

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: P307323

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP187-W2A-U-3000K**

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: P307323
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-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 3000K 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: 1329.0 lumens
Efficiency: N/A
Efficacy: 68.2 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

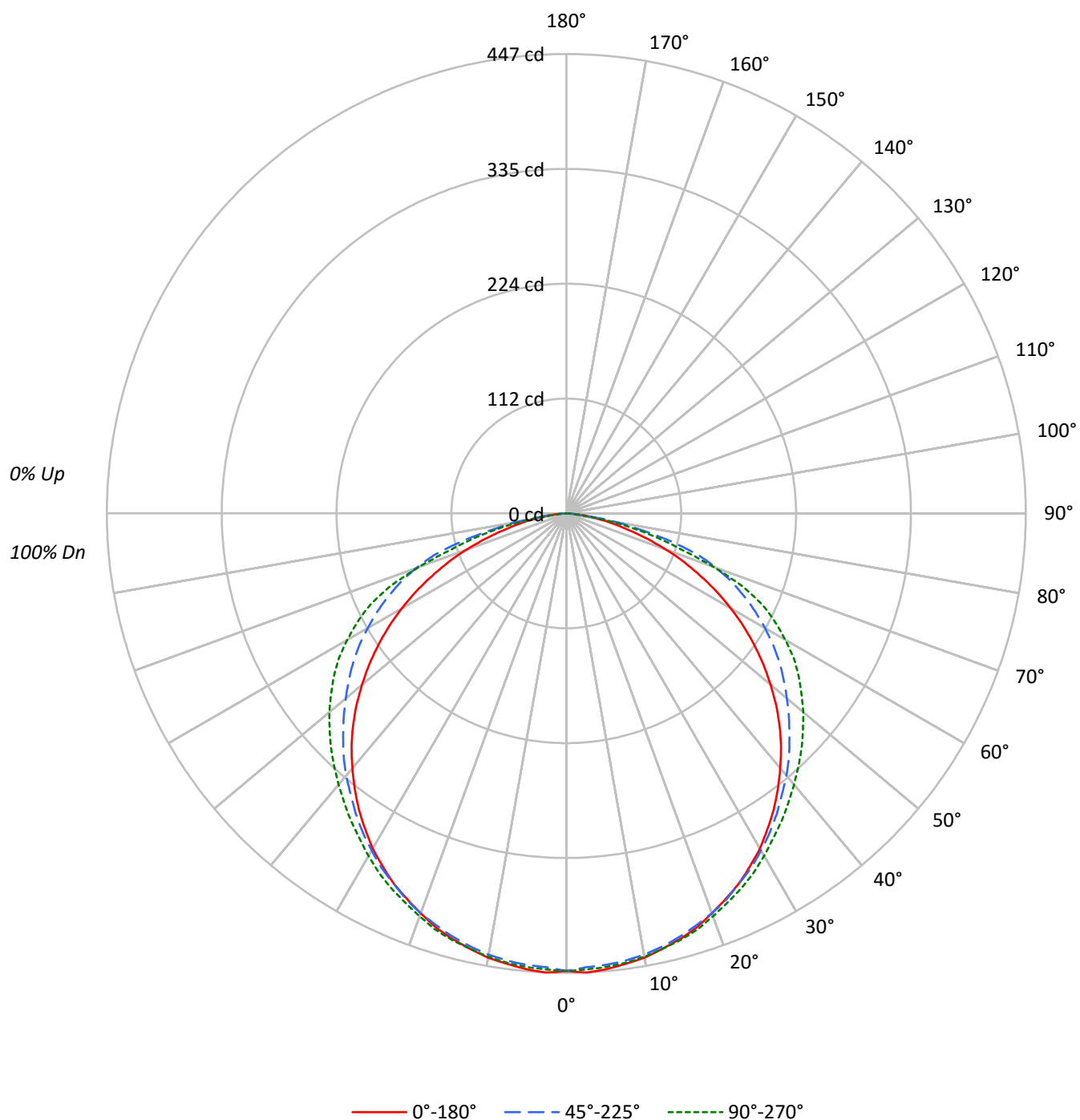
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1198	1198	1198
5°	1202	1191	1197
10°	1199	1191	1197
15°	1194	1188	1197
20°	1186	1186	1194
25°	1180	1180	1195
30°	1170	1177	1196
35°	1155	1172	1200
40°	1137	1170	1210
45°	1117	1169	1232
50°	1086	1173	1260
55°	1047	1188	1295
60°	994	1201	1323
65°	918	1216	1341
70°	817	1224	1200
75°	658	1100	960
80°	514	772	628
85°	352	225	161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	3.2
10°-20°	120.9	9.1
20°-30°	184.1	13.8
30°-40°	224.2	16.9
40°-50°	237.8	17.9
50°-60°	224.5	16.9
60°-70°	181.2	13.6
70°-80°	98.3	7.4
80°-90°	15.9	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°	347.1	26.1
0°-40°	571.2	43.0
0°-60°	1033.5	77.8
0°-90°	1329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	445	445	445	445	445	
5°	445	444	441	444	443	42
15°	428	428	426	430	430	121
25°	397	396	397	402	403	183
35°	352	354	357	364	365	220
45°	294	298	307	318	324	226
55°	223	232	253	270	276	199
65°	144	162	191	206	211	143
75°	63	92	106	96	92	69
85°	11	12	7	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	445.1	445.1	445.1	445.1	445.1
2.5°	447.2	445.1	442.0	445.1	444.1
5°	445.1	444.1	441.0	444.1	443.0
7.5°	442.0	442.0	438.9	441.0	441.0
10°	438.9	437.9	435.8	438.9	437.9
12.5°	433.7	432.7	431.6	434.7	433.7
15°	428.5	427.5	426.4	429.6	429.6
17.5°	422.3	421.3	420.2	424.4	424.4
20°	414.0	414.0	414.0	418.1	417.1
22.5°	405.7	405.7	406.7	410.9	409.8
25°	397.4	396.4	397.4	401.5	402.6
27.5°	387.0	388.0	389.1	393.2	394.3
30°	376.6	377.7	378.7	383.9	384.9
32.5°	364.2	366.3	368.3	374.6	374.6
35°	351.7	353.8	356.9	364.2	365.2
37.5°	338.2	340.3	344.5	352.8	354.8
40°	323.7	326.8	333.1	341.4	344.5
42.5°	309.2	313.3	320.6	329.9	334.1
45°	293.6	297.8	307.1	318.5	323.7
47.5°	277.0	282.2	293.6	308.2	312.3
50°	259.4	266.7	280.1	295.7	300.9
52.5°	241.8	250.1	266.7	283.3	288.4
55°	223.1	232.4	253.2	269.8	276.0
57.5°	204.4	214.8	238.6	256.3	262.5
60°	184.7	197.1	223.1	240.7	245.9
62.5°	165.0	179.5	207.5	225.2	229.3
65°	144.2	161.9	190.9	206.5	210.6
67.5°	124.5	145.3	174.3	185.7	185.7
70°	103.8	126.6	155.6	158.7	152.5
72.5°	83.0	108.9	134.9	123.5	118.3
75°	63.3	92.3	105.8	95.5	92.3
77.5°	47.7	74.7	74.7	68.5	66.4
80°	33.2	57.1	49.8	43.6	40.5
82.5°	21.8	32.2	25.9	20.8	17.6
85°	11.4	12.5	7.3	6.2	5.2
87.5°	4.2	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)