

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: P307880

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA08-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: P307880
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: 14FCZ2-29-UNV-L82765-S-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 2598.0 lumens
Efficiency: N/A
Efficacy: 109.2 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

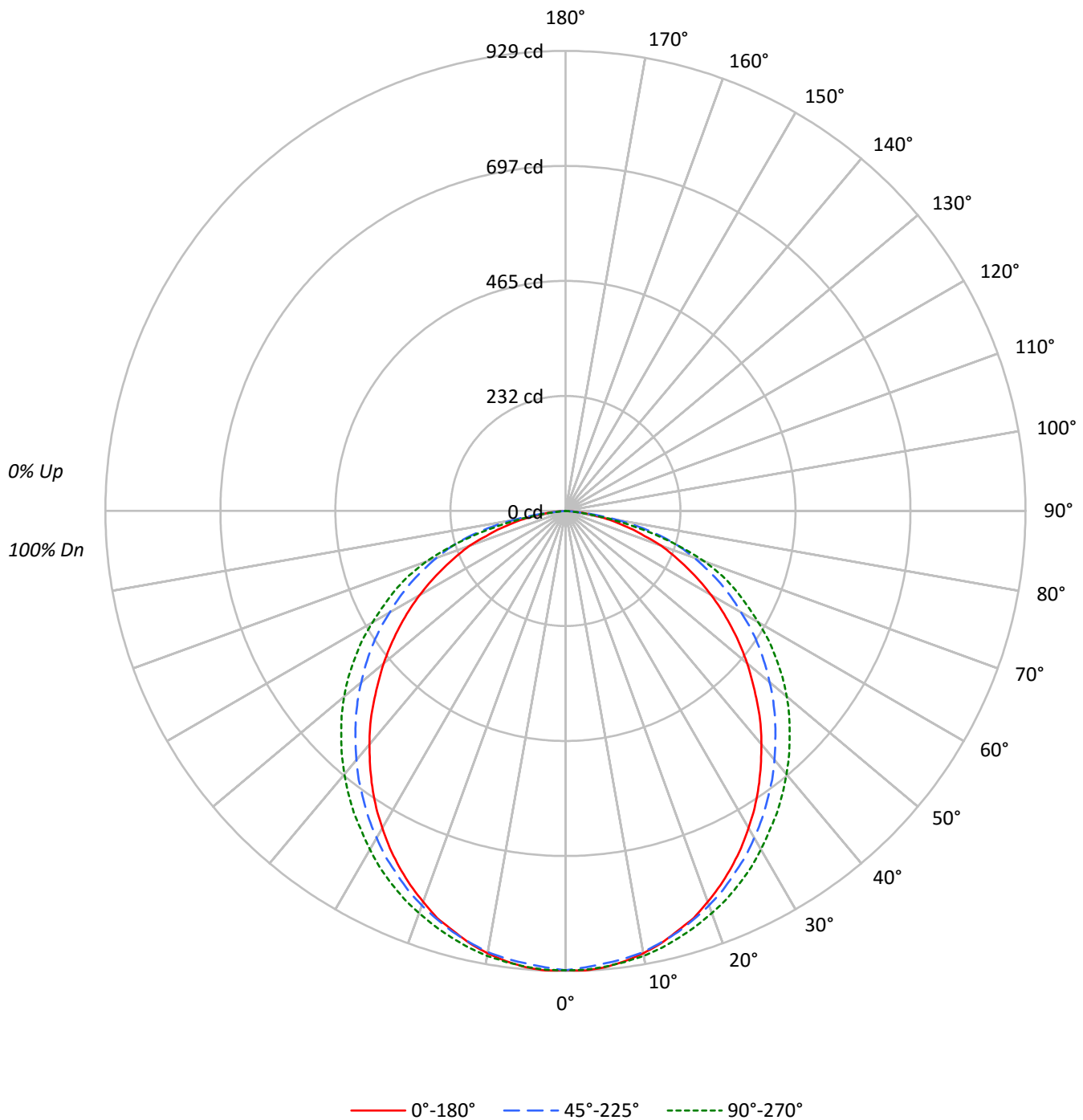
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2496	2496	2496
5°	2498	2477	2495
10°	2478	2471	2492
15°	2444	2451	2483
20°	2405	2427	2475
25°	2356	2398	2467
30°	2298	2370	2454
35°	2234	2336	2446
40°	2163	2308	2439
45°	2083	2280	2436
50°	2006	2254	2443
55°	1922	2236	2435
60°	1830	2204	2420
65°	1722	2198	2420
70°	1622	2179	2351
75°	1407	2129	2009
80°	1137	1717	1337
85°	756	596	398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	3.4
10°-20°	249.2	9.6
20°-30°	373.8	14.4
30°-40°	445.9	17.2
40°-50°	461.0	17.7
50°-60°	420.9	16.2
60°-70°	331.2	12.7
70°-80°	192.8	7.4
80°-90°	35.5	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°	710.6	27.4
0°-40°	1156.5	44.5
0°-60°	2038.4	78.5
0°-90°	2598.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2598.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	925	922	917	925	924	88
15°	877	878	880	891	891	248
25°	794	797	808	827	831	365
35°	680	689	711	738	744	425
45°	547	566	599	632	640	423
55°	410	432	477	511	519	366
65°	270	299	345	372	380	269
75°	135	168	205	201	193	144
85°	24	35	19	16	13	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.4	927.4	927.4	927.4	927.4
2.5°	928.7	926.2	922.3	928.7	927.4
5°	924.9	922.3	917.1	924.9	923.6
7.5°	917.1	914.6	912.0	919.7	918.4
10°	906.8	905.5	904.3	913.3	912.0
12.5°	894.0	894.0	892.7	903.0	903.0
15°	877.2	878.5	879.8	891.4	891.4
17.5°	861.7	860.5	864.3	877.2	878.5
20°	839.9	842.4	847.6	863.0	864.3
22.5°	818.0	820.5	829.5	845.0	848.9
25°	793.5	797.3	807.6	827.0	830.8
27.5°	767.7	772.9	787.0	807.6	811.5
30°	739.4	747.1	762.6	785.8	789.6
32.5°	711.0	718.8	738.1	761.3	766.4
35°	680.1	689.1	711.0	738.1	744.5
37.5°	647.9	659.5	685.3	712.3	720.1
40°	615.7	628.6	656.9	685.3	694.3
42.5°	583.5	596.4	627.3	659.5	668.5
45°	547.4	565.5	599.0	632.5	640.2
47.5°	512.7	532.0	569.3	602.8	613.1
50°	479.2	498.5	538.4	573.2	583.5
52.5°	444.4	465.0	507.5	543.6	552.6
55°	409.6	431.5	476.6	511.4	519.1
57.5°	374.8	398.0	444.4	477.9	486.9
60°	340.1	364.5	409.6	443.1	449.6
62.5°	305.3	331.0	377.4	407.0	413.5
65°	270.5	298.8	345.2	372.3	380.0
67.5°	237.0	265.4	310.4	336.2	342.6
70°	206.1	231.9	276.9	296.3	298.8
72.5°	167.5	199.7	243.5	253.8	247.3
75°	135.3	167.5	204.8	200.9	193.2
77.5°	103.0	135.3	159.7	146.8	136.5
80°	73.4	105.6	110.8	91.5	86.3
82.5°	47.7	73.4	61.8	47.7	38.6
85°	24.5	34.8	19.3	15.5	12.9
87.5°	7.7	5.2	2.6	2.6	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)