

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: P307105

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K**

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: P307105
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: 14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 6500K 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: 2079.0 lumens
Efficiency: N/A
Efficacy: 83.5 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

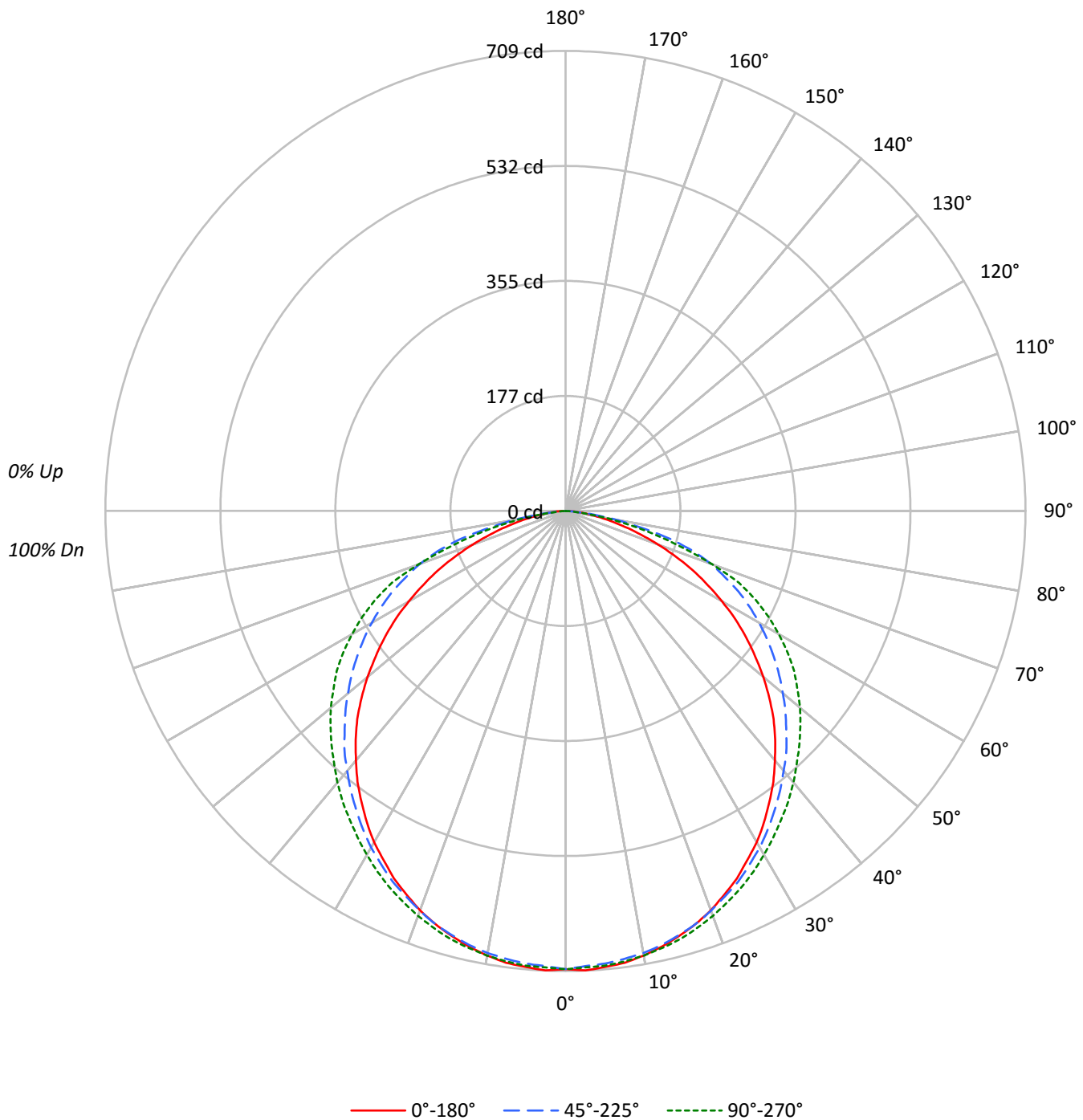
Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307105

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P307105

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K

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°	1900	1900	1900
5°	1905	1891	1900
10°	1901	1890	1901
15°	1889	1885	1903
20°	1876	1878	1902
25°	1856	1871	1902
30°	1832	1861	1901
35°	1800	1847	1905
40°	1764	1837	1920
45°	1727	1831	1940
50°	1667	1831	1976
55°	1595	1840	2018
60°	1499	1854	2044
65°	1382	1873	2056
70°	1204	1877	1893
75°	992	1747	1529
80°	779	1257	1023
85°	605	485	241



TEST NUMBER: P307105

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	3.2
10°-20°	191.8	9.2
20°-30°	291.3	14.0
30°-40°	352.9	17.0
40°-50°	371.9	17.9
50°-60°	347.2	16.7
60°-70°	277.5	13.3
70°-80°	152.7	7.3
80°-90°	27.0	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°	549.9	26.5
0°-40°	902.8	43.4
0°-60°	1621.9	78.0
0°-90°	2079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2079.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	705	703	700	705	703	67
15°	678	678	677	683	683	191
25°	625	626	630	639	641	288
35°	548	553	562	577	580	343
45°	454	462	481	503	510	349
55°	340	357	392	420	430	303
65°	217	244	294	318	323	214
75°	95	137	168	151	147	103
85°	20	25	16	10	8	24
90°	0	0	0	0	0	



TEST NUMBER: P307105

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP187-W2A-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	706.0	706.0	706.0	706.0	706.0
2.5°	708.7	706.7	702.1	706.0	704.1
5°	705.4	703.4	700.2	704.7	703.4
7.5°	702.1	699.5	696.2	701.5	700.2
10°	695.6	693.6	691.7	696.2	695.6
12.5°	687.7	687.1	685.1	690.3	689.7
15°	677.9	677.9	676.6	683.2	683.2
17.5°	667.5	666.8	667.5	674.7	674.0
20°	655.0	655.0	655.7	664.2	664.2
22.5°	640.0	640.7	642.6	653.1	652.4
25°	625.0	626.3	630.2	639.4	640.7
27.5°	606.7	609.9	614.5	625.6	626.9
30°	589.7	591.6	598.8	609.3	611.9
32.5°	569.4	573.3	581.2	592.9	596.2
35°	547.8	553.1	562.2	576.6	579.9
37.5°	526.3	530.8	543.3	558.3	564.2
40°	502.1	509.9	523.0	540.0	546.5
42.5°	478.5	486.4	504.0	521.7	527.6
45°	453.7	462.2	481.2	502.7	509.9
47.5°	426.2	436.0	460.2	483.1	491.0
50°	398.1	410.5	437.4	462.8	472.0
52.5°	368.7	384.4	415.1	441.9	450.4
55°	339.9	356.9	392.2	419.7	430.2
57.5°	310.5	328.8	368.7	400.1	406.0
60°	278.5	300.7	344.5	372.0	379.8
62.5°	247.1	272.6	319.7	345.8	352.4
65°	217.0	244.5	294.2	318.4	322.9
67.5°	184.4	217.0	266.1	288.3	289.6
70°	153.0	190.9	238.6	249.1	240.6
72.5°	122.2	162.8	206.6	198.1	190.9
75°	95.4	136.6	168.0	151.0	147.1
77.5°	70.6	111.8	120.3	111.1	103.9
80°	50.3	88.3	81.1	69.3	66.0
82.5°	34.6	55.6	44.5	34.6	30.1
85°	19.6	24.8	15.7	9.8	7.8
87.5°	8.5	5.9	3.3	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)