

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: P307213

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA08-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: P307213
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-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC 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: 3295.0 lumens
Efficiency: N/A
Efficacy: 82.4 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

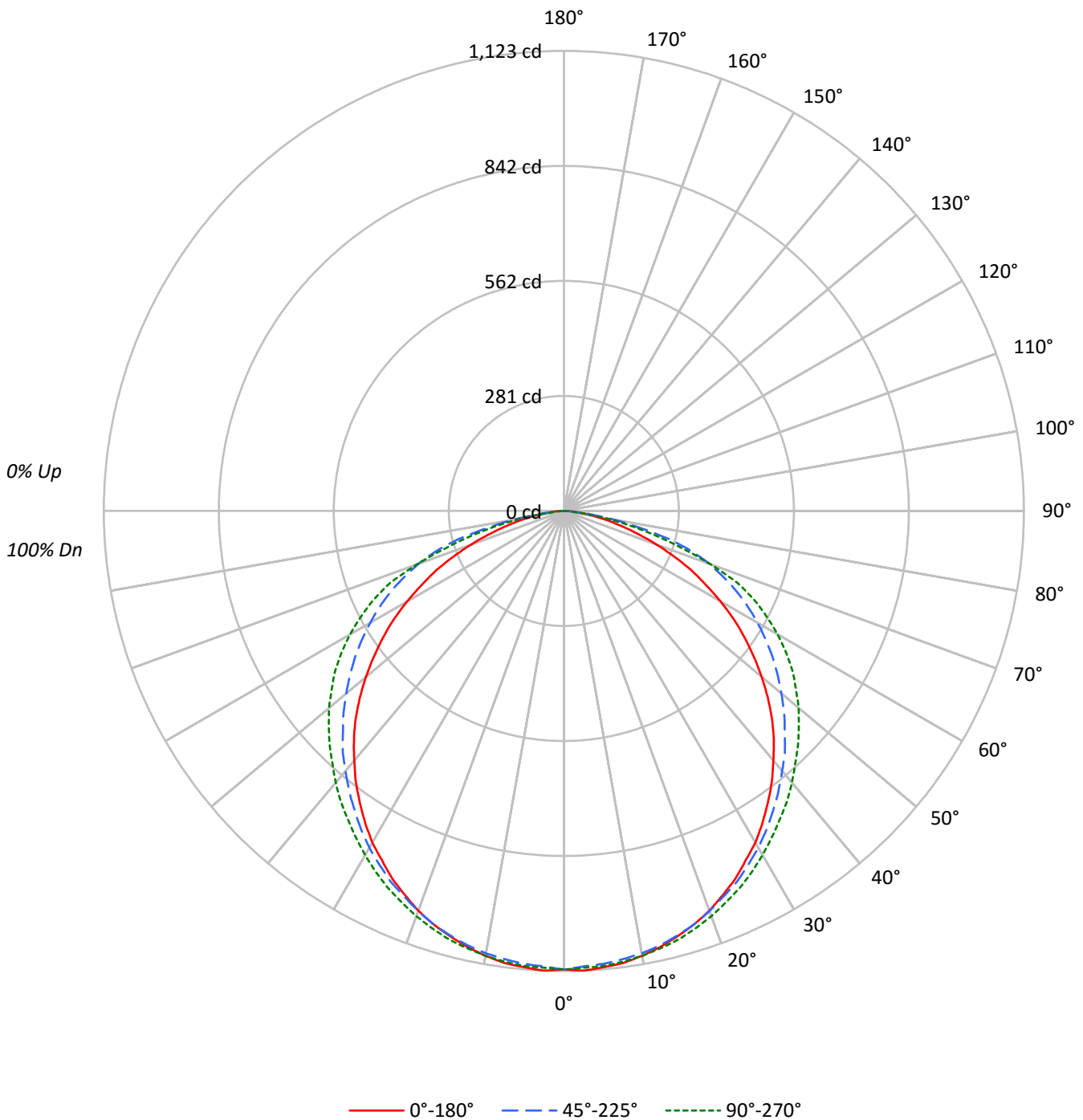
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3011	3011	3011
5°	3020	2998	3012
10°	3012	2995	3012
15°	2993	2988	3016
20°	2973	2976	3015
25°	2941	2966	3015
30°	2904	2949	3013
35°	2852	2927	3019
40°	2795	2912	3043
45°	2737	2902	3076
50°	2642	2902	3132
55°	2528	2917	3199
60°	2376	2939	3240
65°	2190	2968	3259
70°	1907	2976	3000
75°	1573	2769	2424
80°	1237	1991	1621
85°	960	769	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	3.2
10°-20°	304.0	9.2
20°-30°	461.6	14.0
30°-40°	559.3	17.0
40°-50°	589.4	17.9
50°-60°	550.3	16.7
60°-70°	439.7	13.3
70°-80°	242.0	7.3
80°-90°	42.7	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°	871.6	26.5
0°-40°	1430.9	43.4
0°-60°	2570.6	78.0
0°-90°	3295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1118	1115	1110	1117	1115	106
15°	1074	1074	1072	1083	1083	303
25°	990	993	999	1013	1015	456
35°	868	876	891	914	919	543
45°	719	732	763	797	808	553
55°	539	566	622	665	682	481
65°	344	388	466	505	512	339
75°	151	216	266	239	233	163
85°	31	39	25	16	12	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1119.0	1119.0	1119.0	1119.0	1119.0
2.5°	1123.1	1120.0	1112.8	1119.0	1115.9
5°	1118.0	1114.9	1109.7	1116.9	1114.9
7.5°	1112.8	1108.6	1103.5	1111.7	1109.7
10°	1102.4	1099.3	1096.2	1103.5	1102.4
12.5°	1090.0	1089.0	1085.8	1094.1	1093.1
15°	1074.4	1074.4	1072.4	1082.7	1082.7
17.5°	1057.9	1056.8	1057.9	1069.3	1068.2
20°	1038.2	1038.2	1039.2	1052.7	1052.7
22.5°	1014.4	1015.4	1018.5	1035.1	1034.0
25°	990.5	992.6	998.8	1013.3	1015.4
27.5°	961.5	966.7	973.9	991.6	993.6
30°	934.6	937.7	949.1	965.7	969.8
32.5°	902.5	908.7	921.1	939.8	944.9
35°	868.3	876.5	891.1	913.8	919.0
37.5°	834.1	841.3	861.0	884.8	894.2
40°	795.7	808.2	828.9	855.8	866.2
42.5°	758.4	770.9	798.8	826.8	836.1
45°	719.1	732.5	762.6	796.8	808.2
47.5°	675.5	691.1	729.4	765.7	778.1
50°	631.0	650.7	693.2	733.6	748.1
52.5°	584.4	609.2	657.9	700.4	713.9
55°	538.8	565.7	621.7	665.2	681.8
57.5°	492.2	521.2	584.4	634.1	643.4
60°	441.4	476.6	546.0	589.5	602.0
62.5°	391.6	432.1	506.7	548.1	558.5
65°	344.0	387.5	466.2	504.6	511.8
67.5°	292.2	344.0	421.7	456.9	459.0
70°	242.4	302.5	378.2	394.8	381.3
72.5°	193.8	258.0	327.4	313.9	302.5
75°	151.3	216.5	266.3	239.3	233.1
77.5°	111.9	177.2	190.6	176.1	164.7
80°	79.8	139.9	128.5	109.8	104.6
82.5°	54.9	88.1	70.5	54.9	47.7
85°	31.1	39.4	24.9	15.5	12.4
87.5°	13.5	9.3	5.2	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)