

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: P307873

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP250-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: P307873
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-L82765-S-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB 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: 2148.0 lumens
Efficiency: N/A
Efficacy: 109.0 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

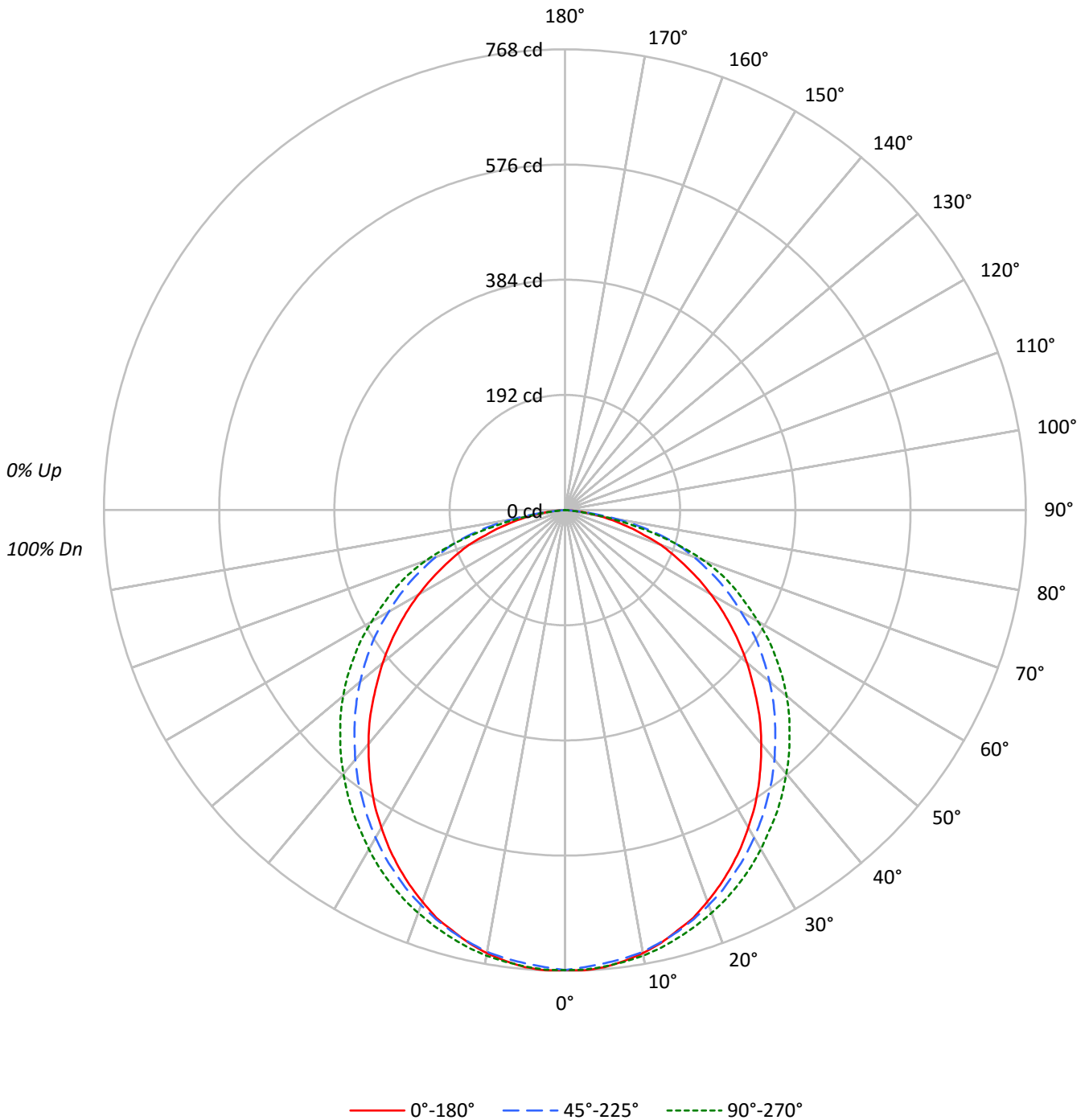
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2063	2063	2063
5°	2066	2048	2063
10°	2049	2043	2060
15°	2021	2026	2053
20°	1989	2007	2046
25°	1948	1983	2040
30°	1899	1959	2028
35°	1847	1931	2022
40°	1788	1908	2016
45°	1722	1885	2014
50°	1659	1864	2020
55°	1589	1849	2014
60°	1513	1823	2000
65°	1424	1817	2001
70°	1341	1802	1944
75°	1162	1760	1661
80°	941	1420	1106
85°	624	494	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.4
10°-20°	206.0	9.6
20°-30°	309.1	14.4
30°-40°	368.7	17.2
40°-50°	381.1	17.7
50°-60°	348.0	16.2
60°-70°	273.9	12.7
70°-80°	159.4	7.4
80°-90°	29.4	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°	587.5	27.4
0°-40°	956.2	44.5
0°-60°	1685.4	78.5
0°-90°	2148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	765	762	758	765	764	72
15°	725	726	727	737	737	205
25°	656	659	668	684	687	302
35°	562	570	588	610	616	351
45°	453	468	495	523	529	350
55°	339	357	394	423	429	303
65°	224	247	285	308	314	222
75°	112	138	169	166	160	119
85°	20	29	16	13	11	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.8	766.8	766.8	766.8	766.8
2.5°	767.9	765.7	762.5	767.9	766.8
5°	764.7	762.5	758.3	764.7	763.6
7.5°	758.3	756.2	754.0	760.4	759.3
10°	749.8	748.7	747.6	755.1	754.0
12.5°	739.1	739.1	738.0	746.6	746.6
15°	725.3	726.3	727.4	737.0	737.0
17.5°	712.5	711.4	714.6	725.3	726.3
20°	694.4	696.5	700.8	713.6	714.6
22.5°	676.3	678.4	685.9	698.6	701.8
25°	656.0	659.2	667.8	683.7	686.9
27.5°	634.7	639.0	650.7	667.8	671.0
30°	611.3	617.7	630.5	649.7	652.8
32.5°	587.9	594.3	610.2	629.4	633.7
35°	562.3	569.8	587.9	610.2	615.6
37.5°	535.7	545.3	566.6	588.9	595.3
40°	509.1	519.7	543.2	566.6	574.0
42.5°	482.4	493.1	518.7	545.3	552.7
45°	452.6	467.5	495.2	522.9	529.3
47.5°	423.9	439.8	470.7	498.4	506.9
50°	396.2	412.2	445.2	473.9	482.4
52.5°	367.4	384.5	419.6	449.4	456.9
55°	338.7	356.8	394.1	422.8	429.2
57.5°	309.9	329.1	367.4	395.1	402.6
60°	281.2	301.4	338.7	366.4	371.7
62.5°	252.4	273.7	312.0	336.5	341.9
65°	223.7	247.1	285.4	307.8	314.2
67.5°	196.0	219.4	256.7	278.0	283.3
70°	170.4	191.7	229.0	245.0	247.1
72.5°	138.5	165.1	201.3	209.8	204.5
75°	111.8	138.5	169.3	166.1	159.8
77.5°	85.2	111.8	132.1	121.4	112.9
80°	60.7	87.3	91.6	75.6	71.4
82.5°	39.4	60.7	51.1	39.4	32.0
85°	20.2	28.8	16.0	12.8	10.7
87.5°	6.4	4.3	2.1	2.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)