

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: P307285

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP187-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: P307285
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-6500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB 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: 1261.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

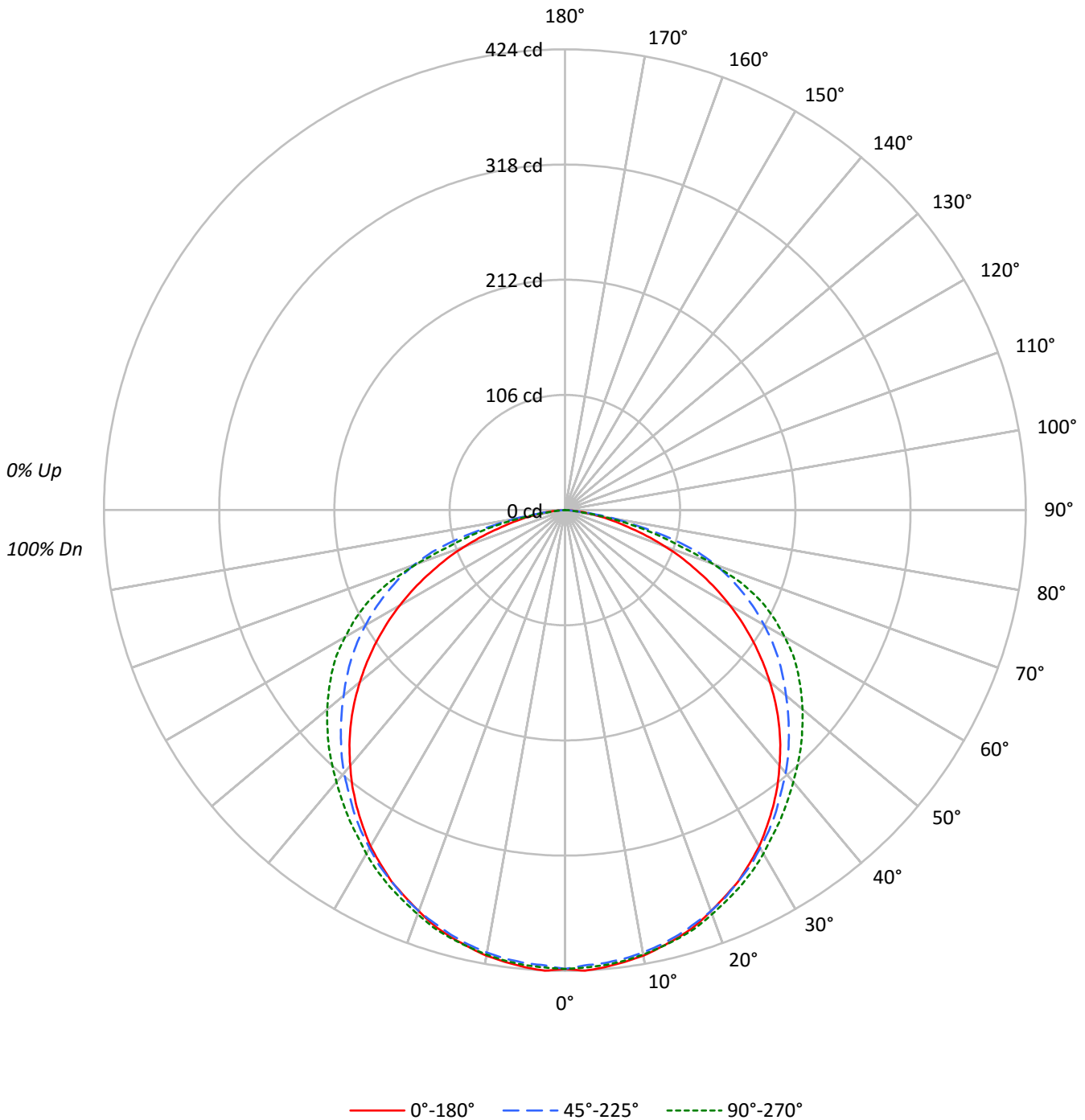
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CP187-W2A-U-6500K

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°	1136	1136	1136
5°	1141	1130	1136
10°	1138	1130	1135
15°	1133	1127	1136
20°	1125	1125	1133
25°	1120	1120	1134
30°	1111	1116	1135
35°	1096	1113	1138
40°	1079	1110	1148
45°	1060	1109	1169
50°	1030	1113	1195
55°	993	1127	1229
60°	943	1139	1256
65°	871	1153	1272
70°	774	1162	1138
75°	625	1044	911
80°	488	733	595
85°	333	213	151



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	3.2
10°-20°	114.7	9.1
20°-30°	174.6	13.8
30°-40°	212.7	16.9
40°-50°	225.7	17.9
50°-60°	213.0	16.9
60°-70°	172.0	13.6
70°-80°	93.3	7.4
80°-90°	15.1	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°	329.3	26.1
0°-40°	542.0	43.0
0°-60°	980.7	77.8
0°-90°	1261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	422	421	418	421	420	40
15°	407	406	405	408	408	115
25°	377	376	377	381	382	174
35°	334	336	339	346	346	209
45°	279	282	291	302	307	215
55°	212	220	240	256	262	189
65°	137	154	181	196	200	136
75°	60	88	100	91	88	66
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°	422.3	422.3	422.3	422.3	422.3
2.5°	424.3	422.3	419.4	422.3	421.4
5°	422.3	421.4	418.4	421.4	420.4
7.5°	419.4	419.4	416.4	418.4	418.4
10°	416.4	415.4	413.5	416.4	415.4
12.5°	411.5	410.5	409.5	412.5	411.5
15°	406.6	405.6	404.6	407.6	407.6
17.5°	400.7	399.7	398.7	402.7	402.7
20°	392.8	392.8	392.8	396.7	395.8
22.5°	384.9	384.9	385.9	389.9	388.9
25°	377.1	376.1	377.1	381.0	382.0
27.5°	367.2	368.2	369.2	373.1	374.1
30°	357.4	358.4	359.3	364.3	365.2
32.5°	345.6	347.5	349.5	355.4	355.4
35°	333.7	335.7	338.7	345.6	346.5
37.5°	320.9	322.9	326.8	334.7	336.7
40°	307.2	310.1	316.0	323.9	326.8
42.5°	293.4	297.3	304.2	313.1	317.0
45°	278.6	282.5	291.4	302.2	307.2
47.5°	262.9	267.8	278.6	292.4	296.3
50°	246.1	253.0	265.8	280.6	285.5
52.5°	229.4	237.3	253.0	268.8	273.7
55°	211.7	220.5	240.2	256.0	261.9
57.5°	193.9	203.8	226.4	243.2	249.1
60°	175.2	187.1	211.7	228.4	233.3
62.5°	156.5	170.3	196.9	213.6	217.6
65°	136.8	153.6	181.1	195.9	199.8
67.5°	118.1	137.8	165.4	176.2	176.2
70°	98.4	120.1	147.7	150.6	144.7
72.5°	78.8	103.4	128.0	117.2	112.2
75°	60.1	87.6	100.4	90.6	87.6
77.5°	45.3	70.9	70.9	65.0	63.0
80°	31.5	54.1	47.3	41.3	38.4
82.5°	20.7	30.5	24.6	19.7	16.7
85°	10.8	11.8	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)