

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: P312170

Luminaire Tested: **14FCZ2-25-UNV-L83050-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: P312170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L83050-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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

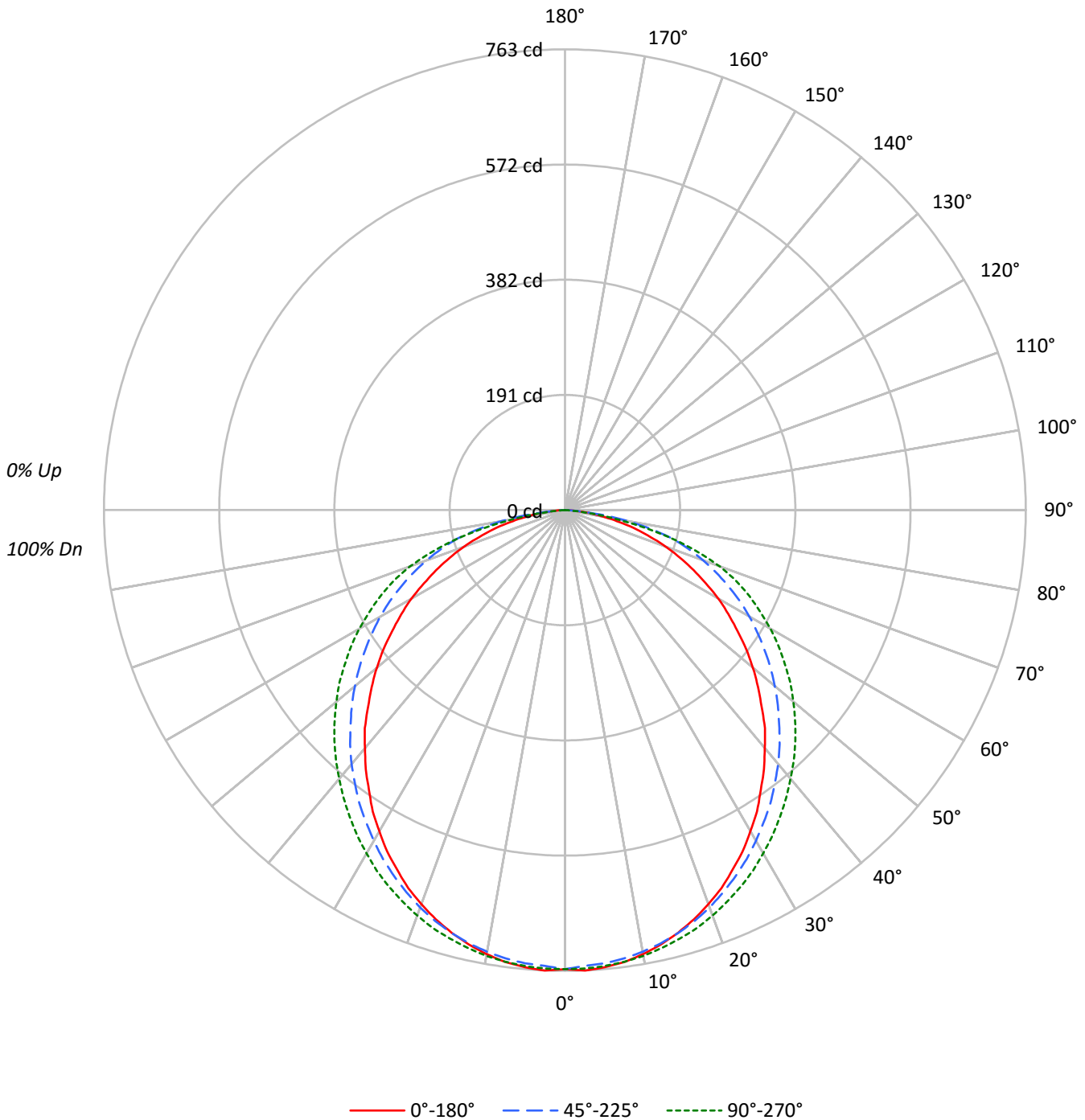
Lumens per Lamp: N/A
Luminaire Lumens: 2207.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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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CATALOG NUMBER: 14FC22-25-UNV-L83050-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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2046	2046	2046
5°	2052	2035	2047
10°	2040	2029	2048
15°	2018	2020	2047
20°	1989	2005	2046
25°	1951	1986	2044
30°	1908	1965	2040
35°	1857	1948	2039
40°	1808	1929	2042
45°	1753	1909	2053
50°	1702	1899	2066
55°	1637	1893	2085
60°	1579	1897	2113
65°	1498	1902	2146
70°	1405	1917	2145
75°	1274	1934	1939
80°	1044	1671	1381
85°	775	790	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.3
10°-20°	205.5	9.3
20°-30°	309.6	14.0
30°-40°	371.5	16.8
40°-50°	387.2	17.5
50°-60°	358.5	16.2
60°-70°	289.6	13.1
70°-80°	176.6	8.0
80°-90°	36.5	1.7
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°	587.1	26.6
0°-40°	958.6	43.4
0°-60°	1704.3	77.2
0°-90°	2207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	760	758	753	759	758	72
15°	724	725	725	735	735	204
25°	657	661	669	686	688	303
35°	565	574	593	615	621	354
45°	461	474	502	530	539	356
55°	349	367	404	435	444	313
65°	235	258	299	329	337	233
75°	122	150	186	189	186	129
85°	25	37	26	14	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.3	760.3	760.3	760.3	760.3
2.5°	763.3	760.8	755.4	760.8	759.8
5°	759.8	757.9	753.4	758.8	757.9
7.5°	754.9	752.9	749.0	755.4	754.4
10°	746.5	745.6	742.6	750.0	749.5
12.5°	736.7	736.2	734.7	743.1	742.6
15°	724.4	724.9	724.9	734.7	734.7
17.5°	710.6	711.6	713.6	724.4	725.9
20°	694.4	696.3	700.3	712.6	714.6
22.5°	677.6	679.1	685.0	699.8	701.8
25°	657.0	660.9	668.8	685.5	688.5
27.5°	637.3	640.7	651.6	668.8	673.7
30°	614.2	619.6	632.4	651.1	656.5
32.5°	592.0	597.9	612.7	634.3	639.3
35°	565.4	574.3	593.0	614.7	620.6
37.5°	541.3	549.7	570.9	594.5	601.4
40°	514.8	525.1	549.2	574.3	581.2
42.5°	490.1	500.0	526.1	551.7	561.0
45°	460.6	474.4	501.5	529.5	539.4
47.5°	433.6	447.3	478.3	508.4	517.2
50°	406.5	421.3	453.7	484.7	493.6
52.5°	378.4	394.2	429.1	460.1	470.5
55°	348.9	367.1	403.5	435.0	444.4
57.5°	320.9	339.6	378.4	410.4	419.8
60°	293.3	312.5	352.4	382.9	392.7
62.5°	262.8	285.4	326.8	356.8	364.2
65°	235.2	258.4	298.7	328.7	337.1
67.5°	206.2	231.3	271.6	299.2	307.1
70°	178.6	204.7	243.6	269.2	272.6
72.5°	149.1	175.7	215.1	231.3	231.3
75°	122.5	149.6	186.0	189.0	186.5
77.5°	93.5	123.5	147.1	141.2	135.3
80°	67.4	96.9	107.8	96.9	89.1
82.5°	45.3	70.4	65.0	51.7	45.8
85°	25.1	37.4	25.6	14.3	10.3
87.5°	9.4	8.4	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)