

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: P307798

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA08-W2A-U-6500K**

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: P307798
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: 14FCZ2-20-UNV-L82765-S-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K 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

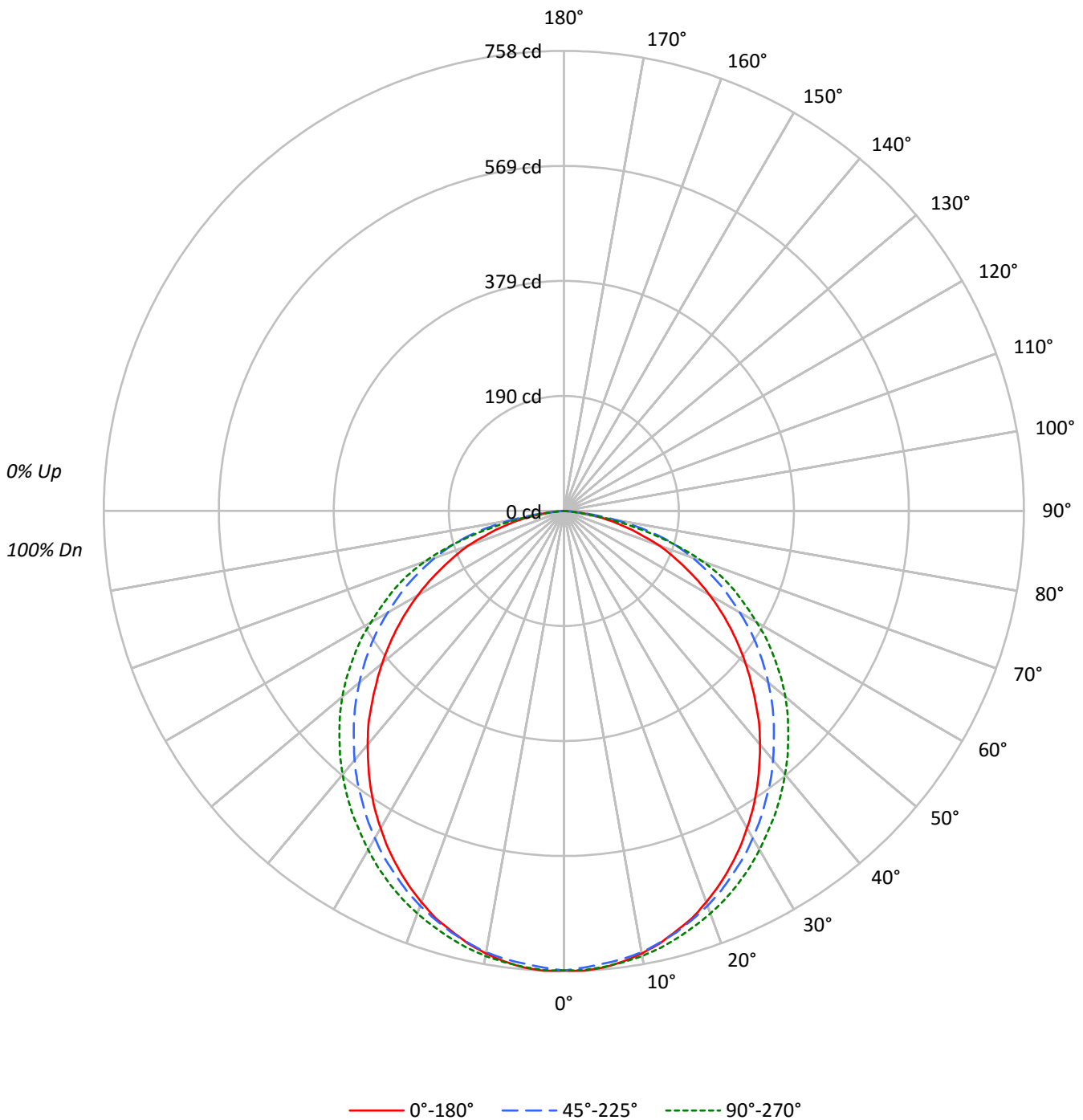
Lumens per Lamp: N/A
Luminaire Lumens: 2121.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.2
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°	2038	2038	2038
5°	2040	2022	2037
10°	2023	2017	2034
15°	1995	2001	2027
20°	1964	1982	2021
25°	1923	1958	2014
30°	1876	1935	2003
35°	1824	1907	1997
40°	1766	1884	1991
45°	1701	1861	1989
50°	1638	1840	1994
55°	1569	1825	1988
60°	1494	1800	1975
65°	1406	1794	1975
70°	1324	1779	1920
75°	1148	1738	1640
80°	928	1401	1093
85°	618	488	324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.5	3.4
10°-20°	203.5	9.6
20°-30°	305.2	14.4
30°-40°	364.1	17.2
40°-50°	376.4	17.7
50°-60°	343.6	16.2
60°-70°	270.4	12.7
70°-80°	157.4	7.4
80°-90°	29.0	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°	580.1	27.4
0°-40°	944.2	44.5
0°-60°	1664.2	78.5
0°-90°	2121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	757	757	757	757	757	
5°	755	753	749	755	754	72
15°	716	717	718	728	728	202
25°	648	651	659	675	678	298
35°	555	563	580	603	608	347
45°	447	462	489	516	523	345
55°	334	352	389	418	424	299
65°	221	244	282	304	310	219
75°	110	137	167	164	158	117
85°	20	28	16	13	10	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.2	757.2	757.2	757.2	757.2
2.5°	758.2	756.1	753.0	758.2	757.2
5°	755.1	753.0	748.7	755.1	754.0
7.5°	748.7	746.6	744.5	750.9	749.8
10°	740.3	739.3	738.2	745.6	744.5
12.5°	729.8	729.8	728.8	737.2	737.2
15°	716.1	717.2	718.3	727.7	727.7
17.5°	703.5	702.5	705.6	716.1	717.2
20°	685.7	687.8	692.0	704.6	705.6
22.5°	667.8	669.9	677.2	689.9	693.0
25°	647.8	650.9	659.4	675.1	678.3
27.5°	626.8	631.0	642.5	659.4	662.5
30°	603.6	609.9	622.6	641.5	644.6
32.5°	580.5	586.8	602.6	621.5	625.7
35°	555.3	562.6	580.5	602.6	607.8
37.5°	529.0	538.4	559.5	581.5	587.9
40°	502.7	513.2	536.3	559.5	566.8
42.5°	476.4	486.9	512.1	538.4	545.8
45°	446.9	461.7	489.0	516.3	522.7
47.5°	418.5	434.3	464.8	492.2	500.6
50°	391.2	407.0	439.6	468.0	476.4
52.5°	362.8	379.6	414.3	443.8	451.1
55°	334.4	352.3	389.1	417.5	423.8
57.5°	306.0	324.9	362.8	390.1	397.5
60°	277.6	297.6	334.4	361.8	367.0
62.5°	249.2	270.3	308.1	332.3	337.6
65°	220.8	244.0	281.8	303.9	310.2
67.5°	193.5	216.6	253.4	274.5	279.7
70°	168.3	189.3	226.1	241.9	244.0
72.5°	136.7	163.0	198.8	207.2	201.9
75°	110.4	136.7	167.2	164.1	157.7
77.5°	84.1	110.4	130.4	119.9	111.5
80°	59.9	86.2	90.4	74.7	70.5
82.5°	38.9	59.9	50.5	38.9	31.5
85°	20.0	28.4	15.8	12.6	10.5
87.5°	6.3	4.2	2.1	2.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)