

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: P307592

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP187-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: P307592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CP187-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB 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: 2013.0 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

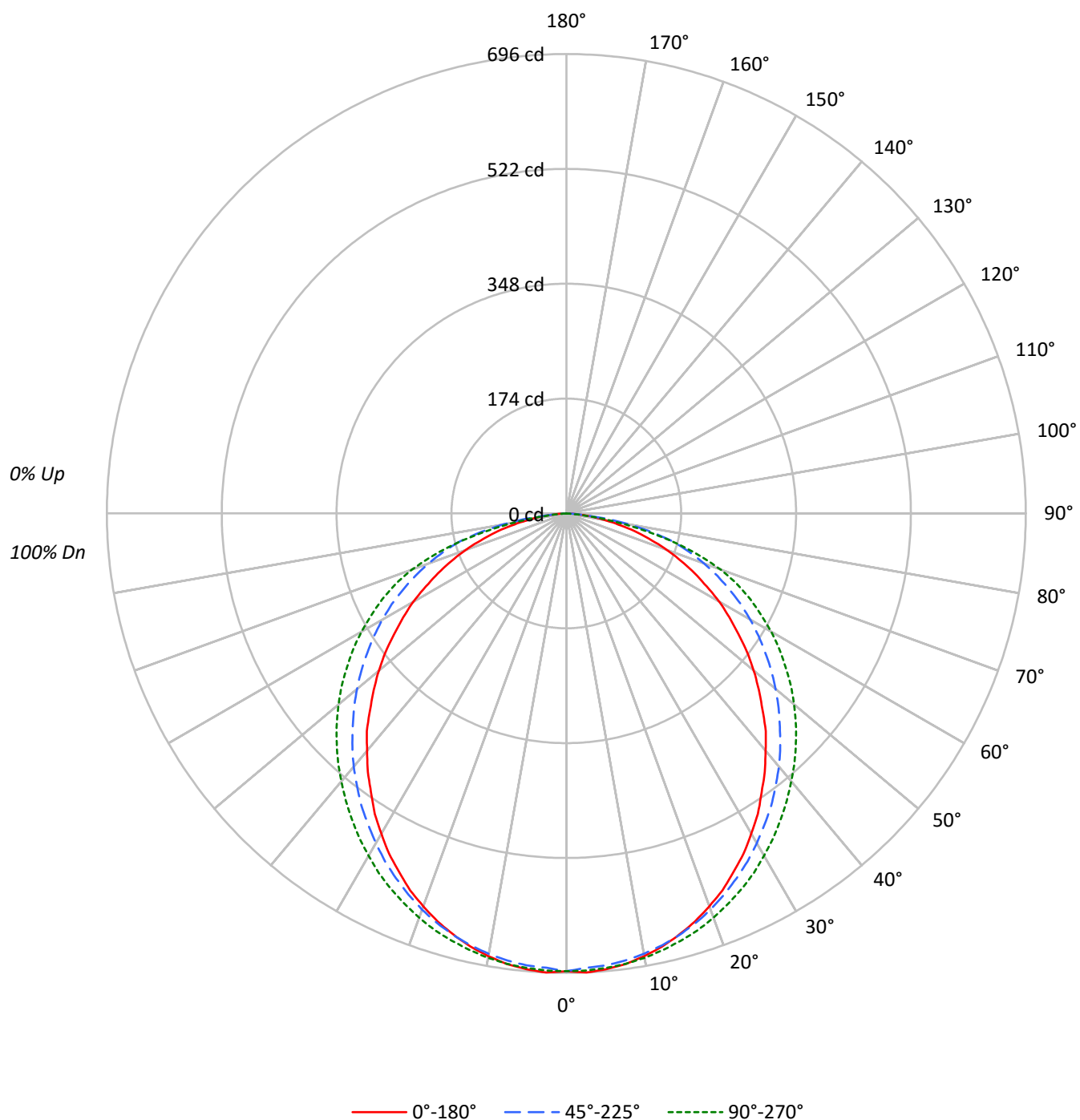
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	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	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1866	1866	1866
5°	1872	1856	1867
10°	1861	1851	1868
15°	1841	1842	1867
20°	1814	1829	1866
25°	1779	1811	1865
30°	1741	1792	1861
35°	1694	1777	1859
40°	1649	1760	1862
45°	1599	1741	1872
50°	1552	1732	1885
55°	1493	1727	1901
60°	1440	1730	1928
65°	1366	1735	1958
70°	1282	1748	1957
75°	1162	1764	1769
80°	953	1523	1258
85°	707	719	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	3.3
10°-20°	187.5	9.3
20°-30°	282.4	14.0
30°-40°	338.9	16.8
40°-50°	353.2	17.5
50°-60°	327.0	16.2
60°-70°	264.2	13.1
70°-80°	161.1	8.0
80°-90°	33.2	1.7
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°	535.5	26.6
0°-40°	874.3	43.4
0°-60°	1554.5	77.2
0°-90°	2013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2013.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	693	691	687	692	691	66
15°	661	661	661	670	670	186
25°	599	603	610	625	628	276
35°	516	524	541	561	566	323
45°	420	433	457	483	492	325
55°	318	335	368	397	405	285
65°	215	236	272	300	308	212
75°	112	136	170	172	170	117
85°	23	34	23	13	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	693.5	693.5	693.5	693.5	693.5
2.5°	696.2	693.9	689.0	693.9	693.0
5°	693.0	691.2	687.2	692.1	691.2
7.5°	688.5	686.8	683.2	689.0	688.1
10°	680.9	680.0	677.3	684.1	683.6
12.5°	671.9	671.5	670.1	677.8	677.3
15°	660.7	661.2	661.2	670.1	670.1
17.5°	648.2	649.0	650.8	660.7	662.1
20°	633.3	635.1	638.7	649.9	651.7
22.5°	618.1	619.4	624.8	638.3	640.1
25°	599.2	602.8	610.0	625.3	628.0
27.5°	581.3	584.4	594.3	610.0	614.5
30°	560.2	565.1	576.8	593.8	598.8
32.5°	540.0	545.4	558.8	578.6	583.1
35°	515.7	523.8	540.9	560.6	566.0
37.5°	493.7	501.4	520.7	542.2	548.5
40°	469.5	478.9	500.9	523.8	530.1
42.5°	447.1	456.0	479.8	503.2	511.7
45°	420.1	432.7	457.4	483.0	491.9
47.5°	395.4	408.0	436.3	463.7	471.7
50°	370.8	384.2	413.8	442.1	450.2
52.5°	345.2	359.5	391.4	419.7	429.1
55°	318.2	334.8	368.1	396.8	405.3
57.5°	292.7	309.7	345.2	374.3	382.9
60°	267.5	285.0	321.4	349.2	358.2
62.5°	239.7	260.3	298.0	325.4	332.2
65°	214.6	235.7	272.5	299.8	307.5
67.5°	188.1	211.0	247.8	272.9	280.1
70°	162.9	186.7	222.2	245.5	248.7
72.5°	136.0	160.2	196.2	211.0	211.0
75°	111.8	136.5	169.7	172.4	170.1
77.5°	85.3	112.7	134.2	128.8	123.4
80°	61.5	88.4	98.3	88.4	81.2
82.5°	41.3	64.2	59.2	47.1	41.7
85°	22.9	34.1	23.3	13.0	9.4
87.5°	8.5	7.6	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)