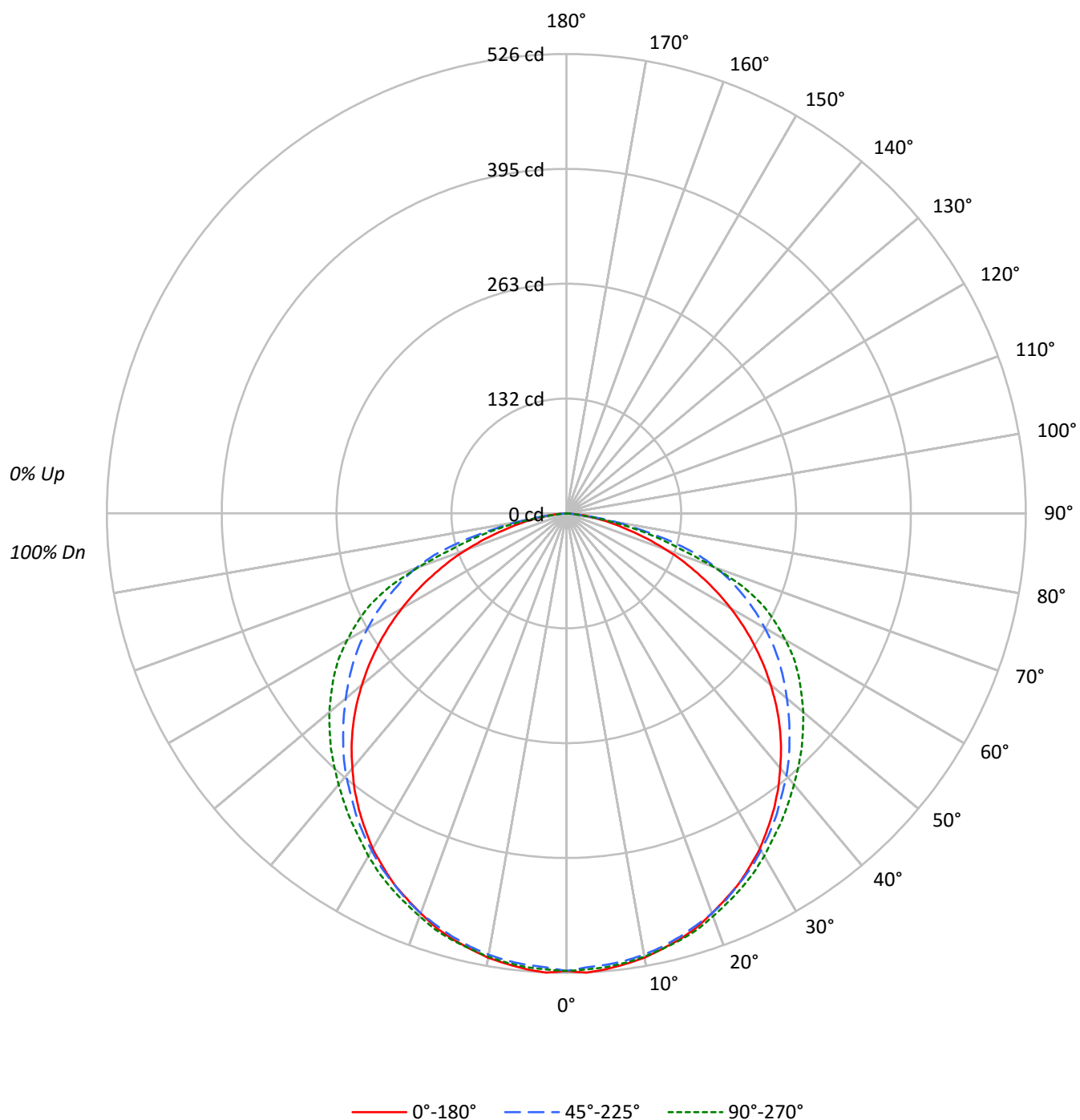
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1410	1410	1410
5°	1415	1402	1408
10°	1411	1401	1408
15°	1405	1398	1408
20°	1395	1395	1406
25°	1389	1389	1407
30°	1377	1385	1408
35°	1360	1380	1412
40°	1338	1377	1424
45°	1315	1375	1450
50°	1278	1380	1482
55°	1232	1398	1524
60°	1169	1413	1558
65°	1081	1431	1578
70°	961	1441	1412
75°	775	1294	1130
80°	606	908	738
85°	414	262	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	3.2
10°-20°	142.2	9.1
20°-30°	216.6	13.8
30°-40°	263.8	16.9
40°-50°	279.9	17.9
50°-60°	264.2	16.9
60°-70°	213.3	13.6
70°-80°	115.7	7.4
80°-90°	18.7	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°	408.4	26.1
0°-40°	672.3	43.0
0°-60°	1216.3	77.8
0°-90°	1564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	524	523	519	523	521	50
15°	504	503	502	506	506	142
25°	468	466	468	472	474	215
35°	414	416	420	429	430	259
45°	346	350	361	375	381	266
55°	262	274	298	318	325	234
65°	170	190	225	243	248	168
75°	74	109	124	112	109	81
85°	13	15	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°	523.8	523.8	523.8	523.8	523.8
2.5°	526.3	523.8	520.2	523.8	522.6
5°	523.8	522.6	518.9	522.6	521.4
7.5°	520.2	520.2	516.5	518.9	518.9
10°	516.5	515.3	512.8	516.5	515.3
12.5°	510.4	509.2	508.0	511.6	510.4
15°	504.3	503.1	501.8	505.5	505.5
17.5°	497.0	495.7	494.5	499.4	499.4
20°	487.2	487.2	487.2	492.1	490.9
22.5°	477.4	477.4	478.6	483.5	482.3
25°	467.7	466.4	467.7	472.5	473.8
27.5°	455.4	456.7	457.9	462.8	464.0
30°	443.2	444.5	445.7	451.8	453.0
32.5°	428.6	431.0	433.5	440.8	440.8
35°	413.9	416.4	420.0	428.6	429.8
37.5°	398.1	400.5	405.4	415.2	417.6
40°	381.0	384.6	392.0	401.7	405.4
42.5°	363.9	368.8	377.3	388.3	393.2
45°	345.6	350.4	361.4	374.9	381.0
47.5°	326.0	332.1	345.6	362.6	367.5
50°	305.3	313.8	329.7	348.0	354.1
52.5°	284.5	294.3	313.8	333.3	339.4
55°	262.5	273.5	297.9	317.5	324.8
57.5°	240.5	252.8	280.8	301.6	308.9
60°	217.3	232.0	262.5	283.3	289.4
62.5°	194.1	211.2	244.2	265.0	269.8
65°	169.7	190.5	224.7	243.0	247.9
67.5°	146.5	170.9	205.1	218.6	218.6
70°	122.1	149.0	183.2	186.8	179.5
72.5°	97.7	128.2	158.7	145.3	139.2
75°	74.5	108.7	124.5	112.3	108.7
77.5°	56.2	87.9	87.9	80.6	78.1
80°	39.1	67.2	58.6	51.3	47.6
82.5°	25.6	37.9	30.5	24.4	20.8
85°	13.4	14.7	8.5	7.3	6.1
87.5°	4.9	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)