

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: P312739

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K**

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: P312739
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: 22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 2620.0 lumens
Efficiency: N/A
Efficacy: 67.2 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

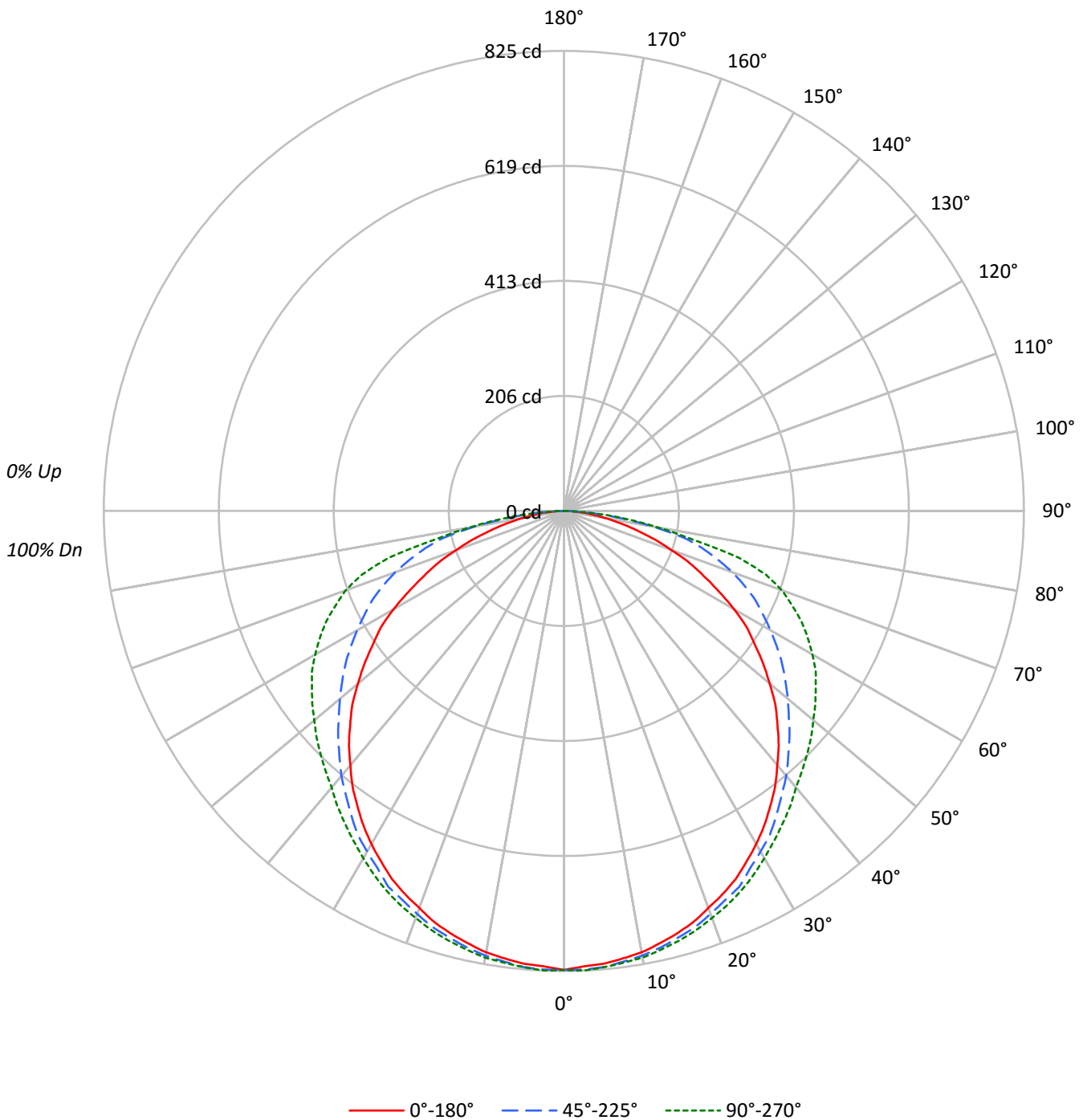
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312739

