

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: P307240

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP187-W2A-U-6500K**

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: P307240
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 6500K 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: 3083.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

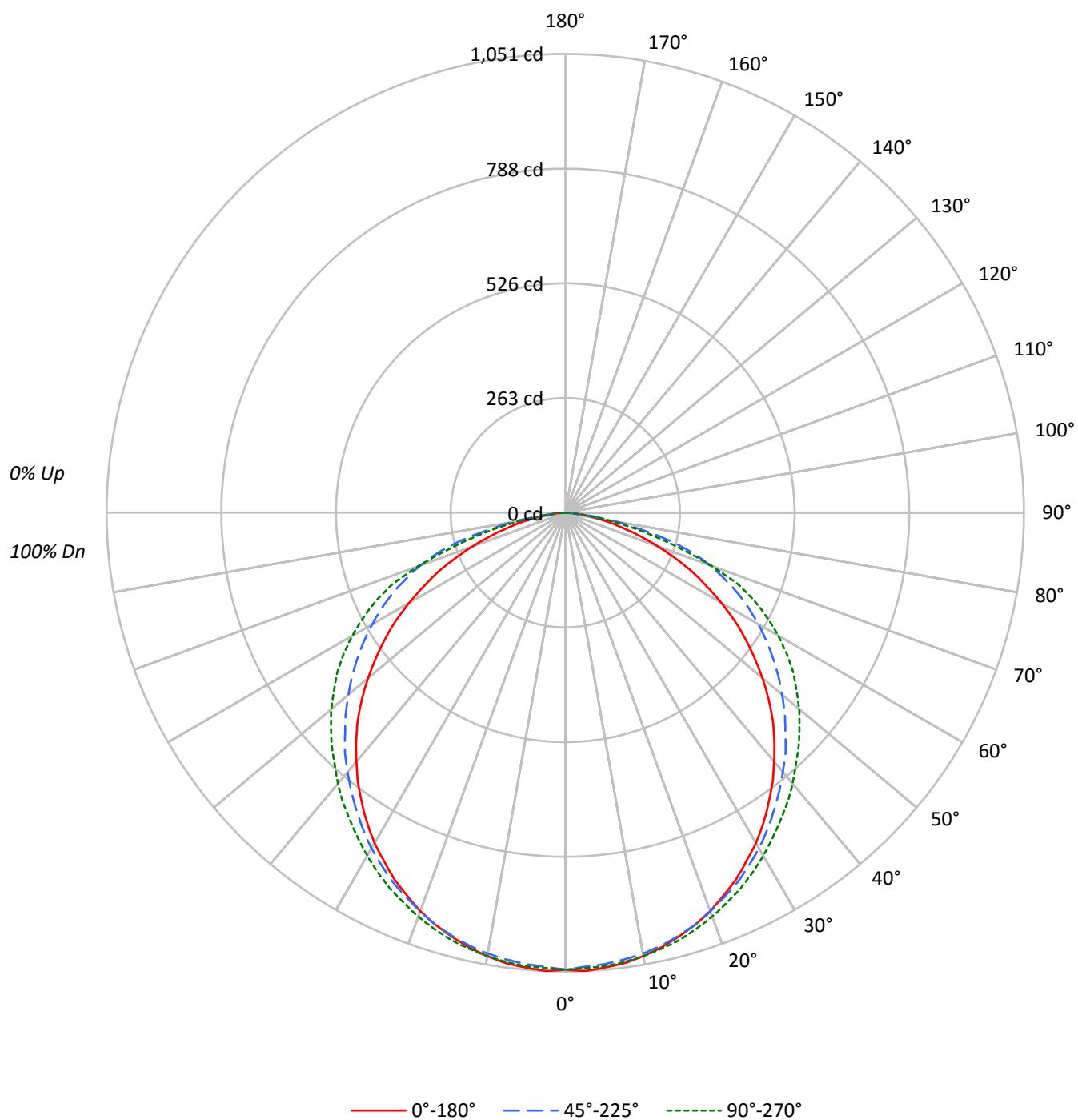
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2817	2817	2817
5°	2826	2805	2818
10°	2819	2803	2819
15°	2801	2795	2822
20°	2782	2785	2821
25°	2752	2775	2821
30°	2717	2759	2820
35°	2669	2739	2825
40°	2615	2725	2847
45°	2560	2715	2878
50°	2472	2715	2930
55°	2365	2729	2993
60°	2223	2750	3031
65°	2050	2778	3049
70°	1785	2784	2807
75°	1471	2590	2268
80°	1156	1863	1517
85°	898	719	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.2
10°-20°	284.4	9.2
20°-30°	431.9	14.0
30°-40°	523.4	17.0
40°-50°	551.5	17.9
50°-60°	514.9	16.7
60°-70°	411.5	13.3
70°-80°	226.4	7.3
80°-90°	40.0	1.3
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°	815.5	26.5
0°-40°	1338.8	43.4
0°-60°	2405.2	78.0
0°-90°	3083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1046	1043	1038	1045	1043	99
15°	1005	1005	1003	1013	1013	284
25°	927	929	934	948	950	427
35°	812	820	834	855	860	508
45°	673	685	714	746	756	518
55°	504	529	582	622	638	450
65°	322	363	436	472	479	317
75°	142	203	249	224	218	152
85°	29	37	23	14	12	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1047.0	1047.0	1047.0	1047.0	1047.0
2.5°	1050.9	1048.0	1041.2	1047.0	1044.1
5°	1046.0	1043.1	1038.3	1045.1	1043.1
7.5°	1041.2	1037.3	1032.5	1040.2	1038.3
10°	1031.5	1028.6	1025.7	1032.5	1031.5
12.5°	1019.9	1018.9	1016.0	1023.7	1022.8
15°	1005.3	1005.3	1003.4	1013.1	1013.1
17.5°	989.8	988.8	989.8	1000.5	999.5
20°	971.4	971.4	972.4	985.0	985.0
22.5°	949.1	950.1	953.0	968.5	967.5
25°	926.8	928.7	934.5	948.1	950.1
27.5°	899.6	904.5	911.3	927.8	929.7
30°	874.4	877.3	888.0	903.5	907.4
32.5°	844.4	850.2	861.8	879.3	884.1
35°	812.4	820.2	833.7	855.1	859.9
37.5°	780.4	787.2	805.6	827.9	836.6
40°	744.5	756.2	775.6	800.8	810.5
42.5°	709.6	721.3	747.4	773.6	782.3
45°	672.8	685.4	713.5	745.5	756.2
47.5°	632.1	646.6	682.5	716.4	728.1
50°	590.4	608.8	648.6	686.4	699.9
52.5°	546.8	570.0	615.6	655.3	667.9
55°	504.1	529.3	581.7	622.4	637.9
57.5°	460.5	487.6	546.8	593.3	602.0
60°	413.0	445.9	510.9	551.6	563.2
62.5°	366.5	404.3	474.1	512.8	522.5
65°	321.9	362.6	436.3	472.1	478.9
67.5°	273.4	321.9	394.6	427.5	429.5
70°	226.9	283.1	353.8	369.4	356.8
72.5°	181.3	241.4	306.3	293.7	283.1
75°	141.5	202.6	249.1	223.9	218.1
77.5°	104.7	165.8	178.4	164.8	154.1
80°	74.6	130.9	120.2	102.8	97.9
82.5°	51.4	82.4	65.9	51.4	44.6
85°	29.1	36.8	23.3	14.5	11.6
87.5°	12.6	8.7	4.8	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)