

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: P307889

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA125-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: P307889
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-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 2700K 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: 2589.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

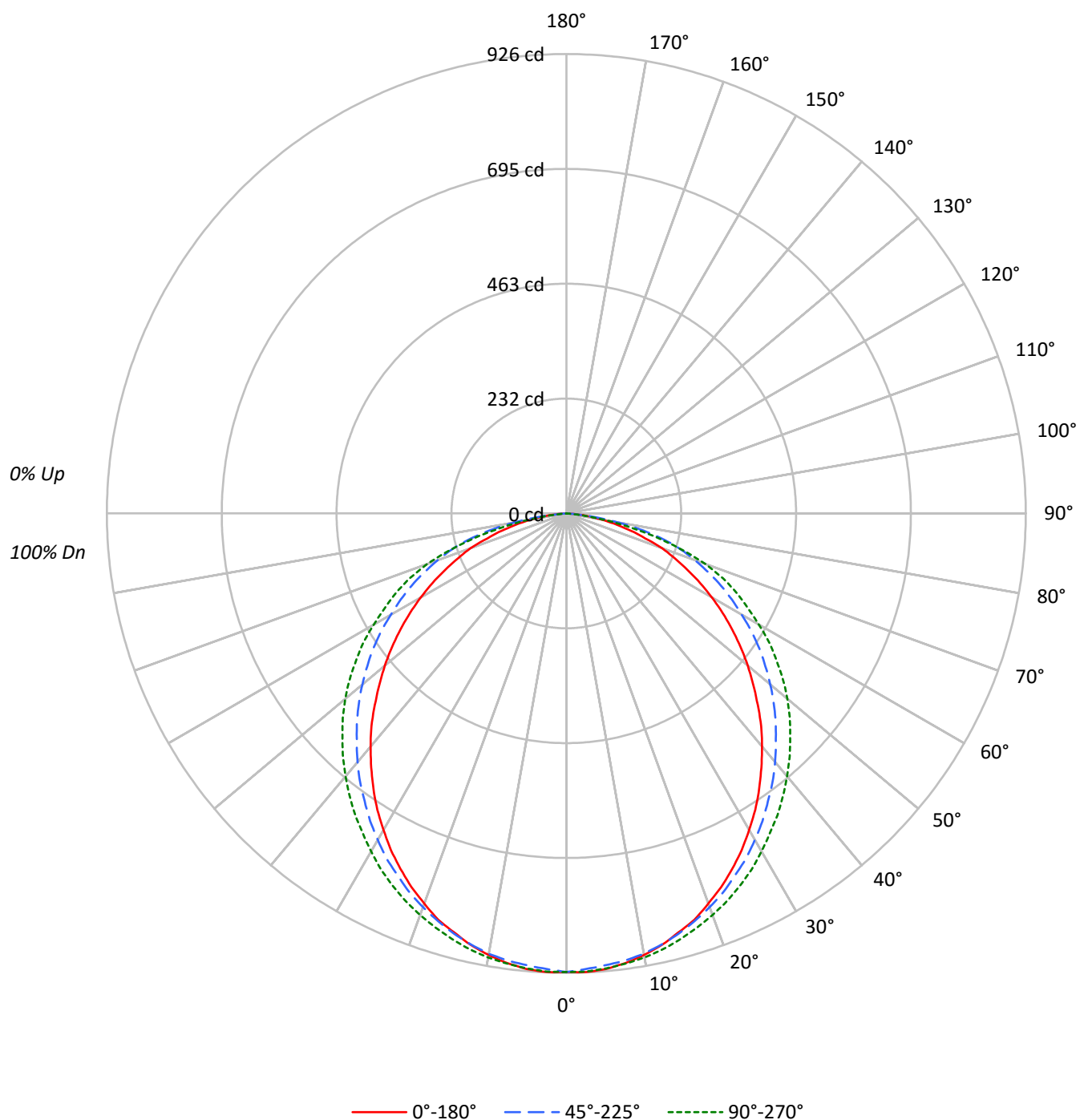
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10
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°	2487	2487	2487
5°	2490	2469	2486
10°	2469	2462	2483
15°	2435	2442	2475
20°	2397	2419	2466
25°	2348	2390	2458
30°	2289	2361	2445
35°	2227	2328	2438
40°	2155	2300	2431
45°	2076	2272	2428
50°	1999	2246	2434
55°	1915	2228	2427
60°	1824	2197	2411
65°	1717	2190	2411
70°	1616	2172	2343
75°	1402	2122	2001
80°	1134	1711	1333
85°	753	596	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	3.4
10°-20°	248.3	9.6
20°-30°	372.5	14.4
30°-40°	444.4	17.2
40°-50°	459.4	17.7
50°-60°	419.4	16.2
60°-70°	330.1	12.7
70°-80°	192.1	7.4
80°-90°	35.4	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°	708.1	27.4
0°-40°	1152.5	44.5
0°-60°	2031.4	78.5
0°-90°	2589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	922	919	914	922	920	87
15°	874	876	877	888	888	247
25°	791	795	805	824	828	364
35°	678	687	709	736	742	424
45°	546	564	597	630	638	421
55°	408	430	475	510	517	365
65°	270	298	344	371	379	268
75°	135	167	204	200	192	143
85°	24	35	19	15	13	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.2	924.2	924.2	924.2	924.2
2.5°	925.5	922.9	919.1	925.5	924.2
5°	921.7	919.1	914.0	921.7	920.4
7.5°	914.0	911.4	908.8	916.5	915.2
10°	903.7	902.4	901.1	910.1	908.8
12.5°	890.9	890.9	889.6	899.8	899.8
15°	874.2	875.5	876.7	888.3	888.3
17.5°	858.8	857.5	861.3	874.2	875.5
20°	836.9	839.5	844.6	860.0	861.3
22.5°	815.1	817.7	826.7	842.1	845.9
25°	790.7	794.6	804.9	824.1	828.0
27.5°	765.1	770.2	784.3	804.9	808.7
30°	736.8	744.5	759.9	783.0	786.9
32.5°	708.6	716.3	735.5	758.6	763.8
35°	677.8	686.8	708.6	735.5	742.0
37.5°	645.7	657.2	682.9	709.9	717.6
40°	613.6	626.4	654.7	682.9	691.9
42.5°	581.5	594.3	625.1	657.2	666.2
45°	545.6	563.5	596.9	630.3	638.0
47.5°	510.9	530.1	567.4	600.7	611.0
50°	477.5	496.8	536.6	571.2	581.5
52.5°	442.9	463.4	505.8	541.7	550.7
55°	408.2	430.0	475.0	509.6	517.3
57.5°	373.5	396.6	442.9	476.2	485.2
60°	338.9	363.3	408.2	441.6	448.0
62.5°	304.2	329.9	376.1	405.6	412.1
65°	269.6	297.8	344.0	371.0	378.7
67.5°	236.2	264.4	309.4	335.0	341.5
70°	205.4	231.1	276.0	295.2	297.8
72.5°	166.9	199.0	242.6	252.9	246.5
75°	134.8	166.9	204.1	200.2	192.5
77.5°	102.7	134.8	159.2	146.3	136.1
80°	73.2	105.3	110.4	91.1	86.0
82.5°	47.5	73.2	61.6	47.5	38.5
85°	24.4	34.7	19.3	15.4	12.8
87.5°	7.7	5.1	2.6	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)