

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: P308888

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-S-CP125-W2A-U-2700K**

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: P308888  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-20HE-UNV-L82765-S-CP125-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 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**

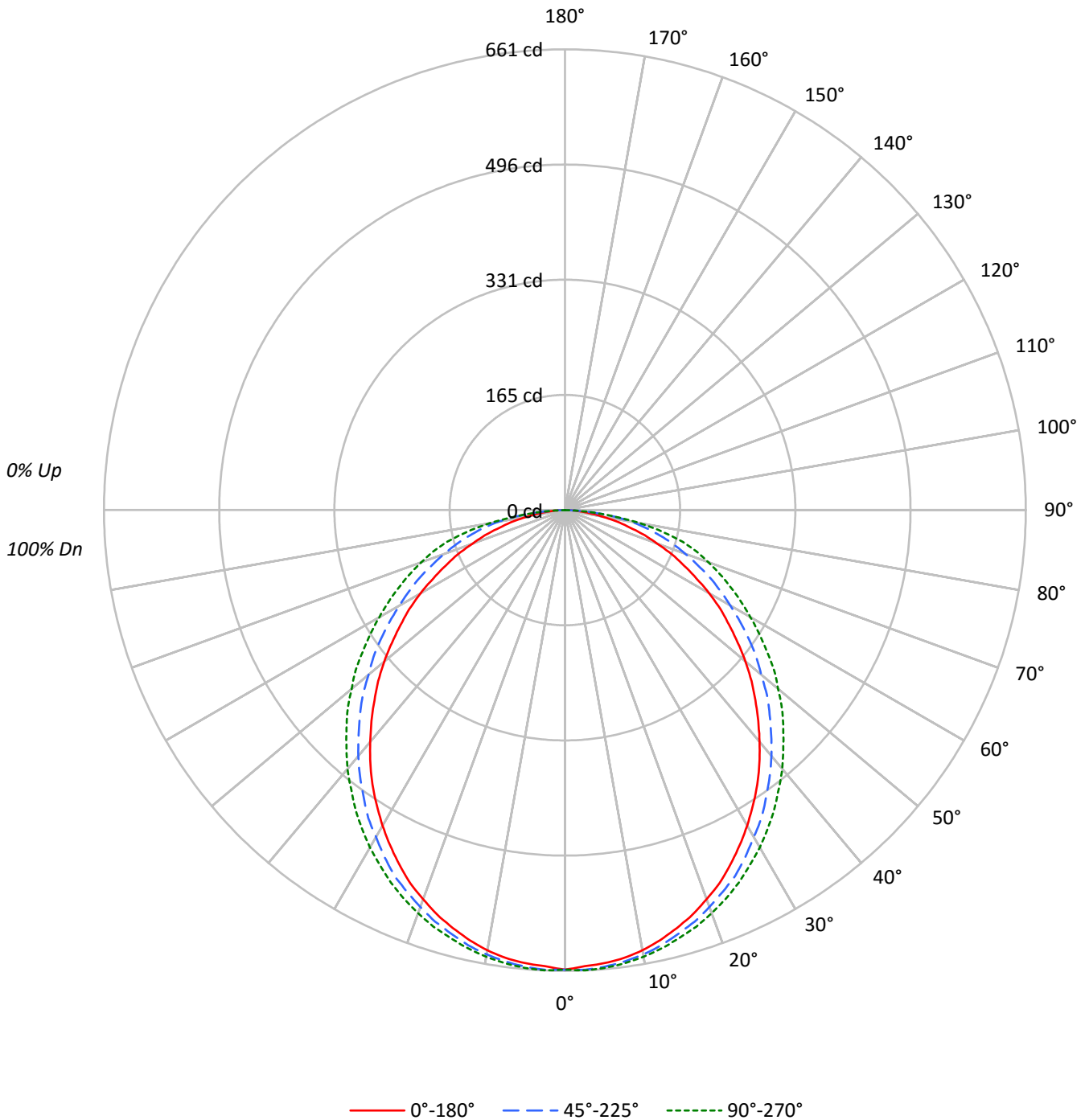
Lumens per Lamp: N/A  
Luminaire Lumens: 1840.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1774	1774	1774
5°	1763	1776	1781
10°	1752	1769	1778
15°	1729	1753	1770
20°	1701	1736	1763
25°	1667	1718	1751
30°	1624	1683	1737
35°	1579	1653	1720
40°	1526	1619	1704
45°	1470	1581	1686
50°	1416	1538	1671
55°	1349	1510	1659
60°	1289	1474	1654
65°	1203	1465	1673
70°	1108	1452	1722
75°	1000	1473	1812
80°	865	1517	1703
85°	716	1272	1272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	3.4
10°-20°	177.4	9.6
20°-30°	265.5	14.4
30°-40°	314.4	17.1
40°-50°	320.4	17.4
50°-60°	287.2	15.6
60°-70°	224.8	12.2
70°-80°	145.0	7.9
80°-90°	42.8	2.3
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°	505.3	27.5
0°-40°	819.7	44.5
0°-60°	1427.3	77.6
0°-90°	1840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	652	654	658	658	659	62
15°	621	624	629	634	635	175
25°	562	567	579	586	590	258
35°	481	487	503	518	524	300
45°	386	395	416	437	443	298
55°	288	297	322	344	354	258
65°	189	200	230	252	263	188
75°	96	111	142	166	174	103
85°	23	32	41	41	41	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	659.3	659.3	659.3	659.3	659.3
2.5°	655.0	656.8	660.2	661.0	661.0
5°	652.5	654.2	657.6	658.5	659.3
7.5°	648.2	649.0	653.3	655.0	655.9
10°	641.3	643.0	647.3	649.9	650.7
12.5°	631.9	634.4	639.6	643.0	643.9
15°	620.7	624.1	629.3	634.4	635.3
17.5°	608.7	612.1	619.0	625.0	626.7
20°	594.1	598.4	606.1	613.0	615.5
22.5°	579.5	582.9	592.4	601.0	603.5
25°	561.5	566.6	578.6	586.4	589.8
27.5°	542.6	548.6	560.6	570.9	574.3
30°	522.8	528.8	541.7	554.6	558.9
32.5°	502.2	509.1	524.5	537.4	541.7
35°	480.8	486.8	503.1	518.5	523.7
37.5°	458.4	463.6	482.5	498.8	503.9
40°	434.4	441.3	461.0	479.9	485.1
42.5°	410.4	418.1	437.8	458.4	463.6
45°	386.3	394.9	415.5	437.0	443.0
47.5°	363.1	370.0	393.2	413.8	422.4
50°	338.2	345.1	367.4	390.6	399.2
52.5°	312.5	321.9	346.0	368.3	378.6
55°	287.6	297.0	321.9	344.3	353.7
57.5°	264.4	272.1	297.9	321.1	330.5
60°	239.5	246.4	273.9	298.8	307.3
62.5°	212.9	223.2	251.5	274.7	285.0
65°	188.9	200.0	230.1	252.4	262.7
67.5°	166.5	176.9	206.0	230.1	241.2
70°	140.8	154.5	184.6	208.6	218.9
72.5°	120.2	132.2	163.1	187.2	198.3
75°	96.2	110.7	141.7	165.7	174.3
77.5°	76.4	91.0	120.2	139.1	143.4
80°	55.8	70.4	97.9	107.3	109.9
82.5°	37.8	51.5	70.4	73.0	73.8
85°	23.2	31.8	41.2	41.2	41.2
87.5°	11.2	12.9	14.6	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)