

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: P307152

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-3000K**

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: P307152  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
POLYCARB 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: 2239.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

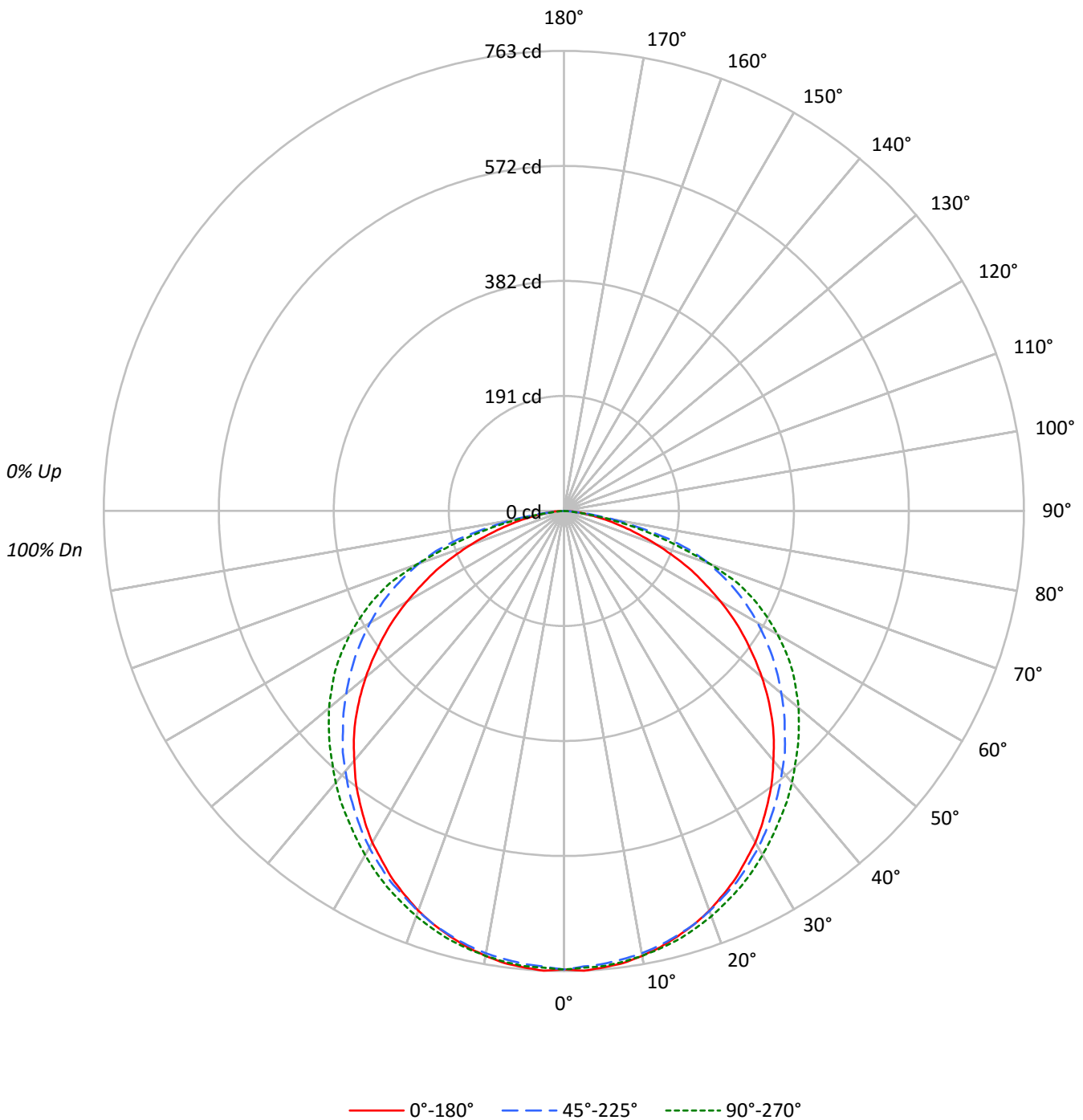
Input Watts (W): 29.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2046	2046	2046
5°	2052	2037	2046
10°	2047	2035	2047
15°	2034	2030	2050
20°	2020	2022	2048
25°	1999	2015	2049
30°	1973	2004	2048
35°	1938	1989	2052
40°	1899	1978	2068
45°	1859	1972	2090
50°	1795	1972	2128
55°	1718	1982	2174
60°	1614	1997	2202
65°	1488	2017	2215
70°	1296	2022	2039
75°	1069	1881	1647
80°	840	1353	1102
85°	651	522	259



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	3.2
10°-20°	206.6	9.2
20°-30°	313.7	14.0
30°-40°	380.1	17.0
40°-50°	400.5	17.9
50°-60°	373.9	16.7
60°-70°	298.8	13.3
70°-80°	164.4	7.3
80°-90°	29.0	1.3
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°	592.2	26.5
0°-40°	972.3	43.4
0°-60°	1746.8	78.0
0°-90°	2239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	760	758	754	759	758	72
15°	730	730	729	736	736	206
25°	673	674	679	689	690	310
35°	590	596	606	621	624	369
45°	489	498	518	541	549	376
55°	366	384	422	452	463	327
65°	234	263	317	343	348	230
75°	103	147	181	163	158	111
85°	21	27	17	11	8	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	760.4	760.4	760.4	760.4	760.4
2.5°	763.2	761.1	756.2	760.4	758.3
5°	759.7	757.6	754.0	759.0	757.6
7.5°	756.2	753.3	749.8	755.4	754.0
10°	749.1	747.0	744.9	749.8	749.1
12.5°	740.7	740.0	737.8	743.5	742.8
15°	730.1	730.1	728.7	735.7	735.7
17.5°	718.8	718.1	718.8	726.6	725.9
20°	705.5	705.5	706.2	715.3	715.3
22.5°	689.3	690.0	692.1	703.3	702.6
25°	673.1	674.5	678.7	688.6	690.0
27.5°	653.4	656.9	661.8	673.8	675.2
30°	635.1	637.2	644.9	656.2	659.0
32.5°	613.2	617.5	625.9	638.6	642.1
35°	590.0	595.6	605.5	621.0	624.5
37.5°	566.8	571.7	585.1	601.3	607.6
40°	540.7	549.2	563.2	581.5	588.6
42.5°	515.4	523.8	542.8	561.8	568.2
45°	488.6	497.8	518.2	541.4	549.2
47.5°	459.0	469.6	495.7	520.3	528.7
50°	428.8	442.1	471.0	498.5	508.3
52.5°	397.1	414.0	447.1	475.9	485.1
55°	366.1	384.4	422.4	452.0	463.3
57.5°	334.4	354.1	397.1	430.9	437.2
60°	299.9	323.9	371.0	400.6	409.1
62.5°	266.1	293.6	344.3	372.4	379.5
65°	233.7	263.3	316.8	342.9	347.8
67.5°	198.5	233.7	286.5	310.5	311.9
70°	164.7	205.6	257.0	268.2	259.1
72.5°	131.7	175.3	222.5	213.3	205.6
75°	102.8	147.1	180.9	162.6	158.4
77.5°	76.0	120.4	129.5	119.7	111.9
80°	54.2	95.0	87.3	74.6	71.1
82.5°	37.3	59.8	47.9	37.3	32.4
85°	21.1	26.8	16.9	10.6	8.4
87.5°	9.2	6.3	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)