

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: P307606

Luminaire Tested: **14FCZ2-25-UNV-L82765-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: P307606
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-L82765-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED 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: 2240.0 lumens
Efficiency: N/A
Efficacy: 111.4 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

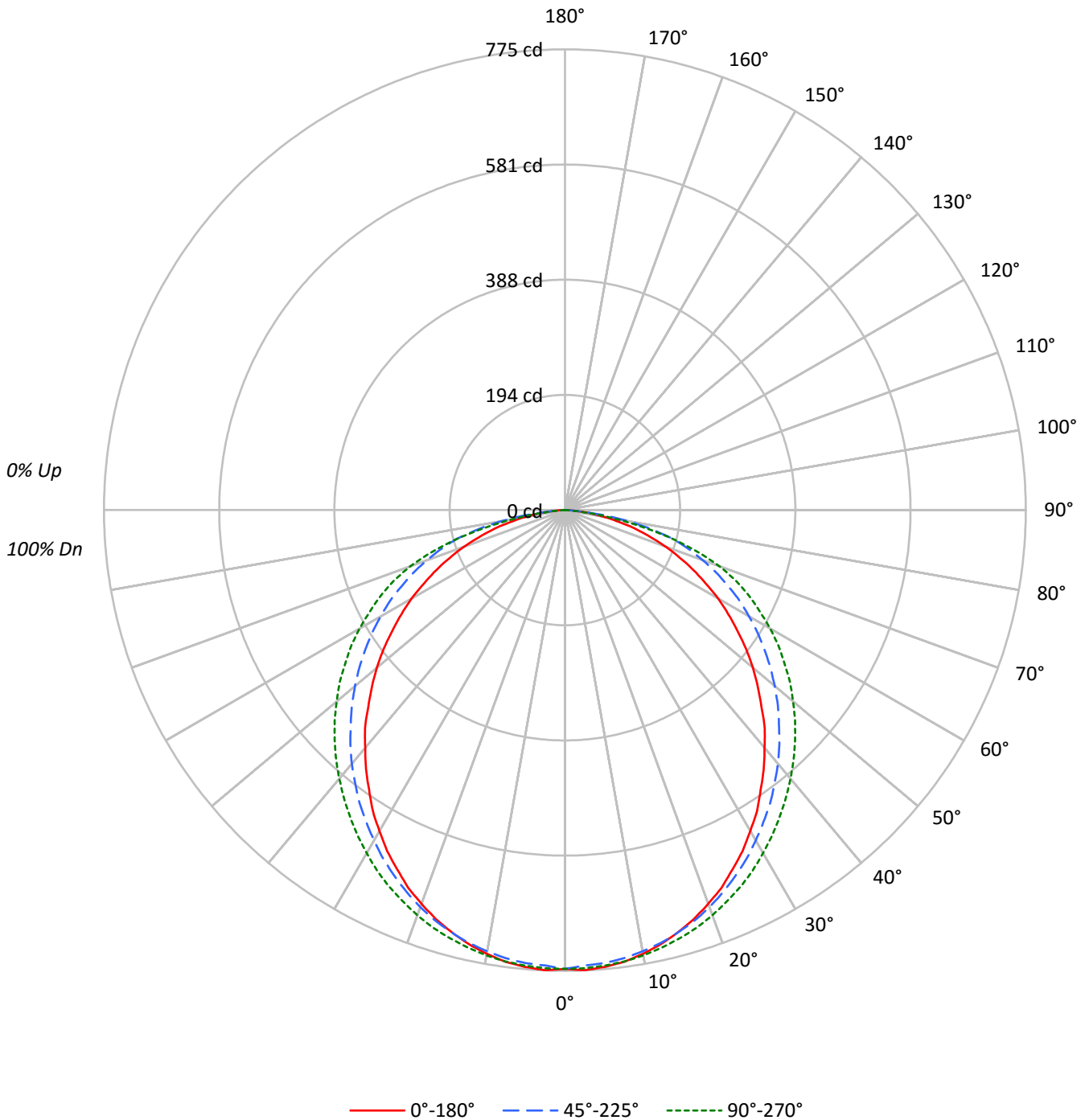
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2077	2077	2077
5°	2083	2066	2078
10°	2070	2059	2079
15°	2048	2050	2077
20°	2018	2036	2077
25°	1980	2015	2075
30°	1937	1994	2070
35°	1885	1977	2069
40°	1835	1958	2072
45°	1779	1937	2083
50°	1727	1928	2097
55°	1661	1922	2116
60°	1602	1925	2145
65°	1520	1931	2178
70°	1426	1945	2177
75°	1293	1963	1968
80°	1060	1695	1401
85°	787	803	324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	3.3
10°-20°	208.6	9.3
20°-30°	314.2	14.0
30°-40°	377.1	16.8
40°-50°	393.0	17.5
50°-60°	363.8	16.2
60°-70°	294.0	13.1
70°-80°	179.2	8.0
80°-90°	37.0	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°	595.8	26.6
0°-40°	972.9	43.4
0°-60°	1729.8	77.2
0°-90°	2240.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2240.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	772	772	772	772	772	
5°	771	769	765	770	769	73
15°	735	736	736	746	746	207
25°	667	671	679	696	699	307
35°	574	583	602	624	630	360
45°	468	482	509	537	547	361
55°	354	373	410	442	451	317
65°	239	262	303	334	342	236
75°	124	152	189	192	189	131
85°	26	38	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°	771.7	771.7	771.7	771.7	771.7
2.5°	774.7	772.2	766.7	772.2	771.2
5°	771.2	769.2	764.7	770.2	769.2
7.5°	766.2	764.2	760.2	766.7	765.7
10°	757.7	756.7	753.7	761.2	760.7
12.5°	747.7	747.2	745.7	754.2	753.7
15°	735.2	735.7	735.7	745.7	745.7
17.5°	721.2	722.2	724.2	735.2	736.7
20°	704.8	706.8	710.8	723.2	725.2
22.5°	687.8	689.3	695.3	710.3	712.2
25°	666.8	670.8	678.8	695.8	698.8
27.5°	646.8	650.3	661.3	678.8	683.8
30°	623.3	628.8	641.8	660.8	666.3
32.5°	600.9	606.9	621.8	643.8	648.8
35°	573.9	582.9	601.9	623.8	629.8
37.5°	549.4	557.9	579.4	603.4	610.4
40°	522.4	532.9	557.4	582.9	589.9
42.5°	497.5	507.5	533.9	559.9	569.4
45°	467.5	481.5	509.0	537.4	547.4
47.5°	440.0	454.0	485.5	516.0	524.9
50°	412.6	427.5	460.5	492.0	501.0
52.5°	384.1	400.1	435.5	467.0	477.5
55°	354.1	372.6	409.6	441.5	451.0
57.5°	325.7	344.6	384.1	416.6	426.1
60°	297.7	317.2	357.6	388.6	398.6
62.5°	266.7	289.7	331.7	362.1	369.6
65°	238.7	262.2	303.2	333.6	342.1
67.5°	209.3	234.8	275.7	303.7	311.7
70°	181.3	207.8	247.2	273.2	276.7
72.5°	151.3	178.3	218.3	234.8	234.8
75°	124.4	151.8	188.8	191.8	189.3
77.5°	94.9	125.4	149.3	143.3	137.4
80°	68.4	98.4	109.4	98.4	90.4
82.5°	46.0	71.4	65.9	52.4	46.5
85°	25.5	38.0	26.0	14.5	10.5
87.5°	9.5	8.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)