

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: P308435

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CA125-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: P308435
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-5500K
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: 1781.0 lumens
Efficiency: N/A
Efficacy: 77.4 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

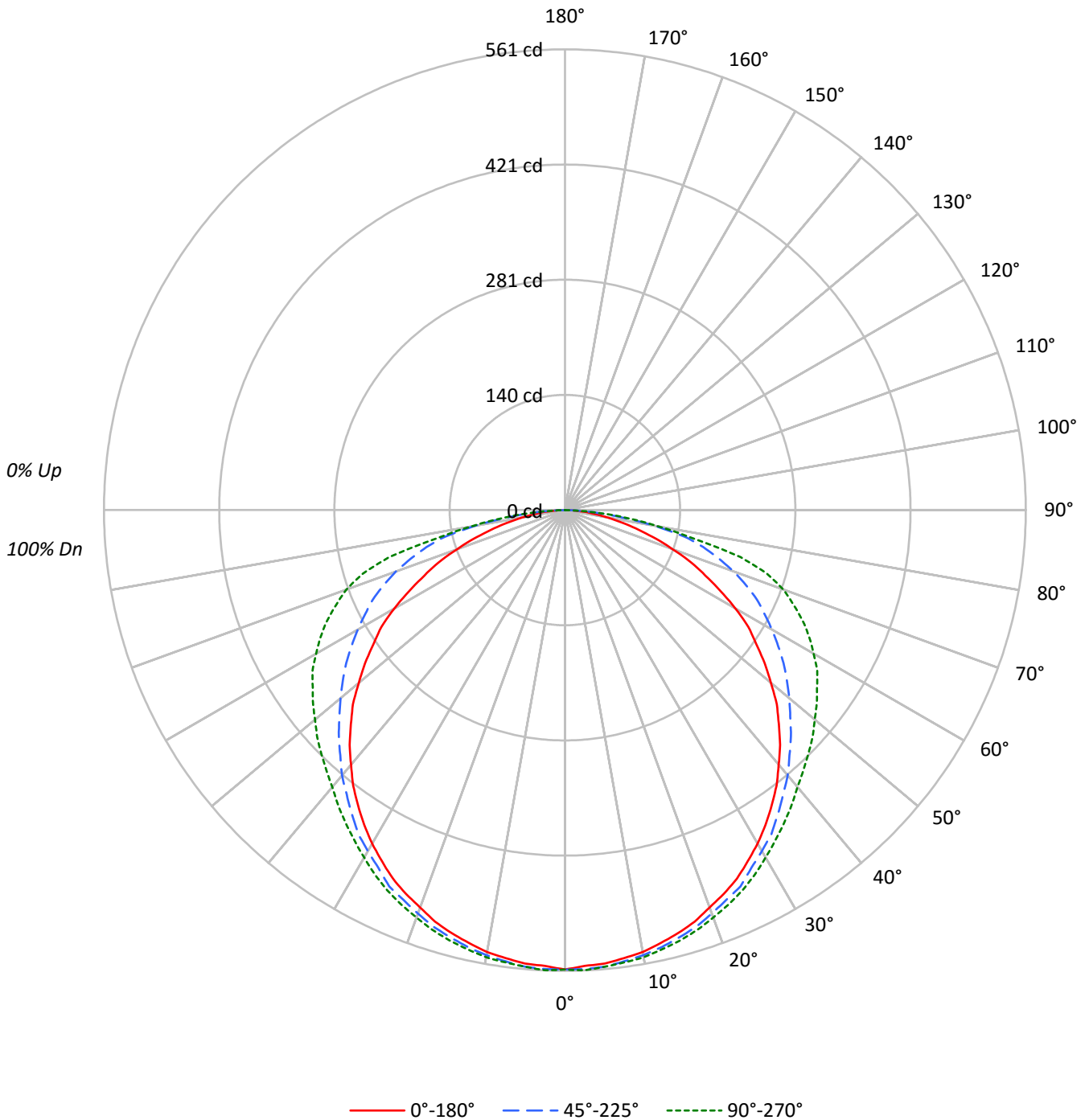
Input Watts (W): 23
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	1505	1505	1505
5°	1497	1508	1508
10°	1493	1504	1511
15°	1485	1500	1511
20°	1475	1497	1512
25°	1470	1502	1517
30°	1457	1490	1519
35°	1442	1485	1528
40°	1422	1482	1546
45°	1401	1481	1596
50°	1371	1492	1662
55°	1334	1524	1758
60°	1291	1566	1883
65°	1202	1643	2036
70°	1103	1721	2227
75°	967	1812	2302
80°	832	1726	1807
85°	729	1254	1374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	3.0
10°-20°	151.9	8.5
20°-30°	231.8	13.0
30°-40°	283.1	15.9
40°-50°	302.7	17.0
50°-60°	292.1	16.4
60°-70°	251.5	14.1
70°-80°	170.1	9.6
80°-90°	44.9	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°	436.7	24.5
0°-40°	719.7	40.4
0°-60°	1314.5	73.8
0°-90°	1781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	554	556	558	558	558	53
15°	533	534	538	541	542	150
25°	495	498	506	508	511	228
35°	439	443	452	461	465	275
45°	368	375	389	409	419	284
55°	284	294	325	358	375	255
65°	189	207	258	299	320	188
75°	93	123	174	210	221	100
85°	24	33	41	42	44	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	559.4	559.4	559.4	559.4	559.4
2.5°	555.5	556.8	559.4	559.4	560.8
5°	554.2	555.5	558.1	558.1	558.1
7.5°	550.3	551.6	554.2	555.5	555.5
10°	546.3	547.7	550.3	551.6	552.9
12.5°	539.8	541.1	545.0	547.7	547.7
15°	533.2	534.5	538.5	541.1	542.4
17.5°	525.4	528.0	531.9	534.5	535.9
20°	514.9	517.5	522.8	526.7	528.0
22.5°	505.7	508.3	513.6	517.5	520.1
25°	495.2	497.9	505.7	508.3	511.0
27.5°	482.1	484.8	491.3	496.6	500.5
30°	469.0	471.7	479.5	486.1	488.7
32.5°	454.6	458.6	467.7	473.0	476.9
35°	438.9	442.8	452.0	461.2	465.1
37.5°	423.2	427.1	436.3	448.1	453.3
40°	404.8	410.1	421.9	437.6	440.2
42.5°	387.8	394.4	404.8	423.2	429.7
45°	368.2	374.7	389.1	408.8	419.3
47.5°	349.8	356.4	372.1	395.7	408.8
50°	327.5	336.7	356.4	383.9	397.0
52.5°	306.6	314.4	340.6	370.8	386.5
55°	284.3	293.5	324.9	357.7	374.7
57.5°	264.7	272.5	307.9	344.6	364.2
60°	239.8	250.2	290.9	330.2	349.8
62.5°	213.6	229.3	273.8	314.4	335.4
65°	188.7	207.0	258.1	298.7	319.7
67.5°	166.4	186.0	238.5	281.7	301.3
70°	140.2	165.1	218.8	260.7	283.0
72.5°	116.6	144.1	196.5	238.5	258.1
75°	93.0	123.2	174.3	209.6	221.4
77.5°	72.1	100.9	149.4	159.8	161.2
80°	53.7	79.9	111.4	112.7	116.6
82.5°	36.7	56.3	72.1	78.6	79.9
85°	23.6	32.8	40.6	41.9	44.5
87.5°	10.5	11.8	14.4	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)