

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: P308443

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CP125-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: P308443
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-CP125-W2A-U-5000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" 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: 1729.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

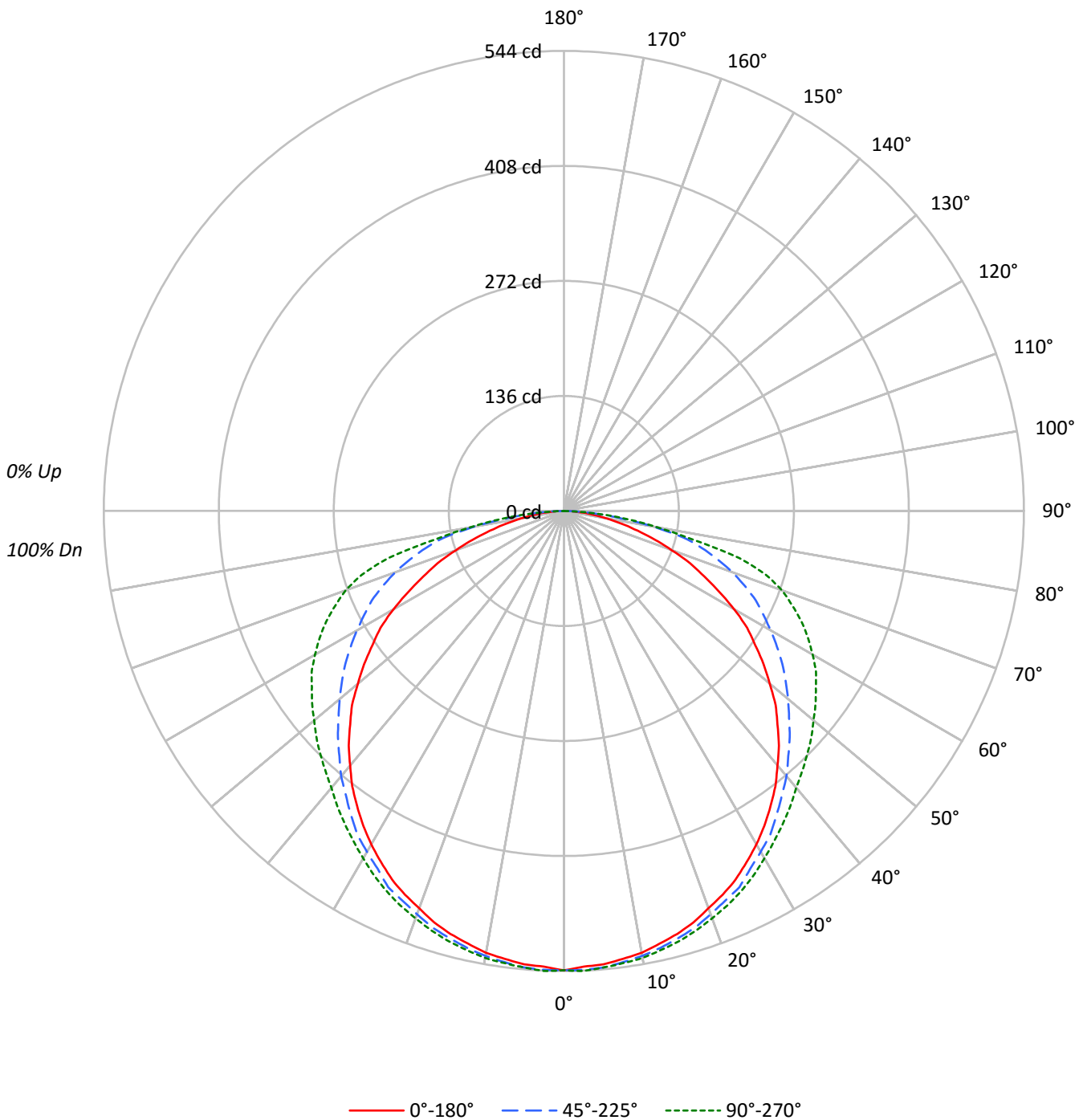
Input Watts (W): 22.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308443

