

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: P307689

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP187-W2A-U-5700K**

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: P307689
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: 14FCZ2-35-UNV-L82765-CP187-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5700K 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: 3286.0 lumens
Efficiency: N/A
Efficacy: 108.4 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

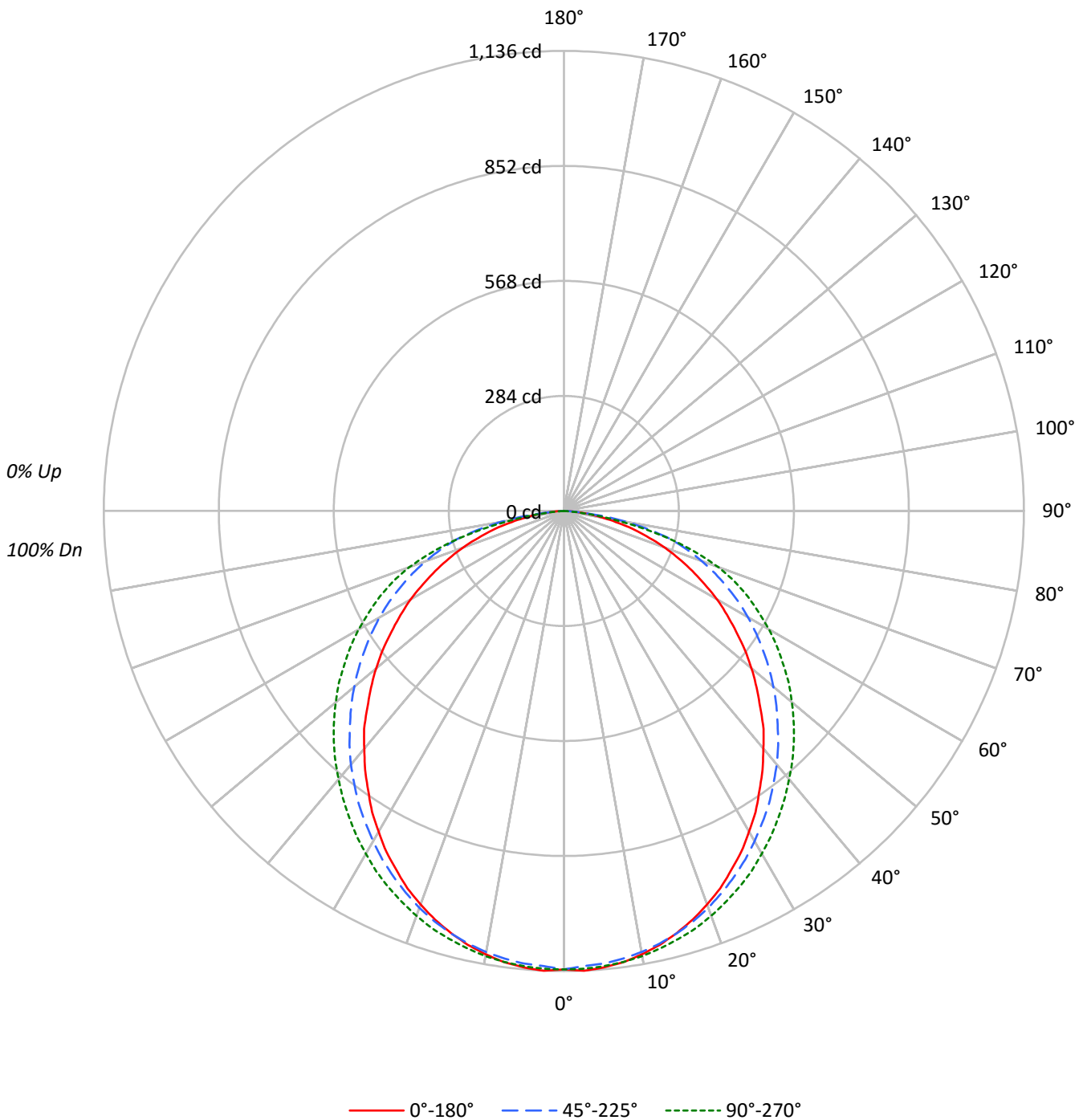
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3046	3046	3046
5°	3056	3030	3048
10°	3037	3021	3049
15°	3005	3007	3048
20°	2961	2986	3047
25°	2904	2957	3044
30°	2841	2925	3037
35°	2766	2900	3035
40°	2692	2872	3040
45°	2610	2841	3056
50°	2534	2828	3077
55°	2437	2819	3104
60°	2350	2823	3147
65°	2230	2832	3196
70°	2093	2854	3194
75°	1896	2880	2887
80°	1556	2487	2055
85°	1155	1176	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	3.3
10°-20°	306.0	9.3
20°-30°	461.0	14.0
30°-40°	553.2	16.8
40°-50°	576.5	17.5
50°-60°	533.7	16.2
60°-70°	431.3	13.1
70°-80°	262.9	8.0
80°-90°	54.3	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°	874.1	26.6
0°-40°	1427.2	43.4
0°-60°	2537.5	77.2
0°-90°	3286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1132	1132	1132	1132	1132	
5°	1131	1128	1122	1130	1128	107
15°	1078	1079	1079	1094	1094	304
25°	978	984	996	1021	1025	451
35°	842	855	883	915	924	527
45°	686	706	747	788	803	530
