

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: P308192

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-HRP-CP250-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: P308192
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-29HE-UNV-L82765-HRP-CP250-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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: 1925.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

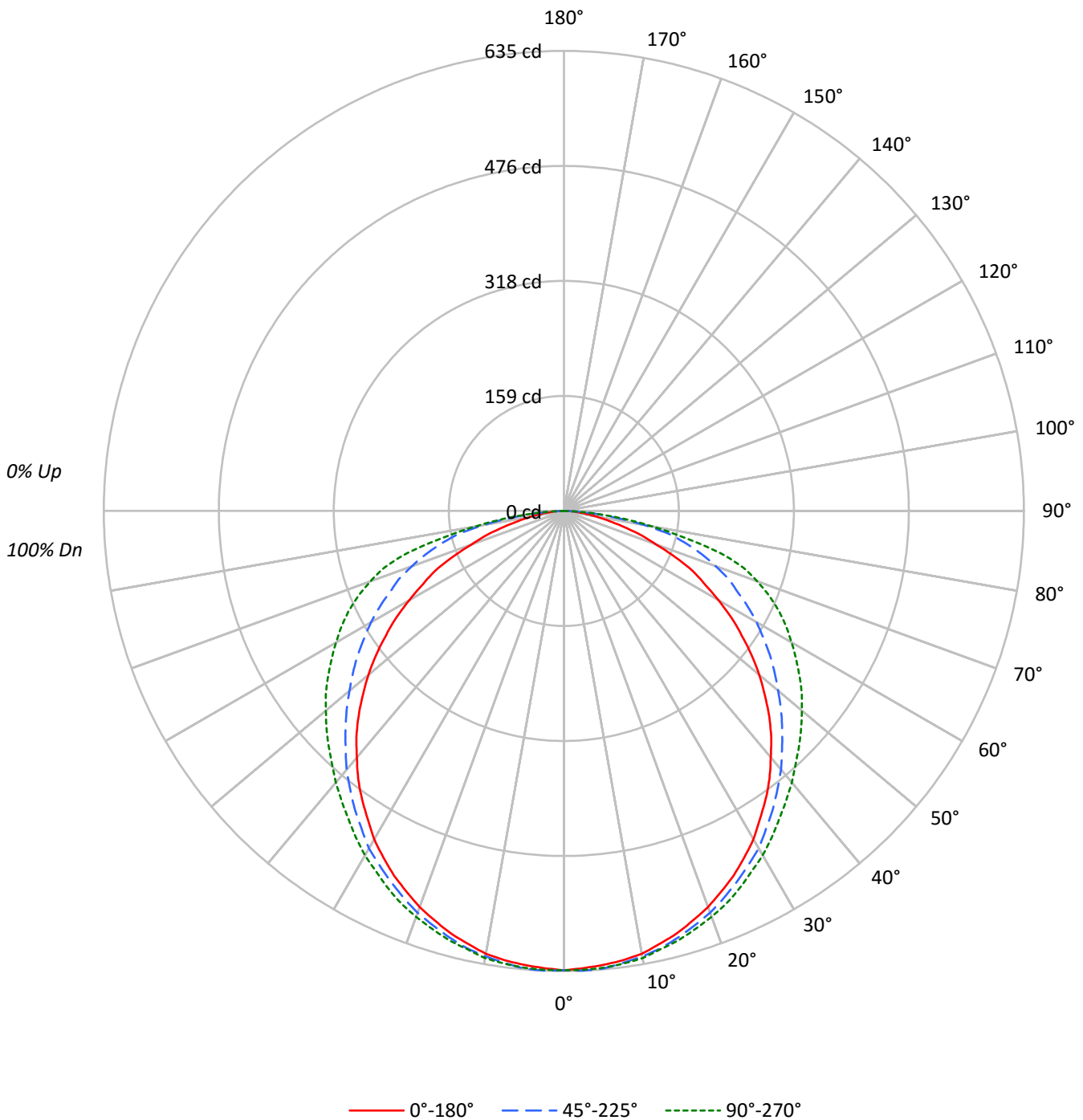
Input Watts (W): 23
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308192

