

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: P308550

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-4500K**

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: P308550
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-4500K
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: 2238.0 lumens
Efficiency: N/A
Efficacy: 67.8 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

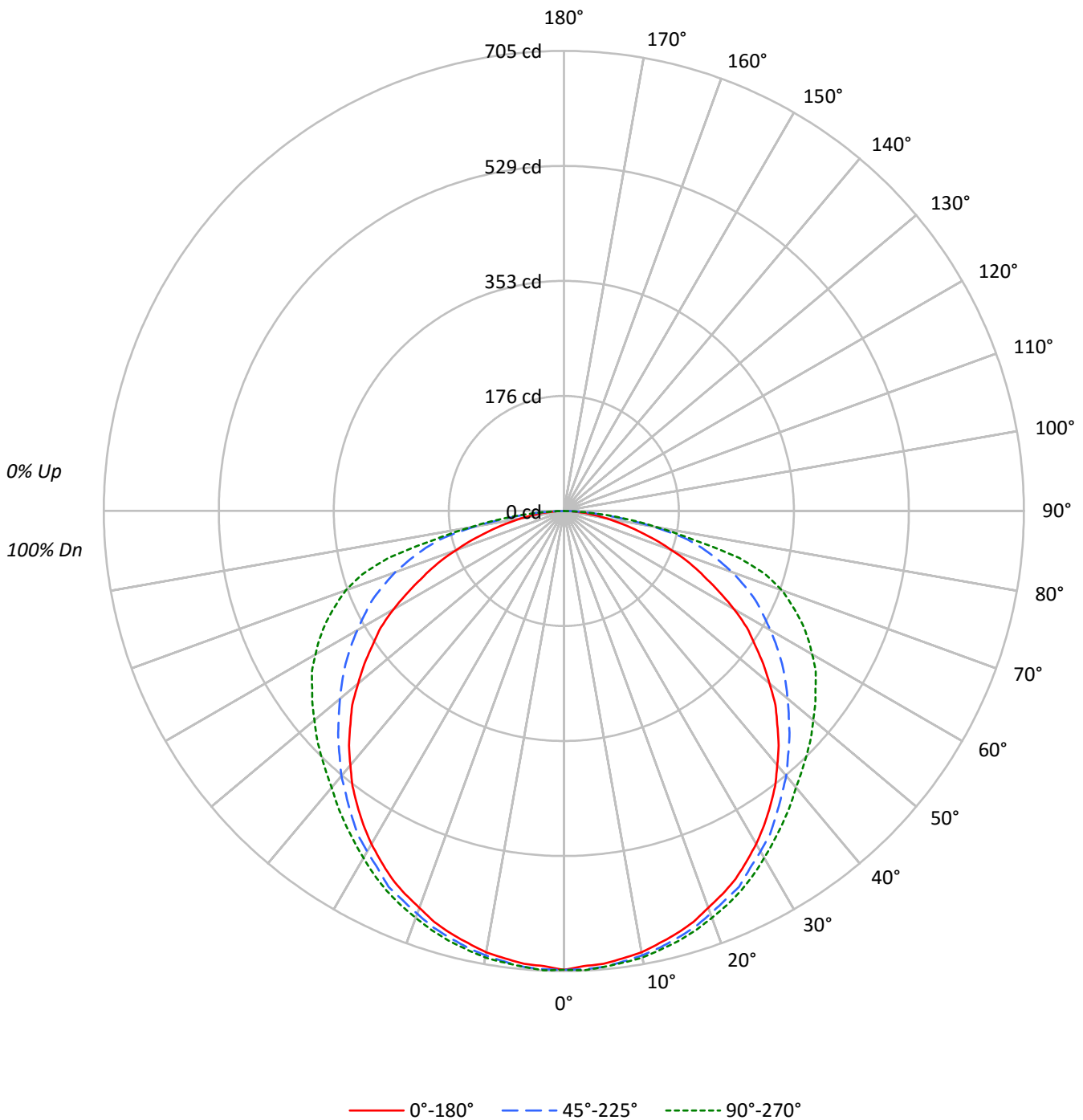
Input Watts (W): 33
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308550

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P308550

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-4500K

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°	1892	1892	1892
5°	1881	1894	1894
10°	1876	1890	1899
15°	1867	1885	1899
20°	1853	1881	1900
25°	1848	1887	1907
30°	1831	1872	1908
35°	1812	1866	1920
40°	1787	1862	1943
45°	1760	1861	2005
50°	1723	1875	2088
55°	1676	1916	2209
60°	1622	1967	2366
65°	1510	2065	2558
70°	1386	2163	2798
75°	1215	2277	2892
80°	1046	2168	2270
85°	914	1575	1729



TEST NUMBER: P308550

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	3.0
10°-20°	190.9	8.5
20°-30°	291.3	13.0
30°-40°	355.7	15.9
40°-50°	380.3	17.0
50°-60°	367.1	16.4
60°-70°	316.0	14.1
70°-80°	213.8	9.6
80°-90°	56.4	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°	548.7	24.5
0°-40°	904.4	40.4
0°-60°	1651.8	73.8
0°-90°	2238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	696	698	701	701	701	66
15°	670	672	677	680	682	189
25°	622	626	636	639	642	286
35°	552	556	568	580	584	345
45°	463	471	489	514	527	357
55°	357	369	408	450	471	320
65°	237	260	324	375	402	236
75°	117	155	219	263	278	125
85°	30	41	51	53	56	33
90°	0	0	0	0	0	



TEST NUMBER: P308550

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.0	703.0	703.0	703.0	703.0
2.5°	698.1	699.7	703.0	703.0	704.6
5°	696.4	698.1	701.3	701.3	701.3
7.5°	691.5	693.1	696.4	698.1	698.1
10°	686.5	688.2	691.5	693.1	694.8
12.5°	678.3	679.9	684.9	688.2	688.2
15°	670.1	671.7	676.7	679.9	681.6
17.5°	660.2	663.5	668.4	671.7	673.4
20°	647.0	650.3	656.9	661.8	663.5
22.5°	635.5	638.8	645.4	650.3	653.6
25°	622.3	625.6	635.5	638.8	642.1
27.5°	605.9	609.2	617.4	624.0	628.9
30°	589.4	592.7	602.6	610.8	614.1
32.5°	571.3	576.2	587.7	594.3	599.3
35°	551.5	556.5	568.0	579.5	584.5
37.5°	531.8	536.7	548.2	563.1	569.6
40°	508.7	515.3	530.1	549.9	553.2
42.5°	487.3	495.6	508.7	531.8	540.0
45°	462.6	470.9	489.0	513.7	526.8
47.5°	439.6	447.8	467.6	497.2	513.7
50°	411.6	423.1	447.8	482.4	498.8
52.5°	385.2	395.1	428.1	465.9	485.7
55°	357.3	368.8	408.3	449.5	470.9
57.5°	332.6	342.4	386.9	433.0	457.7
60°	301.3	314.5	365.5	414.9	439.6
62.5°	268.4	288.1	344.1	395.1	421.5
65°	237.1	260.1	324.3	375.4	401.7
67.5°	209.1	233.8	299.6	354.0	378.7
70°	176.2	207.4	274.9	327.6	355.6
72.5°	146.5	181.1	247.0	299.6	324.3
75°	116.9	154.8	219.0	263.4	278.2
77.5°	90.5	126.8	187.7	200.9	202.5
80°	67.5	100.4	139.9	141.6	146.5
82.5°	46.1	70.8	90.5	98.8	100.4
85°	29.6	41.2	51.0	52.7	56.0
87.5°	13.2	14.8	18.1	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)