

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: P308534

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CP125-W2A-U-5500K**

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: P308534
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-5500K
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: 2412.0 lumens
Efficiency: N/A
Efficacy: 72.4 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

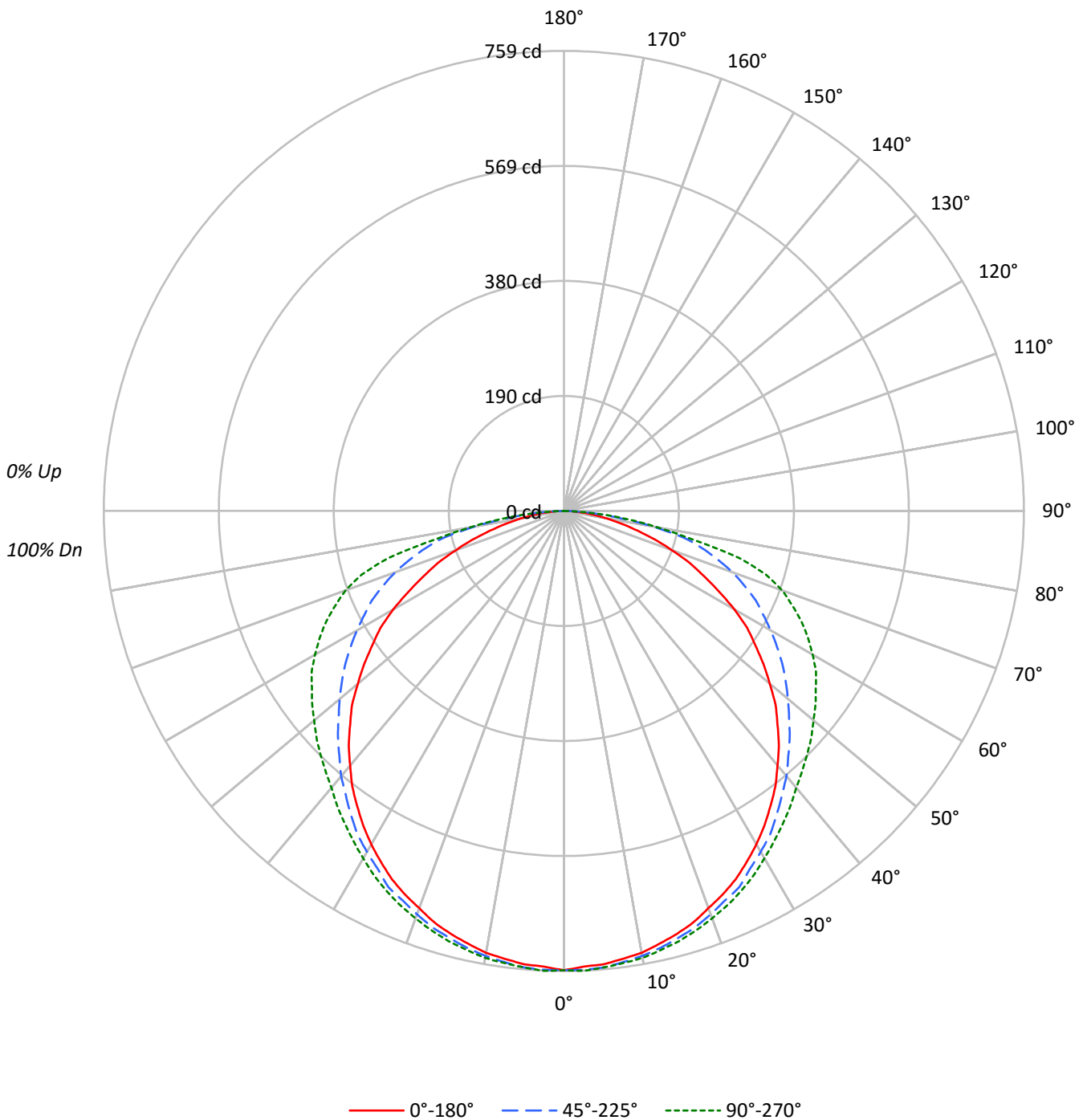
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2039	2039	2039
5°	2028	2042	2042
10°	2022	2036	2046
15°	2012	2032	2047
20°	1997	2027	2048
25°	1991	2034	2055
30°	1974	2018	2056
35°	1953	2011	2069
40°	1926	2007	2094
45°	1897	2006	2161
50°	1857	2020	2251
55°	1806	2064	2381
60°	1748	2120	2550
65°	1627	2225	2756
70°	1494	2331	3016
75°	1310	2454	3118
80°	1127	2337	2447
85°	985	1698	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.0
10°-20°	205.8	8.5
20°-30°	314.0	13.0
30°-40°	383.3	15.9
40°-50°	409.9	17.0
50°-60°	395.6	16.4
60°-70°	340.5	14.1
70°-80°	230.4	9.6
80°-90°	60.8	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°	591.4	24.5
0°-40°	974.7	40.4
0°-60°	1780.2	73.8
0°-90°	2412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	751	752	756	756	756	71
15°	722	724	729	733	735	204
25°	671	674	685	688	692	309
35°	594	600	612	625	630	372
45°	499	508	527	554	568	385
55°	385	398	440	484	508	345
65°	256	280	350	405	433	254
75°	126	167	236	284	300	135
85°	32	44	55	57	60	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.7	757.7	757.7	757.7	757.7
2.5°	752.3	754.1	757.7	757.7	759.4
5°	750.6	752.3	755.9	755.9	755.9
7.5°	745.2	747.0	750.6	752.3	752.3
10°	739.9	741.7	745.2	747.0	748.8
12.5°	731.0	732.8	738.1	741.7	741.7
15°	722.2	723.9	729.3	732.8	734.6
17.5°	711.5	715.1	720.4	723.9	725.7
20°	697.3	700.9	708.0	713.3	715.1
22.5°	684.9	688.5	695.5	700.9	704.4
25°	670.7	674.3	684.9	688.5	692.0
27.5°	653.0	656.5	665.4	672.5	677.8
30°	635.2	638.8	649.4	658.3	661.8
32.5°	615.7	621.0	633.4	640.5	645.9
35°	594.4	599.7	612.2	624.6	629.9
37.5°	573.1	578.4	590.9	606.8	613.9
40°	548.3	555.4	571.3	592.6	596.2
42.5°	525.2	534.1	548.3	573.1	582.0
45°	498.6	507.5	527.0	553.6	567.8
47.5°	473.8	482.6	503.9	535.9	553.6
50°	443.6	456.0	482.6	519.9	537.6
52.5°	415.2	425.8	461.3	502.1	523.4
55°	385.0	397.5	440.0	484.4	507.5
57.5°	358.4	369.1	417.0	466.7	493.3
60°	324.7	338.9	393.9	447.1	473.8
62.5°	289.2	310.5	370.8	425.8	454.2
65°	255.5	280.3	349.5	404.6	432.9
67.5°	225.3	252.0	322.9	381.5	408.1
70°	189.9	223.6	296.3	353.1	383.3
72.5°	157.9	195.2	266.2	322.9	349.5
75°	126.0	166.8	236.0	283.9	299.9
77.5°	97.6	136.6	202.3	216.5	218.2
80°	72.7	108.2	150.8	152.6	157.9
82.5°	49.7	76.3	97.6	106.5	108.2
85°	31.9	44.4	55.0	56.8	60.3
87.5°	14.2	16.0	19.5	17.7	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)