

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: P308536

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CP125-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: P308536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-39HE-UNV-L82765-RDP-CP125-W2A-U-6500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (168) 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: 2424.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

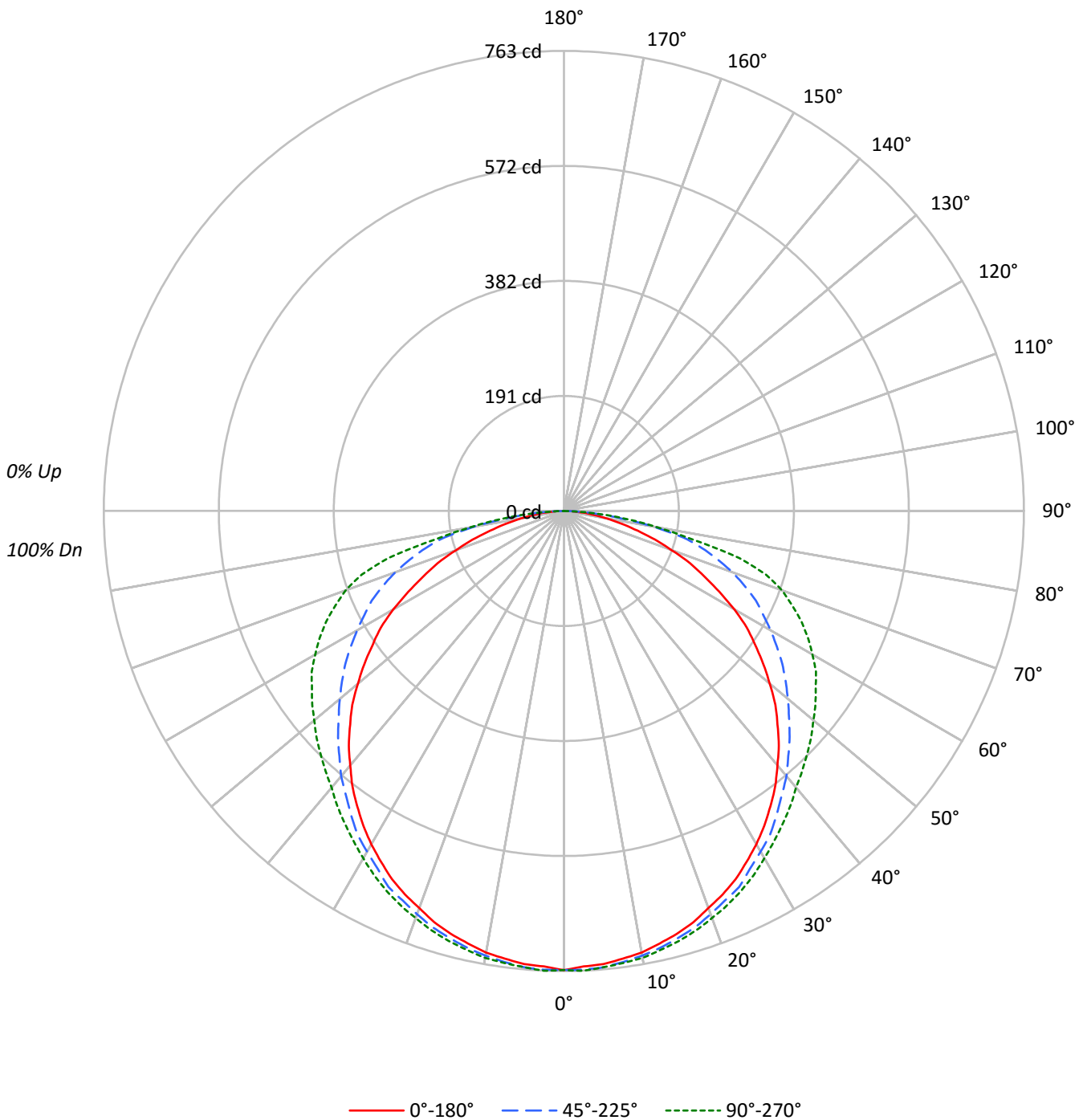
Input Watts (W): 33.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	2049	2049	2049
5°	2038	2052	2052
10°	2032	2046	2056
15°	2022	2042	2057
20°	2007	2038	2058
25°	2001	2044	2065
30°	1984	2028	2067
35°	1963	2021	2079
40°	1936	2017	2105
45°	1907	2015	2171
50°	1866	2030	2262
55°	1816	2075	2393
60°	1756	2131	2562
65°	1635	2237	2770
70°	1501	2343	3031
75°	1316	2466	3134
80°	1133	2349	2459
85°	991	1707	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	3.0
10°-20°	206.8	8.5
20°-30°	315.5	13.0
30°-40°	385.2	15.9
40°-50°	411.9	17.0
50°-60°	397.6	16.4
60°-70°	342.3	14.1
70°-80°	231.6	9.6
80°-90°	61.1	2.5
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°	594.3	24.5
0°-40°	979.6	40.4
0°-60°	1789.1	73.8
0°-90°	2424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	754	756	760	760	760	72
15°	726	728	733	736	738	205
25°	674	678	688	692	695	310
35°	597	603	615	628	633	374
45°	501	510	530	556	571	387
55°	387	399	442	487	510	347
65°	257	282	351	407	435	255
75°	127	168	237	285	301	136
85°	32	45	55	57	61	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	761.4	761.4	761.4	761.4	761.4
2.5°	756.1	757.9	761.4	761.4	763.2
5°	754.3	756.1	759.6	759.6	759.6
7.5°	748.9	750.7	754.3	756.1	756.1
10°	743.6	745.4	748.9	750.7	752.5
12.5°	734.7	736.5	741.8	745.4	745.4
15°	725.8	727.5	732.9	736.5	738.2
17.5°	715.1	718.6	724.0	727.5	729.3
20°	700.8	704.4	711.5	716.8	718.6
22.5°	688.3	691.9	699.0	704.4	707.9
25°	674.0	677.6	688.3	691.9	695.4
27.5°	656.2	659.8	668.7	675.8	681.2
30°	638.4	641.9	652.6	661.6	665.1
32.5°	618.8	624.1	636.6	643.7	649.1
35°	597.4	602.7	615.2	627.7	633.0
37.5°	576.0	581.3	593.8	609.8	617.0
40°	551.0	558.1	574.2	595.6	599.2
42.5°	527.8	536.7	551.0	576.0	584.9
45°	501.1	510.0	529.6	556.4	570.6
47.5°	476.1	485.0	506.4	538.5	556.4
50°	445.8	458.3	485.0	522.5	540.3
52.5°	417.3	428.0	463.6	504.6	526.0
55°	387.0	399.4	442.2	486.8	510.0
57.5°	360.2	370.9	419.0	469.0	495.7
60°	326.3	340.6	395.9	449.4	476.1
62.5°	290.7	312.1	372.7	428.0	456.5
65°	256.8	281.7	351.3	406.6	435.1
67.5°	226.5	253.2	324.5	383.4	410.1
70°	190.8	224.7	297.8	354.9	385.2
72.5°	158.7	196.2	267.5	324.5	351.3
75°	126.6	167.6	237.2	285.3	301.4
77.5°	98.1	137.3	203.3	217.5	219.3
80°	73.1	108.8	151.6	153.4	158.7
82.5°	49.9	76.7	98.1	107.0	108.8
85°	32.1	44.6	55.3	57.1	60.6
87.5°	14.3	16.0	19.6	17.8	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)