

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: P307060

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP187-W2A-U-6500K**

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: P307060
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-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 6500K 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: 1739.0 lumens
Efficiency: N/A
Efficacy: 84.8 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

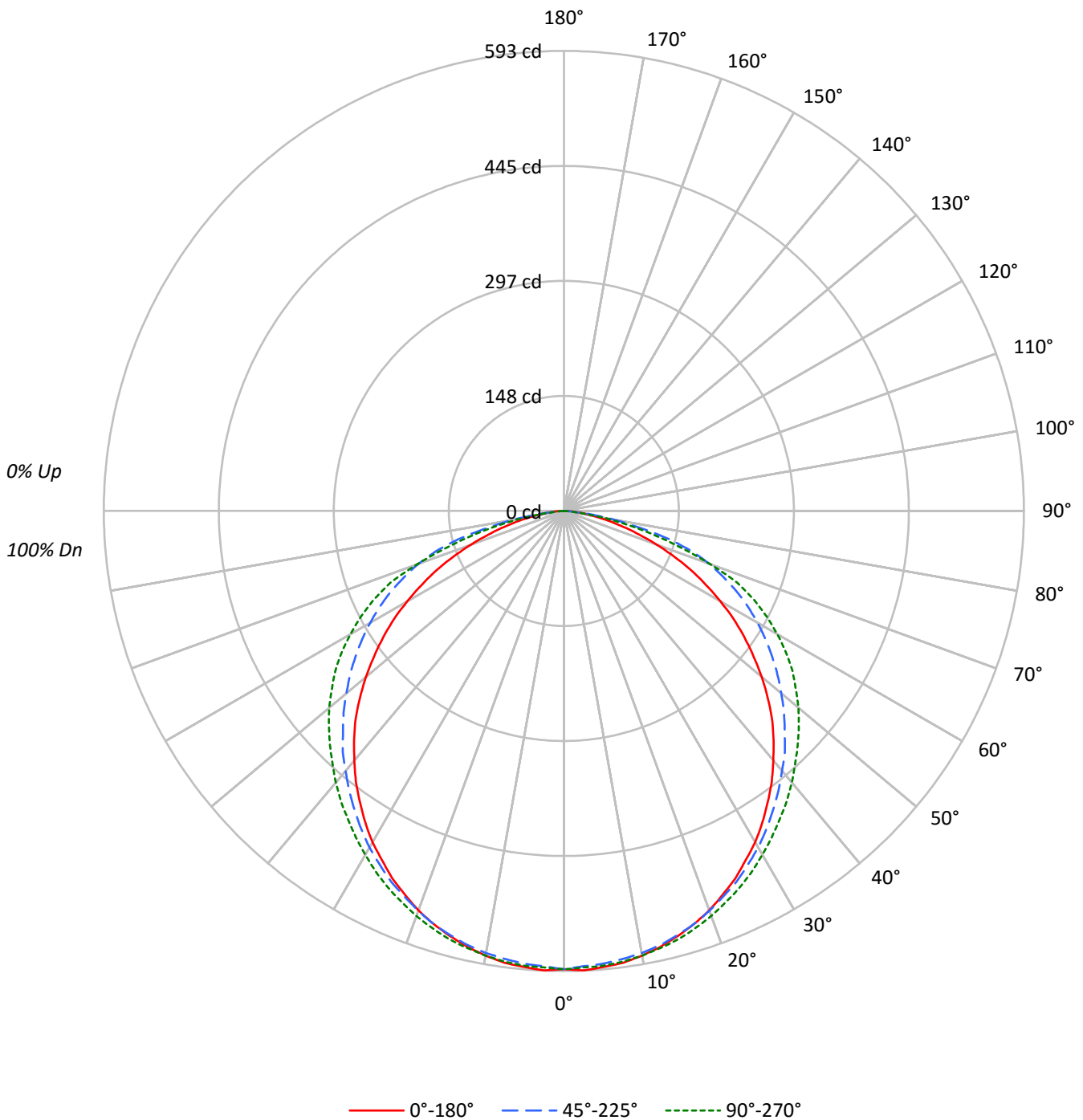
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1589	1589	1589
5°	1594	1582	1589
10°	1590	1581	1590
15°	1580	1577	1592
20°	1569	1571	1591
25°	1552	1565	1591
30°	1533	1556	1590
35°	1505	1545	1593
40°	1475	1537	1606
45°	1444	1532	1623
50°	1394	1531	1653
55°	1334	1539	1688
60°	1253	1551	1710
65°	1156	1567	1720
70°	1007	1570	1583
75°	830	1461	1279
80°	652	1051	855
85°	506	404	204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	3.2
10°-20°	160.4	9.2
20°-30°	243.6	14.0
30°-40°	295.2	17.0
40°-50°	311.1	17.9
50°-60°	290.4	16.7
60°-70°	232.1	13.3
70°-80°	127.7	7.3
80°-90°	22.6	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°	460.0	26.5
0°-40°	755.2	43.4
0°-60°	1356.7	78.0
0°-90°	1739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	591	591	591	591	591	
5°	590	588	586	590	588	56
15°	567	567	566	571	571	160
25°	523	524	527	535	536	241
35°	458	463	470	482	485	287
45°	380	387	402	420	426	292
55°	284	299	328	351	360	254
65°	182	204	246	266	270	179
75°	80	114	140	126	123	86
85°	16	21	13	8	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	590.6	590.6	590.6	590.6	590.6
2.5°	592.8	591.1	587.3	590.6	588.9
5°	590.0	588.4	585.7	589.5	588.4
7.5°	587.3	585.1	582.4	586.7	585.7
10°	581.8	580.2	578.5	582.4	581.8
12.5°	575.3	574.7	573.1	577.4	576.9
15°	567.1	567.1	566.0	571.4	571.4
17.5°	558.3	557.8	558.3	564.3	563.8
20°	547.9	547.9	548.5	555.6	555.6
22.5°	535.3	535.9	537.5	546.3	545.7
25°	522.8	523.9	527.1	534.8	535.9
27.5°	507.5	510.2	514.0	523.3	524.4
30°	493.2	494.9	500.9	509.6	511.8
32.5°	476.3	479.6	486.1	496.0	498.7
35°	458.2	462.6	470.3	482.3	485.0
37.5°	440.2	444.0	454.4	467.0	471.9
40°	420.0	426.5	437.5	451.7	457.1
42.5°	400.3	406.8	421.6	436.4	441.3
45°	379.5	386.6	402.5	420.5	426.5
47.5°	356.5	364.7	385.0	404.1	410.7
50°	333.0	343.4	365.8	387.2	394.8
52.5°	308.4	321.5	347.2	369.7	376.8
55°	284.4	298.6	328.1	351.1	359.8
57.5°	259.7	275.1	308.4	334.7	339.6
60°	232.9	251.5	288.2	311.1	317.7
62.5°	206.7	228.0	267.4	289.3	294.7
65°	181.5	204.5	246.1	266.3	270.1
67.5°	154.2	181.5	222.6	241.2	242.2
70°	128.0	159.7	199.6	208.3	201.2
72.5°	102.3	136.2	172.8	165.7	159.7
75°	79.8	114.3	140.5	126.3	123.0
77.5°	59.1	93.5	100.6	93.0	86.9
80°	42.1	73.8	67.8	58.0	55.2
82.5°	29.0	46.5	37.2	29.0	25.2
85°	16.4	20.8	13.1	8.2	6.6
87.5°	7.1	4.9	2.7	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)