

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: P307802

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA125-W2A-U-4000K**

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: P307802
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: 14FCZ2-20-UNV-L82765-S-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2019.0 lumens
Efficiency: N/A
Efficacy: 120.9 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

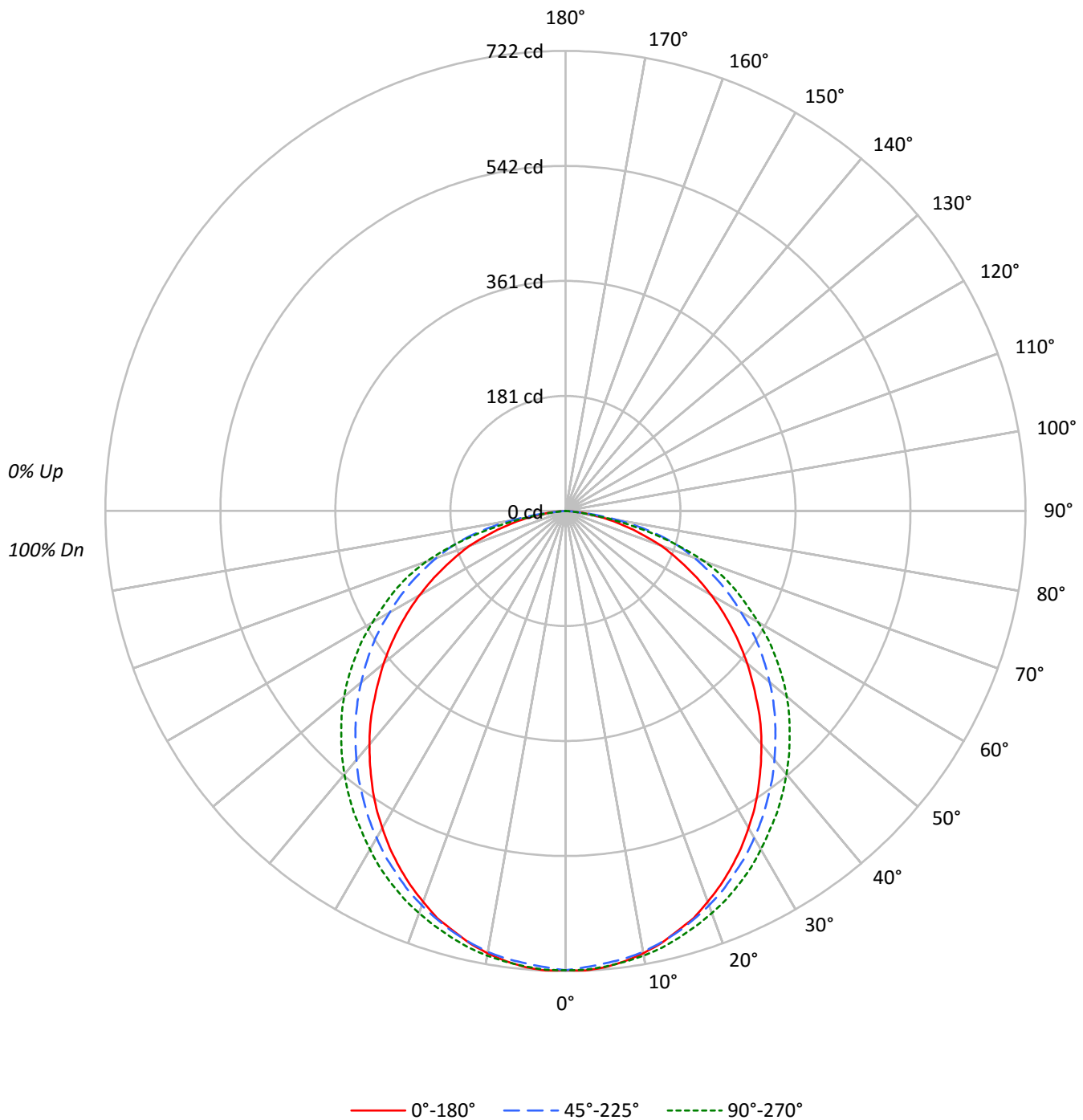
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1939	1939	1939
5°	1941	1925	1939
10°	1926	1920	1937
15°	1899	1905	1930
20°	1869	1886	1924
25°	1831	1864	1917
30°	1785	1841	1907
35°	1736	1815	1901
40°	1681	1793	1896
45°	1619	1772	1893
50°	1559	1752	1899
55°	1493	1738	1893
60°	1422	1713	1880
65°	1338	1708	1880
70°	1260	1693	1827
75°	1093	1655	1562
80°	885	1334	1040
85°	587	463	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	3.4
10°-20°	193.7	9.6
20°-30°	290.5	14.4
30°-40°	346.6	17.2
40°-50°	358.3	17.7
50°-60°	327.1	16.2
60°-70°	257.4	12.7
70°-80°	149.8	7.4
80°-90°	27.6	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°	552.2	27.4
0°-40°	898.8	44.5
0°-60°	1584.1	78.5
0°-90°	2019.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2019.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	719	717	713	719	718	68
15°	682	683	684	693	693	192
25°	617	620	628	643	646	284
35°	528	536	553	574	579	330
45°	425	440	466	492	498	329
55°	318	335	370	397	403	285
65°	210	232	268	289	295	209
75°	105	130	159	156	150	112
85°	19	27	15	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.7	720.7	720.7	720.7	720.7
2.5°	721.8	719.7	716.7	721.8	720.7
5°	718.7	716.7	712.7	718.7	717.7
7.5°	712.7	710.7	708.7	714.7	713.7
10°	704.7	703.7	702.7	709.7	708.7
12.5°	694.7	694.7	693.7	701.7	701.7
15°	681.7	682.7	683.7	692.7	692.7
17.5°	669.7	668.7	671.7	681.7	682.7
20°	652.7	654.7	658.7	670.7	671.7
22.5°	635.7	637.7	644.7	656.7	659.7
25°	616.6	619.6	627.7	642.7	645.7
27.5°	596.6	600.6	611.6	627.7	630.7
30°	574.6	580.6	592.6	610.6	613.6
32.5°	552.6	558.6	573.6	591.6	595.6
35°	528.5	535.6	552.6	573.6	578.6
37.5°	503.5	512.5	532.6	553.6	559.6
40°	478.5	488.5	510.5	532.6	539.6
42.5°	453.5	463.5	487.5	512.5	519.5
45°	425.4	439.5	465.5	491.5	497.5
47.5°	398.4	413.4	442.5	468.5	476.5
50°	372.4	387.4	418.4	445.5	453.5
52.5°	345.4	361.4	394.4	422.4	429.4
55°	318.3	335.3	370.4	397.4	403.4
57.5°	291.3	309.3	345.4	371.4	378.4
60°	264.3	283.3	318.3	344.4	349.4
62.5°	237.2	257.3	293.3	316.3	321.3
65°	210.2	232.2	268.3	289.3	295.3
67.5°	184.2	206.2	241.3	261.3	266.3
70°	160.2	180.2	215.2	230.2	232.2
72.5°	130.1	155.2	189.2	197.2	192.2
75°	105.1	130.1	159.2	156.2	150.2
77.5°	80.1	105.1	124.1	114.1	106.1
80°	57.1	82.1	86.1	71.1	67.1
82.5°	37.0	57.1	48.0	37.0	30.0
85°	19.0	27.0	15.0	12.0	10.0
87.5°	6.0	4.0	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)