

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: P307515

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-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: P307515
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-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 2514.0 lumens
Efficiency: N/A
Efficacy: 64.5 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

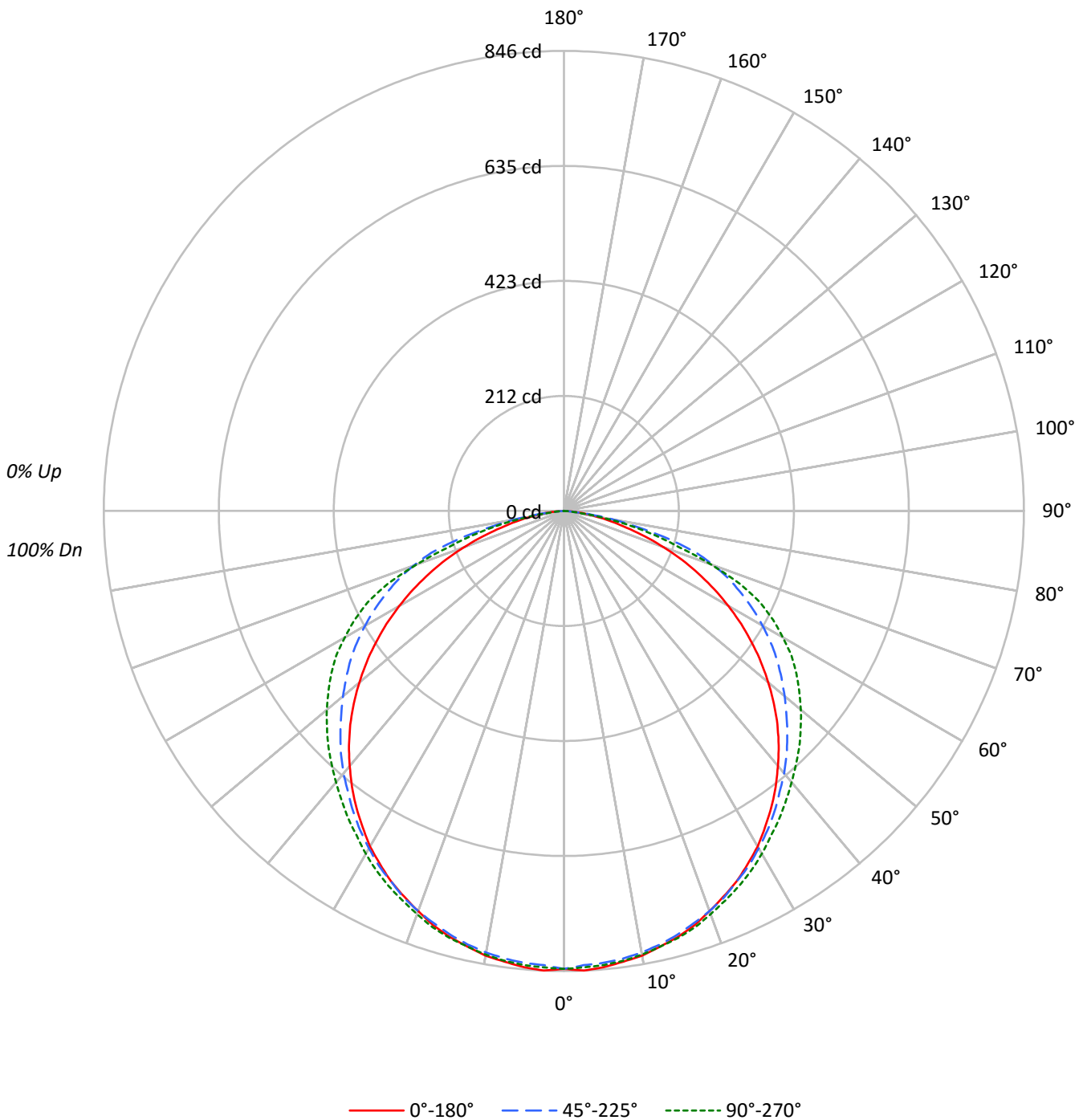
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2266	2266	2266
5°	2274	2253	2264
10°	2269	2252	2263
15°	2258	2247	2264
20°	2243	2243	2259
25°	2232	2232	2261
30°	2214	2226	2263
35°	2186	2218	2270
40°	2151	2213	2289
45°	2114	2211	2331
50°	2054	2218	2383
55°	1980	2247	2449
60°	1880	2271	2504
65°	1737	2299	2537
70°	1544	2316	2270
75°	1245	2082	1816
80°	973	1460	1185
85°	667	423	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	3.2
10°-20°	228.7	9.1
20°-30°	348.2	13.8
30°-40°	424.1	16.9
40°-50°	449.9	17.9
50°-60°	424.6	16.9
60°-70°	342.8	13.6
70°-80°	186.0	7.4
80°-90°	30.1	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°	656.5	26.1
0°-40°	1080.6	43.0
0°-60°	1955.1	77.8
0°-90°	2514.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2514.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	842	840	834	840	838	80
15°	811	809	807	813	813	229
25°	752	750	752	760	762	346
35°	665	669	675	689	691	416
45°	555	563	581	603	612	428
55°	422	440	479	510	522	377
65°	273	306	361	391	398	270
75°	120	175	200	181	175	131
85°	22	24	14	12	10	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	842.0	842.0	842.0	842.0	842.0
2.5°	845.9	842.0	836.1	842.0	840.0
5°	842.0	840.0	834.2	840.0	838.1
7.5°	836.1	836.1	830.2	834.2	834.2
10°	830.2	828.3	824.3	830.2	828.3
12.5°	820.4	818.5	816.5	822.4	820.4
15°	810.6	808.6	806.7	812.6	812.6
17.5°	798.8	796.9	794.9	802.7	802.7
20°	783.1	783.1	783.1	791.0	789.0
22.5°	767.4	767.4	769.4	777.2	775.3
25°	751.7	749.8	751.7	759.6	761.5
27.5°	732.1	734.1	736.0	743.9	745.8
30°	712.5	714.4	716.4	726.2	728.2
32.5°	688.9	692.8	696.8	708.5	708.5
35°	665.4	669.3	675.2	688.9	690.9
37.5°	639.8	643.8	651.6	667.3	671.2
40°	612.4	618.3	630.0	645.7	651.6
42.5°	584.9	592.7	606.5	624.1	632.0
45°	555.4	563.3	581.0	602.6	612.4
47.5°	524.0	533.9	555.4	582.9	590.8
50°	490.7	504.4	529.9	559.4	569.2
52.5°	457.3	473.0	504.4	535.8	545.6
55°	422.0	439.6	478.9	510.3	522.1
57.5°	386.7	406.3	451.4	484.8	496.6
60°	349.4	372.9	422.0	455.3	465.2
62.5°	312.1	339.5	392.5	425.9	433.8
65°	272.8	306.2	361.1	390.6	398.4
67.5°	235.5	274.8	329.7	351.3	351.3
70°	196.3	239.5	294.4	300.3	288.5
72.5°	157.0	206.1	255.2	233.6	223.7
75°	119.7	174.7	200.2	180.6	174.7
77.5°	90.3	141.3	141.3	129.5	125.6
80°	62.8	107.9	94.2	82.4	76.5
82.5°	41.2	60.8	49.1	39.3	33.4
85°	21.6	23.6	13.7	11.8	9.8
87.5°	7.9	3.9	2.0	3.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)