

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: P307034

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA125-W2A-U-2700K**

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: P307034
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-CA125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 2700K 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: 1626.0 lumens
Efficiency: N/A
Efficacy: 83.0 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

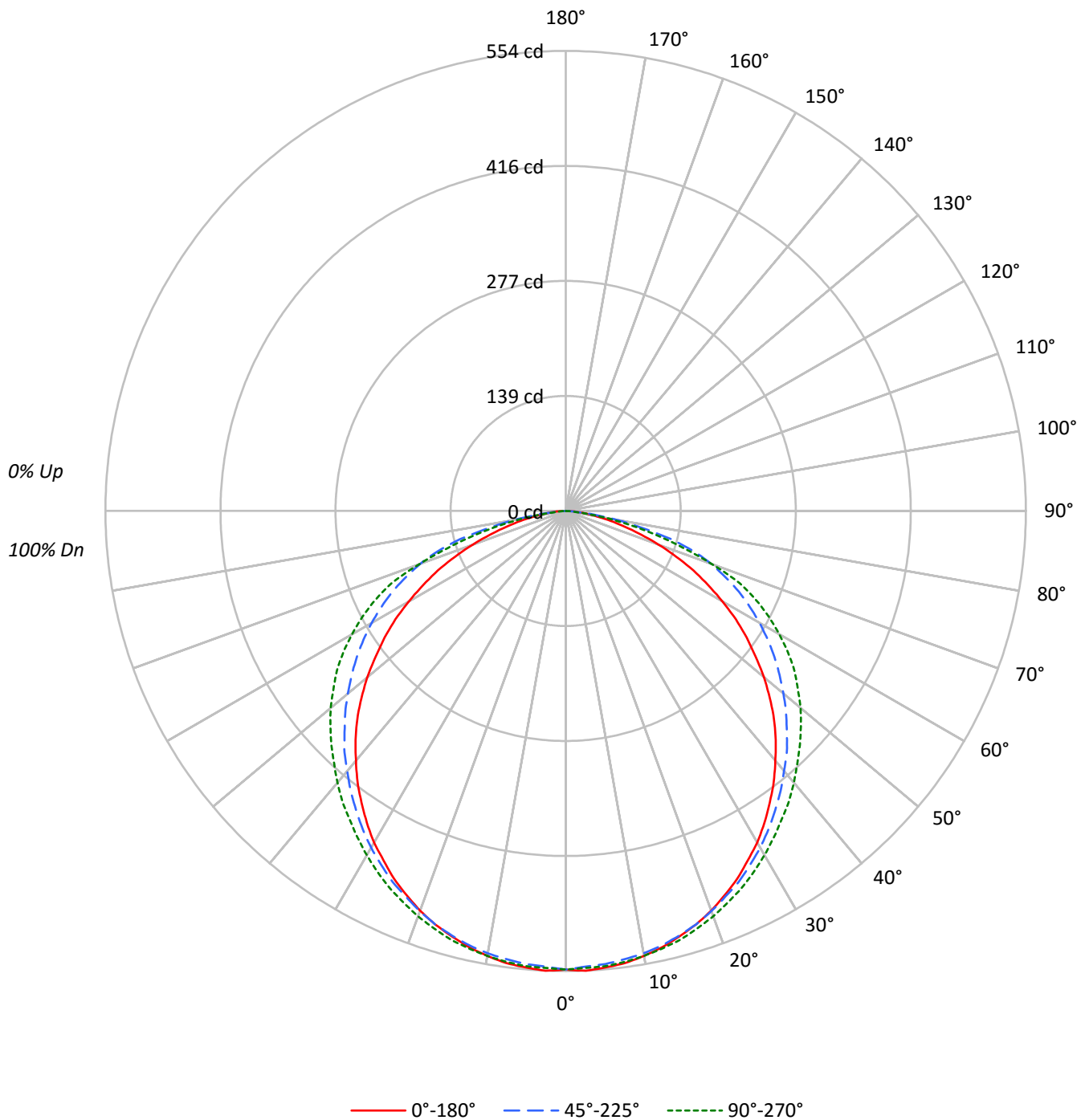
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1486	1486	1486
5°	1490	1479	1486
10°	1486	1478	1486
15°	1477	1474	1489
20°	1467	1468	1488
25°	1451	1464	1488
30°	1433	1455	1487
35°	1408	1444	1490
40°	1379	1437	1501
45°	1350	1432	1518
50°	1304	1432	1546
55°	1247	1439	1578
60°	1172	1450	1599
65°	1081	1465	1608
70°	941	1468	1481
75°	776	1366	1196
80°	611	982	800
85°	472	380	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	3.2
10°-20°	150.0	9.2
20°-30°	227.8	14.0
30°-40°	276.0	17.0
40°-50°	290.9	17.9
50°-60°	271.6	16.7
60°-70°	217.0	13.3
70°-80°	119.4	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°	430.1	26.5
0°-40°	706.1	43.4
0°-60°	1268.5	78.0
0°-90°	1626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	552	550	548	551	550	52
15°	530	530	529	534	534	150
25°	489	490	493	500	501	225
35°	428	433	440	451	454	268
45°	355	362	376	393	399	273
55°	266	279	307	328	336	237
65°	170	191	230	249	253	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°	552.2	552.2	552.2	552.2	552.2
2.5°	554.2	552.7	549.1	552.2	550.7
5°	551.7	550.2	547.6	551.2	550.2
7.5°	549.1	547.1	544.5	548.6	547.6
10°	544.0	542.5	540.9	544.5	544.0
12.5°	537.9	537.4	535.8	539.9	539.4
15°	530.2	530.2	529.2	534.3	534.3
17.5°	522.0	521.5	522.0	527.7	527.1
20°	512.3	512.3	512.8	519.5	519.5
22.5°	500.6	501.1	502.6	510.8	510.3
25°	488.8	489.8	492.9	500.0	501.1
27.5°	474.5	477.0	480.6	489.3	490.3
30°	461.2	462.7	468.3	476.5	478.6
32.5°	445.3	448.4	454.5	463.7	466.3
35°	428.5	432.6	439.7	451.0	453.5
37.5°	411.6	415.2	424.9	436.6	441.2
40°	392.7	398.8	409.0	422.3	427.4
42.5°	374.3	380.4	394.2	408.0	412.6
45°	354.8	361.5	376.3	393.2	398.8
47.5°	333.4	341.0	360.0	377.8	384.0
50°	311.4	321.1	342.1	362.0	369.2
52.5°	288.4	300.6	324.7	345.6	352.3
55°	265.9	279.2	306.8	328.3	336.4
57.5°	242.9	257.2	288.4	312.9	317.5
60°	217.8	235.2	269.5	290.9	297.1
62.5°	193.3	213.2	250.0	270.5	275.6
65°	169.7	191.2	230.1	249.0	252.6
67.5°	144.2	169.7	208.1	225.5	226.5
70°	119.6	149.3	186.6	194.8	188.2
72.5°	95.6	127.3	161.6	154.9	149.3
75°	74.6	106.9	131.4	118.1	115.0
77.5°	55.2	87.4	94.1	86.9	81.3
80°	39.4	69.0	63.4	54.2	51.6
82.5°	27.1	43.5	34.8	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)