

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: P307787

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP250-W2A-U-5500K**

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: P307787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5500K 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: 4011.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

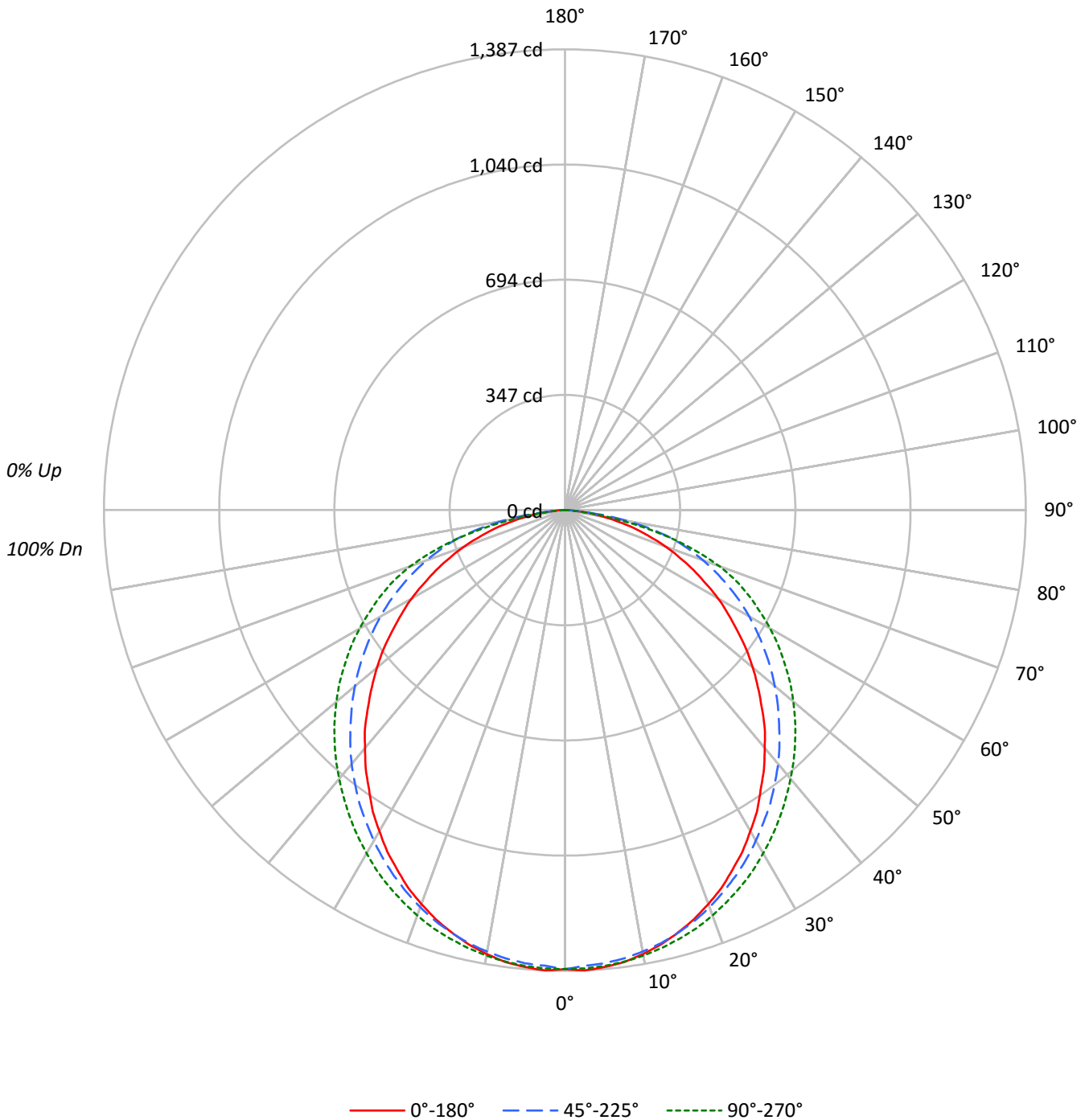
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3718	3718	3718
5°	3730	3699	3720
10°	3707	3688	3722
15°	3668	3670	3720
20°	3614	3645	3719
25°	3545	3609	3715
30°	3468	3571	3707
35°	3376	3540	3705
40°	3286	3506	3711
45°	3186	3468	3730
50°	3093	3452	3756
55°	2975	3441	3789
60°	2869	3447	3841
65°	2722	3457	3901
70°	2555	3483	3899
75°	2315	3515	3525
80°	1898	3036	2509
85°	1408	1436	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.8	3.3
10°-20°	373.5	9.3
20°-30°	562.7	14.0
30°-40°	675.2	16.8
40°-50°	703.8	17.5
50°-60°	651.5	16.2
60°-70°	526.4	13.1
70°-80°	321.0	8.0
80°-90°	66.3	1.7
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°	1066.9	26.6
0°-40°	1742.1	43.4
0°-60°	3097.4	77.2
0°-90°	4011.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4011.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1382	1382	1382	1382	1382	
5°	1381	1377	1369	1379	1377	131
15°	1316	1317	1317	1335	1335	371
25°	1194	1201	1215	1246	1251	550
35°	1028	1044	1078	1117	1128	644
45°	837	862	911	962	980	647
55°	634	667	733	791	808	568
65°	428	470	543	597	613	423
