

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: P307876

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP250-W2A-U-5000K**

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: P307876
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-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 2264.0 lumens
Efficiency: N/A
Efficacy: 112.6 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

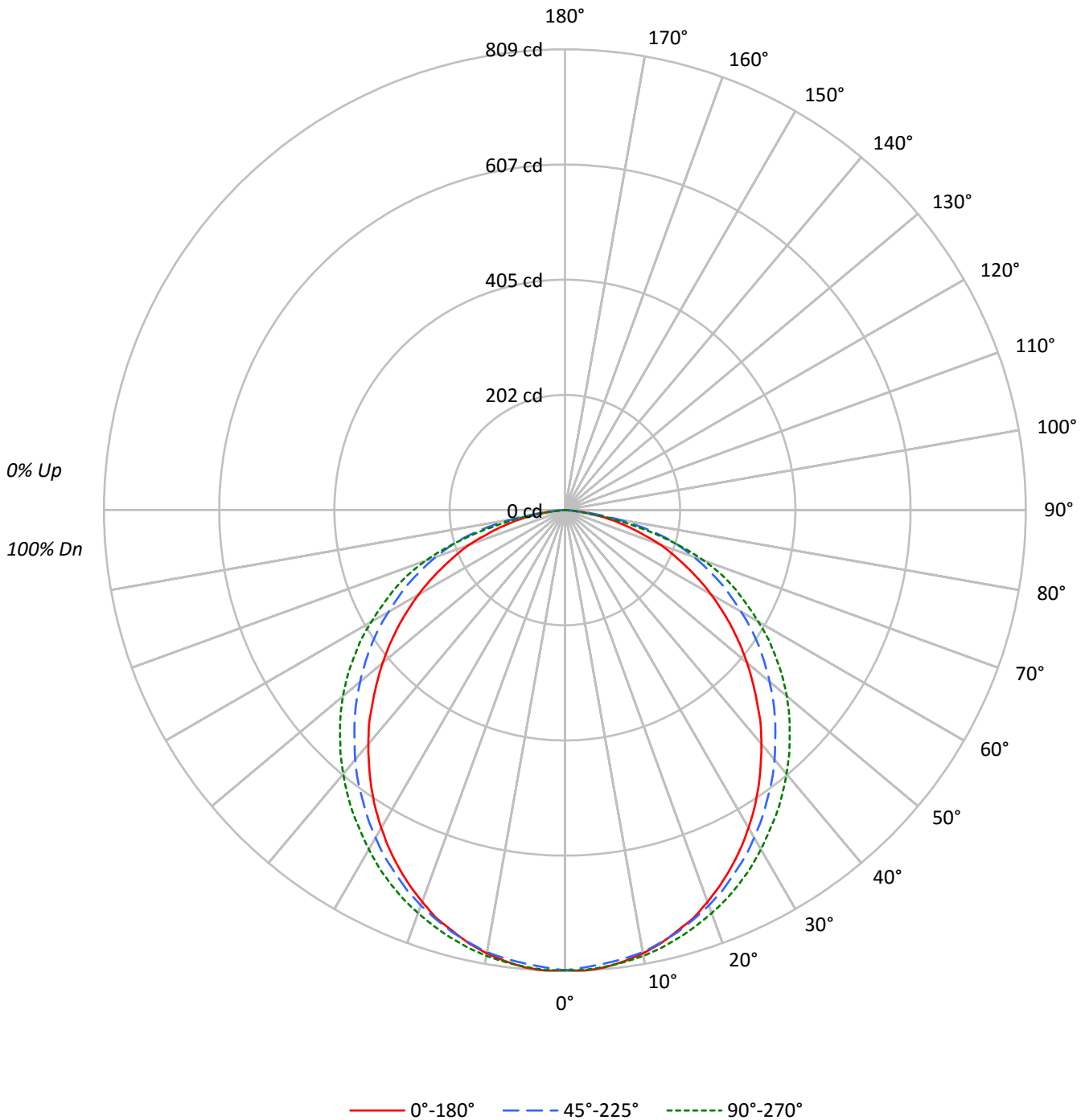
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2175	2175	2175
5°	2177	2159	2174
10°	2159	2153	2172
15°	2130	2136	2164
20°	2096	2115	2157
25°	2053	2090	2150
30°	2002	2065	2138
35°	1947	2035	2131
40°	1885	2011	2125
45°	1816	1987	2123
50°	1748	1964	2129
55°	1675	1948	2122
60°	1595	1921	2109
65°	1501	1915	2108
70°	1413	1899	2049
75°	1226	1856	1751
80°	992	1495	1165
85°	658	519	346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	3.4
10°-20°	217.2	9.6
20°-30°	325.8	14.4
30°-40°	388.6	17.2
40°-50°	401.7	17.7
50°-60°	366.8	16.2
60°-70°	288.6	12.7
70°-80°	168.0	7.4
80°-90°	30.9	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°	619.3	27.4
0°-40°	1007.9	44.5
0°-60°	1776.4	78.5
0°-90°	2264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2264.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	806	804	799	806	805	76
15°	764	766	767	777	777	216
25°	692	695	704	721	724	318
35°	593	600	620	643	649	370
45°	477	493	522	551	558	368
55°	357	376	415	446	452	319
65°	236	260	301	324	331	234
75°	118	146	178	175	168	125
85°	21	30	17	14	11	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.2	808.2	808.2	808.2	808.2
2.5°	809.3	807.1	803.7	809.3	808.2
5°	806.0	803.7	799.2	806.0	804.8
7.5°	799.2	797.0	794.7	801.5	800.4
10°	790.3	789.1	788.0	795.9	794.7
12.5°	779.0	779.0	777.9	786.9	786.9
15°	764.4	765.6	766.7	776.8	776.8
17.5°	751.0	749.8	753.2	764.4	765.6
20°	731.9	734.1	738.6	752.1	753.2
22.5°	712.8	715.0	722.9	736.4	739.7
25°	691.5	694.8	703.8	720.7	724.0
27.5°	669.0	673.5	685.9	703.8	707.2
30°	644.3	651.1	664.5	684.7	688.1
32.5°	619.6	626.4	643.2	663.4	667.9
35°	592.7	600.5	619.6	643.2	648.8
37.5°	564.6	574.7	597.2	620.8	627.5
40°	536.6	547.8	572.5	597.2	605.0
42.5°	508.5	519.7	546.7	574.7	582.6
45°	477.1	492.8	522.0	551.2	557.9
47.5°	446.8	463.6	496.2	525.3	534.3
50°	417.6	434.4	469.2	499.5	508.5
52.5°	387.3	405.2	442.3	473.7	481.6
55°	357.0	376.0	415.3	445.6	452.4
57.5°	326.7	346.9	387.3	416.5	424.3
60°	296.3	317.7	357.0	386.1	391.8
62.5°	266.0	288.5	328.9	354.7	360.3
65°	235.7	260.4	300.8	324.4	331.1
67.5°	206.5	231.2	270.5	293.0	298.6
70°	179.6	202.1	241.3	258.2	260.4
72.5°	145.9	174.0	212.2	221.1	215.5
75°	117.9	145.9	178.5	175.1	168.4
77.5°	89.8	117.9	139.2	128.0	119.0
80°	64.0	92.0	96.5	79.7	75.2
82.5°	41.5	64.0	53.9	41.5	33.7
85°	21.3	30.3	16.8	13.5	11.2
87.5°	6.7	4.5	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)