55°	520	547	601	648	662	465
65°	350	385	445	490	502	346
75°	182	223	277	281	278	192
85°	37	56	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1132.0	1132.0	1132.0	1132.0	1132.0
2.5°	1136.4	1132.8	1124.7	1132.8	1131.3
5°	1131.3	1128.4	1121.8	1129.8	1128.4
7.5°	1124.0	1121.0	1115.2	1124.7	1123.2
10°	1111.5	1110.1	1105.7	1116.7	1115.9
12.5°	1096.9	1096.1	1093.9	1106.4	1105.7
15°	1078.5	1079.3	1079.3	1093.9	1093.9
17.5°	1058.0	1059.5	1062.4	1078.5	1080.7
20°	1033.9	1036.8	1042.6	1061.0	1063.9
22.5°	1008.9	1011.1	1019.9	1041.9	1044.8
25°	978.2	984.0	995.8	1020.7	1025.1
27.5°	948.9	954.0	970.1	995.8	1003.1
30°	914.4	922.5	941.5	969.4	977.4
32.5°	881.5	890.2	912.2	944.5	951.8
35°	841.9	855.1	882.9	915.2	923.9
37.5°	806.0	818.4	849.9	885.1	895.4
40°	766.4	781.8	817.7	855.1	865.3
42.5°	729.8	744.4	783.3	821.4	835.3
45°	685.8	706.3	746.6	788.4	803.1
47.5°	645.5	666.0	712.2	756.9	770.1
50°	605.2	627.2	675.6	721.7	734.9
52.5°	563.5	586.9	638.9	685.1	700.5
55°	519.5	546.6	600.8	647.7	661.6
57.5°	477.7	505.6	563.5	611.1	625.0
60°	436.7	465.3	524.6	570.0	584.7
62.5°	391.3	425.0	486.5	531.2	542.2
65°	350.2	384.7	444.8	489.5	501.9
67.5°	307.0	344.4	404.5	445.5	457.2
70°	266.0	304.8	362.7	400.8	405.9
72.5°	222.0	261.6	320.2	344.4	344.4
75°	182.4	222.7	277.0	281.4	277.7
77.5°	139.2	183.9	219.1	210.3	201.5
80°	100.4	144.3	160.5	144.3	132.6
82.5°	67.4	104.8	96.7	76.9	68.1
85°	37.4	55.7	38.1	21.2	15.4
87.5°	13.9	12.5	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)