

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: P307696

Luminaire Tested: **14FCZ2-35-UNV-L82765-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: P307696
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: 14FCZ2-35-UNV-L82765-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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: 3219.0 lumens
Efficiency: N/A
Efficacy: 106.6 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

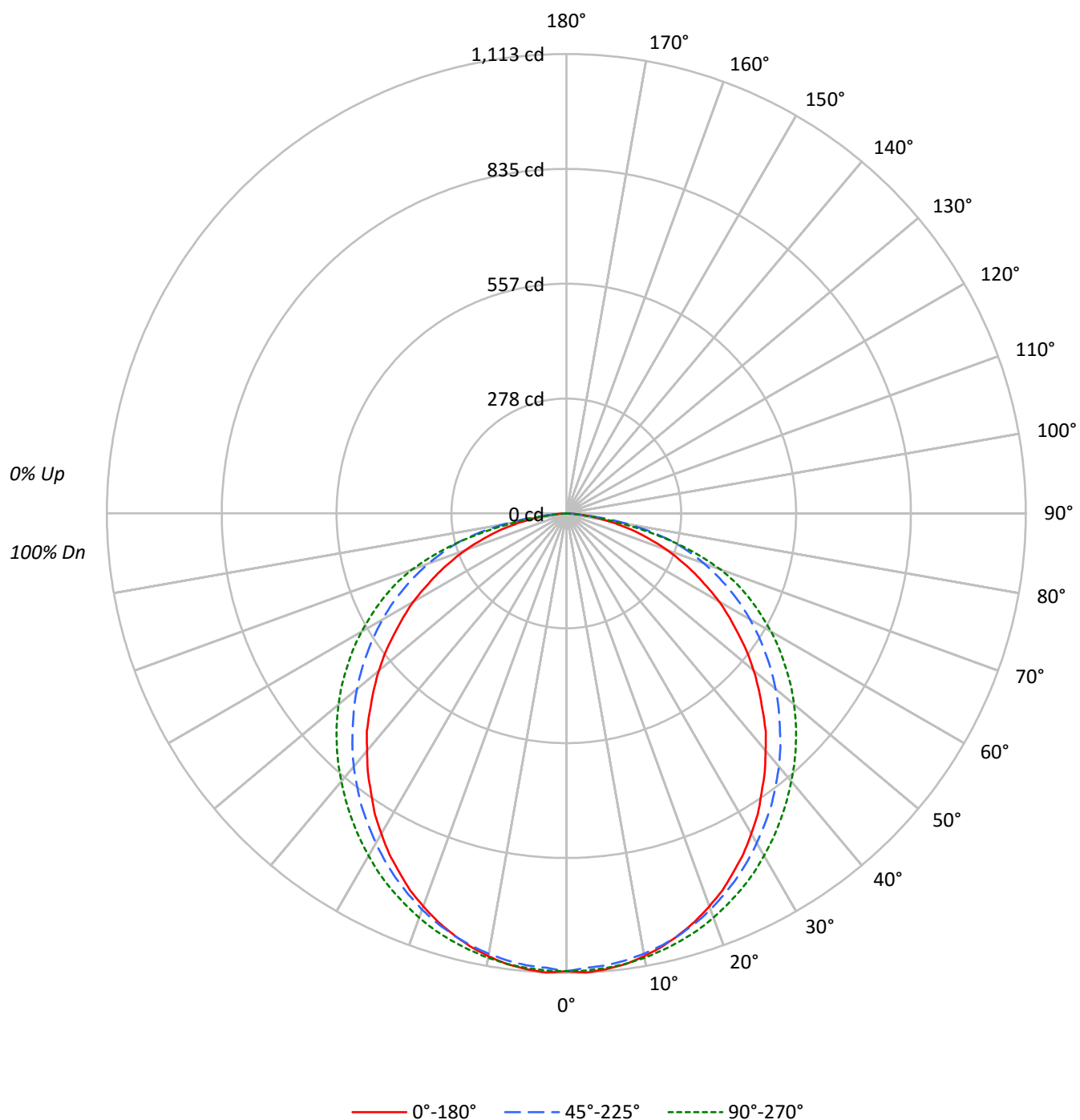
Input Watts (W): 30.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	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	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2984	2984	2984
5°	2994	2968	2986
10°	2975	2960	2987
15°	2944	2946	2985
20°	2900	2925	2985
25°	2845	2896	2982
30°	2783	2866	2975
35°	2709	2841	2973
40°	2637	2814	2978
45°	2557	2783	2994
50°	2482	2771	3014
55°	2388	2761	3041
60°	2302	2766	3083
65°	2185	2774	3131
70°	2050	2795	3128
75°	1858	2821	2828
80°	1523	2436	2013
85°	1130	1152	466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	3.3
10°-20°	299.8	9.3
20°-30°	451.6	14.0
30°-40°	541.9	16.8
40°-50°	564.8	17.5
50°-60°	522.9	16.2
60°-70°	422.5	13.1
70°-80°	257.6	8.0
80°-90°	53.2	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°	856.3	26.6
0°-40°	1398.1	43.4
0°-60°	2485.8	77.2
0°-90°	3219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3219.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1109	1109	1109	1109	1109	
5°	1108	1105	1099	1107	1105	105
15°	1057	1057	1057	1072	1072	298
25°	958	964	976	1000	1004	442
