

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: P312316

Luminaire Tested: **14FCZ2-25-UNV-L83050-S-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: P312316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 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

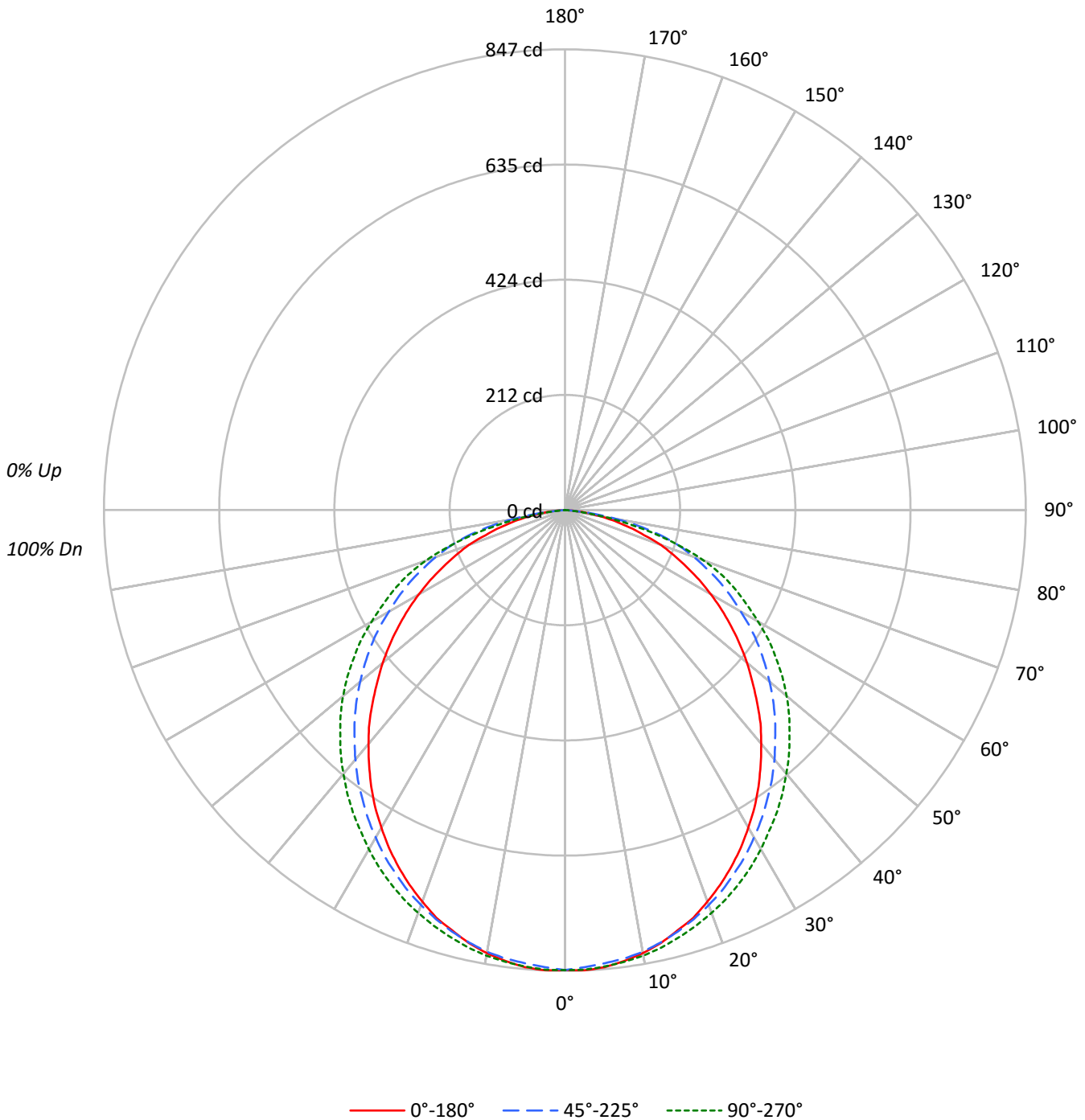
Lumens per Lamp: N/A
Luminaire Lumens: 2369.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (A_{in}): 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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2276	2276	2276
5°	2278	2259	2275
10°	2259	2253	2272
15°	2228	2235	2264
20°	2193	2213	2257
25°	2148	2187	2249
30°	2095	2160	2237
35°	2037	2130	2230
40°	1972	2104	2224
45°	1900	2079	2222
50°	1829	2056	2228
55°	1752	2039	2221
60°	1669	2010	2206
65°	1571	2004	2206
70°	1478	1987	2144
75°	1282	1942	1832
80°	1038	1565	1220
85°	689	543	361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	3.4
10°-20°	227.2	9.6
20°-30°	340.9	14.4
30°-40°	406.6	17.2
40°-50°	420.4	17.7
50°-60°	383.8	16.2
60°-70°	302.0	12.7
70°-80°	175.8	7.4
80°-90°	32.4	1.4
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°	648.0	27.4
0°-40°	1054.6	44.5
0°-60°	1858.8	78.5
0°-90°	2369.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	843	841	836	843	842	80
15°	800	801	802	813	813	226
25°	724	727	736	754	758	333
35°	620	628	648	673	679	388
45°	499	516	546	577	584	385
55°	374	394	435	466	473	334
65°	247	272	315	340	346	245
75°	123	153	187	183	176	131
85°	22	32	18	14	12	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	845.7	845.7	845.7	845.7	845.7
2.5°	846.9	844.5	841.0	846.9	845.7
5°	843.3	841.0	836.3	843.3	842.2
7.5°	836.3	833.9	831.6	838.6	837.5
10°	826.9	825.7	824.6	832.8	831.6
12.5°	815.2	815.2	814.0	823.4	823.4
15°	799.9	801.1	802.2	812.8	812.8
17.5°	785.8	784.6	788.1	799.9	801.1
20°	765.8	768.2	772.9	787.0	788.1
22.5°	745.9	748.2	756.4	770.5	774.0
25°	723.5	727.1	736.5	754.1	757.6
27.5°	700.0	704.7	717.7	736.5	740.0
30°	674.2	681.3	695.3	716.5	720.0
32.5°	648.4	655.4	673.0	694.2	698.9
35°	620.2	628.4	648.4	673.0	678.9
37.5°	590.8	601.4	624.9	649.5	656.6
40°	561.4	573.2	599.0	624.9	633.1
42.5°	532.1	543.8	572.0	601.4	609.6
45°	499.2	515.6	546.2	576.7	583.8
47.5°	467.5	485.1	519.2	549.7	559.1
50°	436.9	454.6	491.0	522.7	532.1
52.5°	405.2	424.0	462.8	495.7	503.9
55°	373.5	393.5	434.6	466.3	473.4
57.5°	341.8	362.9	405.2	435.8	444.0
60°	310.1	332.4	373.5	404.1	409.9
62.5°	278.4	301.9	344.2	371.2	377.0
65°	246.7	272.5	314.8	339.5	346.5
67.5°	216.1	242.0	283.1	306.6	312.4
70°	187.9	211.4	252.5	270.2	272.5
72.5°	152.7	182.1	222.0	231.4	225.5
75°	123.3	152.7	186.8	183.2	176.2
77.5°	94.0	123.3	145.6	133.9	124.5
80°	67.0	96.3	101.0	83.4	78.7
82.5°	43.5	67.0	56.4	43.5	35.2
85°	22.3	31.7	17.6	14.1	11.7
87.5°	7.0	4.7	2.3	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)