

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: P308430

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CA125-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: P308430
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: 22FCZ2-29HE-UNV-L82765-RDP-CA125-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC 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: 1617.0 lumens
Efficiency: N/A
Efficacy: 72.8 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

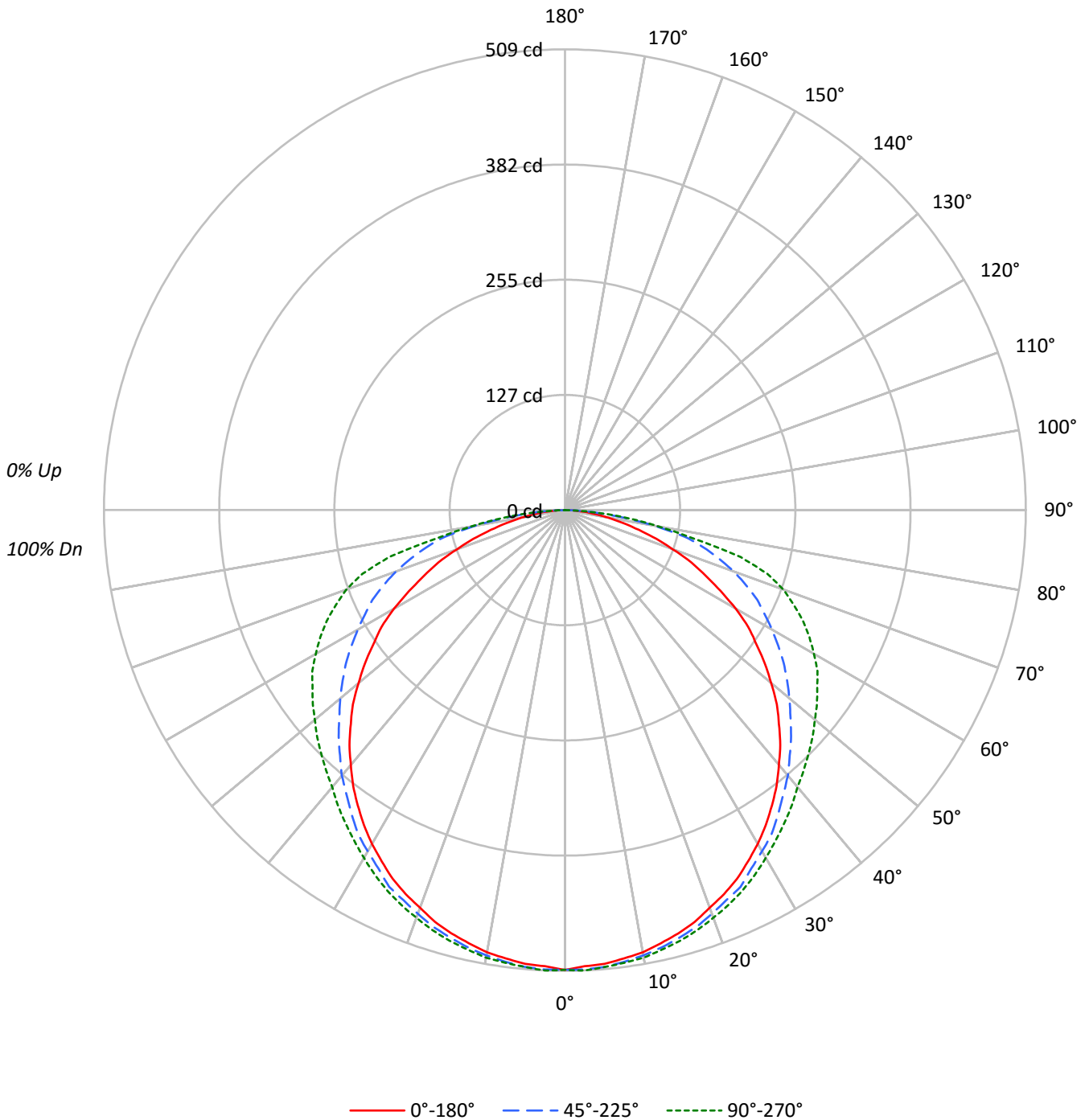
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308430

