

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: P307882

Luminaire Tested: **14FCZ2-29-UNV-L82765-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: P307882
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: 14FCZ2-29-UNV-L82765-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: 2765.0 lumens
Efficiency: N/A
Efficacy: 115.7 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

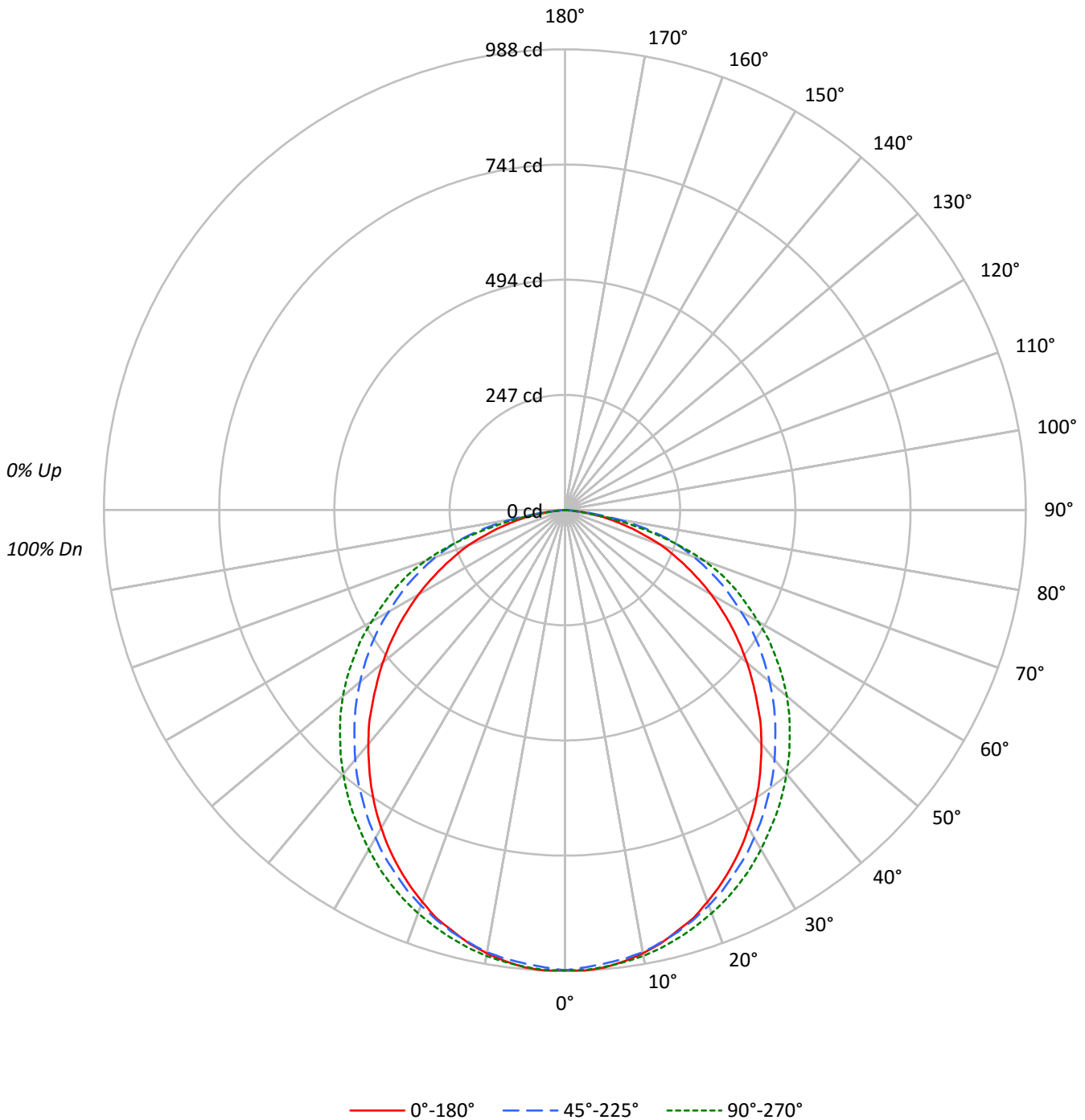
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2656	2656	2656
5°	2659	2637	2655
10°	2637	2630	2652
15°	2601	2608	2643
20°	2560	2583	2634
25°	2507	2552	2625
30°	2445	2522	2611
35°	2378	2486	2603
40°	2302	2456	2596
45°	2217	2426	2593
50°	2135	2399	2600
55°	2046	2380	2592
60°	1948	2347	2575
65°	1833	2339	2575
70°	1725	2319	2503
75°	1496	2267	2138
80°	1210	1827	1424
85°	803	636	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.2	3.4
10°-20°	265.2	9.6
20°-30°	397.9	14.4
30°-40°	474.6	17.2
40°-50°	490.6	17.7
50°-60°	448.0	16.2
60°-70°	352.5	12.7
70°-80°	205.2	7.4
80°-90°	37.8	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°	756.3	27.4
0°-40°	1230.9	44.5
0°-60°	2169.5	78.5
0°-90°	2765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2765.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	984	982	976	984	983	93
15°	934	935	936	949	949	263
25°	844	849	860	880	884	389
35°	724	733	757	786	792	452
45°	583	602	638	673	681	450
55°	436	459	507	544	552	390
65°	288	318	367	396	404	286
75°	144	178	218	214	206	153
85°	26	37	21	16	14	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.1	987.1	987.1	987.1	987.1
2.5°	988.4	985.7	981.6	988.4	987.1
5°	984.3	981.6	976.1	984.3	982.9
7.5°	976.1	973.3	970.6	978.8	977.5
10°	965.1	963.8	962.4	972.0	970.6
12.5°	951.4	951.4	950.0	961.0	961.0
15°	933.6	935.0	936.3	948.7	948.7
17.5°	917.1	915.8	919.9	933.6	935.0
20°	893.8	896.6	902.1	918.5	919.9
22.5°	870.5	873.3	882.9	899.3	903.4
25°	844.5	848.6	859.6	880.1	884.2
27.5°	817.1	822.5	837.6	859.6	863.7
30°	786.9	795.1	811.6	836.3	840.4
32.5°	756.7	765.0	785.5	810.2	815.7
35°	723.8	733.4	756.7	785.5	792.4
37.5°	689.6	701.9	729.3	758.1	766.3
40°	655.3	669.0	699.2	729.3	738.9
42.5°	621.0	634.7	667.6	701.9	711.5
45°	582.6	601.8	637.5	673.1	681.3
47.5°	545.6	566.2	605.9	641.6	652.6
50°	510.0	530.5	573.0	610.1	621.0
52.5°	473.0	494.9	540.1	578.5	588.1
55°	436.0	459.3	507.2	544.3	552.5
57.5°	398.9	423.6	473.0	508.6	518.2
60°	361.9	388.0	436.0	471.6	478.4
62.5°	324.9	352.3	401.7	433.2	440.1
65°	287.9	318.1	367.4	396.2	404.4
67.5°	252.2	282.4	330.4	357.8	364.7
70°	219.3	246.8	294.7	315.3	318.1
72.5°	178.2	212.5	259.1	270.1	263.2
75°	143.9	178.2	218.0	213.9	205.6
77.5°	109.7	143.9	170.0	156.3	145.3
80°	78.1	112.4	117.9	97.3	91.9
82.5°	50.7	78.1	65.8	50.7	41.1
85°	26.0	37.0	20.6	16.5	13.7
87.5°	8.2	5.5	2.7	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)