

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: P307841

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-W2A-U-5500K**

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: P307841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 2463.0 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

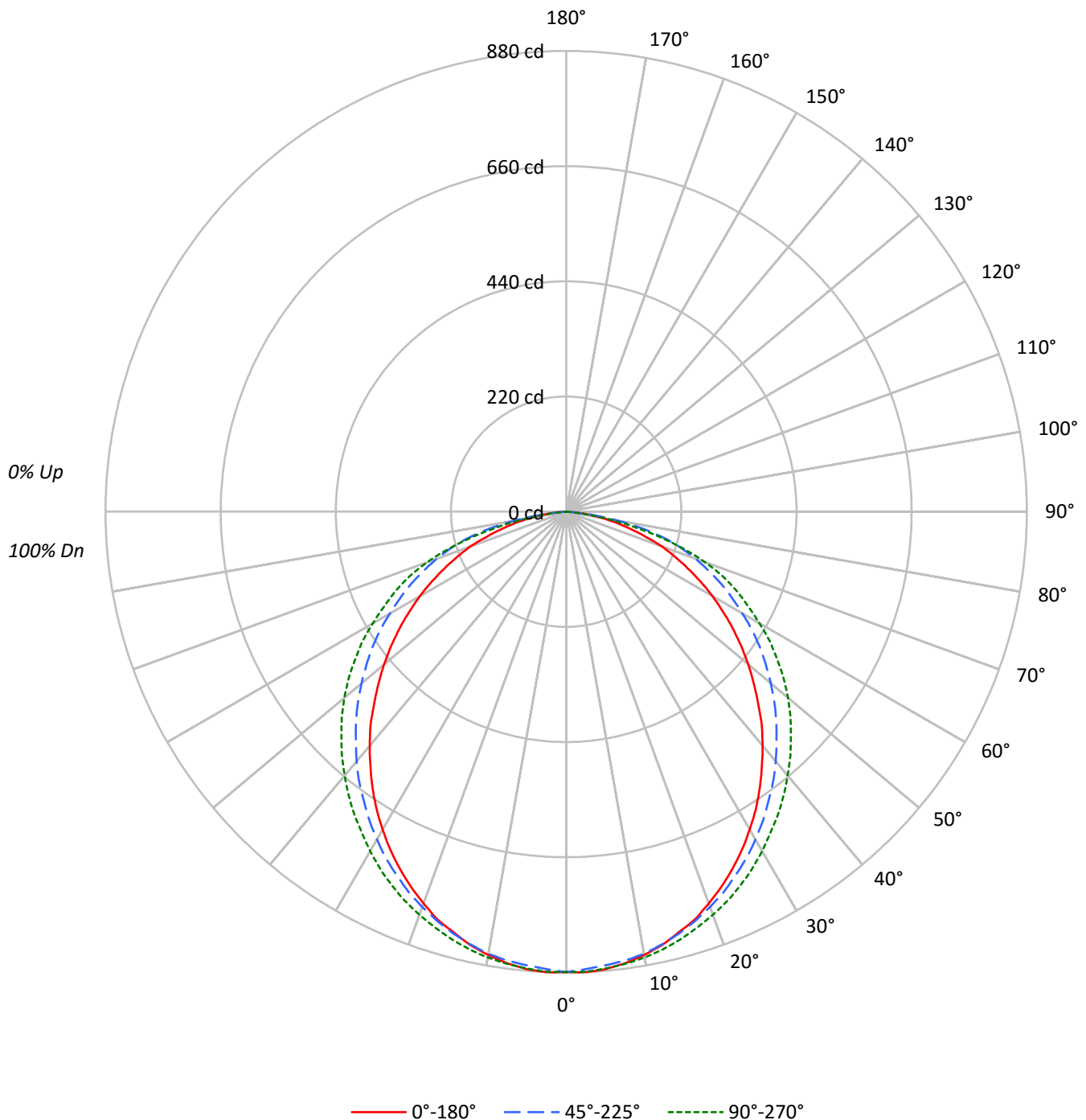
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	94	91	89	90	88	86	84		
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27		
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2366	2366	2366
5°	2368	2349	2365
10°	2349	2343	2363
15°	2317	2324	2354
20°	2280	2301	2346
25°	2233	2273	2339
30°	2178	2246	2326
35°	2118	2214	2319
40°	2050	2188	2312
45°	1975	2161	2310
50°	1902	2137	2316
55°	1822	2120	2309
60°	1735	2090	2294
65°	1633	2084	2294
70°	1537	2066	2229
75°	1333	2019	1905
80°	1079	1627	1268
85°	716	565	377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	3.4
10°-20°	236.3	9.6
20°-30°	354.4	14.4
30°-40°	422.8	17.2
40°-50°	437.0	17.7
50°-60°	399.0	16.2
60°-70°	314.0	12.7
70°-80°	182.8	7.4
80°-90°	33.7	1.4
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°	673.7	27.4
0°-40°	1096.4	44.5
0°-60°	1932.5	78.5
0°-90°	2463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2463.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	877	874	870	877	876	83
15°	832	833	834	845	845	235
25°	752	756	766	784	788	346
35°	645	653	674	700	706	403
45°	519	536	568	600	607	401
55°	388	409	452	485	492	347
65°	256	283	327	353	360	255
75°	128	159	194	190	183	136
85°	23	33	18	15	12	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	879.3	879.3	879.3	879.3	879.3
2.5°	880.5	878.0	874.4	880.5	879.3
5°	876.8	874.4	869.5	876.8	875.6
7.5°	869.5	867.0	864.6	871.9	870.7
10°	859.7	858.5	857.3	865.8	864.6
12.5°	847.5	847.5	846.3	856.0	856.0
15°	831.6	832.8	834.1	845.1	845.1
17.5°	817.0	815.7	819.4	831.6	832.8
20°	796.2	798.7	803.5	818.2	819.4
22.5°	775.4	777.9	786.4	801.1	804.8
25°	752.2	755.9	765.7	784.0	787.7
27.5°	727.8	732.7	746.1	765.7	769.3
30°	701.0	708.3	722.9	744.9	748.6
32.5°	674.1	681.4	699.7	721.7	726.6
35°	644.8	653.3	674.1	699.7	705.8
37.5°	614.3	625.2	649.7	675.3	682.6
40°	583.7	595.9	622.8	649.7	658.2
42.5°	553.2	565.4	594.7	625.2	633.8
45°	519.0	536.1	567.8	599.6	606.9
47.5°	486.0	504.3	539.8	571.5	581.3
50°	454.3	472.6	510.5	543.4	553.2
52.5°	421.3	440.8	481.1	515.3	523.9
55°	388.3	409.1	451.8	484.8	492.1
57.5°	355.4	377.3	421.3	453.1	461.6
60°	322.4	345.6	388.3	420.1	426.2
62.5°	289.4	313.8	357.8	385.9	392.0
65°	256.4	283.3	327.3	352.9	360.2
67.5°	224.7	251.6	294.3	318.7	324.8
70°	195.4	219.8	262.6	280.9	283.3
72.5°	158.8	189.3	230.8	240.6	234.5
75°	128.2	158.8	194.2	190.5	183.2
77.5°	97.7	128.2	151.4	139.2	129.4
80°	69.6	100.1	105.0	86.7	81.8
82.5°	45.2	69.6	58.6	45.2	36.6
85°	23.2	33.0	18.3	14.7	12.2
87.5°	7.3	4.9	2.4	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)