

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: P307871

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP250-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: P307871
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: 14FCZ2-25-UNV-L82765-S-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 2016.9 lumens
Efficiency: N/A
Efficacy: 102.9 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

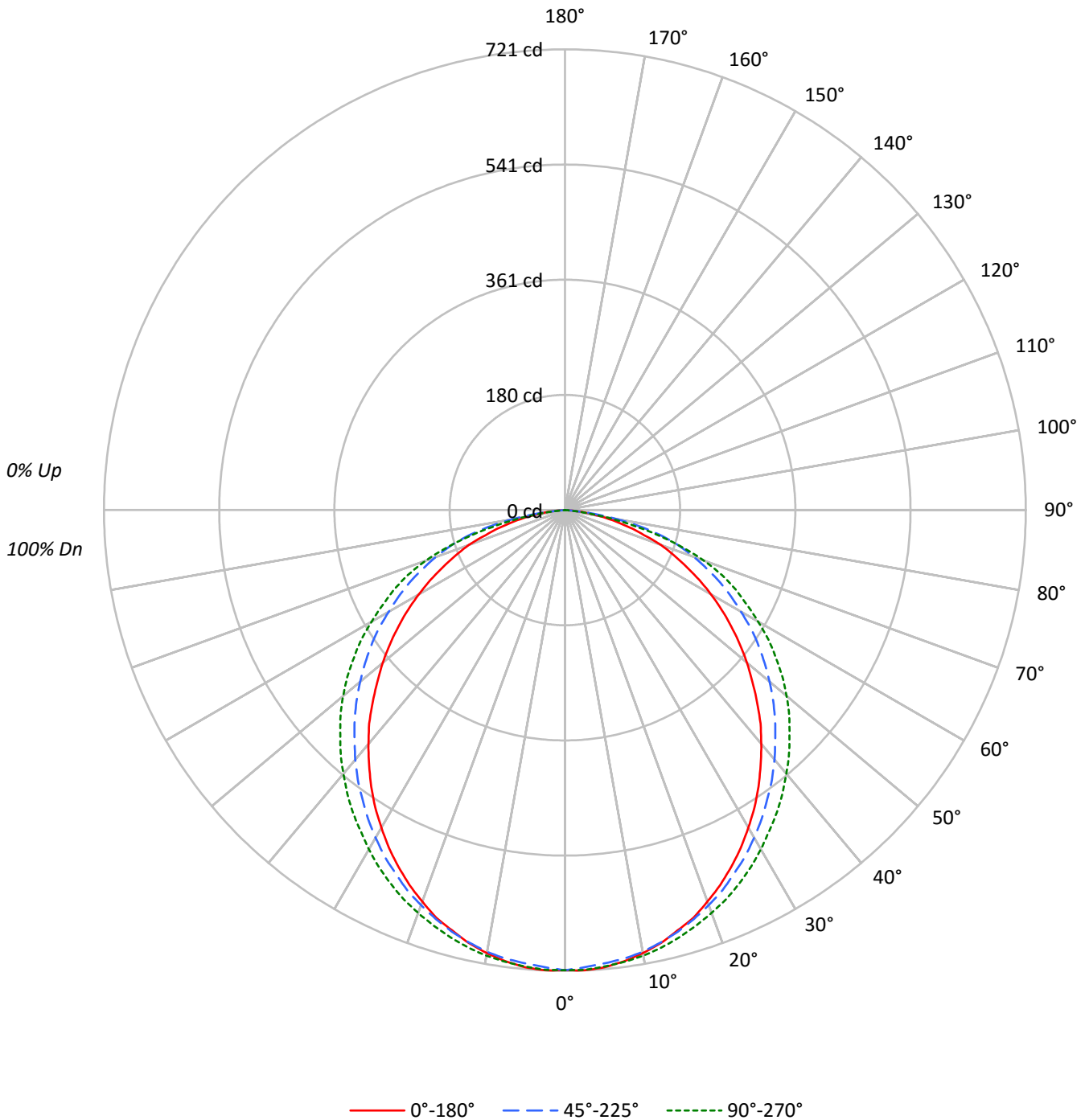
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	1938	1938	1938
5°	1940	1923	1937
10°	1924	1918	1935
15°	1897	1903	1928
20°	1867	1884	1922
25°	1829	1862	1915
30°	1784	1840	1905
35°	1735	1813	1899
40°	1679	1792	1893
45°	1617	1770	1891
50°	1557	1750	1896
55°	1492	1736	1891
60°	1421	1711	1878
65°	1337	1706	1878
70°	1259	1692	1825
75°	1092	1653	1560
80°	883	1333	1038
85°	587	463	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.4
10°-20°	193.5	9.6
20°-30°	290.2	14.4
30°-40°	346.2	17.2
40°-50°	357.9	17.7
50°-60°	326.8	16.2
60°-70°	257.1	12.7
70°-80°	149.7	7.4
80°-90°	27.6	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°	551.7	27.4
0°-40°	897.9	44.5
0°-60°	1582.5	78.5
0°-90°	2016.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2016.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	718	716	712	718	717	68
15°	681	682	683	692	692	192
25°	616	619	627	642	645	284
35°	528	535	552	573	578	330
45°	425	439	465	491	497	328
55°	318	335	370	397	403	284
65°	210	232	268	289	295	209
75°	105	130	159	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°	720	720	720	720	720
2.5°	721	719	716	721	720
5°	718	716	712	718	717
7.5°	712	710	708	714	713
10°	704	703	702	709	708
12.5°	694	694	693	701	701
15°	681	682	683	692	692
17.5°	669	668	671	681	682
20°	652	654	658	670	671
22.5°	635	637	644	656	659
25°	616	619	627	642	645
27.5°	596	600	611	627	630
30°	574	580	592	610	613
32.5°	552	558	573	591	595
35°	528	535	552	573	578
37.5°	503	512	532	553	559
40°	478	488	510	532	539
42.5°	453	463	487	512	519
45°	425	439	465	491	497
47.5°	398	413	442	468	476
50°	372	387	418	445	453
52.5°	345	361	394	422	429
55°	318	335	370	397	403
57.5°	291	309	345	371	378
60°	264	283	318	344	349
62.5°	237	257	293	316	321
65°	210	232	268	289	295
67.5°	184	206	241	261	266
70°	160	180	215	230	232
72.5°	130	155	189	197	192
75°	105	130	159	156	150
77.5°	80	105	124	114	106
80°	57	82	86	71	67
82.5°	37	57	48	37	30
85°	19	27	15	12	10
87.5°	6	4	2	2	1
90°	0	0	0	0	0

(END OF REPORT)