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P312739

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K

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°	2215	2215	2215
5°	2202	2218	2218
10°	2196	2212	2223
15°	2185	2207	2223
20°	2169	2202	2224
25°	2163	2209	2232
30°	2144	2192	2234
35°	2121	2184	2248
40°	2092	2180	2275
45°	2061	2178	2347
50°	2017	2195	2445
55°	1962	2243	2586
60°	1898	2303	2770
65°	1767	2418	2995
70°	1622	2533	3275
75°	1422	2665	3386
80°	1224	2538	2658
85°	1071	1843	2022



TEST NUMBER: P312739

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	3.0
10°-20°	223.5	8.5
20°-30°	341.0	13.0
30°-40°	416.4	15.9
40°-50°	445.2	17.0
50°-60°	429.7	16.4
60°-70°	369.9	14.1
70°-80°	250.3	9.6
80°-90°	66.0	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°	642.4	24.5
0°-40°	1058.8	40.4
0°-60°	1933.7	73.8
0°-90°	2620.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	815	817	821	821	821	77
15°	784	786	792	796	798	221
25°	728	732	744	748	752	335
35°	646	652	665	678	684	404
45°	542	551	572	601	617	418
55°	418	432	478	526	551	375
65°	278	304	380	439	470	276
75°	137	181	256	308	326	147
85°	35	48	60	62	66	39
90°	0	0	0	0	0	



TEST NUMBER: P312739

CATALOG NUMBER: 22FCZ2-44HE-UNV-L83050-RDP-CP250-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	823.0	823.0	823.0	823.0	823.0
2.5°	817.2	819.1	823.0	823.0	824.9
5°	815.3	817.2	821.1	821.1	821.1
7.5°	809.5	811.4	815.3	817.2	817.2
10°	803.7	805.6	809.5	811.4	813.4
12.5°	794.1	796.0	801.8	805.6	805.6
15°	784.4	786.4	792.1	796.0	797.9
17.5°	772.9	776.7	782.5	786.4	788.3
20°	757.5	761.3	769.0	774.8	776.7
22.5°	744.0	747.8	755.5	761.3	765.2
25°	728.5	732.4	744.0	747.8	751.7
27.5°	709.3	713.1	722.8	730.5	736.3
30°	690.0	693.9	705.4	715.1	718.9
32.5°	668.8	674.6	688.1	695.8	701.6
35°	645.7	651.5	664.9	678.4	684.2
37.5°	622.5	628.3	641.8	659.2	666.9
40°	595.6	603.3	620.6	643.7	647.6
42.5°	570.5	580.1	595.6	622.5	632.2
45°	541.6	551.2	572.4	601.3	616.8
47.5°	514.6	524.2	547.4	582.1	601.3
50°	481.8	495.3	524.2	564.7	584.0
52.5°	451.0	462.6	501.1	545.4	568.6
55°	418.2	431.7	478.0	526.2	551.2
57.5°	389.3	400.9	452.9	506.9	535.8
60°	352.7	368.1	427.9	485.7	514.6
62.5°	314.2	337.3	402.8	462.6	493.4
65°	277.5	304.5	379.7	439.4	470.3
67.5°	244.8	273.7	350.8	414.4	443.3
70°	206.2	242.8	321.9	383.5	416.3
72.5°	171.5	212.0	289.1	350.8	379.7
75°	136.8	181.2	256.3	308.4	325.7
77.5°	106.0	148.4	219.7	235.1	237.1
80°	79.0	117.6	163.8	165.8	171.5
82.5°	54.0	82.9	106.0	115.6	117.6
85°	34.7	48.2	59.7	61.7	65.5
87.5°	15.4	17.3	21.2	19.3	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)