

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: P307300

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA08-W2A-U-5000K**

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: P307300
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-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 1549.0 lumens
Efficiency: N/A
Efficacy: 77.1 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

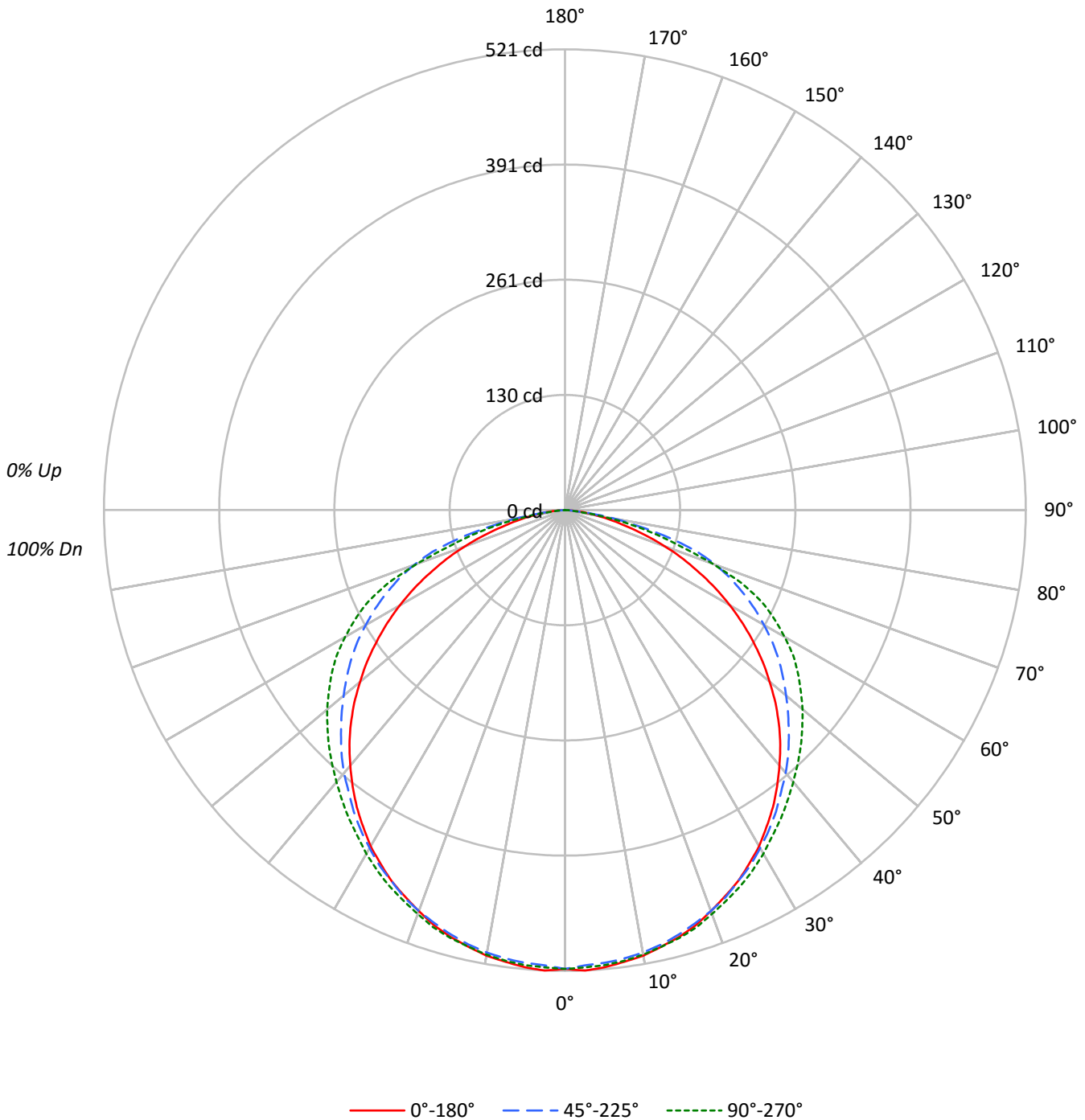
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1396	1396	1396
5°	1401	1388	1395
10°	1398	1388	1394
15°	1392	1385	1395
20°	1382	1382	1392
25°	1375	1375	1393
30°	1364	1372	1394
35°	1347	1367	1398
40°	1325	1364	1410
45°	1302	1362	1436
50°	1266	1367	1468
55°	1220	1384	1509
60°	1159	1399	1542
65°	1070	1417	1563
70°	951	1427	1399
75°	767	1283	1119
80°	600	899	731
85°	411	262	185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	3.2
10°-20°	140.9	9.1
20°-30°	214.5	13.8
30°-40°	261.3	16.9
40°-50°	277.2	17.9
50°-60°	261.6	16.9
60°-70°	211.2	13.6
70°-80°	114.6	7.4
80°-90°	18.5	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°	404.5	26.1
0°-40°	665.8	43.0
0°-60°	1204.6	77.8
0°-90°	1549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1549.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	519	518	514	518	516	49
15°	500	498	497	501	501	141
25°	463	462	463	468	469	213
35°	410	412	416	424	426	256
45°	342	347	358	371	377	264
55°	260	271	295	314	322	232
65°	168	189	222	241	246	167
75°	74	108	123	111	108	81
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°	518.8	518.8	518.8	518.8	518.8
2.5°	521.2	518.8	515.2	518.8	517.6
5°	518.8	517.6	514.0	517.6	516.4
7.5°	515.2	515.2	511.5	514.0	514.0
10°	511.5	510.3	507.9	511.5	510.3
12.5°	505.5	504.3	503.1	506.7	505.5
15°	499.5	498.2	497.0	500.7	500.7
17.5°	492.2	491.0	489.8	494.6	494.6
20°	482.5	482.5	482.5	487.4	486.1
22.5°	472.8	472.8	474.1	478.9	477.7
25°	463.2	462.0	463.2	468.0	469.2
27.5°	451.1	452.3	453.5	458.3	459.5
30°	439.0	440.2	441.4	447.4	448.7
32.5°	424.5	426.9	429.3	436.6	436.6
35°	410.0	412.4	416.0	424.5	425.7
37.5°	394.2	396.7	401.5	411.2	413.6
40°	377.3	380.9	388.2	397.9	401.5
42.5°	360.4	365.2	373.7	384.6	389.4
45°	342.2	347.1	358.0	371.3	377.3
47.5°	322.9	328.9	342.2	359.2	364.0
50°	302.3	310.8	326.5	344.7	350.7
52.5°	281.8	291.4	310.8	330.1	336.2
55°	260.0	270.9	295.1	314.4	321.7
57.5°	238.2	250.3	278.1	298.7	306.0
60°	215.3	229.8	260.0	280.6	286.6
62.5°	192.3	209.2	241.9	262.4	267.3
65°	168.1	188.7	222.5	240.7	245.5
67.5°	145.1	169.3	203.2	216.5	216.5
70°	120.9	147.5	181.4	185.0	177.8
72.5°	96.7	127.0	157.2	143.9	137.9
75°	73.8	107.6	123.4	111.3	107.6
77.5°	55.6	87.1	87.1	79.8	77.4
80°	38.7	66.5	58.0	50.8	47.2
82.5°	25.4	37.5	30.2	24.2	20.6
85°	13.3	14.5	8.5	7.3	6.0
87.5°	4.8	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)