

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: P307475

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CA08-W2A-U-2700K**

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: P307475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 2700K 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: 2448.0 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

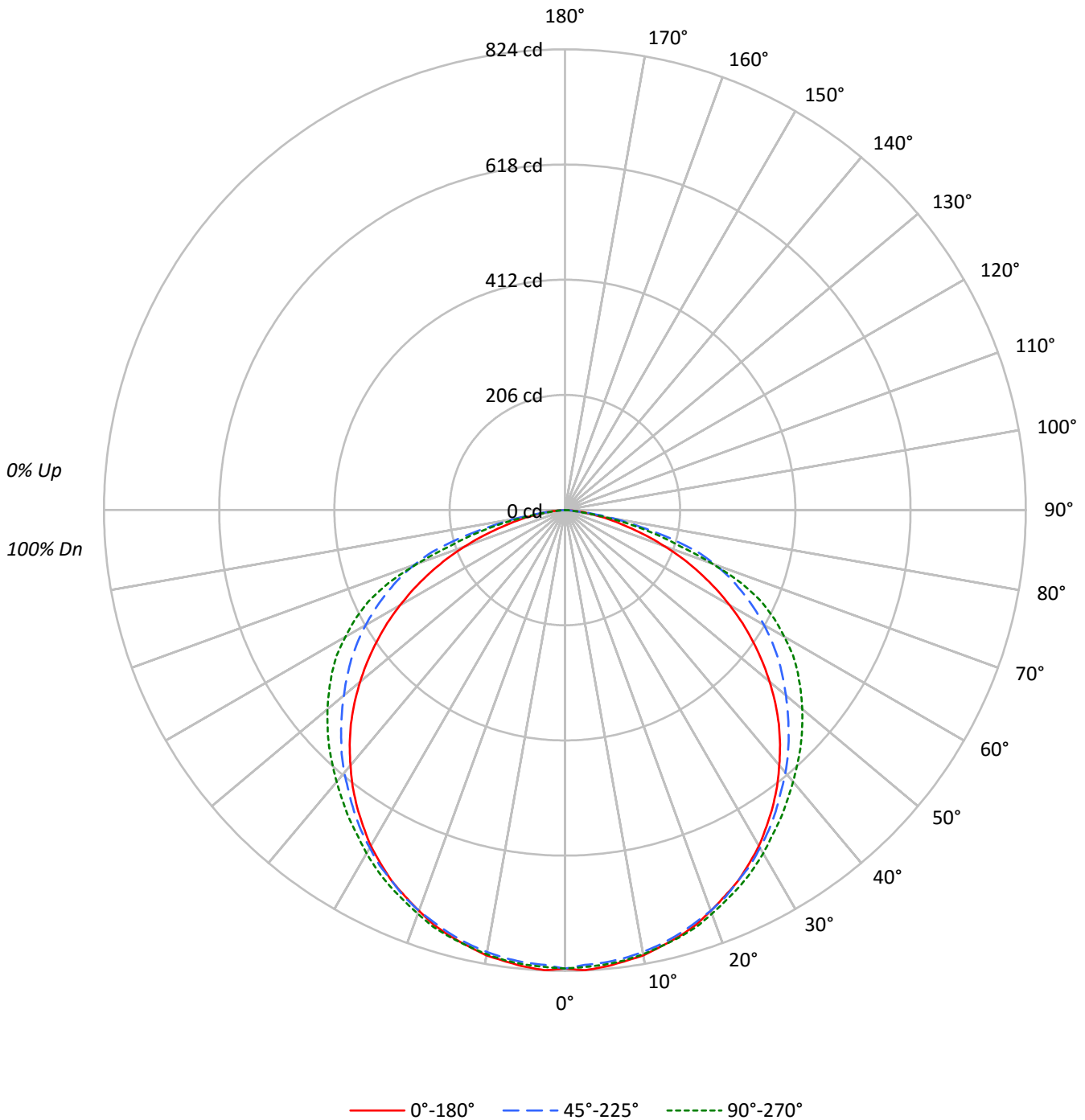
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2206	2206	2206
5°	2215	2194	2204
10°	2209	2193	2204
15°	2199	2188	2204
20°	2184	2184	2200
25°	2173	2173	2202
30°	2156	2168	2203
35°	2128	2160	2210
40°	2095	2155	2229
45°	2058	2153	2269
50°	2000	2160	2320
55°	1928	2188	2385
60°	1831	2211	2438
65°	1692	2239	2471
70°	1504	2256	2210
75°	1212	2026	1769
80°	948	1421	1155
85°	648	414	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.6	3.2
10°-20°	222.7	9.1
20°-30°	339.0	13.8
30°-40°	412.9	16.9
40°-50°	438.1	17.9
50°-60°	413.5	16.9
60°-70°	333.8	13.6
70°-80°	181.1	7.4
80°-90°	29.3	1.2
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°	639.3	26.1
0°-40°	1052.2	43.0
0°-60°	1903.8	77.8
0°-90°	2448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	820	818	812	818	816	78
15°	789	787	786	791	791	223
25°	732	730	732	740	742	337
35°	648	652	657	671	673	405
45°	541	548	566	587	596	417
55°	411	428	466	497	508	367
65°	266	298	352	380	388	263
75°	117	170	195	176	170	127
85°	21	23	13	12	10	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	819.9	819.9	819.9	819.9	819.9
2.5°	823.7	819.9	814.2	819.9	818.0
5°	819.9	818.0	812.3	818.0	816.1
7.5°	814.2	814.2	808.4	812.3	812.3
10°	808.4	806.5	802.7	808.4	806.5
12.5°	798.9	797.0	795.1	800.8	798.9
15°	789.3	787.4	785.5	791.2	791.2
17.5°	777.9	775.9	774.0	781.7	781.7
20°	762.6	762.6	762.6	770.2	768.3
22.5°	747.3	747.3	749.2	756.8	754.9
25°	732.0	730.1	732.0	739.6	741.5
27.5°	712.9	714.8	716.7	724.3	726.2
30°	693.8	695.7	697.6	707.1	709.0
32.5°	670.8	674.6	678.5	689.9	689.9
35°	647.9	651.7	657.4	670.8	672.7
37.5°	623.0	626.9	634.5	649.8	653.6
40°	596.3	602.0	613.5	628.8	634.5
42.5°	569.5	577.2	590.6	607.8	615.4
45°	540.9	548.5	565.7	586.7	596.3
47.5°	510.3	519.8	540.9	567.6	575.3
50°	477.8	491.2	516.0	544.7	554.2
52.5°	445.3	460.6	491.2	521.8	531.3
55°	410.9	428.1	466.3	496.9	508.4
57.5°	376.5	395.6	439.6	472.1	483.5
60°	340.2	363.1	410.9	443.4	453.0
62.5°	303.9	330.6	382.2	414.7	422.4
65°	265.7	298.1	351.7	380.3	388.0
67.5°	229.3	267.6	321.1	342.1	342.1
70°	191.1	233.2	286.7	292.4	280.9
72.5°	152.9	200.7	248.5	227.4	217.9
75°	116.6	170.1	194.9	175.8	170.1
77.5°	87.9	137.6	137.6	126.1	122.3
80°	61.2	105.1	91.7	80.3	74.5
82.5°	40.1	59.2	47.8	38.2	32.5
85°	21.0	22.9	13.4	11.5	9.6
87.5°	7.6	3.8	1.9	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)