

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: P313475

Luminaire Tested: **24FCZ2-35HE-UNV-L83050-RDP-CP125-W2A-U-3000K**

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: P313475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-35HE-UNV-L83050-RDP-CP125-W2A-U-3000K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (336) 3000K 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: 1998.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

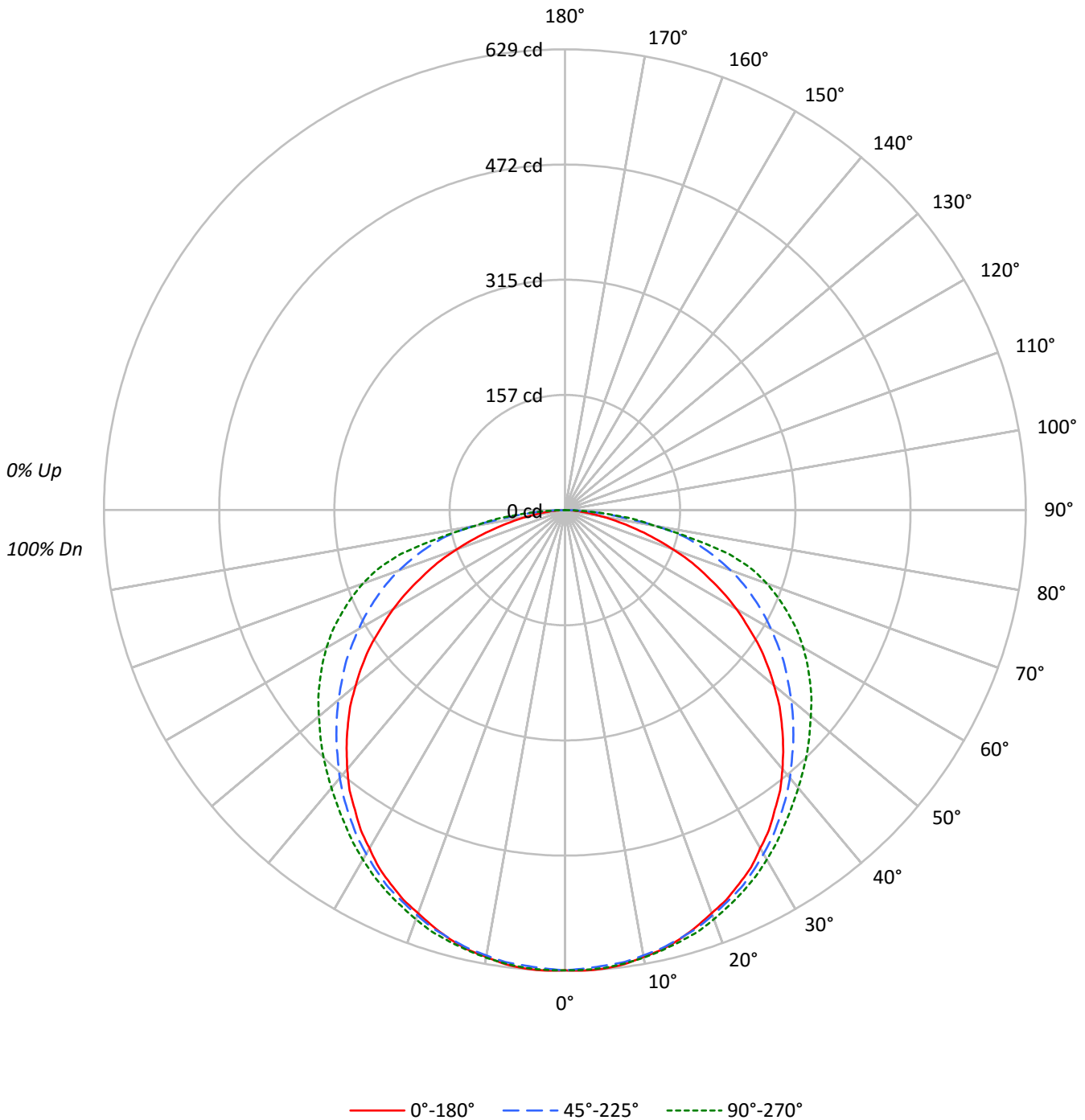
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	845	845	845
5°	849	843	847
10°	846	844	848
15°	845	843	849
20°	839	843	851
25°	836	845	853
30°	828	842	856
35°	820	840	860
40°	811	839	870
45°	798	839	890
50°	780	844	917
55°	760	858	958
60°	728	875	1011
65°	682	905	1073
70°	620	947	1154
75°	526	1000	1206
80°	415	1006	976
85°	306	766	857



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	3.0
10°-20°	171.5	8.6
20°-30°	262.3	13.1
30°-40°	320.7	16.0
40°-50°	341.8	17.1
50°-60°	326.8	16.4
60°-70°	276.8	13.9
70°-80°	186.1	9.3
80°-90°	52.5	2.6
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°	493.4	24.7
0°-40°	814.1	40.7
0°-60°	1482.6	74.2
0°-90°	1998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1998.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	628	627	624	627	627	60
15°	606	606	606	610	610	171
25°	563	565	569	574	575	259
35°	500	503	511	521	523	313
45°	419	426	441	460	468	323
55°	324	336	366	394	408	289
65°	214	236	284	322	337	213
75°	101	138	192	225	232	108
85°	20	41	50	54	56	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	628.3	628.3	628.3	628.3	628.3
2.5°	629.3	629.3	626.3	628.3	628.3
5°	628.3	627.3	624.3	627.3	627.3
7.5°	625.3	624.3	622.4	625.3	624.3
10°	619.4	619.4	617.4	620.4	620.4
12.5°	614.4	613.4	612.5	616.4	615.4
15°	606.5	606.5	605.5	610.5	609.5
17.5°	596.6	597.6	598.6	602.5	603.5
20°	585.7	587.7	588.7	594.6	594.6
22.5°	575.8	576.8	578.8	584.7	584.7
25°	562.9	564.9	568.9	573.8	574.8
27.5°	550.0	551.0	556.0	562.9	563.9
30°	533.2	536.1	542.1	550.0	551.0
32.5°	518.3	521.3	528.2	536.1	538.1
35°	499.5	503.4	511.4	521.3	523.3
37.5°	482.6	485.6	495.5	506.4	509.4
40°	461.8	467.8	477.7	490.6	495.5
42.5°	441.0	447.0	458.8	475.7	481.6
45°	419.2	426.1	441.0	459.8	467.8
47.5°	397.4	405.3	422.2	444.0	452.9
50°	372.6	382.5	403.3	428.1	438.0
52.5°	348.8	360.7	383.5	411.3	424.2
55°	324.1	336.0	365.7	394.4	408.3
57.5°	296.3	312.2	344.9	377.6	392.4
60°	270.6	285.4	325.1	360.7	375.6
62.5°	242.8	262.6	305.2	342.9	357.8
65°	214.1	235.9	284.4	322.1	337.0
67.5°	188.3	212.1	263.6	301.3	316.1
70°	157.6	187.3	240.8	278.5	293.3
72.5°	128.8	161.5	217.0	253.7	267.6
75°	101.1	137.8	192.3	225.0	231.9
77.5°	75.3	114.0	166.5	180.4	175.4
80°	53.5	91.2	129.8	122.9	125.9
82.5°	34.7	69.4	80.3	91.2	94.1
85°	19.8	40.6	49.6	53.5	55.5
87.5°	8.9	14.9	19.8	19.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)