

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: P308053

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP250-W2A-U-3500K**

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: P308053
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: 14FCZ2-44-UNV-L82765-S-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3500K 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: 3806.0 lumens
Efficiency: N/A
Efficacy: 98.9 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

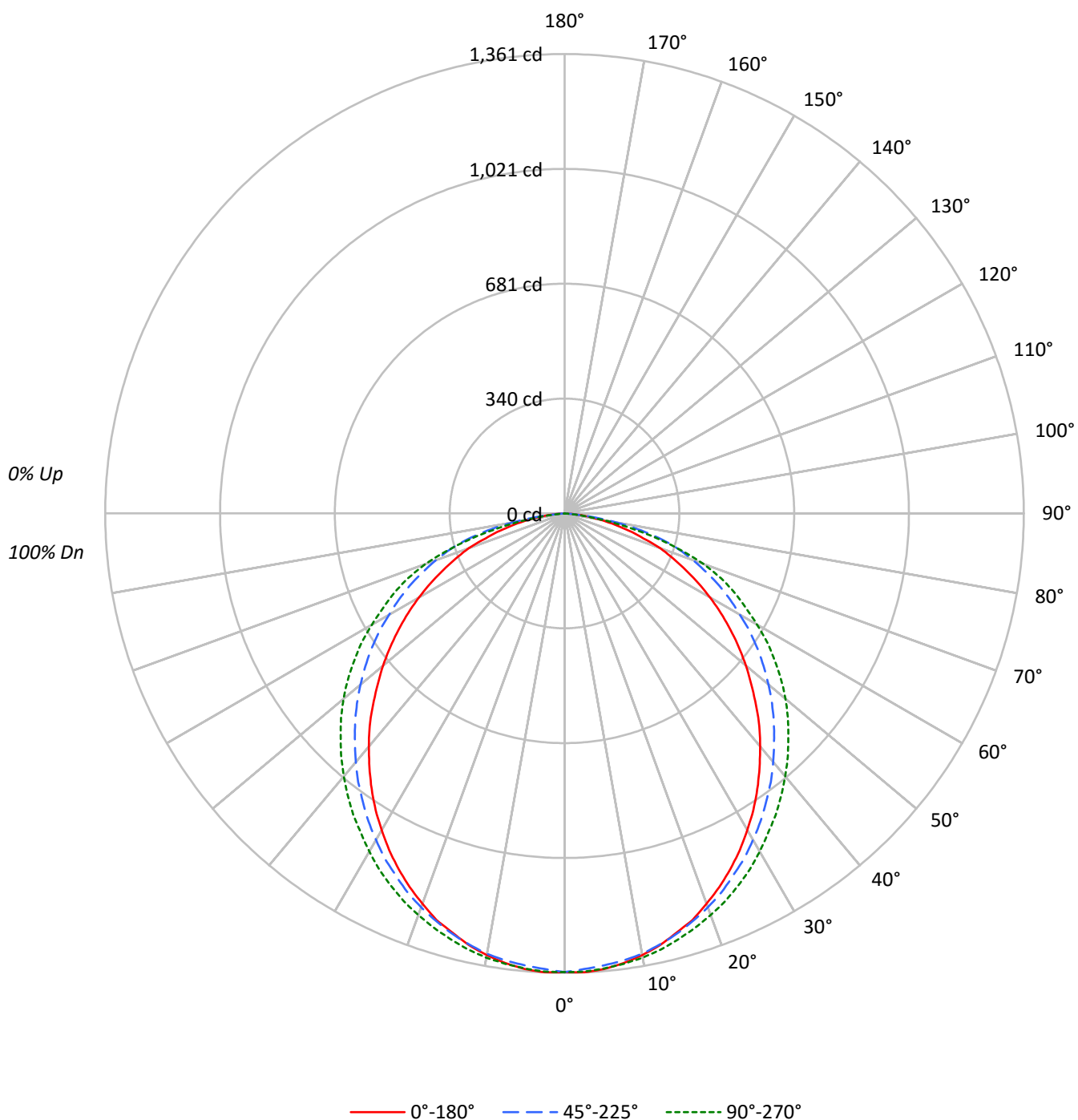
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3656	3656	3656
5°	3660	3629	3655
10°	3630	3620	3651
15°	3580	3591	3638
20°	3523	3556	3626
25°	3451	3513	3614
30°	3366	3471	3594
35°	3273	3422	3583
40°	3169	3381	3573
45°	3052	3339	3569
50°	2939	3302	3579
55°	2815	3276	3568
60°	2681	3230	3545
65°	2523	3220	3545
70°	2375	3192	3445
75°	2060	3119	2943
80°	1667	2515	1959
85°	1108	874	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.4
10°-20°	365.1	9.6
20°-30°	547.6	14.4
30°-40°	653.3	17.2
40°-50°	675.4	17.7
50°-60°	616.6	16.2
60°-70°	485.2	12.7
70°-80°	282.5	7.4
80°-90°	52.0	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°	1041.0	27.4
0°-40°	1694.3	44.5
0°-60°	2986.3	78.5
0°-90°	3806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1355	1351	1344	1355	1353	128
15°	1285	1287	1289	1306	1306	363
25°	1162	1168	1183	1212	1217	535
35°	996	1010	1042	1081	1091	623
45°	802	828	878	926	938	619
55°	600	632	698	749	760	537
