

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: P307837

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3500K**

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: P307837
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-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3500K 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: 2314.0 lumens
Efficiency: N/A
Efficacy: 117.5 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

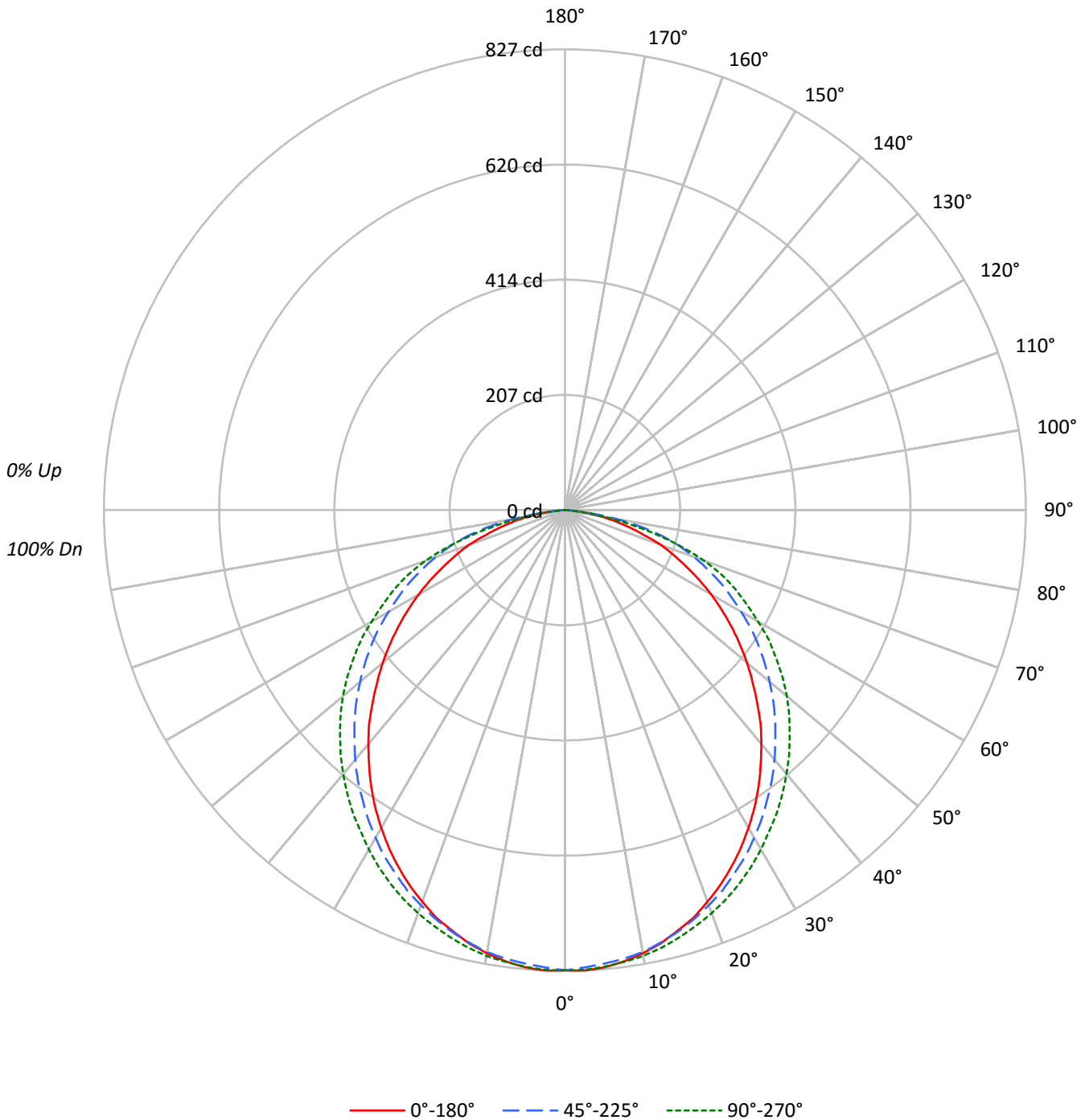
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2223	2223	2223
5°	2225	2207	2222
10°	2207	2201	2220
15°	2177	2183	2212
20°	2142	2162	2204
25°	2098	2136	2197
30°	2046	2110	2185
35°	1990	2080	2178
40°	1926	2055	2172
45°	1856	2030	2170
50°	1787	2008	2176
55°	1711	1992	2169
60°	1630	1963	2155
65°	1534	1958	2155
70°	1445	1941	2094
75°	1253	1896	1789
80°	1013	1530	1192
85°	673	531	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	3.4
10°-20°	222.0	9.6
20°-30°	333.0	14.4
30°-40°	397.2	17.2
40°-50°	410.6	17.7
50°-60°	374.9	16.2
60°-70°	295.0	12.7
70°-80°	171.7	7.4
80°-90°	31.7	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°	632.9	27.4
0°-40°	1030.1	44.5
0°-60°	1815.6	78.5
0°-90°	2314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2314.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	824	822	817	824	823	78
15°	781	782	784	794	794	220
25°	707	710	719	737	740	325
35°	606	614	633	657	663	379
45°	488	504	534	563	570	377
55°	365	384	424	456	462	326
65°	241	266	308	332	338	239
75°	120	149	182	179	172	128
85°	22	31	17	14	12	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	826.1	826.1	826.1	826.1	826.1
2.5°	827.2	824.9	821.5	827.2	826.1
5°	823.8	821.5	816.9	823.8	822.6
7.5°	816.9	814.6	812.3	819.2	818.0
10°	807.7	806.6	805.4	813.4	812.3
12.5°	796.2	796.2	795.1	804.3	804.3
15°	781.3	782.5	783.6	793.9	793.9
17.5°	767.5	766.4	769.8	781.3	782.5
20°	748.0	750.3	754.9	768.7	769.8
22.5°	728.5	730.8	738.9	752.6	756.1
25°	706.7	710.2	719.4	736.6	740.0
27.5°	683.8	688.4	701.0	719.4	722.8
30°	658.6	665.4	679.2	699.9	703.3
32.5°	633.3	640.2	657.4	678.1	682.6
35°	605.8	613.8	633.3	657.4	663.1
37.5°	577.1	587.4	610.4	634.5	641.3
40°	548.4	559.9	585.1	610.4	618.4
42.5°	519.7	531.2	558.7	587.4	595.5
45°	487.6	503.7	533.5	563.3	570.2
47.5°	456.6	473.8	507.1	536.9	546.1
50°	426.8	444.0	479.6	510.6	519.7
52.5°	395.8	414.2	452.0	484.2	492.2
55°	364.8	384.3	424.5	455.5	462.4
57.5°	333.9	354.5	395.8	425.7	433.7
60°	302.9	324.7	364.8	394.7	400.4
62.5°	271.9	294.9	336.2	362.5	368.3
65°	240.9	266.2	307.5	331.6	338.5
67.5°	211.1	236.3	276.5	299.4	305.2
70°	183.6	206.5	246.7	263.9	266.2
72.5°	149.1	177.8	216.8	226.0	220.3
75°	120.5	149.1	182.4	179.0	172.1
77.5°	91.8	120.5	142.3	130.8	121.6
80°	65.4	94.1	98.7	81.5	76.9
82.5°	42.5	65.4	55.1	42.5	34.4
85°	21.8	31.0	17.2	13.8	11.5
87.5°	6.9	4.6	2.3	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)