

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: P312128

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CP125-W2A-U-4500K**

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: P312128
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-L83050-RDP-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 2762.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

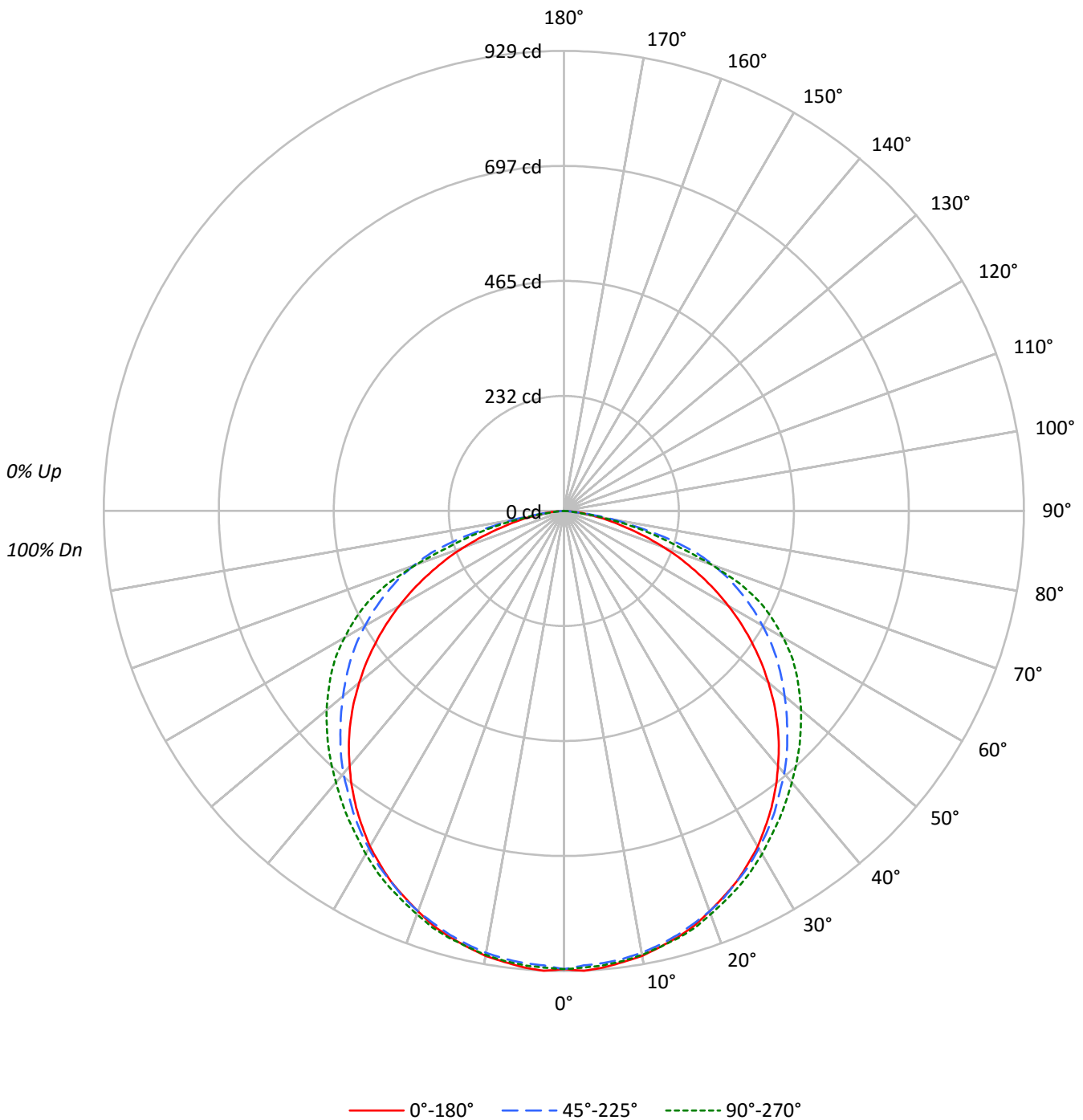
Input Watts (W): 40.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2489	2489	2489
5°	2499	2475	2487
10°	2492	2475	2487
15°	2481	2469	2487
20°	2464	2464	2482
25°	2452	2452	2484
30°	2432	2446	2486
35°	2401	2437	2493
40°	2363	2432	2515
45°	2322	2429	2560
50°	2257	2437	2618
55°	2175	2468	2691
60°	2066	2495	2750
65°	1908	2527	2787
70°	1696	2544	2494
75°	1367	2286	1995
80°	1069	1604	1303
85°	732	466	333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	3.2
10°-20°	251.2	9.1
20°-30°	382.5	13.8
30°-40°	465.9	16.9
40°-50°	494.3	17.9
50°-60°	466.5	16.9
60°-70°	376.7	13.6
70°-80°	204.3	7.4
80°-90°	33.1	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°	721.3	26.1
0°-40°	1187.2	43.0
0°-60°	2148.0	77.8
0°-90°	2762.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	925	923	916	923	921	88
15°	891	888	886	893	893	251
25°	826	824	826	834	837	380
35°	731	735	742	757	759	457
45°	610	619	638	662	673	470
55°	464	483	526	561	574	414
65°	300	336	397	429	438	297
75°	132	192	220	198	192	144
85°	24	26	15	13	11	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	925.1	925.1	925.1	925.1	925.1
2.5°	929.4	925.1	918.6	925.1	922.9
5°	925.1	922.9	916.4	922.9	920.8
7.5°	918.6	918.6	912.1	916.4	916.4
10°	912.1	910.0	905.7	912.1	910.0
12.5°	901.3	899.2	897.0	903.5	901.3
15°	890.6	888.4	886.3	892.7	892.7
17.5°	877.6	875.5	873.3	881.9	881.9
20°	860.4	860.4	860.4	869.0	866.8
22.5°	843.1	843.1	845.3	853.9	851.7
25°	825.9	823.7	825.9	834.5	836.7
27.5°	804.3	806.5	808.6	817.2	819.4
30°	782.7	784.9	787.1	797.8	800.0
32.5°	756.9	761.2	765.5	778.4	778.4
35°	731.0	735.3	741.8	756.9	759.0
37.5°	703.0	707.3	715.9	733.2	737.5
40°	672.8	679.2	692.2	709.4	715.9
42.5°	642.6	651.2	666.3	685.7	694.3
45°	610.2	618.9	638.3	662.0	672.8
47.5°	575.7	586.5	610.2	640.4	649.1
50°	539.1	554.2	582.2	614.6	625.3
52.5°	502.4	519.7	554.2	588.7	599.5
55°	463.6	483.0	526.1	560.6	573.6
57.5°	424.8	446.4	496.0	532.6	545.6
60°	383.8	409.7	463.6	500.3	511.0
62.5°	342.9	373.0	431.3	467.9	476.5
65°	299.7	336.4	396.8	429.1	437.7
67.5°	258.8	301.9	362.3	386.0	386.0
70°	215.6	263.1	323.4	329.9	317.0
72.5°	172.5	226.4	280.3	256.6	245.8
75°	131.5	191.9	219.9	198.4	191.9
77.5°	99.2	155.3	155.3	142.3	138.0
80°	69.0	118.6	103.5	90.6	84.1
82.5°	45.3	66.8	53.9	43.1	36.7
85°	23.7	25.9	15.1	12.9	10.8
87.5°	8.6	4.3	2.2	4.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)