

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: P307283

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP187-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: P307283
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: 14FCZ2-20-UNV-L82765-RDP-CP187-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB 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: 1254.0 lumens
Efficiency: N/A
Efficacy: 73.8 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

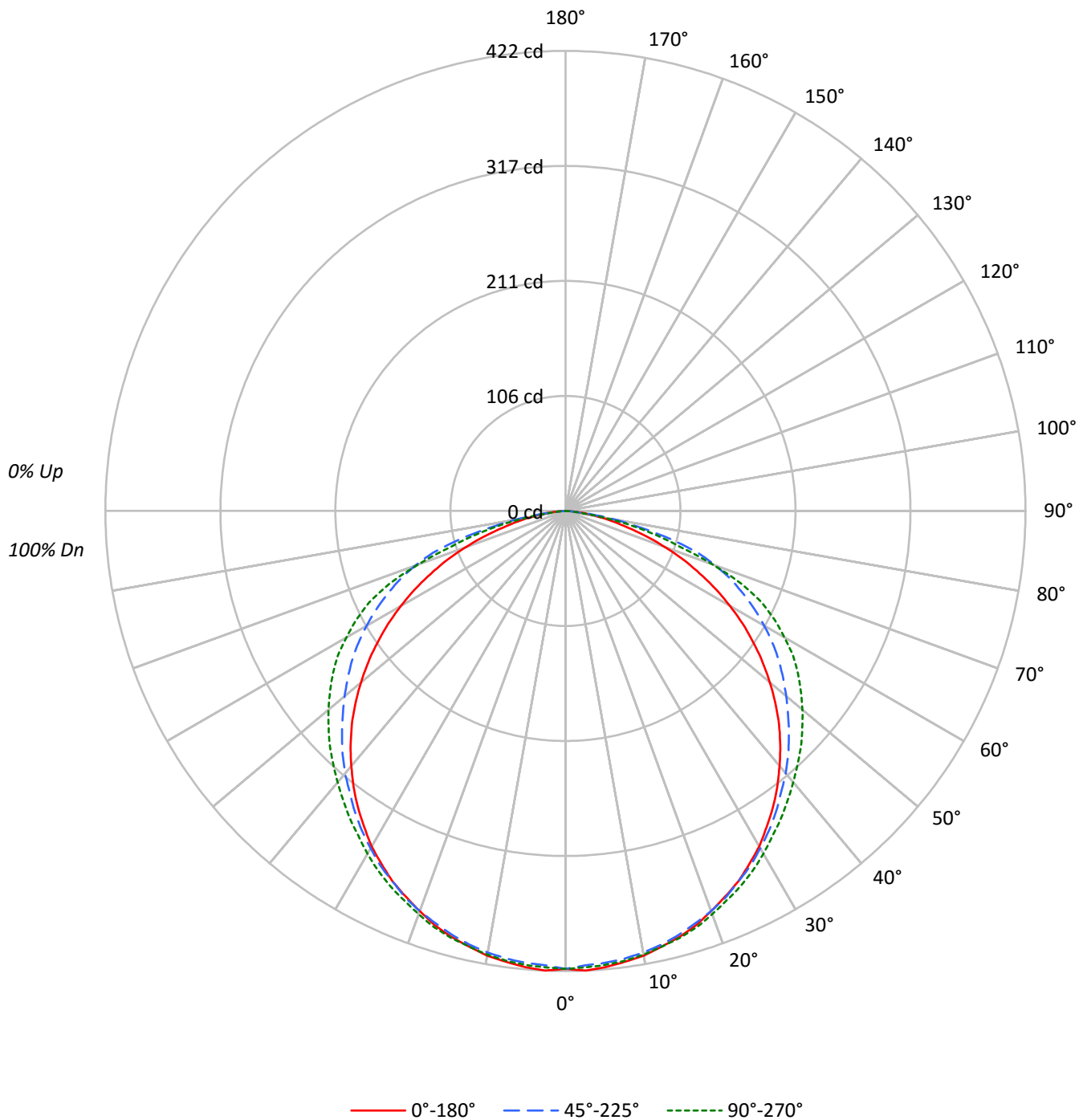
Input Watts (W): 17
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1130	1130	1130
5°	1135	1124	1129
10°	1132	1124	1129
15°	1126	1121	1129
20°	1119	1119	1127
25°	1113	1113	1128
30°	1104	1110	1129
35°	1090	1106	1132
40°	1073	1104	1142
45°	1055	1103	1163
50°	1025	1106	1189
55°	988	1121	1222
60°	938	1133	1249
65°	867	1147	1265
70°	770	1156	1132
75°	621	1039	906
80°	485	728	592
85°	333	213	151



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	3.2
10°-20°	114.1	9.1
20°-30°	173.7	13.8
30°-40°	211.5	16.9
40°-50°	224.4	17.9
50°-60°	211.8	16.9
60°-70°	171.0	13.6
70°-80°	92.8	7.4
80°-90°	15.0	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°	327.5	26.1
0°-40°	539.0	43.0
0°-60°	975.2	77.8
0°-90°	1254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	416	419	418	40
15°	404	403	402	405	405	114
25°	375	374	375	379	380	173
35°	332	334	337	344	345	208
45°	277	281	290	301	306	213
55°	210	219	239	254	260	188
65°	136	153	180	195	199	135
75°	60	87	100	90	87	65
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	420.0	420.0	420.0	420.0	420.0
2.5°	422.0	420.0	417.1	420.0	419.0
5°	420.0	419.0	416.1	419.0	418.0
7.5°	417.1	417.1	414.1	416.1	416.1
10°	414.1	413.1	411.2	414.1	413.1
12.5°	409.2	408.2	407.3	410.2	409.2
15°	404.3	403.4	402.4	405.3	405.3
17.5°	398.5	397.5	396.5	400.4	400.4
20°	390.6	390.6	390.6	394.5	393.6
22.5°	382.8	382.8	383.8	387.7	386.7
25°	375.0	374.0	375.0	378.9	379.9
27.5°	365.2	366.2	367.1	371.0	372.0
30°	355.4	356.4	357.3	362.2	363.2
32.5°	343.6	345.6	347.5	353.4	353.4
35°	331.9	333.8	336.8	343.6	344.6
37.5°	319.2	321.1	325.0	332.9	334.8
40°	305.5	308.4	314.3	322.1	325.0
42.5°	291.7	295.7	302.5	311.3	315.2
45°	277.1	281.0	289.8	300.6	305.5
47.5°	261.4	266.3	277.1	290.8	294.7
50°	244.8	251.6	264.3	279.0	283.9
52.5°	228.1	235.9	251.6	267.3	272.2
55°	210.5	219.3	238.9	254.5	260.4
57.5°	192.9	202.7	225.2	241.8	247.7
60°	174.3	186.0	210.5	227.1	232.0
62.5°	155.7	169.4	195.8	212.4	216.4
65°	136.1	152.7	180.1	194.8	198.7
67.5°	117.5	137.1	164.5	175.2	175.2
70°	97.9	119.4	146.9	149.8	143.9
72.5°	78.3	102.8	127.3	116.5	111.6
75°	59.7	87.1	99.9	90.1	87.1
77.5°	45.0	70.5	70.5	64.6	62.7
80°	31.3	53.8	47.0	41.1	38.2
82.5°	20.6	30.3	24.5	19.6	16.6
85°	10.8	11.7	6.9	5.9	4.9
87.5°	3.9	2.0	1.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)