

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: P307598

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP187-W2A-U-5500K**

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: P307598
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5500K 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: 2281.0 lumens
Efficiency: N/A
Efficacy: 112.9 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

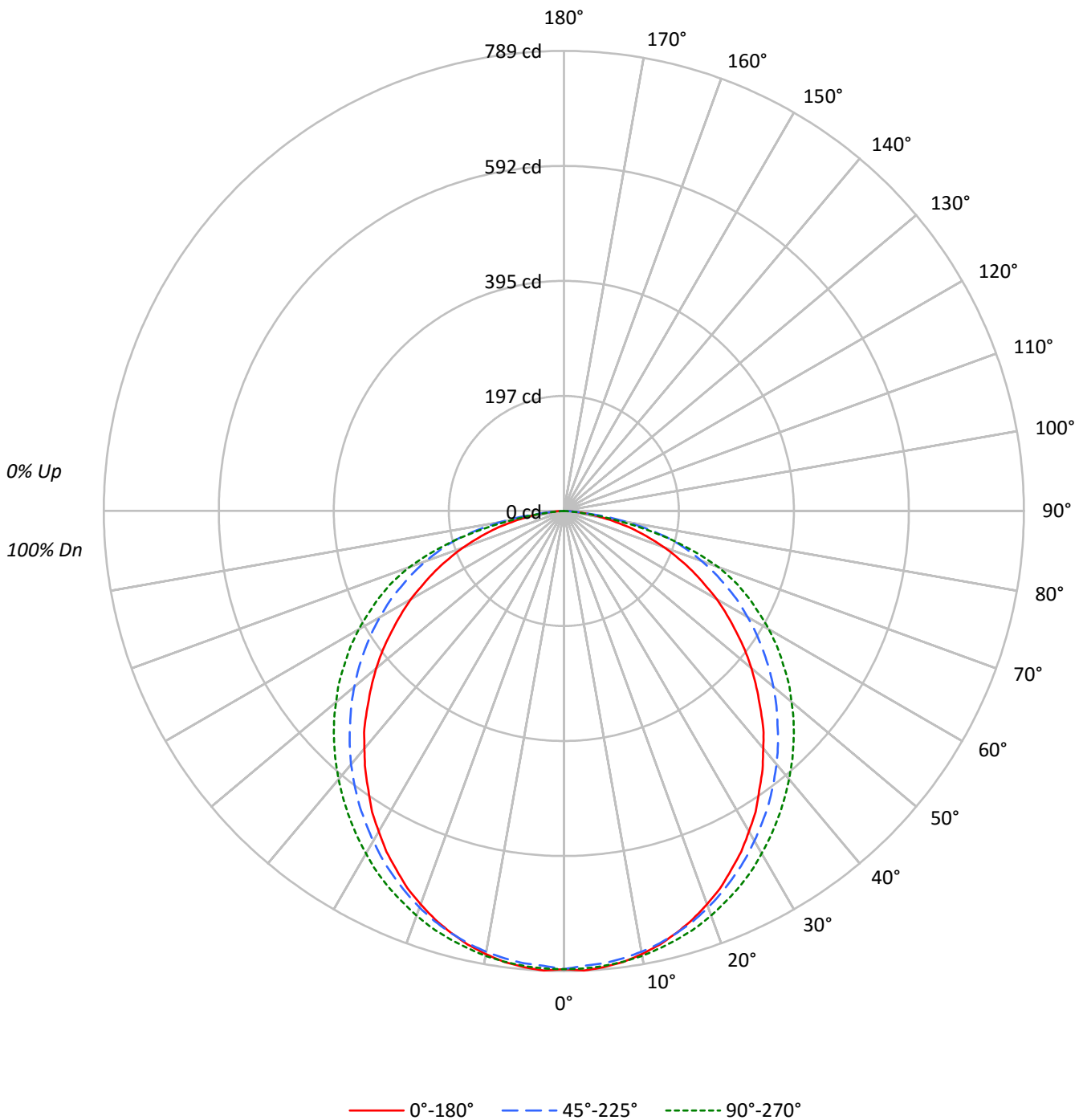
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58				
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49				
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42				
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37				
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32				
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2115	2115	2115
5°	2121	2103	2116
10°	2108	2097	2117
15°	2086	2087	2116
20°	2055	2073	2115
25°	2016	2052	2113
30°	1972	2031	2108
35°	1920	2013	2107
40°	1869	1994	2110
45°	1812	1972	2121
50°	1759	1963	2135
55°	1692	1957	2155
60°	1631	1960	2185
65°	1548	1966	2218
70°	1452	1981	2217
75°	1316	1999	2005
80°	1080	1726	1427
85°	800	815	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	3.3
10°-20°	212.4	9.3
20°-30°	320.0	14.0
30°-40°	384.0	16.8
40°-50°	400.2	17.5
50°-60°	370.5	16.2
60°-70°	299.4	13.1
70°-80°	182.5	8.0
80°-90°	37.7	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°	606.8	26.6
0°-40°	990.7	43.4
0°-60°	1761.5	77.2
0°-90°	2281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2281.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	785	783	779	784	783	75
15°	749	749	749	759	759	211
25°	679	683	691	708	712	313
35°	584	594	613	635	641	366
45°	476	490	518	547	557	368
55°	361	379	417	450	459	323
65°	243	267	309	340	348	240
75°	127	155	192	195	193	133
85°	26	39	26	15	11	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.8	785.8	785.8	785.8	785.8
2.5°	788.9	786.3	780.7	786.3	785.3
5°	785.3	783.3	778.7	784.3	783.3
7.5°	780.2	778.2	774.1	780.7	779.7
10°	771.6	770.6	767.5	775.1	774.6
12.5°	761.4	760.9	759.4	768.0	767.5
15°	748.7	749.2	749.2	759.4	759.4
17.5°	734.4	735.5	737.5	748.7	750.2
20°	717.7	719.7	723.8	736.5	738.5
22.5°	700.4	701.9	708.0	723.3	725.3
25°	679.0	683.1	691.2	708.5	711.6
27.5°	658.7	662.2	673.4	691.2	696.3
30°	634.8	640.3	653.6	672.9	678.5
32.5°	611.9	618.0	633.2	655.6	660.7
35°	584.4	593.6	612.9	635.3	641.4
37.5°	559.5	568.1	590.0	614.4	621.5
40°	532.0	542.7	567.6	593.6	600.7
42.5°	506.6	516.8	543.7	570.2	579.8
45°	476.1	490.3	518.3	547.3	557.4
47.5°	448.1	462.3	494.4	525.4	534.6
50°	420.1	435.4	468.9	501.0	510.1
52.5°	391.1	407.4	443.5	475.6	486.2
55°	360.6	379.4	417.1	449.6	459.3
57.5°	331.6	350.9	391.1	424.2	433.8
60°	303.1	323.0	364.2	395.7	405.9
62.5°	271.6	295.0	337.7	368.7	376.4
65°	243.1	267.0	308.7	339.8	348.4
67.5°	213.1	239.0	280.8	309.2	317.4
70°	184.6	211.6	251.8	278.2	281.8
72.5°	154.1	181.6	222.3	239.0	239.0
75°	126.6	154.6	192.3	195.3	192.8
77.5°	96.6	127.7	152.1	146.0	139.9
80°	69.7	100.2	111.4	100.2	92.1
82.5°	46.8	72.7	67.1	53.4	47.3
85°	25.9	38.7	26.4	14.7	10.7
87.5°	9.7	8.6	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)