65°	396	438	506	545	557	394
75°	198	245	300	294	283	211
85°	36	51	28	23	19	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1358.7	1358.7	1358.7	1358.7	1358.7
2.5°	1360.6	1356.8	1351.1	1360.6	1358.7
5°	1354.9	1351.1	1343.6	1354.9	1353.0
7.5°	1343.6	1339.8	1336.0	1347.4	1345.5
10°	1328.5	1326.6	1324.7	1337.9	1336.0
12.5°	1309.6	1309.6	1307.7	1322.8	1322.8
15°	1285.1	1287.0	1288.9	1305.8	1305.8
17.5°	1262.4	1260.6	1266.2	1285.1	1287.0
20°	1230.4	1234.1	1241.7	1264.3	1266.2
22.5°	1198.3	1202.1	1215.3	1237.9	1243.6
25°	1162.4	1168.1	1183.2	1211.5	1217.1
27.5°	1124.7	1132.2	1153.0	1183.2	1188.8
30°	1083.2	1094.5	1117.1	1151.1	1156.8
32.5°	1041.7	1053.0	1081.3	1115.2	1122.8
35°	996.4	1009.6	1041.7	1081.3	1090.7
37.5°	949.2	966.2	1003.9	1043.5	1054.9
40°	902.0	920.9	962.4	1003.9	1017.1
42.5°	854.8	873.7	919.0	966.2	979.4
45°	802.0	828.4	877.5	926.5	937.9
47.5°	751.0	779.4	834.1	883.1	898.2
50°	702.0	730.3	788.8	839.7	854.8
52.5°	651.0	681.2	743.5	796.3	809.5
55°	600.1	632.2	698.2	749.2	760.5
57.5°	549.1	583.1	651.0	700.1	713.3
60°	498.2	534.0	600.1	649.1	658.6
62.5°	447.2	485.0	552.9	596.3	605.7
65°	396.3	437.8	505.7	545.4	556.7
67.5°	347.2	388.7	454.8	492.5	502.0
70°	301.9	339.7	405.7	434.0	437.8
72.5°	245.3	292.5	356.7	371.7	362.3
75°	198.1	245.3	300.0	294.4	283.1
77.5°	151.0	198.1	234.0	215.1	200.0
80°	107.6	154.7	162.3	134.0	126.4
82.5°	69.8	107.6	90.6	69.8	56.6
85°	35.9	51.0	28.3	22.6	18.9
87.5°	11.3	7.5	3.8	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)