

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: P307628

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP125-W2A-U-2700K**

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: P307628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 2512.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

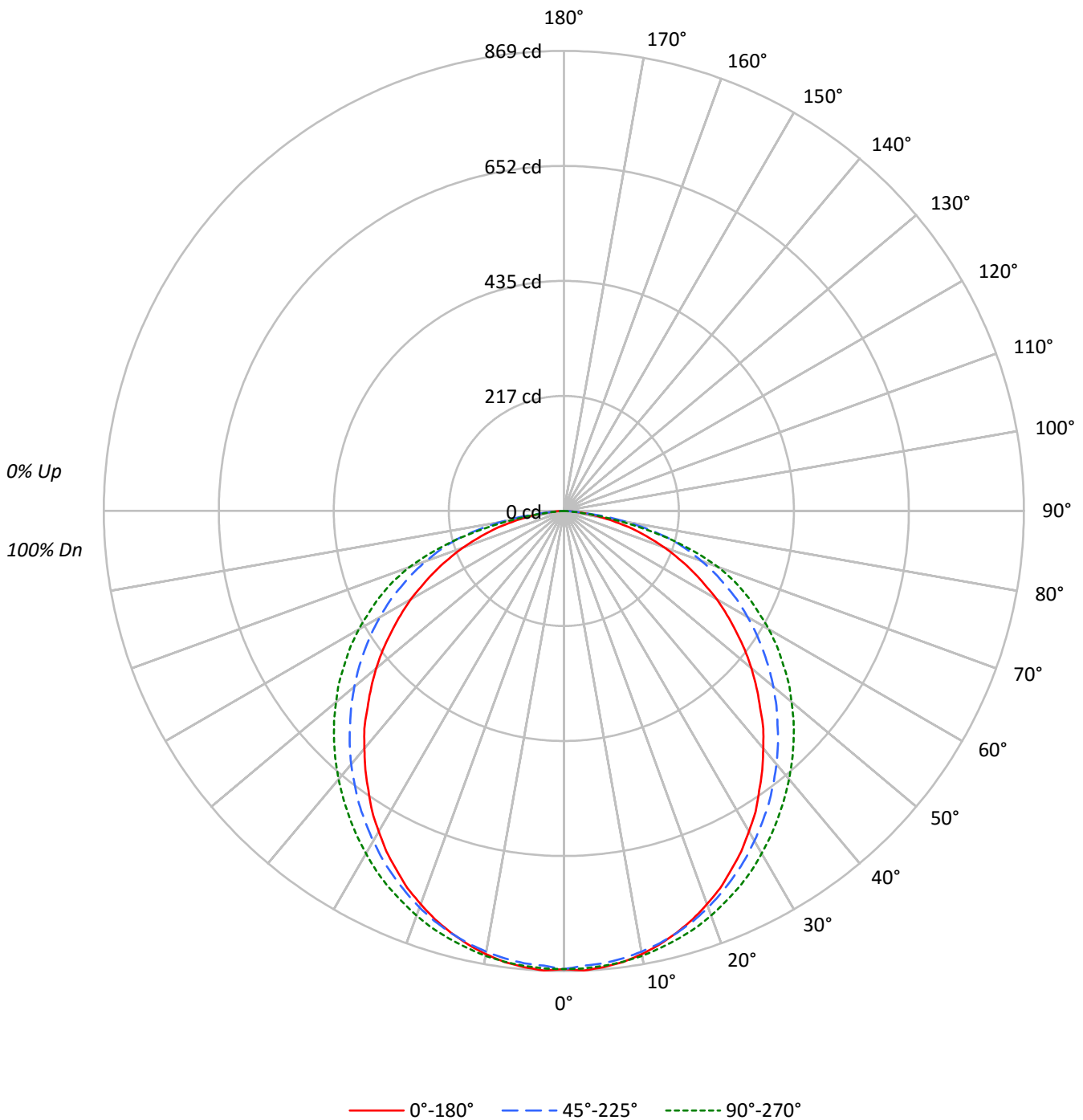
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2329	2329	2329
5°	2336	2317	2330
10°	2322	2310	2331
15°	2297	2299	2330
20°	2263	2283	2329
25°	2220	2260	2327
30°	2172	2237	2322
35°	2114	2217	2320
40°	2058	2196	2324
45°	1995	2172	2336
50°	1937	2162	2352
55°	1863	2155	2373
60°	1796	2158	2406
65°	1705	2165	2443
70°	1600	2182	2441
75°	1450	2201	2207
80°	1189	1901	1571
85°	883	898	364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	3.3
10°-20°	233.9	9.3
20°-30°	352.4	14.0
30°-40°	422.9	16.8
40°-50°	440.8	17.5
50°-60°	408.0	16.2
60°-70°	329.7	13.1
70°-80°	201.0	8.0
80°-90°	41.5	1.7
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°	668.2	26.6
0°-40°	1091.1	43.4
0°-60°	1939.8	77.2
0°-90°	2512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2512.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	865	865	865	865	865	
5°	865	863	858	864	863	82
15°	824	825	825	836	836	232
25°	748	752	761	780	784	345
35°	644	654	675	700	706	403
45°	524	540	571	603	614	405
55°	397	418	459	495	506	356
65°	268	294	340	374	384	265
75°	140	170	212	215	212	146
85°	29	43	29	16	12	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	865.4	865.4	865.4	865.4	865.4
2.5°	868.8	866.0	859.8	866.0	864.8
5°	864.8	862.6	857.6	863.7	862.6
7.5°	859.2	857.0	852.5	859.8	858.7
10°	849.7	848.6	845.2	853.6	853.1
12.5°	838.5	837.9	836.3	845.8	845.2
15°	824.5	825.1	825.1	836.3	836.3
17.5°	808.8	809.9	812.2	824.5	826.2
20°	790.3	792.6	797.1	811.1	813.3
22.5°	771.3	773.0	779.7	796.5	798.7
25°	747.8	752.2	761.2	780.3	783.6
27.5°	725.4	729.3	741.6	761.2	766.8
30°	699.0	705.2	719.8	741.0	747.2
32.5°	673.8	680.6	697.4	722.0	727.6
35°	643.6	653.7	674.9	699.6	706.3
37.5°	616.1	625.7	649.7	676.6	684.5
40°	585.9	597.7	625.1	653.7	661.5
42.5°	557.9	569.1	598.8	627.9	638.5
45°	524.3	540.0	570.8	602.7	613.9
47.5°	493.5	509.2	544.4	578.6	588.7
50°	462.7	479.5	516.4	551.7	561.8
52.5°	430.7	448.7	488.4	523.7	535.5
55°	397.1	417.9	459.3	495.1	505.8
57.5°	365.2	386.5	430.7	467.1	477.8
60°	333.8	355.7	401.0	435.8	447.0
62.5°	299.1	324.9	371.9	406.1	414.5
65°	267.7	294.1	340.0	374.2	383.7
67.5°	234.7	263.3	309.2	340.6	349.5
70°	203.3	233.0	277.3	306.4	310.3
72.5°	169.7	200.0	244.8	263.3	263.3
75°	139.5	170.3	211.7	215.1	212.3
77.5°	106.4	140.6	167.5	160.8	154.0
80°	76.7	110.3	122.7	110.3	101.4
82.5°	51.5	80.1	73.9	58.8	52.1
85°	28.6	42.6	29.1	16.2	11.8
87.5°	10.6	9.5	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)