

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: P307646

Luminaire Tested: **14FCZ2-29-UNV-L82765-CP250-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: P307646
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: 14FCZ2-29-UNV-L82765-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB 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: 2386.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

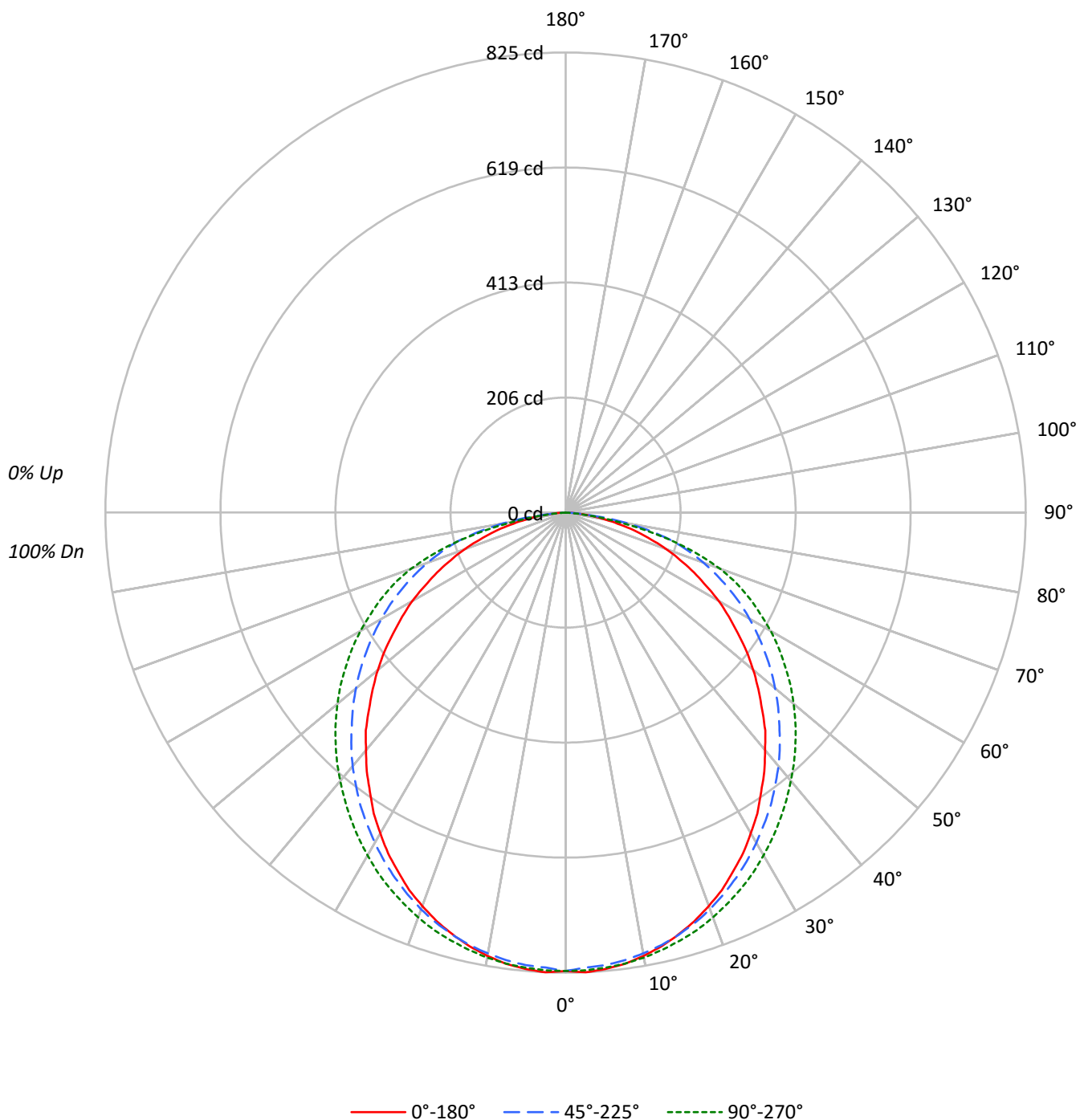
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2212	2212	2212
5°	2219	2200	2213
10°	2205	2194	2214
15°	2182	2183	2213
20°	2150	2168	2212
25°	2109	2147	2210
30°	2063	2124	2205
35°	2008	2106	2204
40°	1955	2086	2207
45°	1895	2063	2219
50°	1840	2053	2234
55°	1770	2047	2254
60°	1707	2050	2285
65°	1619	2056	2320
70°	1519	2072	2319
75°	1378	2091	2096
80°	1130	1805	1492
85°	837	855	346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	3.3
10°-20°	222.2	9.3
20°-30°	334.7	14.0
30°-40°	401.7	16.8
40°-50°	418.6	17.5
50°-60°	387.5	16.2
60°-70°	313.1	13.1
70°-80°	190.9	8.0
80°-90°	39.4	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°	634.7	26.6
0°-40°	1036.3	43.4
0°-60°	1842.5	77.2
0°-90°	2386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	822	819	814	820	819	78
15°	783	784	784	794	794	221
25°	710	714	723	741	744	327
35°	611	621	641	664	671	383
45°	498	513	542	572	583	385
55°	377	397	436	470	480	338
65°	254	279	323	355	364	251
75°	132	162	201	204	202	139
85°	27	40	28	15	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.0	822.0	822.0	822.0	822.0
2.5°	825.2	822.5	816.7	822.5	821.5
5°	821.5	819.3	814.5	820.4	819.3
7.5°	816.1	814.0	809.7	816.7	815.6
10°	807.1	806.0	802.8	810.8	810.3
12.5°	796.4	795.9	794.3	803.4	802.8
15°	783.1	783.7	783.7	794.3	794.3
17.5°	768.2	769.3	771.4	783.1	784.7
20°	750.7	752.8	757.1	770.4	772.5
22.5°	732.6	734.2	740.6	756.5	758.7
25°	710.3	714.5	723.0	741.1	744.3
27.5°	689.0	692.7	704.4	723.0	728.3
30°	664.0	669.8	683.7	703.9	709.7
32.5°	640.0	646.4	662.4	685.8	691.1
35°	611.3	620.9	641.1	664.5	670.9
37.5°	585.2	594.3	617.2	642.7	650.1
40°	556.5	567.7	593.7	620.9	628.3
42.5°	529.9	540.5	568.7	596.4	606.5
45°	498.0	512.9	542.1	572.5	583.1
47.5°	468.7	483.6	517.1	549.6	559.2
50°	439.5	455.4	490.5	524.0	533.6
52.5°	409.1	426.2	463.9	497.4	508.6
55°	377.2	396.9	436.3	470.3	480.4
57.5°	346.9	367.1	409.1	443.7	453.8
60°	317.1	337.8	380.9	413.9	424.6
62.5°	284.1	308.6	353.3	385.7	393.7
65°	254.3	279.3	322.9	355.4	364.4
67.5°	222.9	250.1	293.7	323.5	332.0
70°	193.1	221.3	263.4	291.0	294.7
72.5°	161.2	189.9	232.5	250.1	250.1
75°	132.5	161.7	201.1	204.3	201.6
77.5°	101.1	133.5	159.1	152.7	146.3
80°	72.9	104.8	116.5	104.8	96.3
82.5°	48.9	76.1	70.2	55.9	49.5
85°	27.1	40.4	27.7	15.4	11.2
87.5°	10.1	9.0	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)