

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: P307496

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP125-W2A-U-4000K**

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: P307496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 4000K 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: 2601.0 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

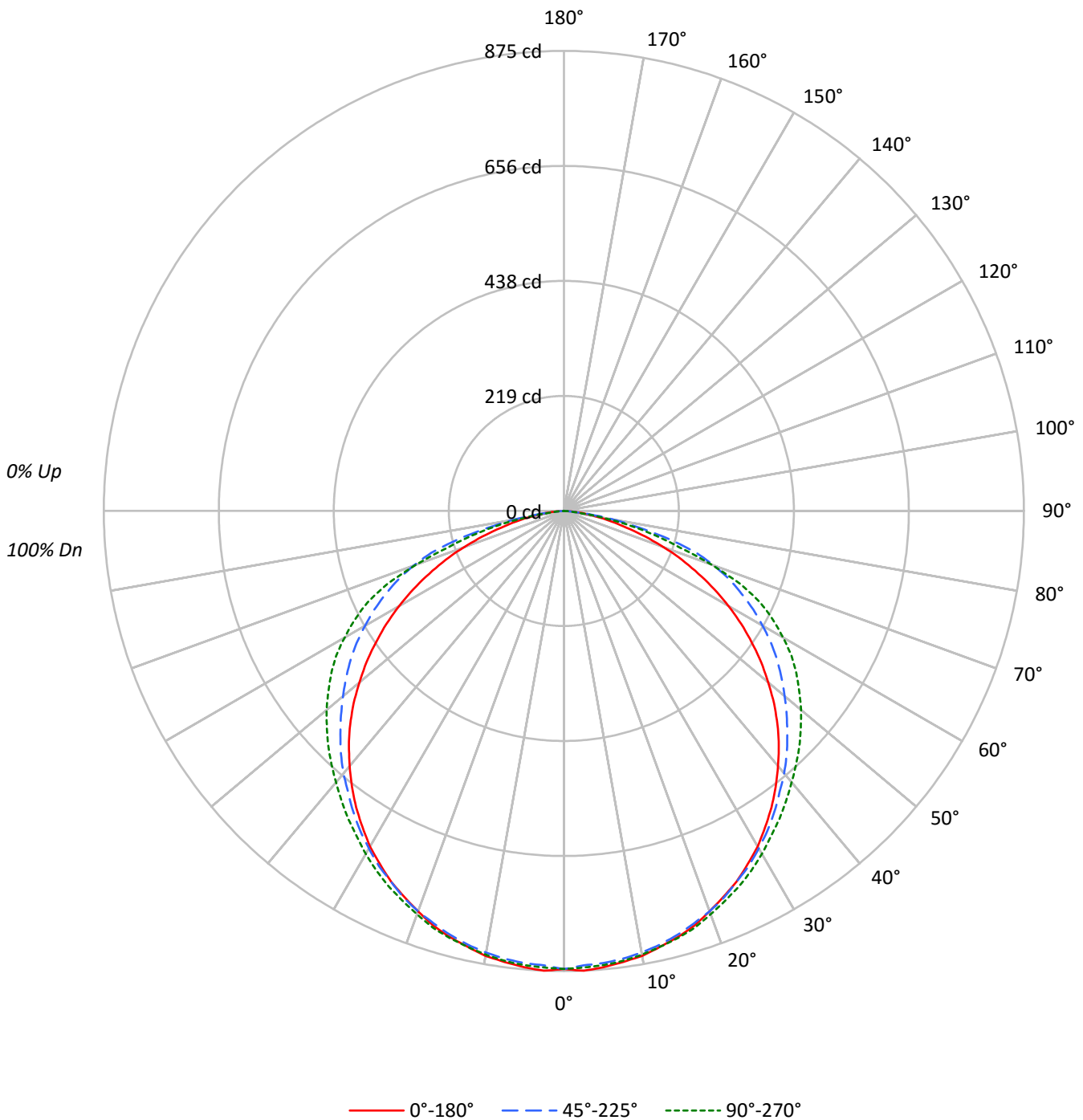
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2344	2344	2344
5°	2353	2331	2342
10°	2347	2331	2341
15°	2337	2325	2342
20°	2320	2320	2338
25°	2309	2309	2339
30°	2290	2303	2341
35°	2261	2295	2348
40°	2226	2290	2368
45°	2187	2288	2411
50°	2125	2295	2465
55°	2048	2325	2534
60°	1946	2350	2590
65°	1798	2379	2625
70°	1598	2397	2349
75°	1288	2153	1879
80°	1007	1511	1227
85°	689	438	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.5	3.2
10°-20°	236.6	9.1
20°-30°	360.2	13.8
30°-40°	438.7	16.9
40°-50°	465.5	17.9
50°-60°	439.3	16.9
60°-70°	354.7	13.6
70°-80°	192.4	7.4
80°-90°	31.1	1.2
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°	679.2	26.1
0°-40°	1118.0	43.0
0°-60°	2022.8	77.8
0°-90°	2601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2601.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	871	869	863	869	867	83
15°	839	837	835	841	841	237
25°	778	776	778	786	788	358
35°	688	692	698	713	715	430
45°	575	583	601	623	634	443
55°	437	455	496	528	540	390
65°	282	317	374	404	412	280
75°	124	181	207	187	181	135
85°	22	24	14	12	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.1	871.1	871.1	871.1	871.1
2.5°	875.2	871.1	865.0	871.1	869.1
5°	871.1	869.1	863.0	869.1	867.1
7.5°	865.0	865.0	859.0	863.0	863.0
10°	859.0	856.9	852.9	859.0	856.9
12.5°	848.8	846.8	844.7	850.8	848.8
15°	838.7	836.6	834.6	840.7	840.7
17.5°	826.5	824.4	822.4	830.5	830.5
20°	810.2	810.2	810.2	818.3	816.3
22.5°	794.0	794.0	796.0	804.1	802.1
25°	777.7	775.7	777.7	785.9	787.9
27.5°	757.4	759.5	761.5	769.6	771.6
30°	737.1	739.2	741.2	751.3	753.4
32.5°	712.8	716.8	720.9	733.1	733.1
35°	688.4	692.4	698.5	712.8	714.8
37.5°	662.0	666.0	674.2	690.4	694.5
40°	633.6	639.6	651.8	668.1	674.2
42.5°	605.1	613.3	627.5	645.7	653.9
45°	574.7	582.8	601.1	623.4	633.6
47.5°	542.2	552.3	574.7	603.1	611.2
50°	507.7	521.9	548.3	578.7	588.9
52.5°	473.1	489.4	521.9	554.4	564.5
55°	436.6	454.9	495.5	528.0	540.1
57.5°	400.0	420.3	467.0	501.6	513.8
60°	361.5	385.8	436.6	471.1	481.3
62.5°	322.9	351.3	406.1	440.6	448.8
65°	282.3	316.8	373.6	404.1	412.2
67.5°	243.7	284.3	341.1	363.5	363.5
70°	203.1	247.7	304.6	310.7	298.5
72.5°	162.5	213.2	264.0	241.6	231.5
75°	123.9	180.7	207.1	186.8	180.7
77.5°	93.4	146.2	146.2	134.0	130.0
80°	65.0	111.7	97.5	85.3	79.2
82.5°	42.6	62.9	50.8	40.6	34.5
85°	22.3	24.4	14.2	12.2	10.2
87.5°	8.1	4.1	2.0	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)