

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: P312296

Luminaire Tested: **14FCZ2-20-UNV-L83050-S-CA125-W2A-U-3500K**

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: P312296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L83050-S-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 2023.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

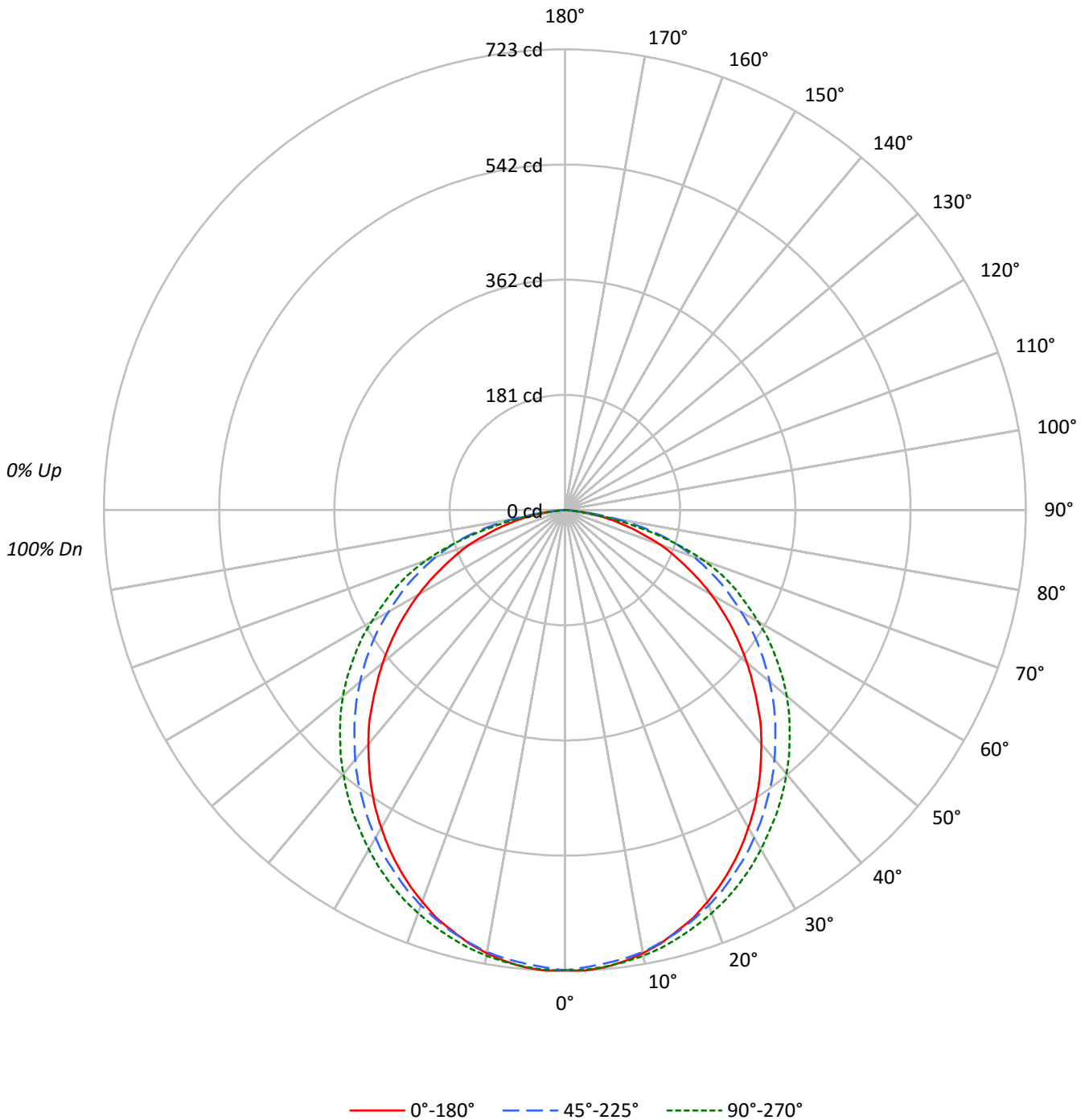
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	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	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1943	1943	1943
5°	1945	1929	1943
10°	1929	1924	1940
15°	1903	1909	1934
20°	1873	1890	1927
25°	1835	1867	1921
30°	1789	1845	1911
35°	1740	1819	1904
40°	1684	1797	1899
45°	1622	1775	1897
50°	1562	1755	1902
55°	1497	1741	1896
60°	1425	1717	1884
65°	1341	1712	1884
70°	1263	1697	1831
75°	1095	1658	1565
80°	886	1337	1041
85°	590	463	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.4
10°-20°	194.1	9.6
20°-30°	291.1	14.4
30°-40°	347.2	17.2
40°-50°	359.0	17.7
50°-60°	327.7	16.2
60°-70°	257.9	12.7
70°-80°	150.1	7.4
80°-90°	27.7	1.4
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°	553.3	27.4
0°-40°	900.6	44.5
0°-60°	1587.3	78.5
0°-90°	2023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	720	718	714	720	719	68
15°	683	684	685	694	694	193
25°	618	621	629	644	647	284
35°	530	537	554	575	580	331
45°	426	440	466	492	498	329
55°	319	336	371	398	404	285
65°	211	233	269	290	296	209
75°	105	130	160	156	150	112
85°	19	27	15	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	722.2	722.2	722.2	722.2	722.2
2.5°	723.2	721.2	718.2	723.2	722.2
5°	720.2	718.2	714.2	720.2	719.2
7.5°	714.2	712.1	710.1	716.2	715.2
10°	706.1	705.1	704.1	711.1	710.1
12.5°	696.1	696.1	695.1	703.1	703.1
15°	683.1	684.1	685.1	694.1	694.1
17.5°	671.0	670.0	673.0	683.1	684.1
20°	654.0	656.0	660.0	672.0	673.0
22.5°	636.9	638.9	645.9	658.0	661.0
25°	617.9	620.9	628.9	643.9	647.0
27.5°	597.8	601.8	612.8	628.9	631.9
30°	575.7	581.8	593.8	611.8	614.9
32.5°	553.7	559.7	574.7	592.8	596.8
35°	529.6	536.6	553.7	574.7	579.7
37.5°	504.5	513.5	533.6	554.7	560.7
40°	479.4	489.5	511.5	533.6	540.6
42.5°	454.4	464.4	488.5	513.5	520.6
45°	426.3	440.3	466.4	492.5	498.5
47.5°	399.2	414.2	443.3	469.4	477.4
50°	373.1	388.2	419.3	446.3	454.4
52.5°	346.0	362.1	395.2	423.3	430.3
55°	319.0	336.0	371.1	398.2	404.2
57.5°	291.9	309.9	346.0	372.1	379.1
60°	264.8	283.9	319.0	345.0	350.1
62.5°	237.7	257.8	293.9	317.0	322.0
65°	210.6	232.7	268.8	289.9	295.9
67.5°	184.6	206.6	241.7	261.8	266.8
70°	160.5	180.5	215.7	230.7	232.7
72.5°	130.4	155.5	189.6	197.6	192.6
75°	105.3	130.4	159.5	156.5	150.5
77.5°	80.2	105.3	124.4	114.3	106.3
80°	57.2	82.2	86.3	71.2	67.2
82.5°	37.1	57.2	48.1	37.1	30.1
85°	19.1	27.1	15.0	12.0	10.0
87.5°	6.0	4.0	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)