

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: P308555

Luminaire Tested: **22FCZ2-44HE-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: P308555
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-RDP-CA08-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2444.0 lumens
Efficiency: N/A
Efficacy: 65.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

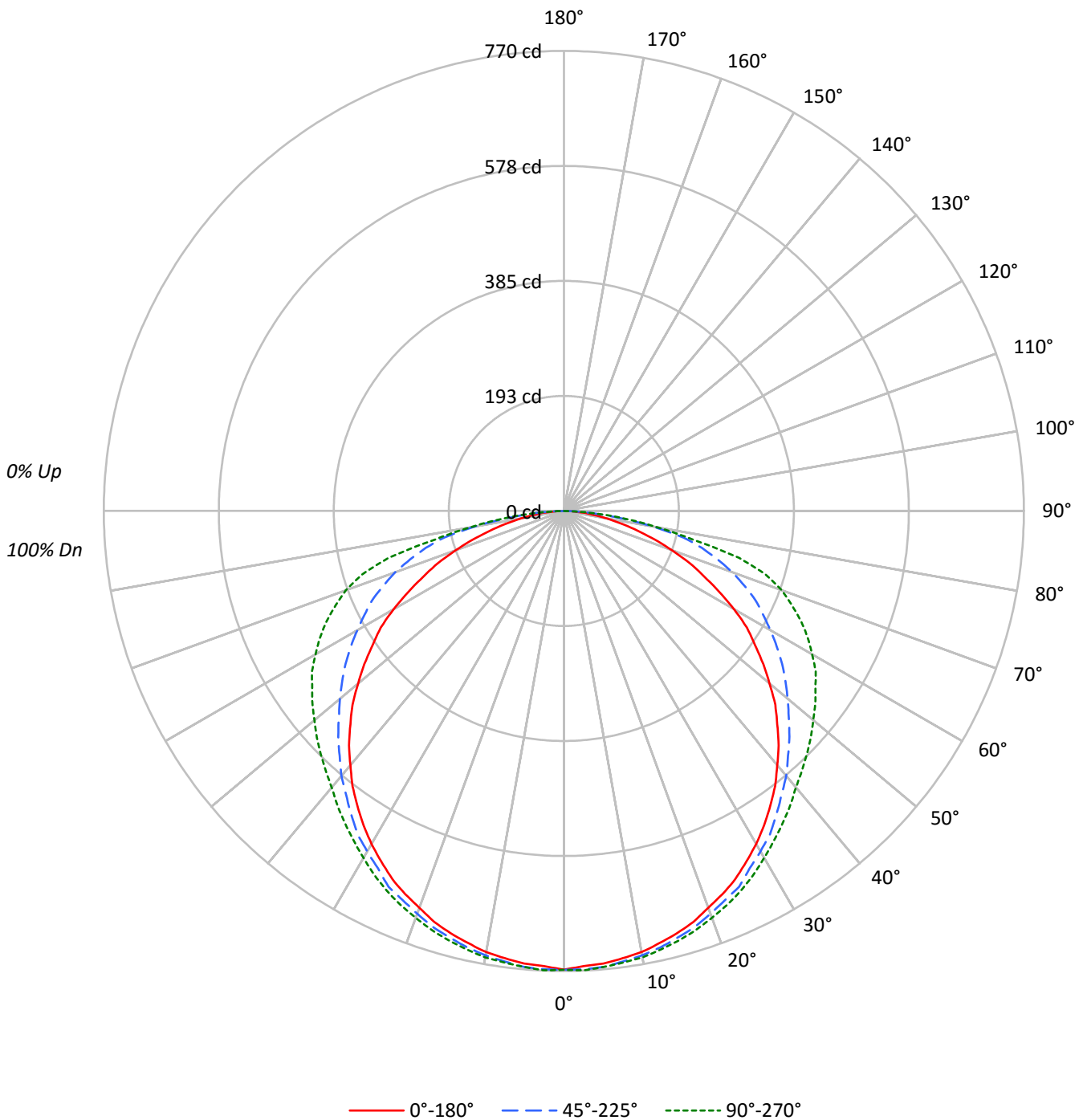
Input Watts (W): 37.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2066	2066	2066
5°	2054	2069	2069
10°	2049	2063	2073
15°	2038	2059	2074
20°	2023	2054	2075
25°	2018	2061	2082
30°	2000	2045	2084
35°	1979	2038	2097
40°	1952	2034	2122
45°	1923	2032	2189
50°	1882	2047	2281
55°	1830	2092	2412
60°	1771	2148	2583
65°	1649	2255	2793
70°	1514	2362	3055
75°	1328	2486	3159
80°	1142	2368	2479
85°	1000	1720	1886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	3.0
10°-20°	208.5	8.5
20°-30°	318.1	13.0
30°-40°	388.4	15.9
40°-50°	415.3	17.0
50°-60°	400.9	16.4
60°-70°	345.1	14.1
70°-80°	233.5	9.6
80°-90°	61.6	2.5
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°	599.2	24.5
0°-40°	987.7	40.4
0°-60°	1803.8	73.8
0°-90°	2444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2444.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	760	762	766	766	766	72
15°	732	734	739	742	744	206
25°	680	683	694	698	701	313
35°	602	608	620	633	638	377
45°	505	514	534	561	575	390
55°	390	403	446	491	514	350
65°	259	284	354	410	439	257
75°	128	169	239	288	304	137
85°	32	45	56	58	61	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	767.7	767.7	767.7	767.7	767.7
2.5°	762.3	764.1	767.7	767.7	769.5
5°	760.5	762.3	765.9	765.9	765.9
7.5°	755.1	756.9	760.5	762.3	762.3
10°	749.7	751.5	755.1	756.9	758.7
12.5°	740.7	742.5	747.9	751.5	751.5
15°	731.7	733.5	738.9	742.5	744.3
17.5°	721.0	724.6	729.9	733.5	735.3
20°	706.6	710.2	717.4	722.8	724.6
22.5°	694.0	697.6	704.8	710.2	713.8
25°	679.6	683.2	694.0	697.6	701.2
27.5°	661.6	665.2	674.2	681.4	686.8
30°	643.6	647.2	658.0	667.0	670.6
32.5°	623.9	629.3	641.9	649.0	654.4
35°	602.3	607.7	620.3	632.9	638.3
37.5°	580.7	586.1	598.7	614.9	622.1
40°	555.6	562.7	578.9	600.5	604.1
42.5°	532.2	541.2	555.6	580.7	589.7
45°	505.2	514.2	534.0	560.9	575.3
47.5°	480.0	489.0	510.6	543.0	560.9
50°	449.5	462.1	489.0	526.8	544.8
52.5°	420.7	431.5	467.5	508.8	530.4
55°	390.1	402.7	445.9	490.8	514.2
57.5°	363.2	374.0	422.5	472.8	499.8
60°	329.0	343.4	399.1	453.1	480.0
62.5°	293.1	314.6	375.8	431.5	460.3
65°	258.9	284.1	354.2	409.9	438.7
67.5°	228.3	255.3	327.2	386.5	413.5
70°	192.4	226.5	300.2	357.8	388.3
72.5°	160.0	197.8	269.7	327.2	354.2
75°	127.7	169.0	239.1	287.7	303.8
77.5°	98.9	138.4	205.0	219.3	221.1
80°	73.7	109.7	152.8	154.6	160.0
82.5°	50.3	77.3	98.9	107.9	109.7
85°	32.4	44.9	55.7	57.5	61.1
87.5°	14.4	16.2	19.8	18.0	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)