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CP125-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P308443

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CP125-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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1461	1461	1461
5°	1453	1464	1464
10°	1449	1460	1467
15°	1442	1456	1467
20°	1432	1453	1468
25°	1428	1458	1473
30°	1415	1446	1474
35°	1400	1441	1483
40°	1381	1439	1501
45°	1360	1438	1549
50°	1331	1449	1613
55°	1295	1480	1707
60°	1253	1520	1828
65°	1167	1596	1976
70°	1071	1671	2161
75°	939	1759	2235
80°	807	1675	1754
85°	707	1216	1334



TEST NUMBER: P308443

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CP125-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	3.0
10°-20°	147.5	8.5
20°-30°	225.1	13.0
30°-40°	274.8	15.9
40°-50°	293.8	17.0
50°-60°	283.6	16.4
60°-70°	244.1	14.1
70°-80°	165.2	9.6
80°-90°	43.6	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°	423.9	24.5
0°-40°	698.7	40.4
0°-60°	1276.1	73.8
0°-90°	1729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1729.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	538	539	542	542	542	51
15°	518	519	523	525	527	146
25°	481	483	491	494	496	221
35°	426	430	439	448	452	267
45°	357	364	378	397	407	276
55°	276	285	315	347	364	247
65°	183	201	251	290	310	182
75°	90	120	169	204	215	97
85°	23	32	39	41	43	26
90°	0	0	0	0	0	



TEST NUMBER: P308443

CATALOG NUMBER: 22FCZ2-29HE-UNV-L82765-RDP-CP125-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	543.1	543.1	543.1	543.1	543.1
2.5°	539.3	540.6	543.1	543.1	544.4
5°	538.0	539.3	541.8	541.8	541.8
7.5°	534.2	535.5	538.0	539.3	539.3
10°	530.4	531.7	534.2	535.5	536.7
12.5°	524.0	525.3	529.1	531.7	531.7
15°	517.7	518.9	522.8	525.3	526.6
17.5°	510.0	512.6	516.4	518.9	520.2
20°	499.9	502.4	507.5	511.3	512.6
22.5°	491.0	493.5	498.6	502.4	505.0
25°	480.8	483.3	491.0	493.5	496.0
27.5°	468.1	470.6	477.0	482.1	485.9
30°	455.3	457.9	465.5	471.9	474.4
32.5°	441.4	445.2	454.1	459.2	463.0
35°	426.1	429.9	438.8	447.7	451.5
37.5°	410.8	414.6	423.5	435.0	440.1
40°	393.0	398.1	409.6	424.8	427.4
42.5°	376.5	382.8	393.0	410.8	417.2
45°	357.4	363.8	377.8	396.8	407.0
47.5°	339.6	346.0	361.2	384.1	396.8
50°	318.0	326.9	346.0	372.7	385.4
52.5°	297.6	305.3	330.7	360.0	375.2
55°	276.0	284.9	315.4	347.2	363.8
57.5°	256.9	264.6	298.9	334.5	353.6
60°	232.8	242.9	282.4	320.5	339.6
62.5°	207.3	222.6	265.8	305.3	325.6
65°	183.2	201.0	250.6	290.0	310.3
67.5°	161.5	180.6	231.5	273.5	292.5
70°	136.1	160.3	212.4	253.1	274.7
72.5°	113.2	139.9	190.8	231.5	250.6
75°	90.3	119.6	169.2	203.5	215.0
77.5°	70.0	97.9	145.0	155.2	156.4
80°	52.1	77.6	108.1	109.4	113.2
82.5°	35.6	54.7	70.0	76.3	77.6
85°	22.9	31.8	39.4	40.7	43.2
87.5°	10.2	11.4	14.0	12.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)