

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: P307201

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP250-W2A-U-5000K**

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: P307201
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: 14FCZ2-39-UNV-L82765-HRP-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 5000K 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: 2695.0 lumens
Efficiency: N/A
Efficacy: 79.0 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

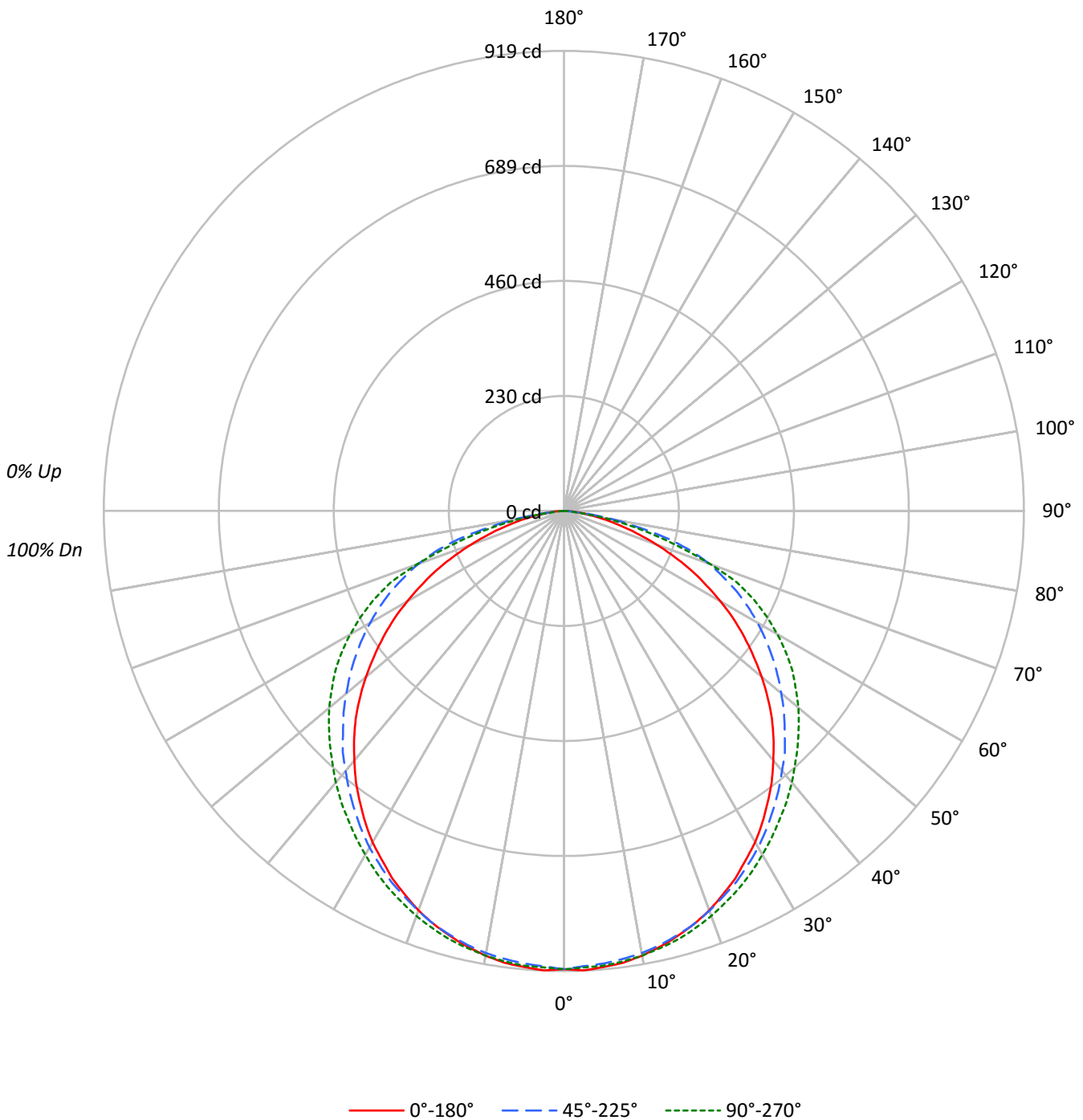
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2463	2463	2463
5°	2470	2452	2463
10°	2464	2450	2464
15°	2448	2444	2467
20°	2432	2434	2466
25°	2406	2426	2466
30°	2375	2412	2465
35°	2333	2394	2469
40°	2286	2382	2489
45°	2238	2374	2516
50°	2161	2373	2562
55°	2068	2386	2616
60°	1943	2404	2650
65°	1792	2428	2665
70°	1560	2434	2454
75°	1286	2264	1983
80°	1012	1629	1327
85°	784	627	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	3.2
10°-20°	248.6	9.2
20°-30°	377.6	14.0
30°-40°	457.5	17.0
40°-50°	482.1	17.9
50°-60°	450.1	16.7
60°-70°	359.7	13.3
70°-80°	197.9	7.3
80°-90°	34.9	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°	712.8	26.5
0°-40°	1170.3	43.4
0°-60°	2102.5	78.0
0°-90°	2695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2695.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	915	915	915	915	915	
5°	914	912	908	914	912	87
15°	879	879	877	886	886	248
25°	810	812	817	829	830	373
35°	710	717	729	747	752	444
45°	588	599	624	652	661	452
55°	441	463	508	544	558	393
65°	281	317	381	413	419	277
75°	124	177	218	196	191	133
85°	25	32	20	13	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	915.2	915.2	915.2	915.2	915.2
2.5°	918.6	916.1	910.2	915.2	912.7
5°	914.4	911.8	907.6	913.5	911.8
7.5°	910.2	906.8	902.5	909.3	907.6
10°	901.7	899.1	896.6	902.5	901.7
12.5°	891.5	890.7	888.1	894.9	894.0
15°	878.8	878.8	877.1	885.6	885.6
17.5°	865.2	864.4	865.2	874.6	873.7
20°	849.1	849.1	850.0	861.0	861.0
22.5°	829.6	830.5	833.0	846.6	845.7
25°	810.2	811.8	816.9	828.8	830.5
27.5°	786.4	790.7	796.6	811.0	812.7
30°	764.4	766.9	776.3	789.8	793.2
32.5°	738.1	743.2	753.4	768.6	772.9
35°	710.2	716.9	728.8	747.4	751.7
37.5°	682.2	688.1	704.2	723.7	731.3
40°	650.8	661.0	678.0	700.0	708.5
42.5°	620.3	630.5	653.4	676.3	683.9
45°	588.1	599.1	623.7	651.7	661.0
47.5°	552.5	565.2	596.6	626.3	636.4
50°	516.1	532.2	566.9	600.0	611.9
52.5°	478.0	498.3	538.1	572.9	583.9
55°	440.7	462.7	508.5	544.1	557.6
57.5°	402.5	426.3	478.0	518.6	526.3
60°	361.0	389.8	446.6	482.2	492.4
62.5°	320.3	353.4	414.4	448.3	456.8
65°	281.4	316.9	381.3	412.7	418.6
67.5°	239.0	281.4	344.9	373.7	375.4
70°	198.3	247.5	309.3	322.9	311.9
72.5°	158.5	211.0	267.8	256.8	247.5
75°	123.7	177.1	217.8	195.8	190.7
77.5°	91.5	144.9	155.9	144.1	134.7
80°	65.3	114.4	105.1	89.8	85.6
82.5°	44.9	72.0	57.6	44.9	39.0
85°	25.4	32.2	20.3	12.7	10.2
87.5°	11.0	7.6	4.2	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)