

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: P307336

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-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: P307336
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: 14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB 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: 1438.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

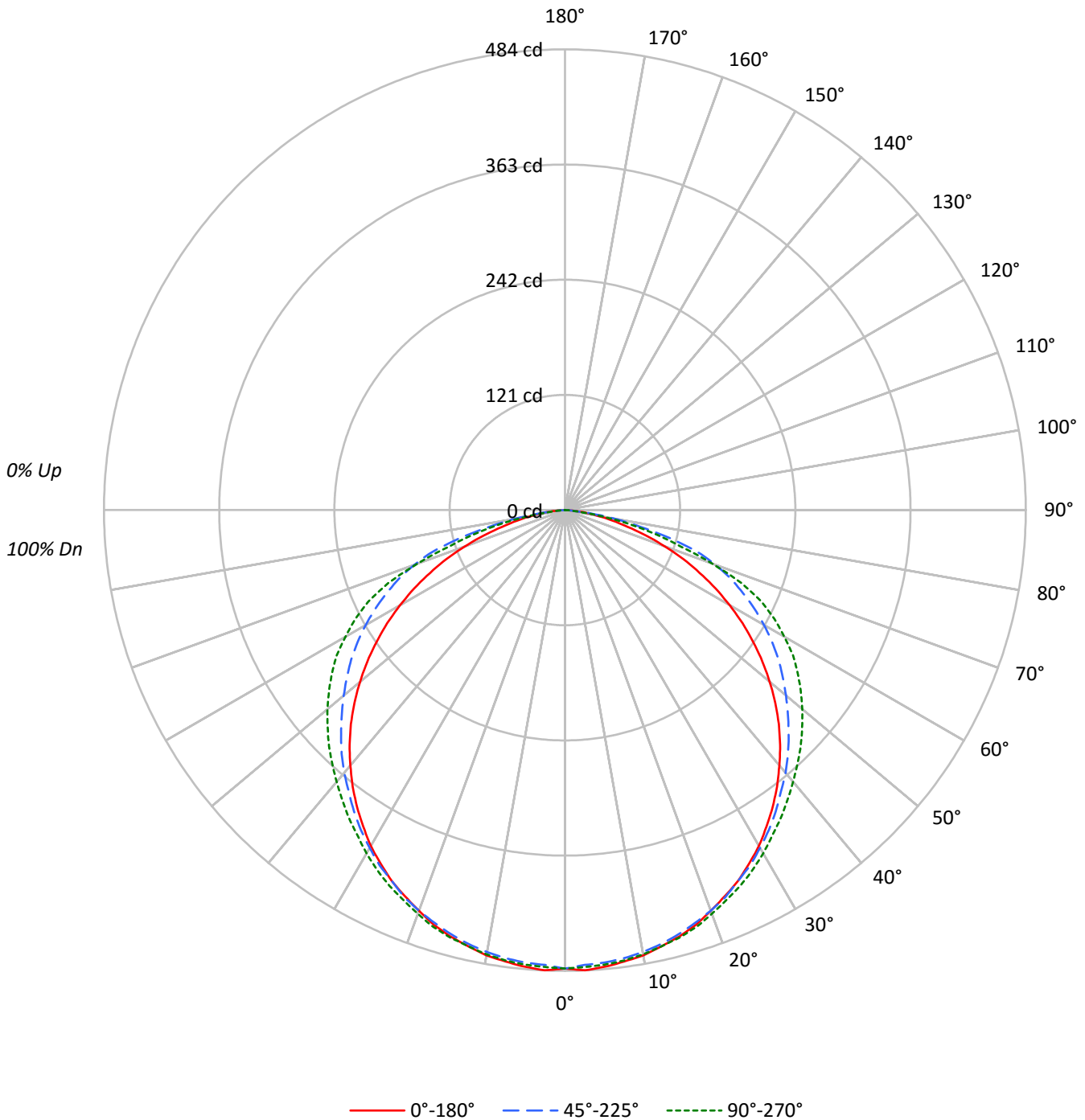
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1296	1296	1296
5°	1301	1289	1295
10°	1298	1288	1295
15°	1292	1285	1295
20°	1283	1283	1292
25°	1277	1277	1293
30°	1266	1273	1294
35°	1250	1269	1298
40°	1231	1266	1309
45°	1209	1265	1333
50°	1175	1269	1363
55°	1133	1285	1401
60°	1075	1299	1432
65°	994	1316	1451
70°	884	1325	1298
75°	712	1190	1039
80°	556	835	679
85°	380	244	173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	3.2
10°-20°	130.8	9.1
20°-30°	199.2	13.8
30°-40°	242.6	16.9
40°-50°	257.3	17.9
50°-60°	242.9	16.9
60°-70°	196.1	13.6
70°-80°	106.4	7.4
80°-90°	17.2	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°	375.5	26.1
0°-40°	618.1	43.0
0°-60°	1118.3	77.8
0°-90°	1438.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1438.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	482	482	482	482	482	
5°	482	480	477	480	479	46
15°	464	462	461	465	465	131
25°	430	429	430	434	436	198
35°	381	383	386	394	395	238
45°	318	322	332	345	350	245
55°	241	252	274	292	299	216
65°	156	175	207	223	228	155
75°	68	100	114	103	100	75
85°	12	14	8	7	6	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	481.6	481.6	481.6	481.6	481.6
2.5°	483.9	481.6	478.3	481.6	480.5
5°	481.6	480.5	477.1	480.5	479.4
7.5°	478.3	478.3	474.9	477.1	477.1
10°	474.9	473.8	471.5	474.9	473.8
12.5°	469.3	468.2	467.0	470.4	469.3
15°	463.7	462.5	461.4	464.8	464.8
17.5°	456.9	455.8	454.7	459.2	459.2
20°	447.9	447.9	447.9	452.4	451.3
22.5°	439.0	439.0	440.1	444.6	443.5
25°	430.0	428.9	430.0	434.5	435.6
27.5°	418.8	419.9	421.0	425.5	426.6
30°	407.5	408.6	409.8	415.4	416.5
32.5°	394.1	396.3	398.5	405.3	405.3
35°	380.6	382.8	386.2	394.1	395.2
37.5°	366.0	368.2	372.7	381.7	384.0
40°	350.3	353.6	360.4	369.4	372.7
42.5°	334.6	339.0	346.9	357.0	361.5
45°	317.7	322.2	332.3	344.7	350.3
47.5°	299.8	305.4	317.7	333.4	337.9
50°	280.7	288.5	303.1	320.0	325.6
52.5°	261.6	270.6	288.5	306.5	312.1
55°	241.4	251.5	273.9	291.9	298.6
57.5°	221.2	232.4	258.2	277.3	284.0
60°	199.8	213.3	241.4	260.5	266.1
62.5°	178.5	194.2	224.5	243.6	248.1
65°	156.1	175.1	206.6	223.4	227.9
67.5°	134.7	157.2	188.6	201.0	201.0
70°	112.3	137.0	168.4	171.8	165.0
72.5°	89.8	117.9	145.9	133.6	128.0
75°	68.5	99.9	114.5	103.3	99.9
77.5°	51.6	80.8	80.8	74.1	71.9
80°	35.9	61.7	53.9	47.2	43.8
82.5°	23.6	34.8	28.1	22.5	19.1
85°	12.3	13.5	7.9	6.7	5.6
87.5°	4.5	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)