

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: P307322

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-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: P307322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CP187-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 1292.0 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

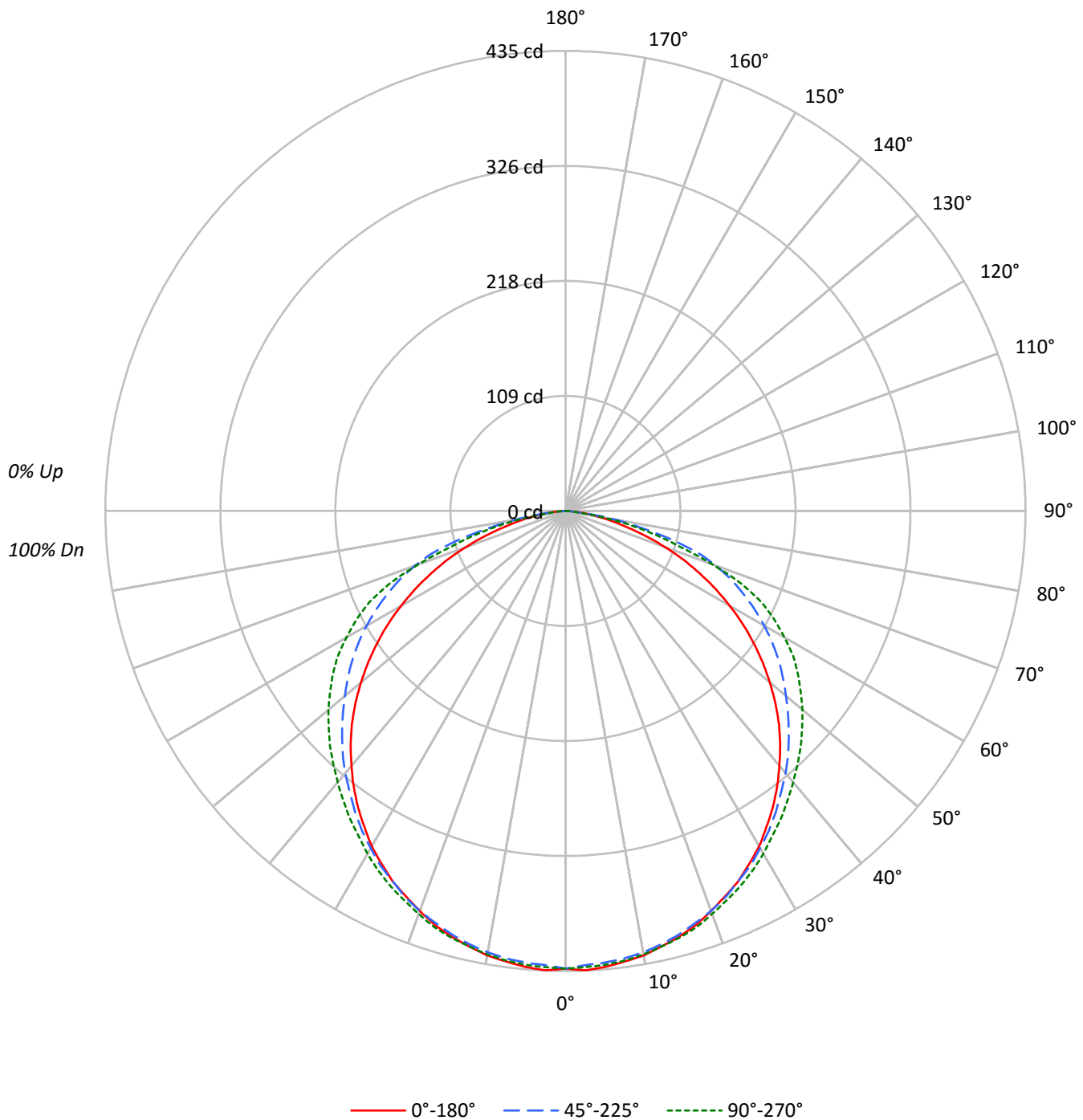
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1164	1164	1164
5°	1169	1158	1163
10°	1166	1157	1163
15°	1161	1155	1163
20°	1153	1153	1161
25°	1147	1147	1162
30°	1138	1144	1163
35°	1123	1140	1167
40°	1105	1137	1176
45°	1087	1136	1198
50°	1056	1140	1225
55°	1018	1155	1259
60°	966	1167	1287
65°	893	1182	1304
70°	794	1190	1167
75°	639	1070	934
80°	501	750	609
85°	343	219	154



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.0	3.2
10°-20°	117.5	9.1
20°-30°	178.9	13.8
30°-40°	217.9	16.9
40°-50°	231.2	17.9
50°-60°	218.2	16.9
60°-70°	176.2	13.6
70°-80°	95.6	7.4
80°-90°	15.5	1.2
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°	337.4	26.1
0°-40°	555.3	43.0
0°-60°	1004.8	77.8
0°-90°	1292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1292.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	433	433	433	433	433	
5°	433	432	429	432	431	41
15°	417	416	415	418	418	118
25°	386	385	386	390	391	178
35°	342	344	347	354	355	214
45°	286	290	299	310	315	220
55°	217	226	246	262	268	194
65°	140	157	186	201	205	139
75°	62	90	103	93	90	67
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	432.7	432.7	432.7	432.7	432.7
2.5°	434.7	432.7	429.7	432.7	431.7
5°	432.7	431.7	428.7	431.7	430.7
7.5°	429.7	429.7	426.7	428.7	428.7
10°	426.7	425.7	423.6	426.7	425.7
12.5°	421.6	420.6	419.6	422.6	421.6
15°	416.6	415.6	414.6	417.6	417.6
17.5°	410.5	409.5	408.5	412.6	412.6
20°	402.5	402.5	402.5	406.5	405.5
22.5°	394.4	394.4	395.4	399.4	398.4
25°	386.3	385.3	386.3	390.4	391.4
27.5°	376.2	377.2	378.3	382.3	383.3
30°	366.2	367.2	368.2	373.2	374.2
32.5°	354.0	356.1	358.1	364.1	364.1
35°	341.9	344.0	347.0	354.0	355.1
37.5°	328.8	330.8	334.9	343.0	345.0
40°	314.7	317.7	323.8	331.9	334.9
42.5°	300.6	304.6	311.7	320.8	324.8
45°	285.5	289.5	298.6	309.7	314.7
47.5°	269.3	274.4	285.5	299.6	303.6
50°	252.2	259.2	272.3	287.5	292.5
52.5°	235.0	243.1	259.2	275.4	280.4
55°	216.9	225.9	246.1	262.3	268.3
57.5°	198.7	208.8	232.0	249.1	255.2
60°	179.5	191.6	216.9	234.0	239.1
62.5°	160.4	174.5	201.7	218.9	222.9
65°	140.2	157.4	185.6	200.7	204.8
67.5°	121.0	141.2	169.5	180.6	180.6
70°	100.9	123.1	151.3	154.3	148.3
72.5°	80.7	105.9	131.1	120.0	115.0
75°	61.5	89.8	102.9	92.8	89.8
77.5°	46.4	72.6	72.6	66.6	64.6
80°	32.3	55.5	48.4	42.4	39.3
82.5°	21.2	31.3	25.2	20.2	17.1
85°	11.1	12.1	7.1	6.1	5.0
87.5°	4.0	2.0	1.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)