

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: P307052

Luminaire Tested: **14FCZ2-25-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: P307052
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: 14FCZ2-25-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: 1527.0 lumens
Efficiency: N/A
Efficacy: 77.9 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

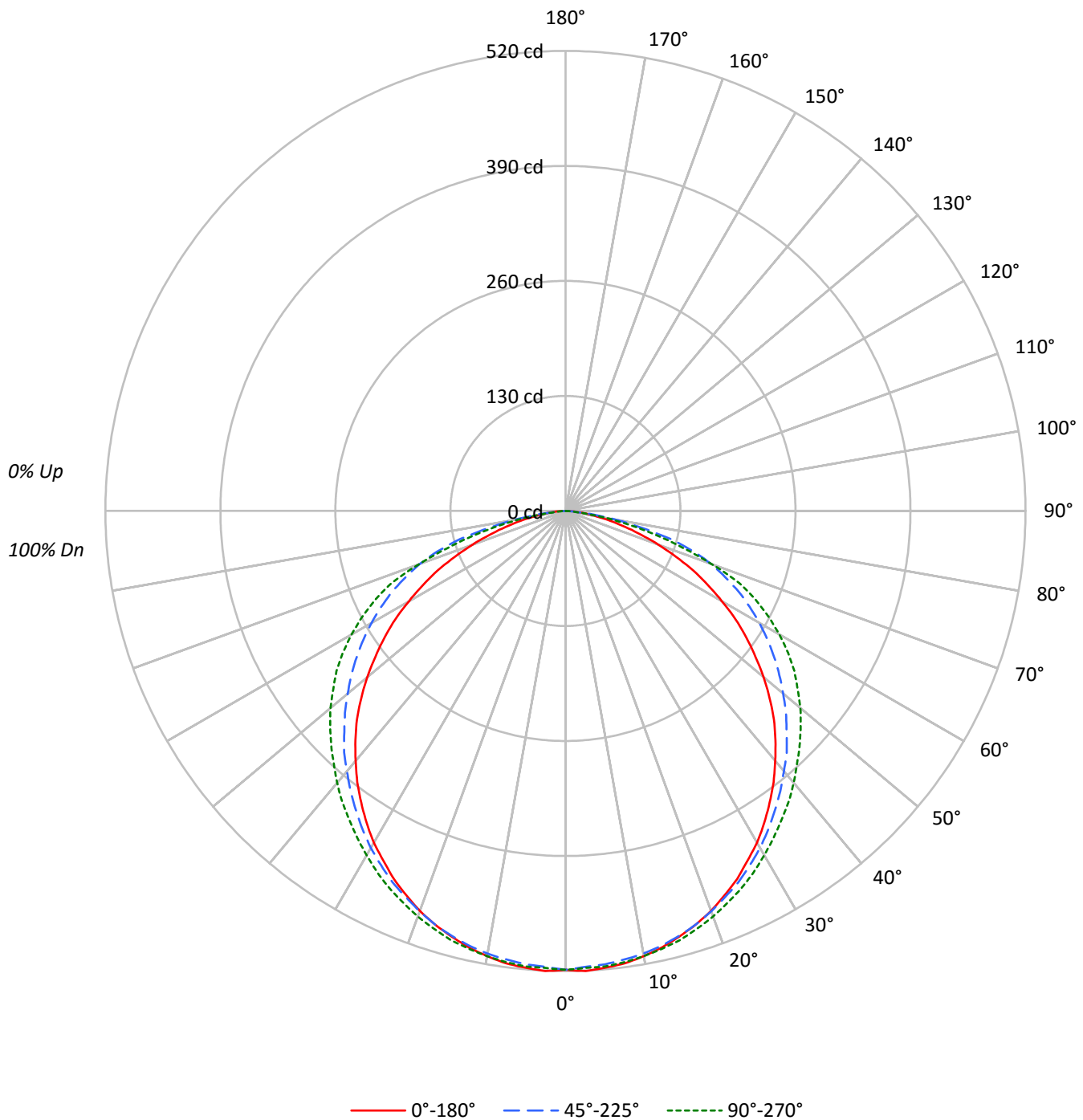
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1396	1396	1396
5°	1400	1389	1396
10°	1396	1388	1396
15°	1387	1385	1398
20°	1378	1379	1397
25°	1363	1374	1397
30°	1346	1367	1396
35°	1322	1356	1399
40°	1296	1349	1410
45°	1268	1345	1425
50°	1224	1345	1451
55°	1171	1352	1482
60°	1101	1362	1502
65°	1015	1376	1510
70°	884	1379	1390
75°	729	1283	1123
80°	573	922	752
85°	445	355	179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	3.2
10°-20°	140.9	9.2
20°-30°	213.9	14.0
30°-40°	259.2	17.0
40°-50°	273.1	17.9
50°-60°	255.0	16.7
60°-70°	203.8	13.3
70°-80°	112.1	7.3
80°-90°	19.8	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°	403.9	26.5
0°-40°	663.1	43.4
0°-60°	1191.3	78.0
0°-90°	1527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1527.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	518	517	514	518	517	49
15°	498	498	497	502	502	141
25°	459	460	463	470	471	211
35°	402	406	413	424	426	252
45°	333	340	353	369	374	256
55°	250	262	288	308	316	223
65°	159	180	216	234	237	157
75°	70	100	123	111	108	75
85°	14	18	12	7	6	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	518.6	518.6	518.6	518.6	518.6
2.5°	520.5	519.1	515.7	518.6	517.1
5°	518.1	516.7	514.3	517.6	516.7
7.5°	515.7	513.8	511.4	515.2	514.3
10°	510.9	509.5	508.0	511.4	510.9
12.5°	505.1	504.7	503.2	507.1	506.6
15°	497.9	497.9	497.0	501.8	501.8
17.5°	490.2	489.8	490.2	495.5	495.0
20°	481.1	481.1	481.6	487.8	487.8
22.5°	470.1	470.6	472.0	479.7	479.2
25°	459.0	460.0	462.9	469.6	470.6
27.5°	445.6	448.0	451.4	459.5	460.5
30°	433.1	434.5	439.8	447.5	449.4
32.5°	418.2	421.1	426.9	435.5	437.9
35°	402.4	406.2	412.9	423.5	425.9
37.5°	386.5	389.9	399.0	410.1	414.4
40°	368.8	374.5	384.1	396.6	401.4
42.5°	351.5	357.2	370.2	383.2	387.5
45°	333.2	339.5	353.4	369.2	374.5
47.5°	313.1	320.3	338.0	354.8	360.6
50°	292.4	301.5	321.2	340.0	346.7
52.5°	270.8	282.3	304.9	324.6	330.8
55°	249.7	262.2	288.1	308.3	315.9
57.5°	228.1	241.5	270.8	293.9	298.2
60°	204.5	220.9	253.0	273.2	279.0
62.5°	181.5	200.2	234.8	254.0	258.8
65°	159.4	179.6	216.1	233.8	237.2
67.5°	135.4	159.4	195.4	211.8	212.7
70°	112.4	140.2	175.3	182.9	176.7
72.5°	89.8	119.6	151.7	145.5	140.2
75°	70.1	100.4	123.4	110.9	108.0
77.5°	51.9	82.1	88.4	81.6	76.3
80°	37.0	64.8	59.5	50.9	48.5
82.5°	25.4	40.8	32.7	25.4	22.1
85°	14.4	18.2	11.5	7.2	5.8
87.5°	6.2	4.3	2.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)