

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: P307328

Luminaire Tested: **14FCZ2-25-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: P307328
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: 14FCZ2-25-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: 1464.0 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

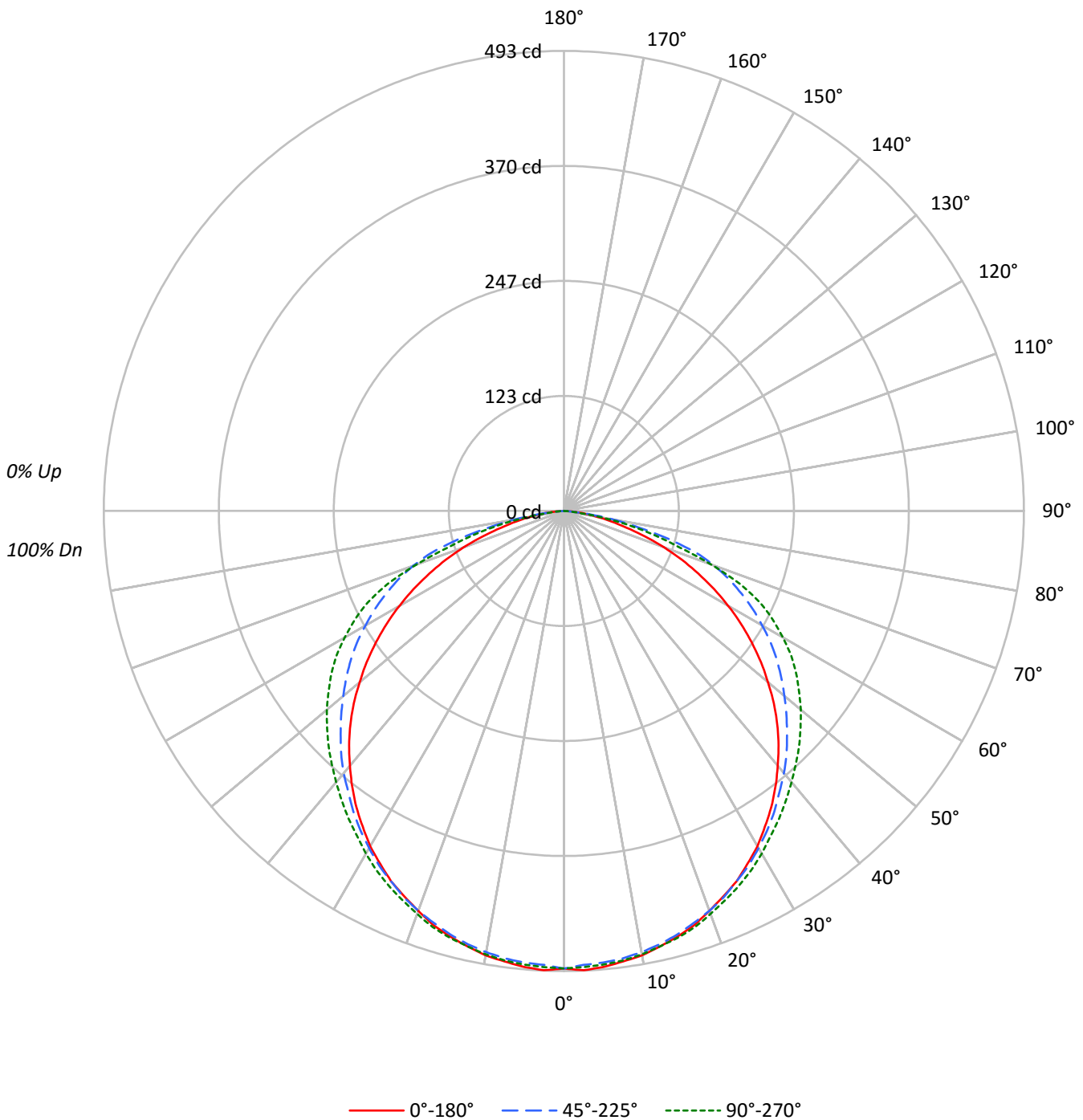
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1319	1319	1319
5°	1324	1312	1318
10°	1321	1312	1318
15°	1315	1309	1318
20°	1306	1306	1316
25°	1300	1300	1317
30°	1289	1296	1317
35°	1273	1292	1322
40°	1253	1289	1333
45°	1231	1287	1357
50°	1196	1292	1388
55°	1153	1308	1426
60°	1095	1322	1458
65°	1012	1339	1477
70°	899	1349	1322
75°	725	1212	1057
80°	567	851	691
85°	389	247	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	3.2
10°-20°	133.2	9.1
20°-30°	202.7	13.8
30°-40°	247.0	16.9
40°-50°	262.0	17.9
50°-60°	247.3	16.9
60°-70°	199.6	13.6
70°-80°	108.3	7.4
80°-90°	17.5	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°	382.3	26.1
0°-40°	629.3	43.0
0°-60°	1138.5	77.8
0°-90°	1464.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1464.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	490	490	490	490	490	
5°	490	489	486	489	488	47
15°	472	471	470	473	473	133
25°	438	437	438	442	444	202
35°	388	390	393	401	402	242
45°	324	328	338	351	357	249
55°	246	256	279	297	304	219
65°	159	178	210	227	232	157
75°	70	102	117	105	102	76
85°	13	14	8	7	6	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	490.3	490.3	490.3	490.3	490.3
2.5°	492.6	490.3	486.9	490.3	489.2
5°	490.3	489.2	485.8	489.2	488.0
7.5°	486.9	486.9	483.5	485.8	485.8
10°	483.5	482.3	480.0	483.5	482.3
12.5°	477.8	476.6	475.5	478.9	477.8
15°	472.0	470.9	469.8	473.2	473.2
17.5°	465.2	464.0	462.9	467.5	467.5
20°	456.0	456.0	456.0	460.6	459.5
22.5°	446.9	446.9	448.0	452.6	451.5
25°	437.8	436.6	437.8	442.3	443.5
27.5°	426.3	427.5	428.6	433.2	434.3
30°	414.9	416.0	417.2	422.9	424.0
32.5°	401.2	403.5	405.8	412.6	412.6
35°	387.5	389.8	393.2	401.2	402.3
37.5°	372.6	374.9	379.5	388.6	390.9
40°	356.6	360.0	366.9	376.0	379.5
42.5°	340.6	345.2	353.2	363.5	368.0
45°	323.5	328.0	338.3	350.9	356.6
47.5°	305.2	310.9	323.5	339.5	344.0
50°	285.7	293.7	308.6	325.7	331.5
52.5°	266.3	275.5	293.7	312.0	317.7
55°	245.7	256.0	278.9	297.2	304.0
57.5°	225.2	236.6	262.9	282.3	289.2
60°	203.4	217.2	245.7	265.2	270.9
62.5°	181.7	197.7	228.6	248.0	252.6
65°	158.9	178.3	210.3	227.4	232.0
67.5°	137.2	160.0	192.0	204.6	204.6
70°	114.3	139.4	171.4	174.9	168.0
72.5°	91.4	120.0	148.6	136.0	130.3
75°	69.7	101.7	116.6	105.2	101.7
77.5°	52.6	82.3	82.3	75.4	73.1
80°	36.6	62.9	54.9	48.0	44.6
82.5°	24.0	35.4	28.6	22.9	19.4
85°	12.6	13.7	8.0	6.9	5.7
87.5°	4.6	2.3	1.1	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)