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA125-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P308430

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA125-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°	1367	1367	1367
5°	1359	1369	1369
10°	1355	1365	1372
15°	1349	1362	1372
20°	1339	1359	1373
25°	1335	1363	1377
30°	1323	1353	1379
35°	1309	1348	1387
40°	1291	1345	1404
45°	1272	1345	1448
50°	1245	1355	1509
55°	1211	1384	1596
60°	1172	1421	1709
65°	1091	1492	1848
70°	1002	1563	2021
75°	879	1645	2090
80°	756	1567	1641
85°	661	1139	1247



TEST NUMBER: P308430

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA125-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	3.0
10°-20°	138.0	8.5
20°-30°	210.5	13.0
30°-40°	257.0	15.9
40°-50°	274.8	17.0
50°-60°	265.2	16.4
60°-70°	228.3	14.1
70°-80°	154.5	9.6
80°-90°	40.8	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°	396.5	24.5
0°-40°	653.5	40.4
0°-60°	1193.4	73.8
0°-90°	1617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1617.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	503	504	507	507	507	48
15°	484	485	489	491	492	137
25°	450	452	459	462	464	207
35°	398	402	410	419	422	249
45°	334	340	353	371	381	258
55°	258	266	295	325	340	231
65°	171	188	234	271	290	170
75°	84	112	158	190	201	91
85°	21	30	37	38	40	24
90°	0	0	0	0	0	



TEST NUMBER: P308430

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CA125-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.9	507.9	507.9	507.9	507.9
2.5°	504.4	505.5	507.9	507.9	509.1
5°	503.2	504.4	506.7	506.7	506.7
7.5°	499.6	500.8	503.2	504.4	504.4
10°	496.0	497.2	499.6	500.8	502.0
12.5°	490.1	491.3	494.8	497.2	497.2
15°	484.1	485.3	488.9	491.3	492.5
17.5°	477.0	479.4	482.9	485.3	486.5
20°	467.5	469.9	474.6	478.2	479.4
22.5°	459.2	461.5	466.3	469.9	472.2
25°	449.6	452.0	459.2	461.5	463.9
27.5°	437.7	440.1	446.1	450.8	454.4
30°	425.9	428.2	435.4	441.3	443.7
32.5°	412.8	416.3	424.7	429.4	433.0
35°	398.5	402.1	410.4	418.7	422.3
37.5°	384.2	387.8	396.1	406.8	411.6
40°	367.6	372.3	383.0	397.3	399.7
42.5°	352.1	358.0	367.6	384.2	390.2
45°	334.3	340.2	353.3	371.1	380.6
47.5°	317.6	323.6	337.8	359.2	371.1
50°	297.4	305.7	323.6	348.5	360.4
52.5°	278.3	285.5	309.3	336.6	350.9
55°	258.1	266.5	295.0	324.7	340.2
57.5°	240.3	247.4	279.5	312.8	330.7
60°	217.7	227.2	264.1	299.8	317.6
62.5°	193.9	208.2	248.6	285.5	304.5
65°	171.3	187.9	234.3	271.2	290.2
67.5°	151.1	168.9	216.5	255.7	273.6
70°	127.3	149.9	198.7	236.7	256.9
72.5°	105.9	130.8	178.4	216.5	234.3
75°	84.5	111.8	158.2	190.3	201.0
77.5°	65.4	91.6	135.6	145.1	146.3
80°	48.8	72.6	101.1	102.3	105.9
82.5°	33.3	51.1	65.4	71.4	72.6
85°	21.4	29.7	36.9	38.1	40.4
87.5°	9.5	10.7	13.1	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)