

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: P308547

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CP250-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: P308547
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-CP250-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" 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: 2080.0 lumens
Efficiency: N/A
Efficacy: 64.6 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

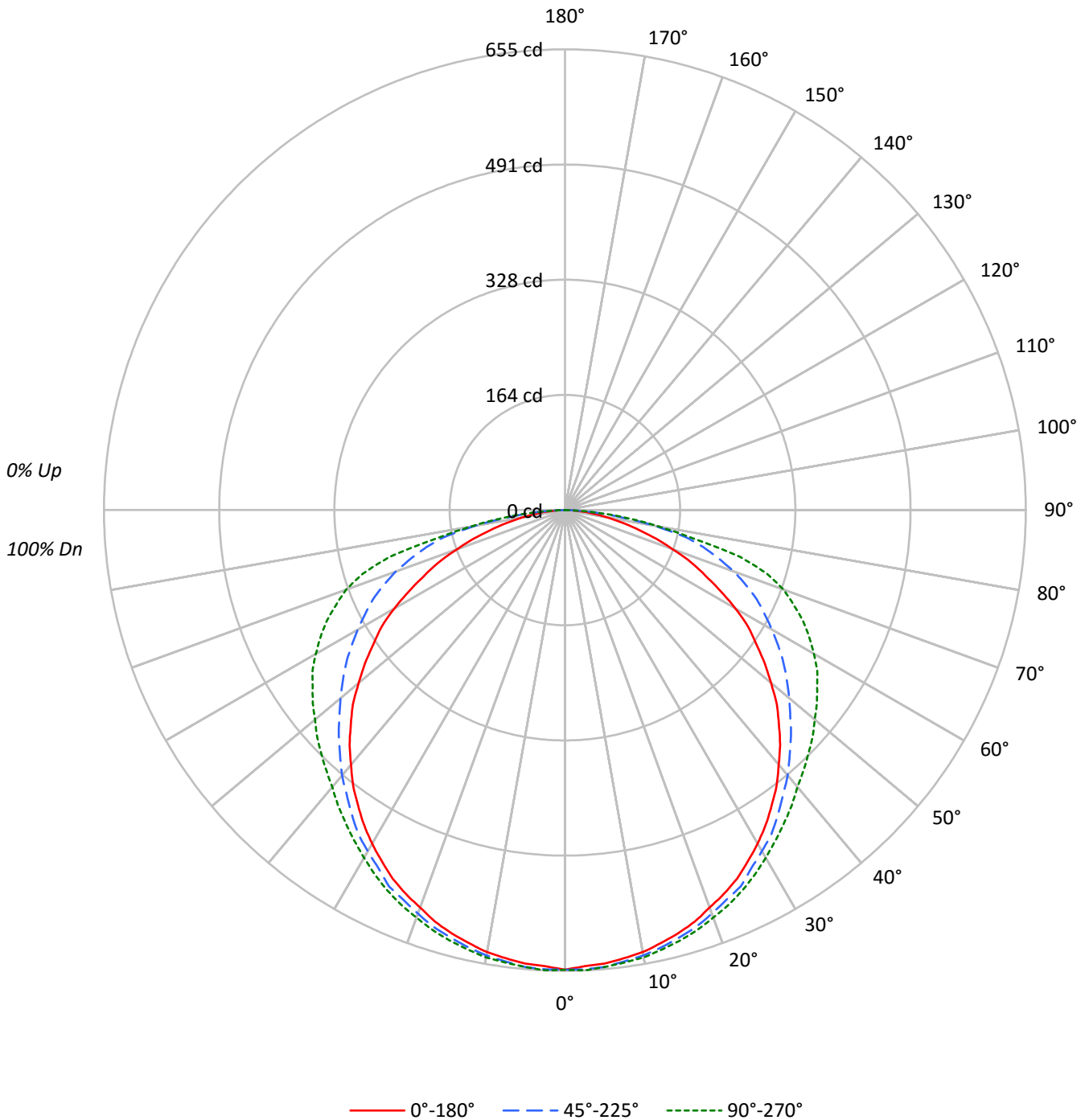
Input Watts (W): 32.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308547

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P308547

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-3000K

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°	1758	1758	1758
5°	1748	1761	1761
10°	1744	1756	1764
15°	1735	1752	1765
20°	1722	1748	1766
25°	1717	1754	1772
30°	1702	1740	1773
35°	1684	1734	1784
40°	1661	1731	1806
45°	1636	1729	1863
50°	1601	1742	1941
55°	1558	1780	2053
60°	1507	1828	2199
65°	1403	1919	2378
70°	1288	2010	2600
75°	1129	2116	2689
80°	972	2016	2111
85°	849	1463	1606



TEST NUMBER: P308547

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.0
10°-20°	177.4	8.5
20°-30°	270.7	13.0
30°-40°	330.6	15.9
40°-50°	353.5	17.0
50°-60°	341.2	16.4
60°-70°	293.7	14.1
70°-80°	198.7	9.6
80°-90°	52.4	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°	510.0	24.5
0°-40°	840.6	40.4
0°-60°	1535.2	73.8
0°-90°	2080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	653	653	653	653	653	
5°	647	649	652	652	652	61
15°	623	624	629	632	634	176
25°	578	581	591	594	597	266
35°	513	517	528	539	543	321
45°	430	438	454	477	490	332
55°	332	343	380	418	438	298
65°	220	242	301	349	373	219
75°	109	144	204	245	259	117
85°	28	38	47	49	52	31
90°	0	0	0	0	0	



TEST NUMBER: P308547

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	653.4	653.4	653.4	653.4	653.4
2.5°	648.8	650.3	653.4	653.4	654.9
5°	647.2	648.8	651.8	651.8	651.8
7.5°	642.7	644.2	647.2	648.8	648.8
10°	638.1	639.6	642.7	644.2	645.7
12.5°	630.4	631.9	636.5	639.6	639.6
15°	622.8	624.3	628.9	631.9	633.5
17.5°	613.6	616.6	621.2	624.3	625.8
20°	601.3	604.4	610.5	615.1	616.6
22.5°	590.6	593.7	599.8	604.4	607.5
25°	578.4	581.4	590.6	593.7	596.7
27.5°	563.1	566.1	573.8	579.9	584.5
30°	547.8	550.8	560.0	567.7	570.7
32.5°	531.0	535.5	546.3	552.4	557.0
35°	512.6	517.2	527.9	538.6	543.2
37.5°	494.2	498.8	509.5	523.3	529.4
40°	472.8	478.9	492.7	511.1	514.1
42.5°	452.9	460.6	472.8	494.2	501.9
45°	430.0	437.6	454.4	477.4	489.6
47.5°	408.5	416.2	434.6	462.1	477.4
50°	382.5	393.2	416.2	448.3	463.6
52.5°	358.0	367.2	397.8	433.0	451.4
55°	332.0	342.7	379.5	417.7	437.6
57.5°	309.1	318.3	359.6	402.4	425.4
60°	280.0	292.3	339.7	385.6	408.5
62.5°	249.4	267.8	319.8	367.2	391.7
65°	220.3	241.8	301.4	348.9	373.4
67.5°	194.3	217.3	278.5	329.0	351.9
70°	163.7	192.8	255.5	304.5	330.5
72.5°	136.2	168.3	229.5	278.5	301.4
75°	108.6	143.8	203.5	244.8	258.6
77.5°	84.2	117.8	174.4	186.7	188.2
80°	62.7	93.3	130.1	131.6	136.2
82.5°	42.8	65.8	84.2	91.8	93.3
85°	27.5	38.3	47.4	49.0	52.0
87.5°	12.2	13.8	16.8	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)