

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: P307029

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA08-W2A-U-4500K**

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: P307029
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-CA08-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 4500K 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: 1806.0 lumens
Efficiency: N/A
Efficacy: 90.3 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

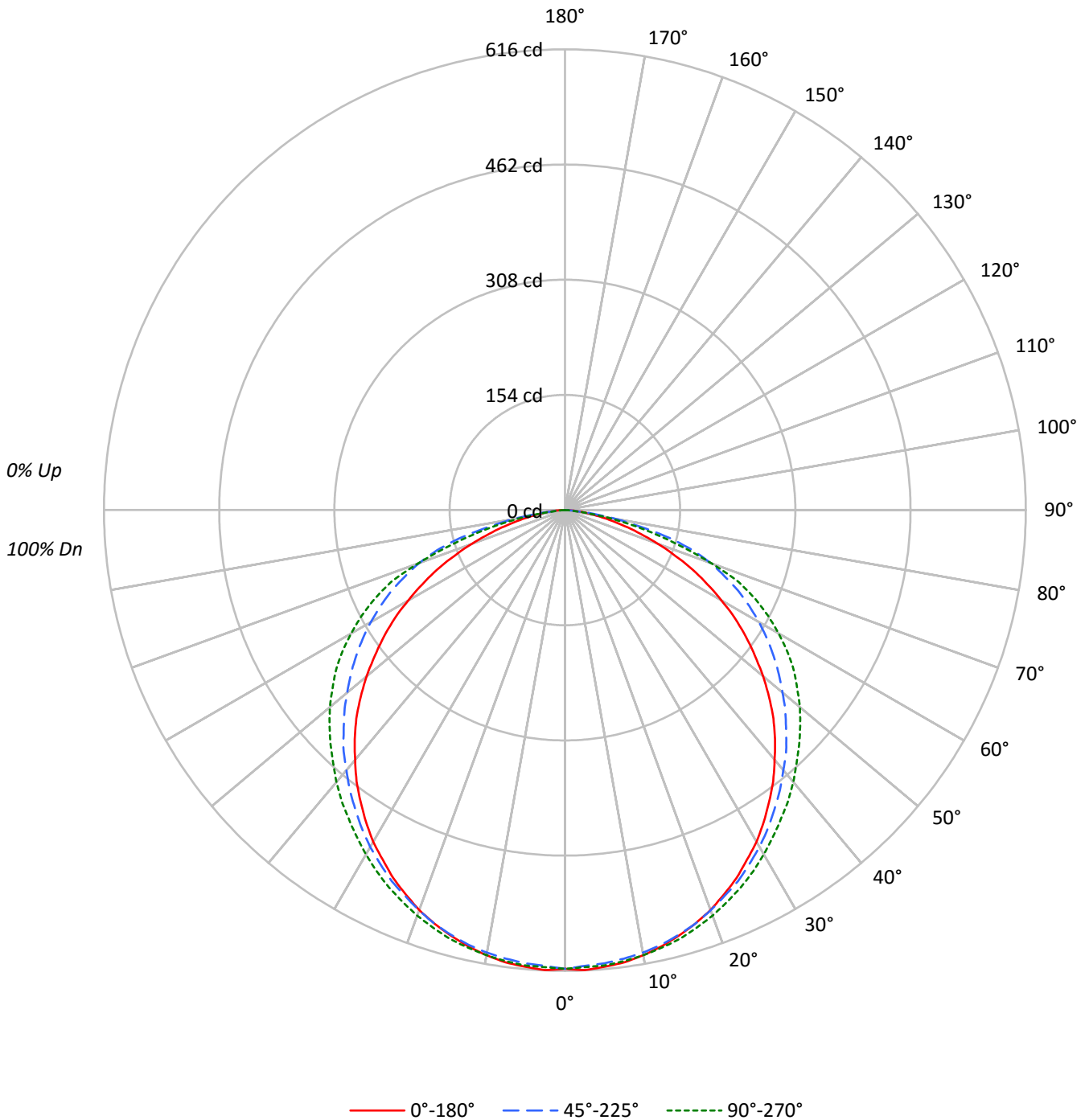
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1650	1650	1650
5°	1655	1643	1651
10°	1651	1642	1651
15°	1641	1638	1653
20°	1629	1631	1652
25°	1612	1626	1652
30°	1592	1616	1652
35°	1563	1604	1655
40°	1532	1596	1668
45°	1500	1591	1686
50°	1448	1590	1716
55°	1385	1598	1753
60°	1302	1611	1776
65°	1200	1628	1786
70°	1046	1631	1644
75°	862	1517	1329
80°	677	1091	890
85°	525	420	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	3.2
10°-20°	166.6	9.2
20°-30°	253.0	14.0
30°-40°	306.6	17.0
40°-50°	323.1	17.9
50°-60°	301.6	16.7
60°-70°	241.0	13.3
70°-80°	132.6	7.3
80°-90°	23.4	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°	477.7	26.5
0°-40°	784.3	43.4
0°-60°	1408.9	78.0
0°-90°	1806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	613	611	608	612	611	58
15°	589	589	588	594	594	166
25°	543	544	548	555	556	250
35°	476	480	488	501	504	298
45°	394	402	418	437	443	303
55°	295	310	341	365	374	264
65°	188	212	256	277	280	186
75°	83	119	146	131	128	89
85°	17	22	14	8	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.3	613.3	613.3	613.3	613.3
2.5°	615.6	613.9	609.9	613.3	611.6
5°	612.8	611.1	608.2	612.2	611.1
7.5°	609.9	607.6	604.8	609.4	608.2
10°	604.2	602.5	600.8	604.8	604.2
12.5°	597.4	596.9	595.2	599.7	599.1
15°	588.9	588.9	587.8	593.5	593.5
17.5°	579.8	579.3	579.8	586.1	585.5
20°	569.0	569.0	569.6	577.0	577.0
22.5°	556.0	556.5	558.2	567.3	566.8
25°	542.9	544.0	547.5	555.4	556.5
27.5°	527.0	529.8	533.8	543.5	544.6
30°	512.2	513.9	520.2	529.3	531.5
32.5°	494.6	498.0	504.9	515.1	517.9
35°	475.9	480.4	488.4	500.9	503.7
37.5°	457.2	461.1	471.9	485.0	490.1
40°	436.1	443.0	454.3	469.1	474.8
42.5°	415.7	422.5	437.8	453.2	458.3
45°	394.1	401.5	418.0	436.7	443.0
47.5°	370.3	378.8	399.8	419.7	426.5
50°	345.8	356.6	379.9	402.1	410.0
52.5°	320.3	333.9	360.6	383.9	391.3
55°	295.3	310.1	340.7	364.6	373.7
57.5°	269.8	285.7	320.3	347.6	352.7
60°	241.9	261.2	299.3	323.1	329.9
62.5°	214.7	236.8	277.7	300.4	306.1
65°	188.5	212.4	255.6	276.6	280.5
67.5°	160.1	188.5	231.1	250.4	251.6
70°	132.9	165.8	207.3	216.4	209.0
72.5°	106.2	141.4	179.5	172.1	165.8
75°	82.9	118.7	145.9	131.2	127.8
77.5°	61.3	97.1	104.5	96.5	90.3
80°	43.7	76.7	70.4	60.2	57.4
82.5°	30.1	48.3	38.6	30.1	26.1
85°	17.0	21.6	13.6	8.5	6.8
87.5°	7.4	5.1	2.8	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)