

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: P307054

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-3500K**

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: P307054
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP187-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 3500K 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: 1625.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

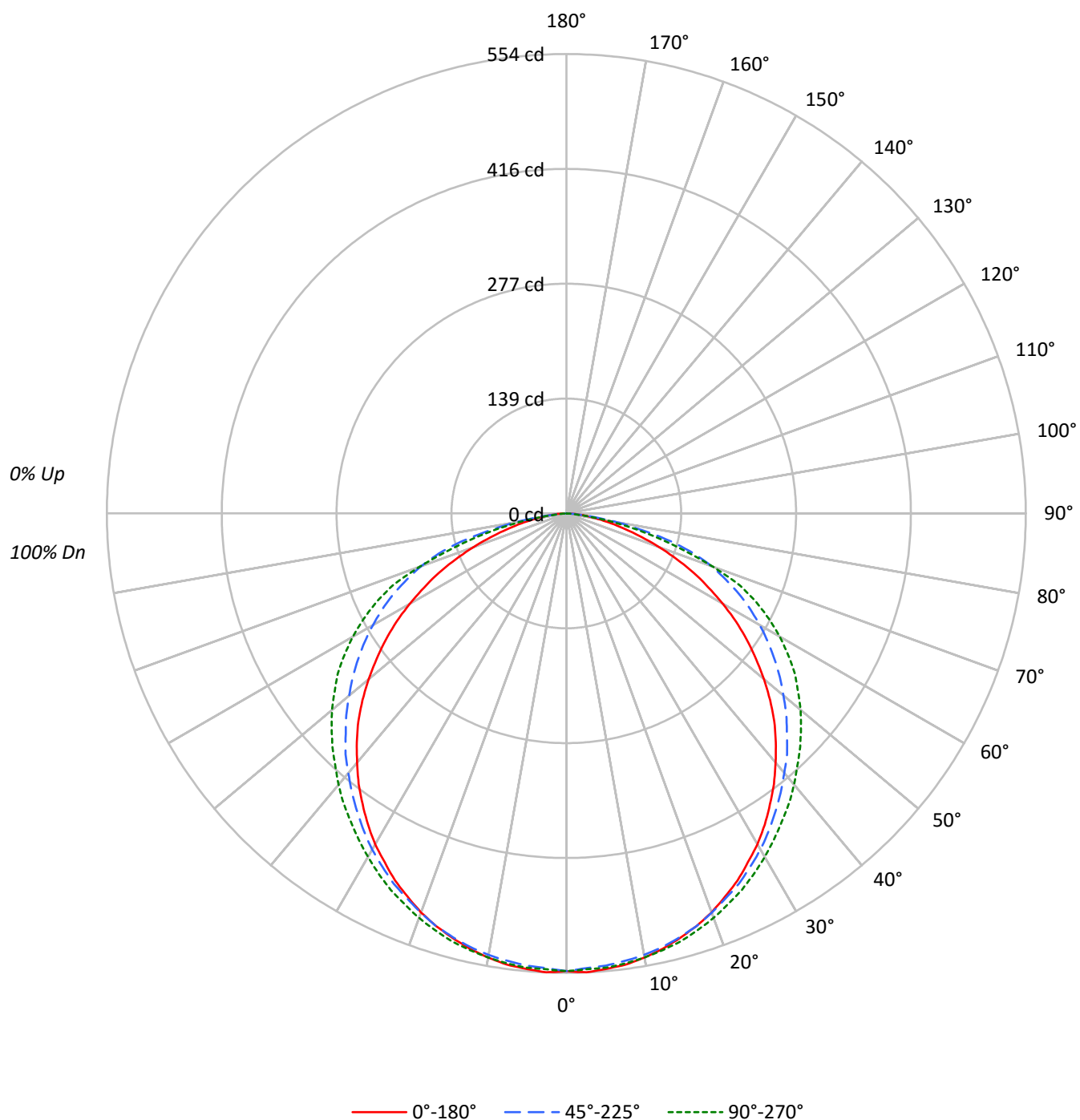
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1485	1485	1485
5°	1489	1478	1485
10°	1486	1477	1486
15°	1476	1473	1488
20°	1466	1468	1487
25°	1450	1463	1487
30°	1432	1455	1486
35°	1407	1443	1489
40°	1378	1436	1501
45°	1349	1431	1517
50°	1303	1431	1544
55°	1247	1438	1577
60°	1172	1449	1598
65°	1080	1464	1607
70°	941	1467	1479
75°	776	1365	1196
80°	609	982	800
85°	472	380	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	3.2
10°-20°	149.9	9.2
20°-30°	227.7	14.0
30°-40°	275.9	17.0
40°-50°	290.7	17.9
50°-60°	271.4	16.7
60°-70°	216.9	13.3
70°-80°	119.3	7.3
80°-90°	21.1	1.3
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°	429.8	26.5
0°-40°	705.7	43.4
0°-60°	1267.7	78.0
0°-90°	1625.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	551	550	547	551	550	52
15°	530	530	529	534	534	150
25°	488	490	493	500	501	225
35°	428	432	439	451	453	268
45°	355	361	376	393	399	273
55°	266	279	307	328	336	237
65°	170	191	230	249	252	167
75°	75	107	131	118	115	80
85°	15	19	12	8	6	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	551.9	551.9	551.9	551.9	551.9
2.5°	553.9	552.4	548.8	551.9	550.3
5°	551.3	549.8	547.3	550.8	549.8
7.5°	548.8	546.7	544.2	548.3	547.3
10°	543.7	542.1	540.6	544.2	543.7
12.5°	537.6	537.0	535.5	539.6	539.1
15°	529.9	529.9	528.9	534.0	534.0
17.5°	521.7	521.2	521.7	527.3	526.8
20°	512.0	512.0	512.5	519.2	519.2
22.5°	500.2	500.8	502.3	510.5	510.0
25°	488.5	489.5	492.6	499.7	500.8
27.5°	474.2	476.7	480.3	489.0	490.0
30°	460.9	462.4	468.1	476.2	478.3
32.5°	445.1	448.1	454.3	463.5	466.0
35°	428.2	432.3	439.4	450.7	453.2
37.5°	411.3	414.9	424.6	436.4	441.0
40°	392.4	398.6	408.8	422.1	427.2
42.5°	374.0	380.2	394.0	407.8	412.4
45°	354.6	361.3	376.1	392.9	398.6
47.5°	333.2	340.8	359.7	377.6	383.7
50°	311.2	320.9	341.8	361.8	368.9
52.5°	288.2	300.5	324.5	345.4	352.1
55°	265.7	279.0	306.6	328.0	336.2
57.5°	242.7	257.0	288.2	312.7	317.3
60°	217.7	235.1	269.3	290.7	296.9
62.5°	193.2	213.1	249.9	270.3	275.4
65°	169.6	191.1	229.9	248.8	252.4
67.5°	144.1	169.6	208.0	225.3	226.4
70°	119.6	149.2	186.5	194.7	188.0
72.5°	95.6	127.2	161.5	154.8	149.2
75°	74.6	106.8	131.3	118.0	115.0
77.5°	55.2	87.4	94.0	86.9	81.2
80°	39.3	69.0	63.4	54.2	51.6
82.5°	27.1	43.4	34.7	27.1	23.5
85°	15.3	19.4	12.3	7.7	6.1
87.5°	6.6	4.6	2.6	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)