

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: P307834

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP250-W2A-U-6500K**

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: P307834
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-CP250-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 6500K 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: 1969.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

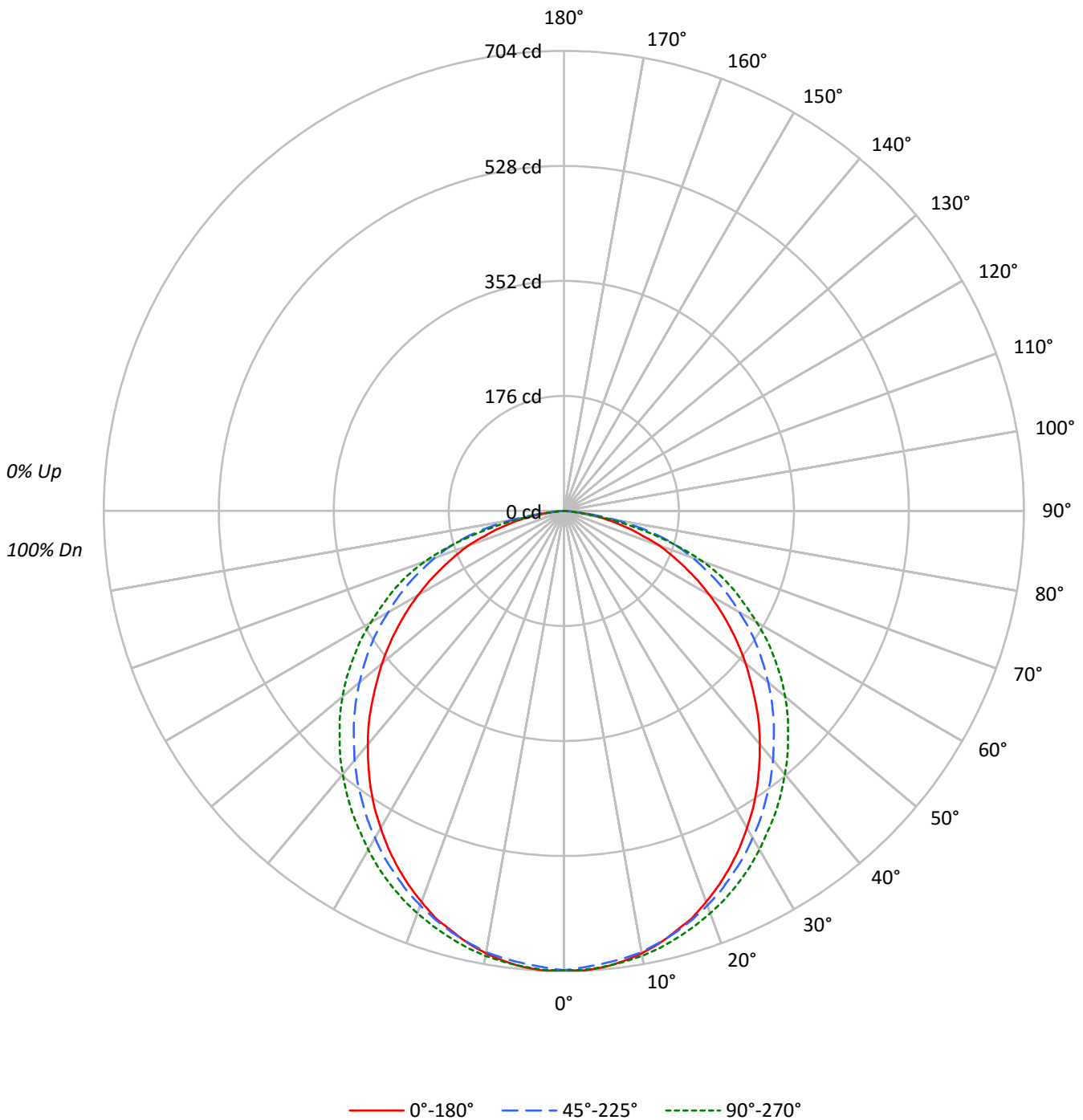
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1891	1891	1891
5°	1893	1878	1891
10°	1878	1873	1889
15°	1852	1858	1882
20°	1823	1840	1876
25°	1786	1817	1870
30°	1741	1796	1859
35°	1693	1770	1854
40°	1639	1749	1848
45°	1579	1728	1846
50°	1521	1708	1851
55°	1456	1695	1846
60°	1387	1671	1834
65°	1305	1666	1834
70°	1229	1651	1782
75°	1066	1614	1522
80°	862	1302	1013
85°	571	451	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	3.4
10°-20°	188.9	9.6
20°-30°	283.3	14.4
30°-40°	338.0	17.2
40°-50°	349.4	17.7
50°-60°	319.0	16.2
60°-70°	251.0	12.7
70°-80°	146.1	7.4
80°-90°	26.9	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°	538.6	27.4
0°-40°	876.5	44.5
0°-60°	1544.9	78.5
0°-90°	1969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1969.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	701	699	695	701	700	66
15°	665	666	667	676	676	188
25°	601	604	612	627	630	277
35°	516	522	539	559	564	322
45°	415	429	454	479	485	320
55°	310	327	361	388	393	278
65°	205	226	262	282	288	204
75°	102	127	155	152	146	109
85°	18	26	15	12	10	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.9	702.9	702.9	702.9	702.9
2.5°	703.9	701.9	699.0	703.9	702.9
5°	700.9	699.0	695.1	700.9	700.0
7.5°	695.1	693.1	691.2	697.0	696.1
10°	687.3	686.3	685.3	692.2	691.2
12.5°	677.5	677.5	676.5	684.4	684.4
15°	664.8	665.8	666.8	675.6	675.6
17.5°	653.1	652.1	655.1	664.8	665.8
20°	636.5	638.5	642.4	654.1	655.1
22.5°	619.9	621.9	628.7	640.4	643.3
25°	601.4	604.3	612.1	626.8	629.7
27.5°	581.8	585.8	596.5	612.1	615.0
30°	560.4	566.2	577.9	595.5	598.4
32.5°	538.9	544.7	559.4	577.0	580.9
35°	515.5	522.3	538.9	559.4	564.3
37.5°	491.1	499.8	519.4	539.9	545.7
40°	466.6	476.4	497.9	519.4	526.2
42.5°	442.2	452.0	475.4	499.8	506.7
45°	414.9	428.6	454.0	479.3	485.2
47.5°	388.5	403.2	431.5	456.9	464.7
50°	363.2	377.8	408.1	434.4	442.2
52.5°	336.8	352.4	384.6	412.0	418.8
55°	310.4	327.0	361.2	387.6	393.4
57.5°	284.1	301.7	336.8	362.2	369.0
60°	257.7	276.3	310.4	335.8	340.7
62.5°	231.4	250.9	286.0	308.5	313.4
65°	205.0	226.5	261.6	282.1	288.0
67.5°	179.6	201.1	235.3	254.8	259.7
70°	156.2	175.7	209.9	224.5	226.5
72.5°	126.9	151.3	184.5	192.3	187.4
75°	102.5	126.9	155.2	152.3	146.4
77.5°	78.1	102.5	121.1	111.3	103.5
80°	55.6	80.1	84.0	69.3	65.4
82.5°	36.1	55.6	46.9	36.1	29.3
85°	18.5	26.4	14.6	11.7	9.8
87.5°	5.9	3.9	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)