

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: P307874

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP250-W2A-U-4000K**

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: P307874
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-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 2195.0 lumens
Efficiency: N/A
Efficacy: 110.9 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

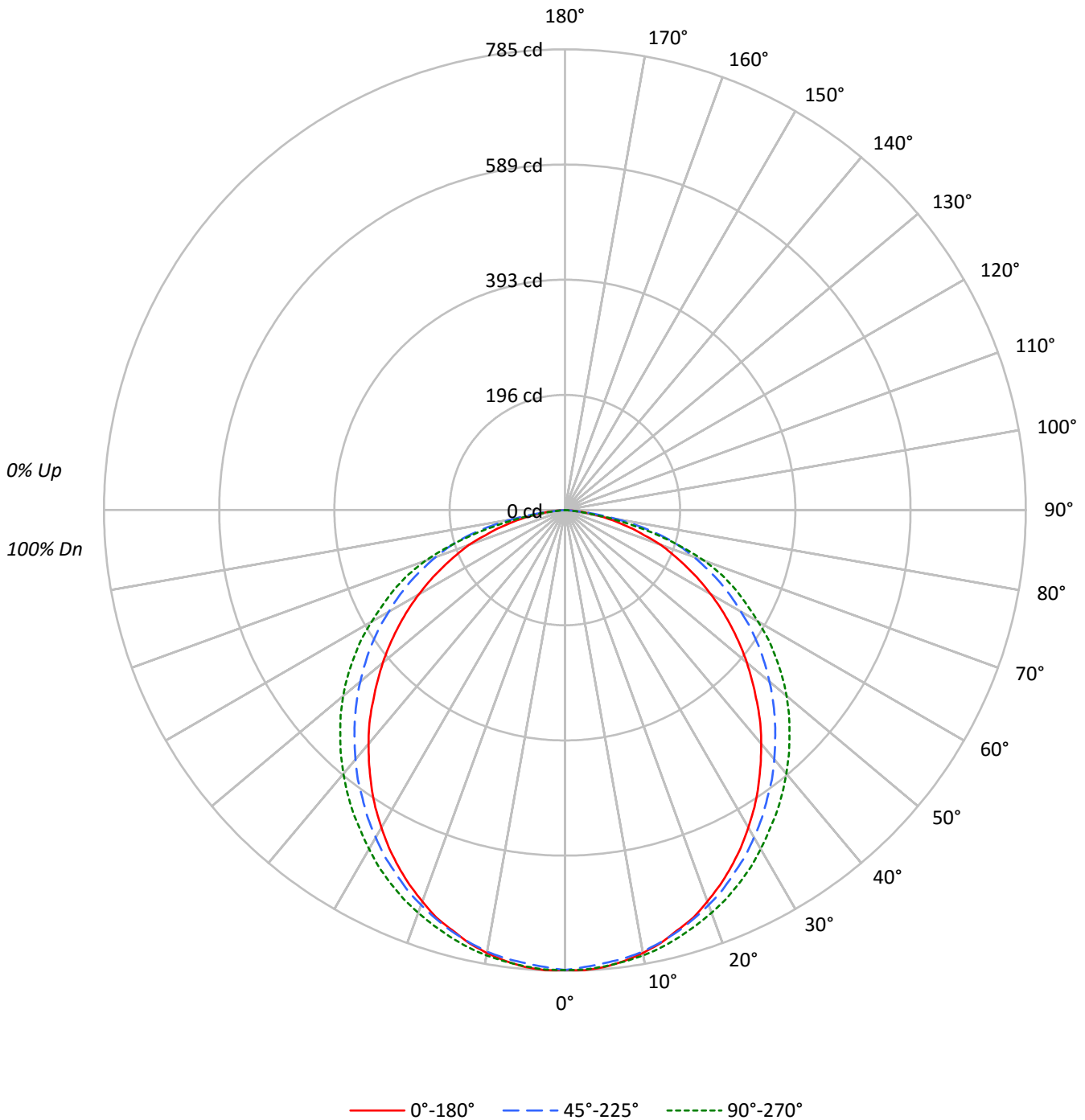
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2109	2109	2109
5°	2111	2093	2108
10°	2094	2088	2105
15°	2065	2071	2098
20°	2032	2051	2091
25°	1991	2026	2084
30°	1941	2002	2073
35°	1888	1973	2066
40°	1827	1950	2061
45°	1760	1926	2058
50°	1695	1904	2064
55°	1624	1889	2058
60°	1546	1863	2044
65°	1455	1857	2044
70°	1370	1841	1987
75°	1188	1799	1697
80°	961	1450	1130
85°	639	503	337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	3.4
10°-20°	210.6	9.6
20°-30°	315.8	14.4
30°-40°	376.8	17.2
40°-50°	389.5	17.7
50°-60°	355.6	16.2
60°-70°	279.8	12.7
70°-80°	162.9	7.4
80°-90°	30.0	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°	600.4	27.4
0°-40°	977.1	44.5
0°-60°	1722.3	78.5
0°-90°	2195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	784	784	784	784	784	
5°	781	779	775	781	780	74
15°	741	742	743	753	753	209
25°	670	674	682	699	702	309
35°	575	582	601	624	629	359
45°	462	478	506	534	541	357
55°	346	365	403	432	439	309
65°	228	252	292	314	321	227
75°	114	142	173	170	163	121
85°	21	29	16	13	11	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	783.6	783.6	783.6	783.6	783.6
2.5°	784.7	782.5	779.2	784.7	783.6
5°	781.4	779.2	774.9	781.4	780.3
7.5°	774.9	772.7	770.5	777.0	776.0
10°	766.2	765.1	764.0	771.6	770.5
12.5°	755.3	755.3	754.2	762.9	762.9
15°	741.1	742.2	743.3	753.1	753.1
17.5°	728.1	727.0	730.3	741.1	742.2
20°	709.6	711.8	716.1	729.2	730.3
22.5°	691.1	693.2	700.9	713.9	717.2
25°	670.4	673.7	682.4	698.7	702.0
27.5°	648.6	653.0	665.0	682.4	685.6
30°	624.7	631.2	644.3	663.9	667.1
32.5°	600.7	607.3	623.6	643.2	647.5
35°	574.6	582.2	600.7	623.6	629.0
37.5°	547.4	557.2	579.0	601.8	608.4
40°	520.2	531.1	555.0	579.0	586.6
42.5°	493.0	503.9	530.0	557.2	564.8
45°	462.5	477.8	506.1	534.4	540.9
47.5°	433.1	449.5	481.0	509.3	518.0
50°	404.8	421.2	454.9	484.3	493.0
52.5°	375.5	392.9	428.8	459.3	466.9
55°	346.1	364.6	402.7	432.1	438.6
57.5°	316.7	336.3	375.5	403.8	411.4
60°	287.3	308.0	346.1	374.4	379.8
62.5°	257.9	279.7	318.9	343.9	349.3
65°	228.5	252.5	291.7	314.5	321.0
67.5°	200.2	224.2	262.3	284.0	289.5
70°	174.1	195.9	234.0	250.3	252.5
72.5°	141.5	168.7	205.7	214.4	209.0
75°	114.3	141.5	173.0	169.8	163.2
77.5°	87.1	114.3	134.9	124.1	115.4
80°	62.0	89.2	93.6	77.3	72.9
82.5°	40.3	62.0	52.2	40.3	32.6
85°	20.7	29.4	16.3	13.1	10.9
87.5°	6.5	4.4	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)