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-HRP-CP250-W2A-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P308192

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-HRP-CP250-W2A-U-5500K

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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1706	1706	1706
5°	1699	1712	1709
10°	1696	1706	1712
15°	1681	1698	1708
20°	1666	1690	1707
25°	1648	1677	1705
30°	1626	1671	1706
35°	1596	1651	1703
40°	1561	1638	1719
45°	1525	1622	1747
50°	1474	1617	1795
55°	1407	1629	1863
60°	1327	1653	1954
65°	1252	1685	2088
70°	1070	1758	2236
75°	896	1831	2323
80°	735	1768	1939
85°	636	1312	1423



TEST NUMBER: P308192

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-HRP-CP250-W2A-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	3.1
10°-20°	171.8	8.9
20°-30°	260.4	13.5
30°-40°	314.5	16.3
40°-50°	330.4	17.2
50°-60°	310.9	16.2
60°-70°	259.2	13.5
70°-80°	171.8	8.9
80°-90°	45.8	2.4
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°	492.4	25.6
0°-40°	806.8	41.9
0°-60°	1448.2	75.2
0°-90°	1925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1925.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	629	630	634	634	633	60
15°	604	606	610	612	613	170
25°	555	559	565	572	574	256
35°	486	491	503	514	518	304
45°	401	407	426	448	459	309
55°	300	313	347	382	397	268
65°	197	214	265	308	328	191
75°	86	120	176	212	223	94
85°	21	32	42	46	46	24
90°	0	0	0	0	0	



TEST NUMBER: P308192

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-HRP-CP250-W2A-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.9	633.9	633.9	633.9	633.9
2.5°	631.5	632.7	635.1	635.1	633.9
5°	629.0	630.2	633.9	633.9	632.7
7.5°	625.4	626.6	629.0	631.5	630.2
10°	620.5	621.7	624.2	626.6	626.6
12.5°	612.0	613.2	618.1	619.3	619.3
15°	603.5	606.0	609.6	612.0	613.2
17.5°	592.6	595.0	599.9	604.7	604.7
20°	581.7	584.1	590.2	595.0	596.2
22.5°	568.3	571.9	578.0	584.1	586.5
25°	554.9	558.6	564.7	571.9	574.4
27.5°	539.2	542.8	551.3	559.8	561.0
30°	523.4	527.0	537.9	545.2	548.9
32.5°	503.9	508.8	519.7	530.7	534.3
35°	485.7	490.6	502.7	513.7	518.5
37.5°	466.3	471.2	484.5	497.9	503.9
40°	444.4	450.5	466.3	480.9	489.4
42.5°	423.8	429.9	445.7	465.1	473.6
45°	400.7	406.8	426.2	448.1	459.0
47.5°	376.4	383.7	406.8	433.5	444.4
50°	352.2	360.7	386.2	416.5	428.7
52.5°	326.7	337.6	366.7	399.5	414.1
55°	299.9	313.3	347.3	382.5	397.1
57.5°	274.4	286.6	326.7	364.3	380.1
60°	246.5	262.3	307.2	346.1	363.1
62.5°	219.8	236.8	286.6	327.9	346.1
65°	196.7	213.7	264.7	308.4	327.9
67.5°	166.4	189.4	246.5	287.8	307.2
70°	136.0	167.6	223.4	265.9	284.2
72.5°	112.9	143.3	200.4	242.9	259.9
75°	86.2	120.2	176.1	212.5	223.4
77.5°	64.4	99.6	150.6	168.8	170.0
80°	47.4	76.5	114.1	120.2	125.1
82.5°	32.8	53.4	74.1	81.4	83.8
85°	20.6	31.6	42.5	46.1	46.1
87.5°	10.9	12.1	14.6	14.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)