

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: P308545

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-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: P308545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-39HE-UNV-L82765-RDP-CP187-W2A-U-6500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.187" POLYCARB SHEET
Light Source: (168) 3000K 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: 2322.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

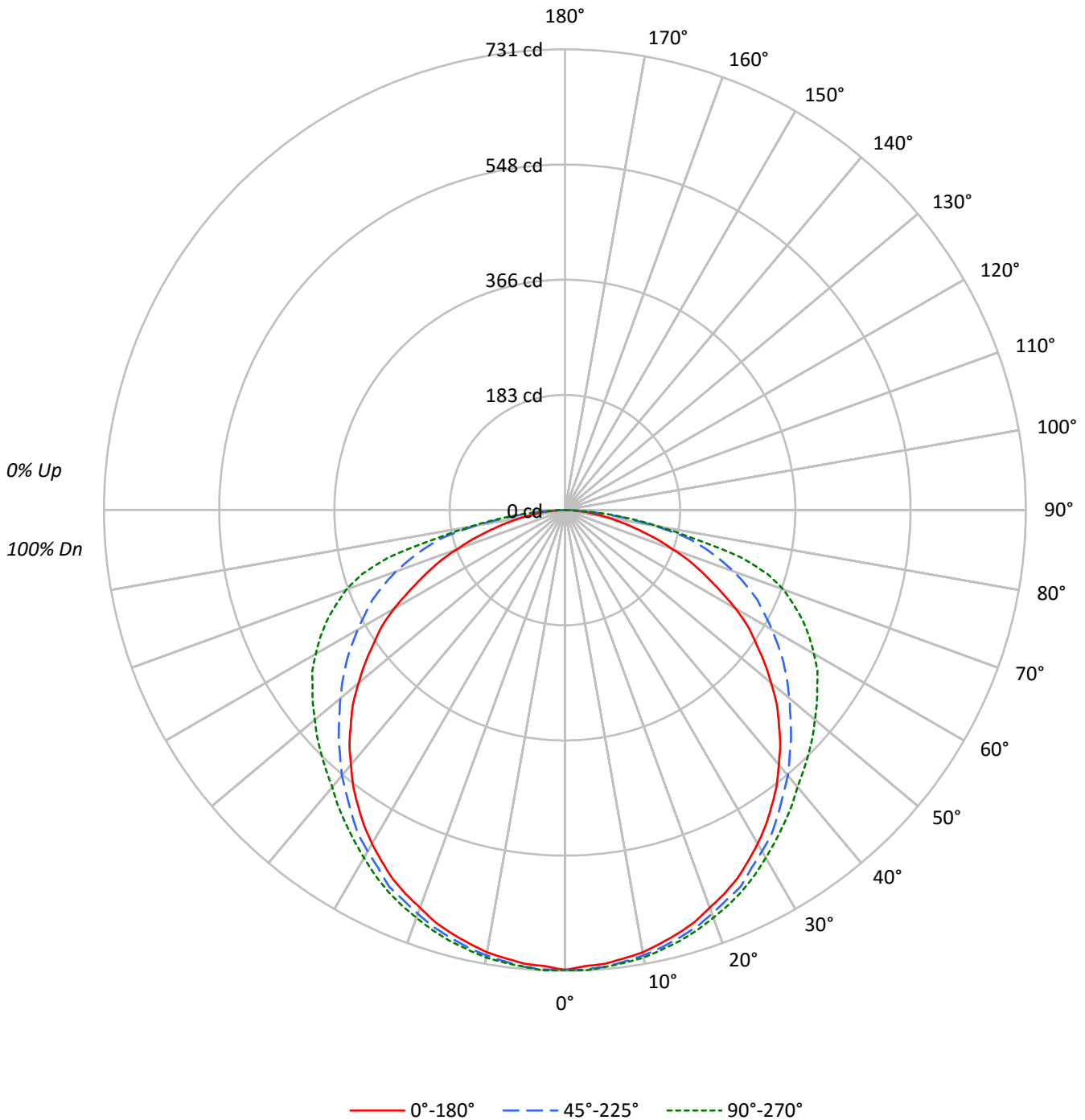
Input Watts (W): 33.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1963	1963	1963
5°	1952	1966	1966
10°	1946	1960	1970
15°	1937	1956	1970
20°	1922	1952	1971
25°	1917	1958	1978
30°	1900	1943	1980
35°	1880	1936	1992
40°	1854	1932	2016
45°	1827	1931	2080
50°	1788	1945	2167
55°	1739	1987	2292
60°	1682	2041	2455
65°	1566	2143	2654
70°	1438	2245	2903
75°	1261	2362	3002
80°	1085	2250	2356
85°	948	1636	1794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	3.0
10°-20°	198.1	8.5
20°-30°	302.2	13.0
30°-40°	369.0	15.9
40°-50°	394.6	17.0
50°-60°	380.9	16.4
60°-70°	327.9	14.1
70°-80°	221.8	9.6
80°-90°	58.5	2.5
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°	569.3	24.5
0°-40°	938.4	40.4
0°-60°	1713.8	73.8
0°-90°	2322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	722	724	728	728	728	69
15°	695	697	702	706	707	196
25°	646	649	659	663	666	297
35°	572	577	589	601	606	358
45°	480	488	507	533	547	371
55°	371	383	424	466	488	332
65°	246	270	336	390	417	245
75°	121	161	227	273	289	130
85°	31	43	53	55	58	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.4	729.4	729.4	729.4	729.4
2.5°	724.3	726.0	729.4	729.4	731.1
5°	722.5	724.3	727.7	727.7	727.7
7.5°	717.4	719.1	722.5	724.3	724.3
10°	712.3	714.0	717.4	719.1	720.8
12.5°	703.8	705.5	710.6	714.0	714.0
15°	695.2	696.9	702.1	705.5	707.2
17.5°	685.0	688.4	693.5	696.9	698.6
20°	671.3	674.7	681.6	686.7	688.4
22.5°	659.3	662.8	669.6	674.7	678.1
25°	645.7	649.1	659.3	662.8	666.2
27.5°	628.6	632.0	640.6	647.4	652.5
30°	611.5	614.9	625.2	633.7	637.1
32.5°	592.7	597.9	609.8	616.6	621.8
35°	572.2	577.4	589.3	601.3	606.4
37.5°	551.7	556.9	568.8	584.2	591.0
40°	527.8	534.7	550.0	570.5	573.9
42.5°	505.6	514.2	527.8	551.7	560.3
45°	480.0	488.5	507.3	532.9	546.6
47.5°	456.1	464.6	485.1	515.9	532.9
50°	427.0	439.0	464.6	500.5	517.6
52.5°	399.7	410.0	444.1	483.4	503.9
55°	370.7	382.6	423.6	466.3	488.5
57.5°	345.0	355.3	401.4	449.2	474.9
60°	312.6	326.3	379.2	430.5	456.1
62.5°	278.4	298.9	357.0	410.0	437.3
65°	246.0	269.9	336.5	389.5	416.8
67.5°	216.9	242.6	310.9	367.3	392.9
70°	182.8	215.2	285.3	339.9	369.0
72.5°	152.0	187.9	256.2	310.9	336.5
75°	121.3	160.6	227.2	273.3	288.7
77.5°	93.9	131.5	194.7	208.4	210.1
80°	70.0	104.2	145.2	146.9	152.0
82.5°	47.8	73.5	93.9	102.5	104.2
85°	30.7	42.7	53.0	54.7	58.1
87.5°	13.7	15.4	18.8	17.1	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)