

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: P307127

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P307127
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: 14FCZ2-35-UNV-L82765-HRP-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2542.0 lumens
Efficiency: N/A
Efficacy: 85.3 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

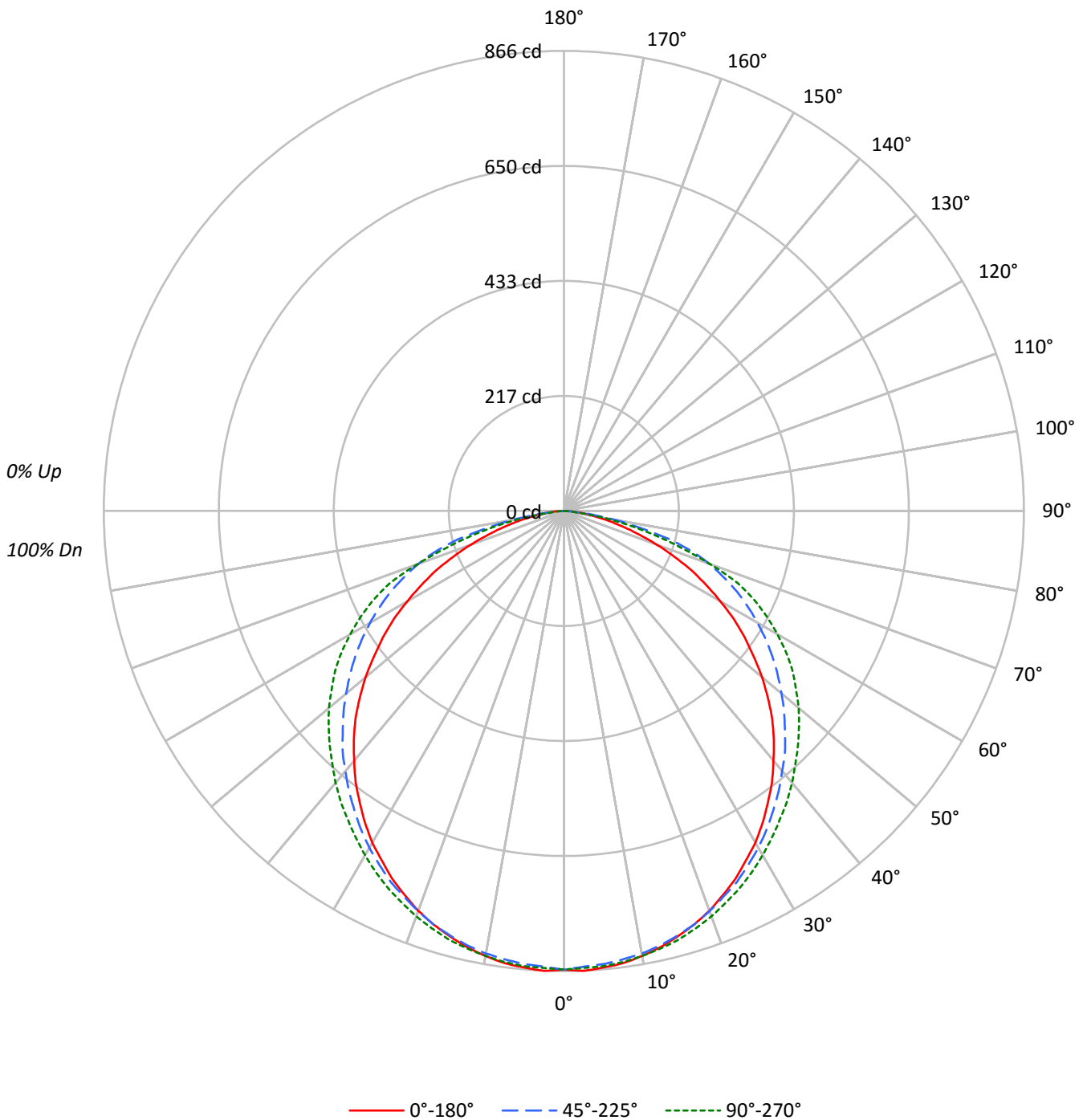
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2323	2323	2323
5°	2330	2313	2323
10°	2324	2311	2324
15°	2309	2305	2327
20°	2294	2296	2326
25°	2269	2288	2326
30°	2240	2275	2325
35°	2200	2258	2329
40°	2157	2246	2347
45°	2111	2239	2373
50°	2038	2239	2416
55°	1950	2250	2468
60°	1833	2267	2499
65°	1690	2290	2514
70°	1471	2296	2315
75°	1213	2136	1869
80°	953	1536	1251
85°	741	593	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	3.2
10°-20°	234.5	9.2
20°-30°	356.1	14.0
30°-40°	431.5	17.0
40°-50°	454.7	17.9
50°-60°	424.5	16.7
60°-70°	339.2	13.3
70°-80°	186.7	7.3
80°-90°	33.0	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°	672.4	26.5
0°-40°	1103.9	43.4
0°-60°	1983.1	78.0
0°-90°	2542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	862	860	856	862	860	82
15°	829	829	827	835	835	234
25°	764	766	771	782	783	352
35°	670	676	687	705	709	419
45°	555	565	588	615	624	427
55°	416	436	480	513	526	371
65°	265	299	360	389	395	261
75°	117	167	205	185	180	126
85°	24	30	19	12	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	863.3	863.3	863.3	863.3	863.3
2.5°	866.5	864.1	858.5	863.3	860.9
5°	862.5	860.1	856.1	861.7	860.1
7.5°	858.5	855.3	851.3	857.7	856.1
10°	850.5	848.1	845.7	851.3	850.5
12.5°	840.9	840.1	837.7	844.1	843.3
15°	828.9	828.9	827.3	835.3	835.3
17.5°	816.1	815.3	816.1	824.9	824.1
20°	800.9	800.9	801.7	812.1	812.1
22.5°	782.5	783.3	785.7	798.5	797.7
25°	764.2	765.8	770.6	781.7	783.3
27.5°	741.8	745.8	751.4	765.0	766.6
30°	721.0	723.4	732.2	745.0	748.2
32.5°	696.2	701.0	710.6	725.0	729.0
35°	669.8	676.2	687.4	705.0	709.0
37.5°	643.5	649.1	664.2	682.6	689.8
40°	613.9	623.5	639.5	660.2	668.2
42.5°	585.1	594.7	616.3	637.9	645.1
45°	554.7	565.1	588.3	614.7	623.5
47.5°	521.2	533.2	562.7	590.7	600.3
50°	486.8	502.0	534.8	565.9	577.1
52.5°	450.8	470.0	507.6	540.3	550.7
55°	415.7	436.4	479.6	513.2	526.0
57.5°	379.7	402.1	450.8	489.2	496.4
60°	340.5	367.7	421.2	454.8	464.4
62.5°	302.1	333.3	390.9	422.8	430.8
65°	265.4	298.9	359.7	389.3	394.9
67.5°	225.4	265.4	325.3	352.5	354.1
70°	187.0	233.4	291.8	304.5	294.2
72.5°	149.5	199.0	252.6	242.2	233.4
75°	116.7	167.1	205.4	184.6	179.8
77.5°	86.3	136.7	147.1	135.9	127.1
80°	61.5	107.9	99.1	84.7	80.7
82.5°	42.4	67.9	54.4	42.4	36.8
85°	24.0	30.4	19.2	12.0	9.6
87.5°	10.4	7.2	4.0	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)