

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: P307838

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-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: P307838
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-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 2365.0 lumens
Efficiency: N/A
Efficacy: 119.4 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

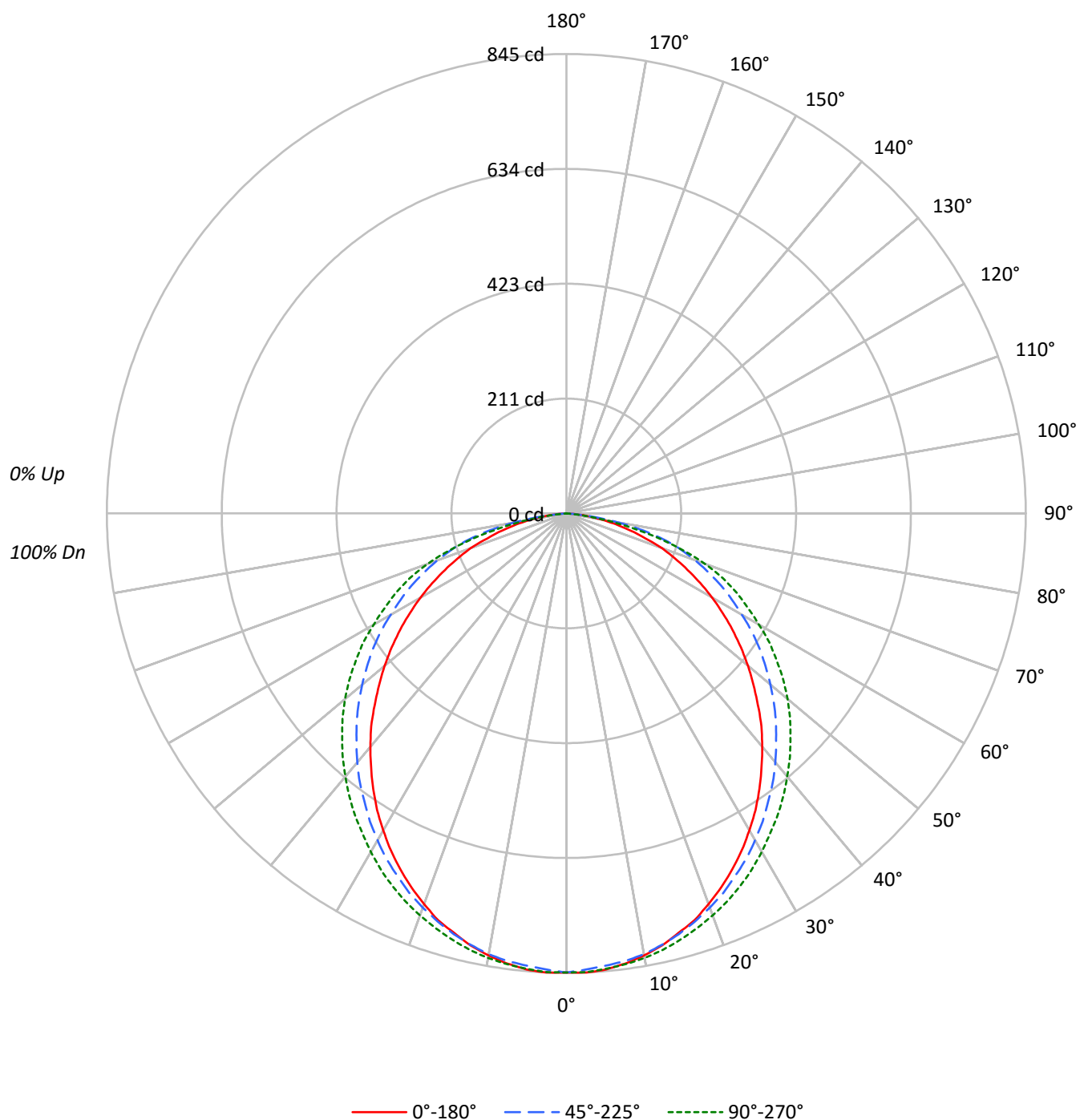
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2272	2272	2272
5°	2274	2255	2271
10°	2256	2249	2269
15°	2225	2231	2260
20°	2189	2210	2253
25°	2145	2183	2246
30°	2092	2157	2234
35°	2034	2126	2227
40°	1969	2101	2220
45°	1897	2075	2218
50°	1826	2052	2224
55°	1749	2036	2217
60°	1666	2007	2202
65°	1568	2001	2202
70°	1476	1983	2140
75°	1280	1938	1829
80°	1035	1562	1218
85°	689	543	361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	3.4
10°-20°	226.9	9.6
20°-30°	340.3	14.4
30°-40°	405.9	17.2
40°-50°	419.7	17.7
50°-60°	383.1	16.2
60°-70°	301.5	12.7
70°-80°	175.5	7.4
80°-90°	32.3	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°	646.9	27.4
0°-40°	1052.8	44.5
0°-60°	1855.6	78.5
0°-90°	2365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	844	844	844	844	844	
5°	842	840	835	842	841	80
15°	798	800	801	811	811	225
25°	722	726	735	753	756	333
35°	619	627	647	672	678	387
45°	498	515	545	576	583	385
55°	373	393	434	466	473	333
65°	246	272	314	339	346	245
75°	123	152	186	183	176	131
85°	22	32	18	14	12	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	844.3	844.3	844.3	844.3	844.3
2.5°	845.4	843.1	839.6	845.4	844.3
5°	841.9	839.6	834.9	841.9	840.7
7.5°	834.9	832.5	830.2	837.2	836.1
10°	825.5	824.3	823.2	831.4	830.2
12.5°	813.8	813.8	812.6	822.0	822.0
15°	798.5	799.7	800.9	811.4	811.4
17.5°	784.5	783.3	786.8	798.5	799.7
20°	764.5	766.9	771.6	785.6	786.8
22.5°	744.6	746.9	755.1	769.2	772.7
25°	722.3	725.8	735.2	752.8	756.3
27.5°	698.9	703.6	716.5	735.2	738.7
30°	673.1	680.1	694.2	715.3	718.8
32.5°	647.3	654.3	671.9	693.0	697.7
35°	619.1	627.3	647.3	671.9	677.8
37.5°	589.8	600.4	623.8	648.4	655.5
40°	560.5	572.2	598.0	623.8	632.0
42.5°	531.2	542.9	571.1	600.4	608.6
45°	498.4	514.8	545.3	575.7	582.8
47.5°	466.7	484.3	518.3	548.8	558.2
50°	436.2	453.8	490.1	521.8	531.2
52.5°	404.5	423.3	462.0	494.8	503.0
55°	372.9	392.8	433.9	465.5	472.6
57.5°	341.2	362.3	404.5	435.0	443.2
60°	309.6	331.8	372.9	403.4	409.2
62.5°	277.9	301.4	343.6	370.5	376.4
65°	246.2	272.0	314.3	338.9	345.9
67.5°	215.8	241.6	282.6	306.0	311.9
70°	187.6	211.1	252.1	269.7	272.0
72.5°	152.4	181.8	221.6	231.0	225.1
75°	123.1	152.4	186.4	182.9	175.9
77.5°	93.8	123.1	145.4	133.7	124.3
80°	66.8	96.2	100.8	83.3	78.6
82.5°	43.4	66.8	56.3	43.4	35.2
85°	22.3	31.7	17.6	14.1	11.7
87.5°	7.0	4.7	2.3	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)