75°	223	272	338	343	339	234
85°	46	68	46	26	19	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1381.8	1381.8	1381.8	1381.8	1381.8
2.5°	1387.2	1382.7	1372.9	1382.7	1380.9
5°	1380.9	1377.3	1369.3	1379.1	1377.3
7.5°	1372.0	1368.4	1361.2	1372.9	1371.1
10°	1356.8	1355.0	1349.6	1363.0	1362.1
12.5°	1338.9	1338.0	1335.3	1350.5	1349.6
15°	1316.5	1317.4	1317.4	1335.3	1335.3
17.5°	1291.5	1293.3	1296.8	1316.5	1319.2
20°	1262.0	1265.5	1272.7	1295.0	1298.6
22.5°	1231.5	1234.2	1245.0	1271.8	1275.4
25°	1194.0	1201.1	1215.4	1245.9	1251.2
27.5°	1158.2	1164.5	1184.1	1215.4	1224.4
30°	1116.2	1126.0	1149.3	1183.3	1193.1
32.5°	1075.9	1086.7	1113.5	1152.8	1161.8
35°	1027.6	1043.7	1077.7	1117.1	1127.8
37.5°	983.8	999.0	1037.5	1080.4	1092.9
40°	935.5	954.3	998.1	1043.7	1056.3
42.5°	890.8	908.7	956.1	1002.6	1019.6
45°	837.1	862.2	911.4	962.3	980.2
47.5°	787.9	813.0	869.3	923.9	940.0
50°	738.8	765.6	824.6	881.0	897.1
52.5°	687.8	716.4	779.9	836.2	855.0
55°	634.1	667.2	733.4	790.6	807.6
57.5°	583.1	617.1	687.8	745.9	762.9
60°	533.0	567.9	640.4	695.8	713.7
62.5°	477.6	518.7	593.9	648.4	661.8
65°	427.5	469.5	542.9	597.4	612.6
67.5°	374.7	420.4	493.7	543.8	558.1
70°	324.7	372.1	442.7	489.2	495.5
72.5°	271.0	319.3	390.8	420.4	420.4
75°	222.7	271.9	338.1	343.4	339.0
77.5°	169.9	224.5	267.4	256.7	246.0
80°	122.5	176.2	195.9	176.2	161.9
82.5°	82.3	127.9	118.1	93.9	83.2
85°	45.6	68.0	46.5	25.9	18.8
87.5°	17.0	15.2	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)