35°	825	838	865	896	905	517
45°	672	692	731	772	787	519
55°	509	536	589	634	648	456
65°	343	377	436	480	492	339
75°	179	218	271	276	272	188
85°	37	55	37	21	15	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1109.0	1109.0	1109.0	1109.0	1109.0
2.5°	1113.3	1109.7	1101.8	1109.7	1108.2
5°	1108.2	1105.4	1098.9	1106.8	1105.4
7.5°	1101.1	1098.2	1092.4	1101.8	1100.3
10°	1088.9	1087.4	1083.1	1093.9	1093.2
12.5°	1074.5	1073.8	1071.6	1083.8	1083.1
15°	1056.6	1057.3	1057.3	1071.6	1071.6
17.5°	1036.5	1037.9	1040.8	1056.6	1058.7
20°	1012.8	1015.6	1021.4	1039.3	1042.2
22.5°	988.4	990.5	999.1	1020.7	1023.5
25°	958.2	964.0	975.5	999.9	1004.2
27.5°	929.5	934.5	950.3	975.5	982.6
30°	895.8	903.7	922.3	949.6	957.5
32.5°	863.5	872.1	893.6	925.2	932.4
35°	824.7	837.6	864.9	896.5	905.1
37.5°	789.5	801.8	832.6	867.1	877.1
40°	750.8	765.9	801.0	837.6	847.7
42.5°	714.9	729.3	767.3	804.6	818.3
45°	671.8	691.9	731.4	772.3	786.7
47.5°	632.4	652.5	697.7	741.5	754.4
50°	592.9	614.4	661.8	707.0	719.9
52.5°	552.0	574.9	625.9	671.1	686.2
55°	508.9	535.5	588.6	634.5	648.1
57.5°	468.0	495.3	552.0	598.6	612.3
60°	427.8	455.8	513.9	558.4	572.8
62.5°	383.3	416.3	476.6	520.4	531.2
65°	343.1	376.8	435.7	479.5	491.7
67.5°	300.7	337.4	396.2	436.4	447.9
70°	260.6	298.6	355.3	392.6	397.6
72.5°	217.5	256.2	313.7	337.4	337.4
75°	178.7	218.2	271.3	275.6	272.0
77.5°	136.4	180.2	214.6	206.0	197.4
80°	98.3	141.4	157.2	141.4	129.9
82.5°	66.0	102.6	94.7	75.4	66.8
85°	36.6	54.6	37.3	20.8	15.1
87.5°	13.6	12.2	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)