

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: P307187

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP187-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: P307187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-HRP-CP187-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
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: 2422.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

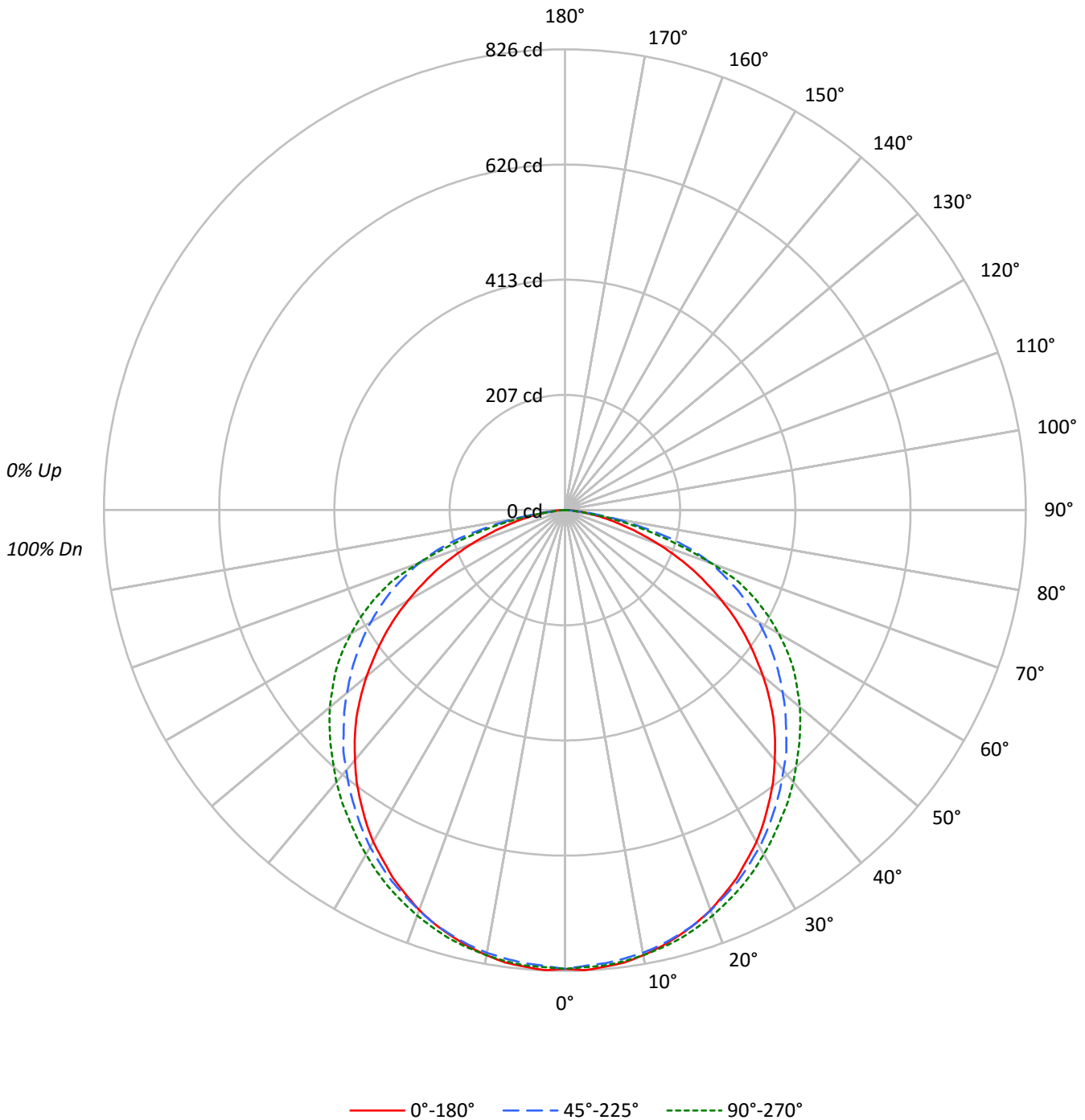
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2213	2213	2213
5°	2220	2203	2214
10°	2214	2202	2214
15°	2200	2196	2217
20°	2185	2188	2216
25°	2162	2180	2216
30°	2135	2168	2215
35°	2097	2152	2219
40°	2055	2140	2237
45°	2011	2133	2261
50°	1942	2133	2302
55°	1858	2144	2351
60°	1746	2160	2382
65°	1610	2182	2395
70°	1402	2187	2205
75°	1156	2035	1782
80°	908	1463	1192
85°	704	565	281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.2
10°-20°	223.4	9.2
20°-30°	339.3	14.0
30°-40°	411.1	17.0
40°-50°	433.3	17.9
50°-60°	404.5	16.7
60°-70°	323.2	13.3
70°-80°	177.9	7.3
80°-90°	31.4	1.3
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°	640.6	26.5
0°-40°	1051.8	43.4
0°-60°	1889.5	78.0
0°-90°	2422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2422.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	822	820	816	821	820	78
15°	790	790	788	796	796	223
25°	728	730	734	745	746	335
35°	638	644	655	672	676	399
45°	528	538	560	586	594	407
55°	396	416	457	489	501	354
65°	253	285	343	371	376	249
75°	111	159	196	176	171	120
85°	23	29	18	11	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.5	822.5	822.5	822.5	822.5
2.5°	825.6	823.3	818.0	822.5	820.2
5°	821.8	819.5	815.7	821.0	819.5
7.5°	818.0	814.9	811.1	817.2	815.7
10°	810.3	808.1	805.8	811.1	810.3
12.5°	801.2	800.4	798.2	804.2	803.5
15°	789.8	789.8	788.3	795.9	795.9
17.5°	777.6	776.8	777.6	786.0	785.2
20°	763.1	763.1	763.9	773.8	773.8
22.5°	745.6	746.4	748.6	760.8	760.1
25°	728.1	729.6	734.2	744.8	746.4
27.5°	706.8	710.6	715.9	728.8	730.4
30°	687.0	689.2	697.6	709.8	712.9
32.5°	663.3	667.9	677.1	690.8	694.6
35°	638.2	644.3	655.0	671.7	675.5
37.5°	613.1	618.4	632.9	650.4	657.3
40°	584.9	594.0	609.3	629.1	636.7
42.5°	557.5	566.6	587.2	607.8	614.6
45°	528.5	538.4	560.5	585.7	594.0
47.5°	496.6	508.0	536.2	562.8	572.0
50°	463.8	478.3	509.5	539.2	549.9
52.5°	429.5	447.8	483.6	514.8	524.7
55°	396.0	415.8	457.0	488.9	501.1
57.5°	361.8	383.1	429.5	466.1	473.0
60°	324.4	350.3	401.4	433.3	442.5
62.5°	287.9	317.6	372.4	402.9	410.5
65°	252.8	284.8	342.7	370.9	376.2
67.5°	214.8	252.8	310.0	335.9	337.4
70°	178.2	222.4	278.0	290.2	280.3
72.5°	142.4	189.6	240.7	230.8	222.4
75°	111.2	159.2	195.7	175.9	171.4
77.5°	82.3	130.2	140.1	129.5	121.1
80°	58.6	102.8	94.4	80.7	76.9
82.5°	40.4	64.7	51.8	40.4	35.0
85°	22.8	28.9	18.3	11.4	9.1
87.5°	9.9	6.9	3.8	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)