

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: P307864

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-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: P307864
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP187-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH 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: 2165.0 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

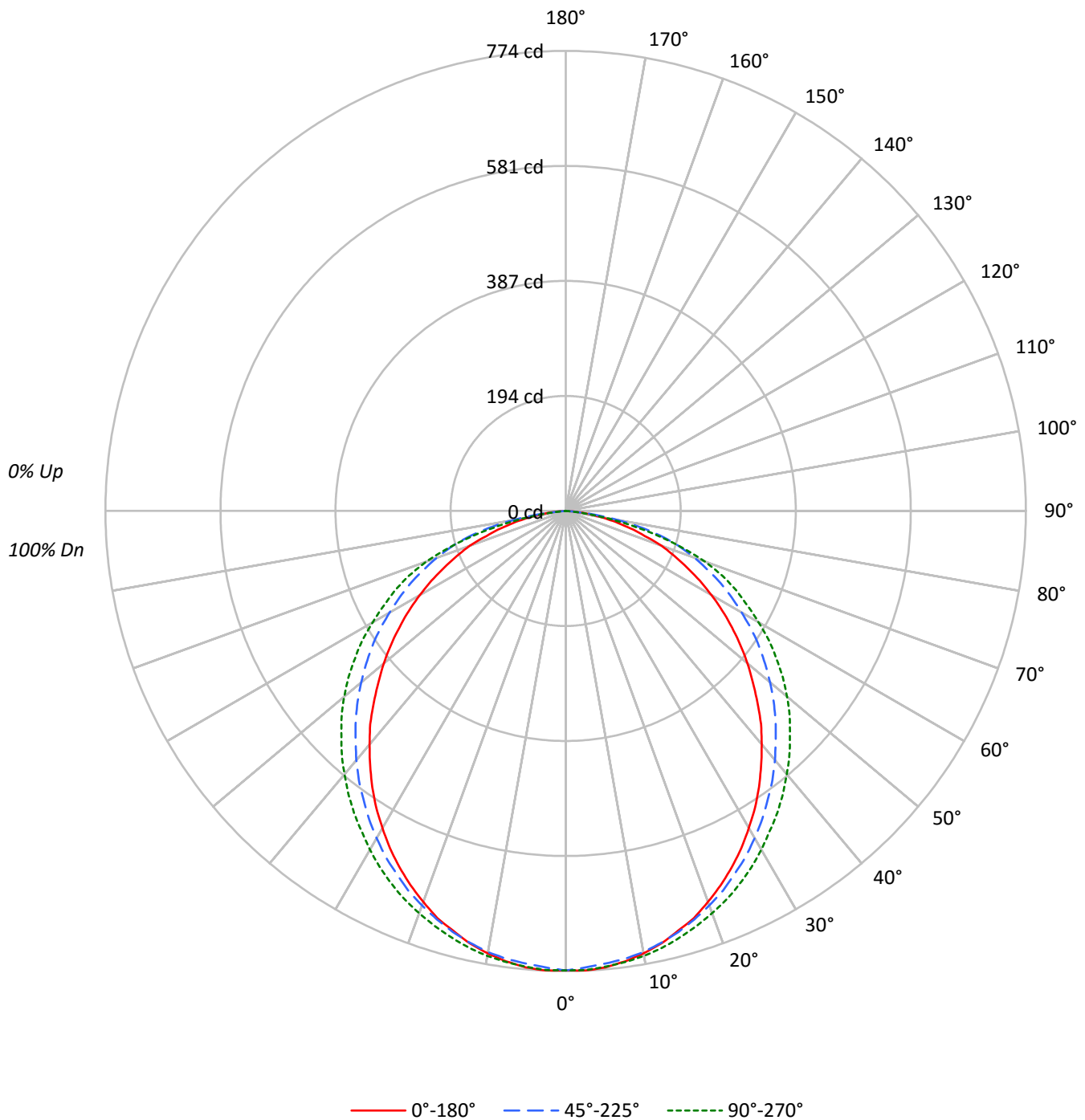
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2080	2080	2080
5°	2082	2065	2079
10°	2065	2059	2077
15°	2036	2043	2069
20°	2004	2023	2063
25°	1963	1998	2056
30°	1914	1975	2045
35°	1862	1946	2038
40°	1802	1923	2033
45°	1736	1899	2030
50°	1672	1878	2036
55°	1602	1863	2030
60°	1525	1837	2016
65°	1435	1832	2017
70°	1351	1816	1959
75°	1172	1775	1674
80°	948	1430	1114
85°	630	497	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	3.4
10°-20°	207.7	9.6
20°-30°	311.5	14.4
30°-40°	371.6	17.2
40°-50°	384.2	17.7
50°-60°	350.8	16.2
60°-70°	276.0	12.7
70°-80°	160.7	7.4
80°-90°	29.6	1.4
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°	592.2	27.4
0°-40°	963.8	44.5
0°-60°	1698.7	78.5
0°-90°	2165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2165.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	771	769	764	771	770	73
15°	731	732	733	743	743	206
25°	661	664	673	689	692	304
35°	567	574	592	615	620	354
45°	456	471	499	527	534	352
55°	341	360	397	426	433	305
65°	225	249	288	310	317	224
75°	113	140	171	168	161	120
85°	20	29	16	13	11	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	772.9	772.9	772.9	772.9	772.9
2.5°	773.9	771.8	768.6	773.9	772.9
5°	770.7	768.6	764.3	770.7	769.6
7.5°	764.3	762.1	760.0	766.4	765.4
10°	755.7	754.6	753.5	761.1	760.0
12.5°	745.0	745.0	743.9	752.5	752.5
15°	731.0	732.1	733.2	742.8	742.8
17.5°	718.1	717.1	720.3	731.0	732.1
20°	699.9	702.0	706.3	719.2	720.3
22.5°	681.6	683.8	691.3	704.2	707.4
25°	661.2	664.5	673.0	689.1	692.4
27.5°	639.8	644.1	655.9	673.0	676.3
30°	616.1	622.6	635.5	654.8	658.0
32.5°	592.5	599.0	615.1	634.4	638.7
35°	566.8	574.3	592.5	615.1	620.4
37.5°	539.9	549.6	571.1	593.6	600.0
40°	513.1	523.8	547.4	571.1	578.6
42.5°	486.3	497.0	522.8	549.6	557.1
45°	456.2	471.2	499.1	527.1	533.5
47.5°	427.2	443.3	474.5	502.4	511.0
50°	399.3	415.4	448.7	477.7	486.3
52.5°	370.3	387.5	422.9	453.0	460.5
55°	341.4	359.6	397.2	426.2	432.6
57.5°	312.4	331.7	370.3	398.2	405.8
60°	283.4	303.8	341.4	369.3	374.6
62.5°	254.4	275.9	314.5	339.2	344.6
65°	225.4	249.0	287.7	310.2	316.7
67.5°	197.5	221.1	258.7	280.2	285.5
70°	171.7	193.2	230.8	246.9	249.0
72.5°	139.5	166.4	202.9	211.5	206.1
75°	112.7	139.5	170.7	167.5	161.0
77.5°	85.9	112.7	133.1	122.4	113.8
80°	61.2	88.0	92.3	76.2	71.9
82.5°	39.7	61.2	51.5	39.7	32.2
85°	20.4	29.0	16.1	12.9	10.7
87.5°	6.4	4.3	2.1	2.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)