

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: P307793

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA08-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: P307793
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-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" 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: 2026.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

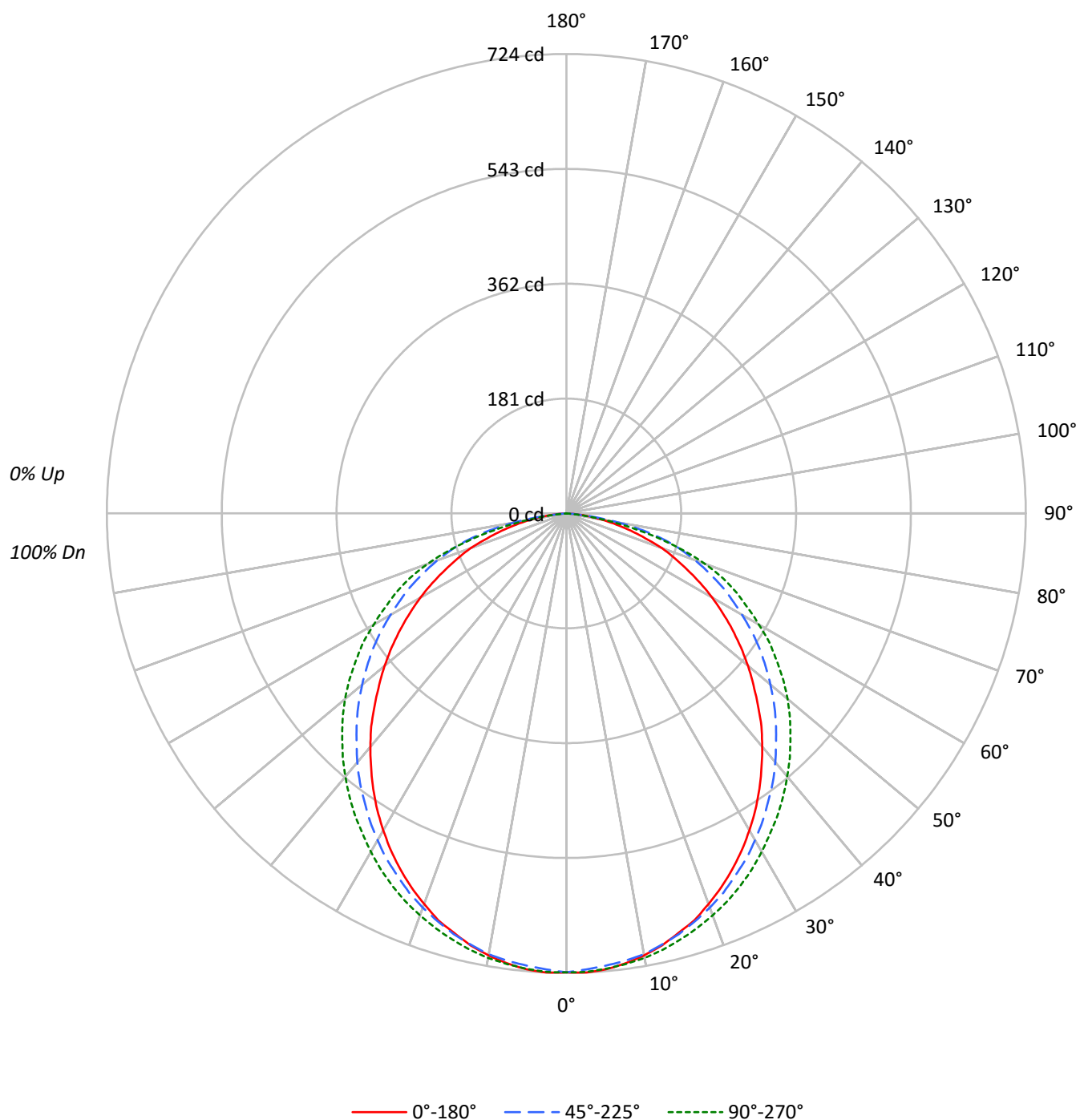
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1946	1946	1946
5°	1948	1932	1945
10°	1932	1927	1943
15°	1906	1911	1936
20°	1875	1893	1930
25°	1837	1870	1924
30°	1792	1848	1913
35°	1742	1822	1907
40°	1687	1800	1902
45°	1625	1778	1900
50°	1564	1758	1905
55°	1498	1744	1899
60°	1427	1719	1887
65°	1343	1714	1887
70°	1264	1699	1833
75°	1097	1660	1567
80°	888	1339	1043
85°	590	466	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.4
10°-20°	194.3	9.6
20°-30°	291.5	14.4
30°-40°	347.8	17.2
40°-50°	359.5	17.7
50°-60°	328.2	16.2
60°-70°	258.3	12.7
70°-80°	150.4	7.4
80°-90°	27.7	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°	554.2	27.4
0°-40°	901.9	44.5
0°-60°	1589.6	78.5
0°-90°	2026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	721	719	715	721	720	68
15°	684	685	686	695	695	193
25°	619	622	630	645	648	285
35°	530	537	554	576	581	332
45°	427	441	467	493	499	330
55°	319	336	372	399	405	286
65°	211	233	269	290	296	209
75°	106	131	160	157	151	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°	723.2	723.2	723.2	723.2	723.2
2.5°	724.3	722.2	719.2	724.3	723.2
5°	721.2	719.2	715.2	721.2	720.2
7.5°	715.2	713.2	711.2	717.2	716.2
10°	707.2	706.2	705.2	712.2	711.2
12.5°	697.1	697.1	696.1	704.2	704.2
15°	684.1	685.1	686.1	695.1	695.1
17.5°	672.0	671.0	674.0	684.1	685.1
20°	654.9	657.0	661.0	673.0	674.0
22.5°	637.9	639.9	646.9	659.0	662.0
25°	618.8	621.8	629.8	644.9	647.9
27.5°	598.7	602.7	613.8	629.8	632.8
30°	576.6	582.6	594.7	612.8	615.8
32.5°	554.5	560.5	575.6	593.7	597.7
35°	530.4	537.4	554.5	575.6	580.6
37.5°	505.3	514.3	534.4	555.5	561.5
40°	480.2	490.2	512.3	534.4	541.4
42.5°	455.0	465.1	489.2	514.3	521.3
45°	426.9	441.0	467.1	493.2	499.2
47.5°	399.8	414.9	444.0	470.1	478.1
50°	373.7	388.7	419.9	447.0	455.0
52.5°	346.6	362.6	395.8	423.9	430.9
55°	319.4	336.5	371.7	398.8	404.8
57.5°	292.3	310.4	346.6	372.7	379.7
60°	265.2	284.3	319.4	345.6	350.6
62.5°	238.1	258.2	294.3	317.4	322.4
65°	210.9	233.0	269.2	290.3	296.3
67.5°	184.8	206.9	242.1	262.2	267.2
70°	160.7	180.8	216.0	231.0	233.0
72.5°	130.6	155.7	189.9	197.9	192.9
75°	105.5	130.6	159.7	156.7	150.7
77.5°	80.4	105.5	124.6	114.5	106.5
80°	57.3	82.4	86.4	71.3	67.3
82.5°	37.2	57.3	48.2	37.2	30.1
85°	19.1	27.1	15.1	12.1	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)