

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: P312030

Luminaire Tested: **14FCZ2-25-UNV-L83050-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: P312030  
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-L83050-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**

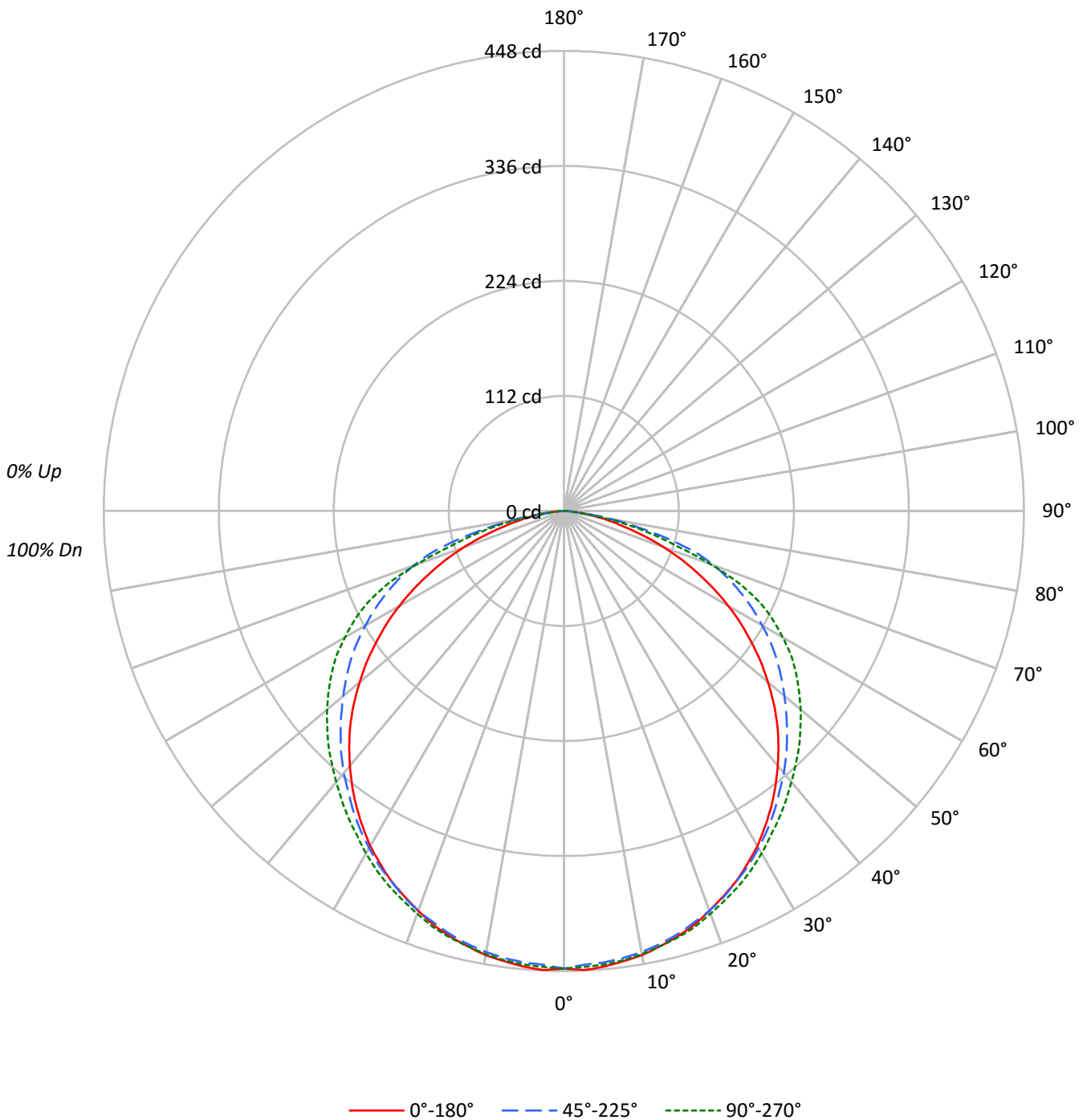
Lumens per Lamp: N/A  
Luminaire Lumens: 1330.0 lumens  
Efficiency: N/A  
Efficacy: 67.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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				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°	1199	1199	1199
5°	1203	1192	1198
10°	1200	1192	1197
15°	1195	1189	1198
20°	1186	1186	1195
25°	1181	1181	1196
30°	1171	1178	1197
35°	1156	1173	1201
40°	1138	1171	1211
45°	1118	1170	1233
50°	1087	1174	1261
55°	1047	1189	1296
60°	995	1201	1324
65°	919	1217	1342
70°	817	1226	1201
75°	658	1101	961
80°	514	772	628
85°	352	225	161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.2	3.2
10°-20°	121.0	9.1
20°-30°	184.2	13.8
30°-40°	224.3	16.9
40°-50°	238.0	17.9
50°-60°	224.6	16.9
60°-70°	181.4	13.6
70°-80°	98.4	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°	347.3	26.1
0°-40°	571.7	43.0
0°-60°	1034.3	77.8
0°-90°	1330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1330.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	446	444	441	444	443	42
15°	429	428	427	430	430	121
25°	398	397	398	402	403	183
35°	352	354	357	364	366	220
45°	294	298	307	319	324	226
55°	223	233	253	270	276	199
65°	144	162	191	207	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°	445.5	445.5	445.5	445.5	445.5
2.5°	447.5	445.5	442.3	445.5	444.4
5°	445.5	444.4	441.3	444.4	443.4
7.5°	442.3	442.3	439.2	441.3	441.3
10°	439.2	438.2	436.1	439.2	438.2
12.5°	434.0	433.0	432.0	435.1	434.0
15°	428.8	427.8	426.8	429.9	429.9
17.5°	422.6	421.6	420.5	424.7	424.7
20°	414.3	414.3	414.3	418.5	417.4
22.5°	406.0	406.0	407.0	411.2	410.1
25°	397.7	396.6	397.7	401.8	402.9
27.5°	387.3	388.3	389.4	393.5	394.6
30°	376.9	378.0	379.0	384.2	385.2
32.5°	364.5	366.5	368.6	374.8	374.8
35°	352.0	354.1	357.2	364.5	365.5
37.5°	338.5	340.6	344.7	353.0	355.1
40°	324.0	327.1	333.3	341.6	344.7
42.5°	309.4	313.6	320.8	330.2	334.3
45°	293.9	298.0	307.4	318.8	324.0
47.5°	277.2	282.4	293.9	308.4	312.5
50°	259.6	266.9	280.4	295.9	301.1
52.5°	241.9	250.2	266.9	283.5	288.7
55°	223.2	232.6	253.4	270.0	276.2
57.5°	204.6	214.9	238.8	256.5	262.7
60°	184.8	197.3	223.2	240.9	246.1
62.5°	165.1	179.6	207.7	225.3	229.5
65°	144.3	162.0	191.1	206.6	210.8
67.5°	124.6	145.4	174.4	185.9	185.9
70°	103.8	126.7	155.8	158.9	152.6
72.5°	83.1	109.0	135.0	123.6	118.4
75°	63.3	92.4	105.9	95.5	92.4
77.5°	47.8	74.8	74.8	68.5	66.5
80°	33.2	57.1	49.8	43.6	40.5
82.5°	21.8	32.2	26.0	20.8	17.7
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)