

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: P307255

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CA08-W2A-U-5000K**

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: P307255
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: 14FCZ2-20-UNV-L82765-RDP-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 1328.0 lumens
Efficiency: N/A
Efficacy: 78.6 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

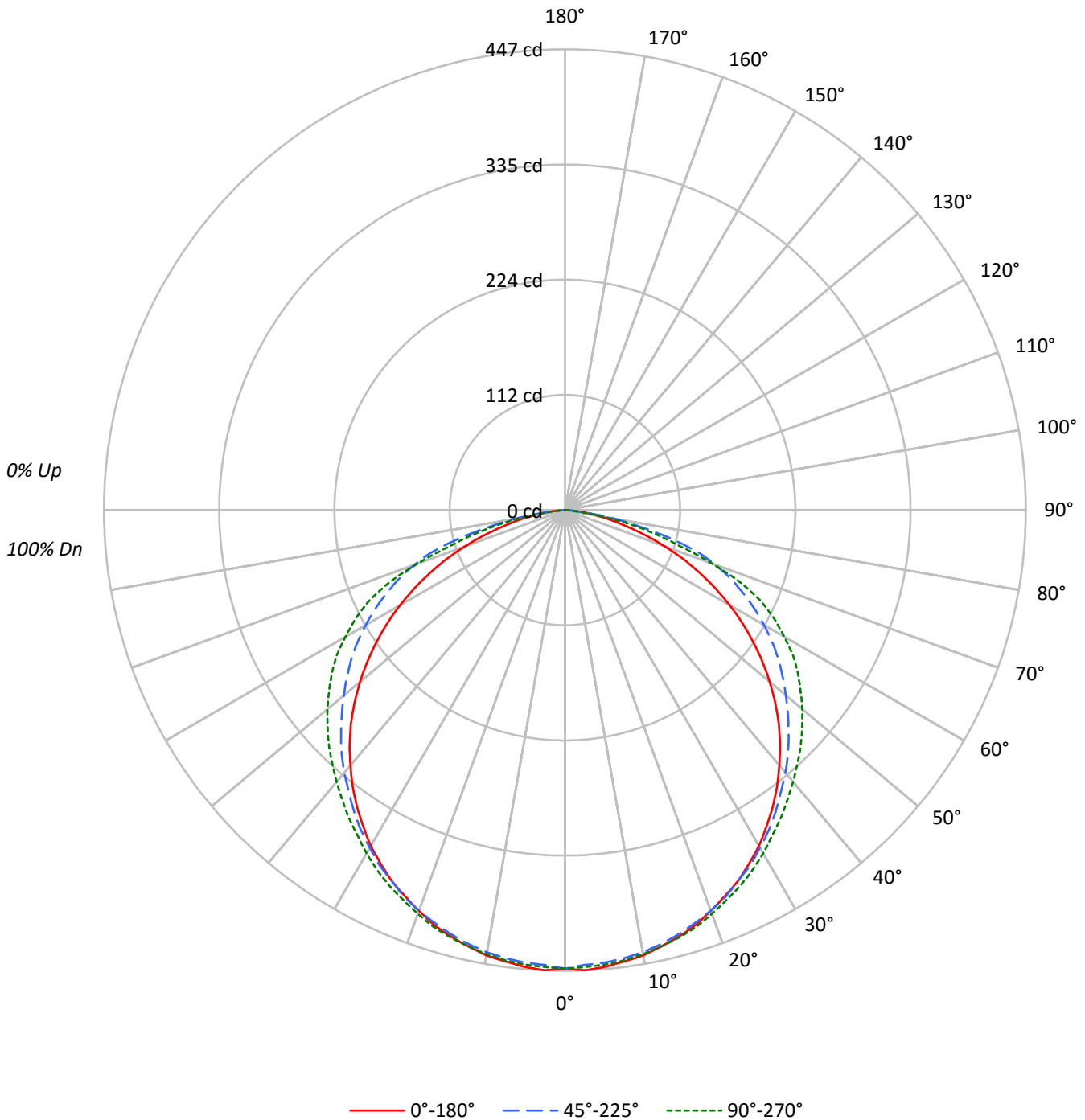
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CA08-W2A-U-5000K

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°	1197	1197	1197
5°	1202	1190	1196
10°	1198	1190	1195
15°	1193	1187	1196
20°	1185	1185	1194
25°	1179	1179	1194
30°	1170	1176	1195
35°	1155	1172	1199
40°	1136	1169	1209
45°	1117	1168	1231
50°	1085	1172	1259
55°	1046	1187	1294
60°	993	1200	1322
65°	918	1215	1340
70°	816	1223	1199
75°	657	1100	960
80°	514	772	626
85°	352	225	161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	3.2
10°-20°	120.8	9.1
20°-30°	183.9	13.8
30°-40°	224.0	16.9
40°-50°	237.7	17.9
50°-60°	224.3	16.9
60°-70°	181.1	13.6
70°-80°	98.2	7.4
80°-90°	15.9	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°	346.8	26.1
0°-40°	570.8	43.0
0°-60°	1032.8	77.8
0°-90°	1328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1328.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	445	445	445	445	445	
5°	445	444	441	444	443	42
15°	428	427	426	429	429	121
25°	397	396	397	401	402	183
35°	352	354	357	364	365	220
45°	293	298	307	318	324	226
55°	223	232	253	270	276	199
65°	144	162	191	206	210	143
75°	63	92	106	95	92	69
85°	11	12	7	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.8	444.8	444.8	444.8	444.8
2.5°	446.9	444.8	441.7	444.8	443.7
5°	444.8	443.7	440.6	443.7	442.7
7.5°	441.7	441.7	438.6	440.6	440.6
10°	438.6	437.5	435.5	438.6	437.5
12.5°	433.4	432.3	431.3	434.4	433.4
15°	428.2	427.2	426.1	429.2	429.2
17.5°	422.0	420.9	419.9	424.0	424.0
20°	413.7	413.7	413.7	417.8	416.8
22.5°	405.4	405.4	406.4	410.6	409.5
25°	397.1	396.1	397.1	401.2	402.3
27.5°	386.7	387.8	388.8	392.9	394.0
30°	376.4	377.4	378.4	383.6	384.6
32.5°	363.9	366.0	368.1	374.3	374.3
35°	351.5	353.5	356.7	363.9	364.9
37.5°	338.0	340.1	344.2	352.5	354.6
40°	323.5	326.6	332.8	341.1	344.2
42.5°	309.0	313.1	320.4	329.7	333.8
45°	293.4	297.6	306.9	318.3	323.5
47.5°	276.8	282.0	293.4	307.9	312.1
50°	259.2	266.5	279.9	295.5	300.7
52.5°	241.6	249.9	266.5	283.0	288.2
55°	222.9	232.2	253.0	269.6	275.8
57.5°	204.2	214.6	238.5	256.1	262.3
60°	184.5	197.0	222.9	240.5	245.7
62.5°	164.8	179.4	207.4	225.0	229.1
65°	144.1	161.7	190.8	206.3	210.5
67.5°	124.4	145.2	174.2	185.6	185.6
70°	103.7	126.5	155.5	158.6	152.4
72.5°	82.9	108.9	134.8	123.4	118.2
75°	63.2	92.3	105.8	95.4	92.3
77.5°	47.7	74.6	74.6	68.4	66.4
80°	33.2	57.0	49.8	43.5	40.4
82.5°	21.8	32.1	25.9	20.7	17.6
85°	11.4	12.4	7.3	6.2	5.2
87.5°	4.1	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)