

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: P307922

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CP250-W2A-U-5500K**

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: P307922
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-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5500K 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: 2732.0 lumens
Efficiency: N/A
Efficacy: 111.5 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

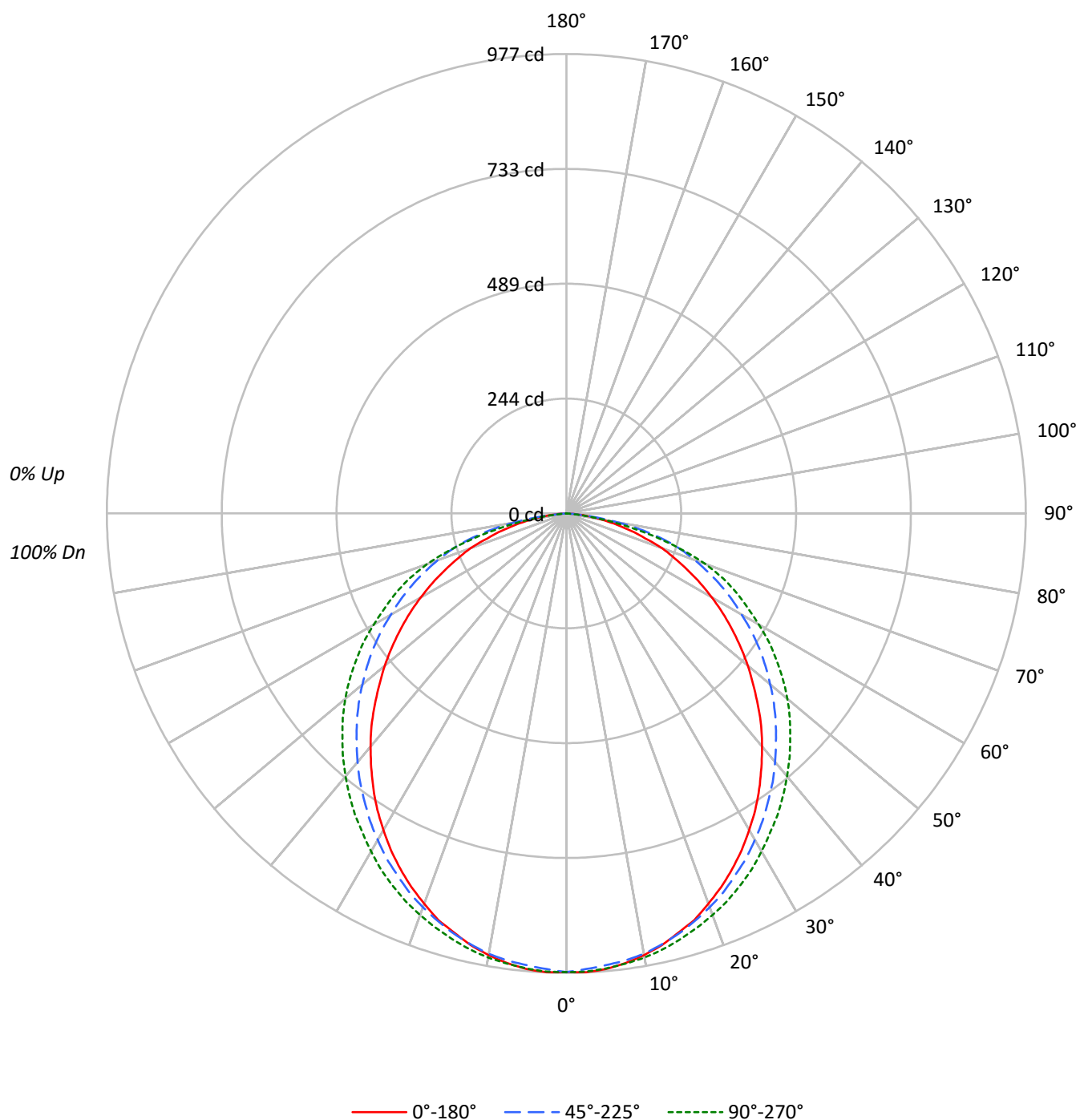
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2627	2605	2623
10°	2606	2598	2620
15°	2570	2578	2612
20°	2529	2552	2603
25°	2477	2522	2594
30°	2416	2492	2580
35°	2349	2456	2572
40°	2275	2427	2565
45°	2191	2397	2562
50°	2110	2370	2569
55°	2021	2351	2561
60°	1925	2318	2544
65°	1812	2311	2544
70°	1705	2291	2473
75°	1478	2240	2113
80°	1196	1805	1407
85°	794	627	417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.1	3.4
10°-20°	262.1	9.6
20°-30°	393.1	14.4
30°-40°	468.9	17.2
40°-50°	484.8	17.7
50°-60°	442.6	16.2
60°-70°	348.3	12.7
70°-80°	202.8	7.4
80°-90°	37.4	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°	747.3	27.4
0°-40°	1216.2	44.5
0°-60°	2143.6	78.5
0°-90°	2732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	975	975	975	975	975	
5°	973	970	964	973	971	92
15°	922	924	925	937	937	260
25°	834	838	849	870	874	384
35°	715	725	748	776	783	447
45°	576	595	630	665	673	445
55°	431	454	501	538	546	385
65°	284	314	363	392	400	282
75°	142	176	215	211	203	151
85°	26	37	20	16	14	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	975.3	975.3	975.3	975.3	975.3
2.5°	976.6	973.9	969.9	976.6	975.3
5°	972.6	969.9	964.4	972.6	971.2
7.5°	964.4	961.7	959.0	967.2	965.8
10°	953.6	952.3	950.9	960.4	959.0
12.5°	940.1	940.1	938.7	949.5	949.5
15°	922.5	923.8	925.2	937.4	937.4
17.5°	906.2	904.8	908.9	922.5	923.8
20°	883.2	885.9	891.3	907.6	908.9
22.5°	860.1	862.9	872.3	888.6	892.7
25°	834.4	838.5	849.3	869.6	873.7
27.5°	807.3	812.7	827.6	849.3	853.4
30°	777.5	785.6	801.9	826.3	830.3
32.5°	747.7	755.8	776.2	800.5	806.0
35°	715.2	724.7	747.7	776.2	782.9
37.5°	681.3	693.5	720.6	749.1	757.2
40°	647.5	661.0	690.8	720.6	730.1
42.5°	613.6	627.2	659.7	693.5	703.0
45°	575.7	594.6	629.9	665.1	673.2
47.5°	539.1	559.4	598.7	633.9	644.8
50°	503.9	524.2	566.2	602.8	613.6
52.5°	467.3	489.0	533.7	571.6	581.1
55°	430.7	453.8	501.2	537.8	545.9
57.5°	394.2	418.6	467.3	502.5	512.0
60°	357.6	383.3	430.7	466.0	472.7
62.5°	321.0	348.1	396.9	428.0	434.8
65°	284.5	314.3	363.0	391.5	399.6
67.5°	249.2	279.0	326.4	353.5	360.3
70°	216.7	243.8	291.2	311.5	314.3
72.5°	176.1	210.0	256.0	266.8	260.1
75°	142.2	176.1	215.4	211.3	203.2
77.5°	108.4	142.2	168.0	154.4	143.6
80°	77.2	111.1	116.5	96.2	90.8
82.5°	50.1	77.2	65.0	50.1	40.6
85°	25.7	36.6	20.3	16.3	13.5
87.5°	8.1	5.4	2.7	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)