

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: P307148

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP187-W2A-U-5500K**

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: P307148
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: 14FCZ2-35-UNV-L82765-HRP-CP187-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.187"
POLYCARB SHEET
Light Source: (168) 5500K 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: 2487.0 lumens
Efficiency: N/A
Efficacy: 82.1 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

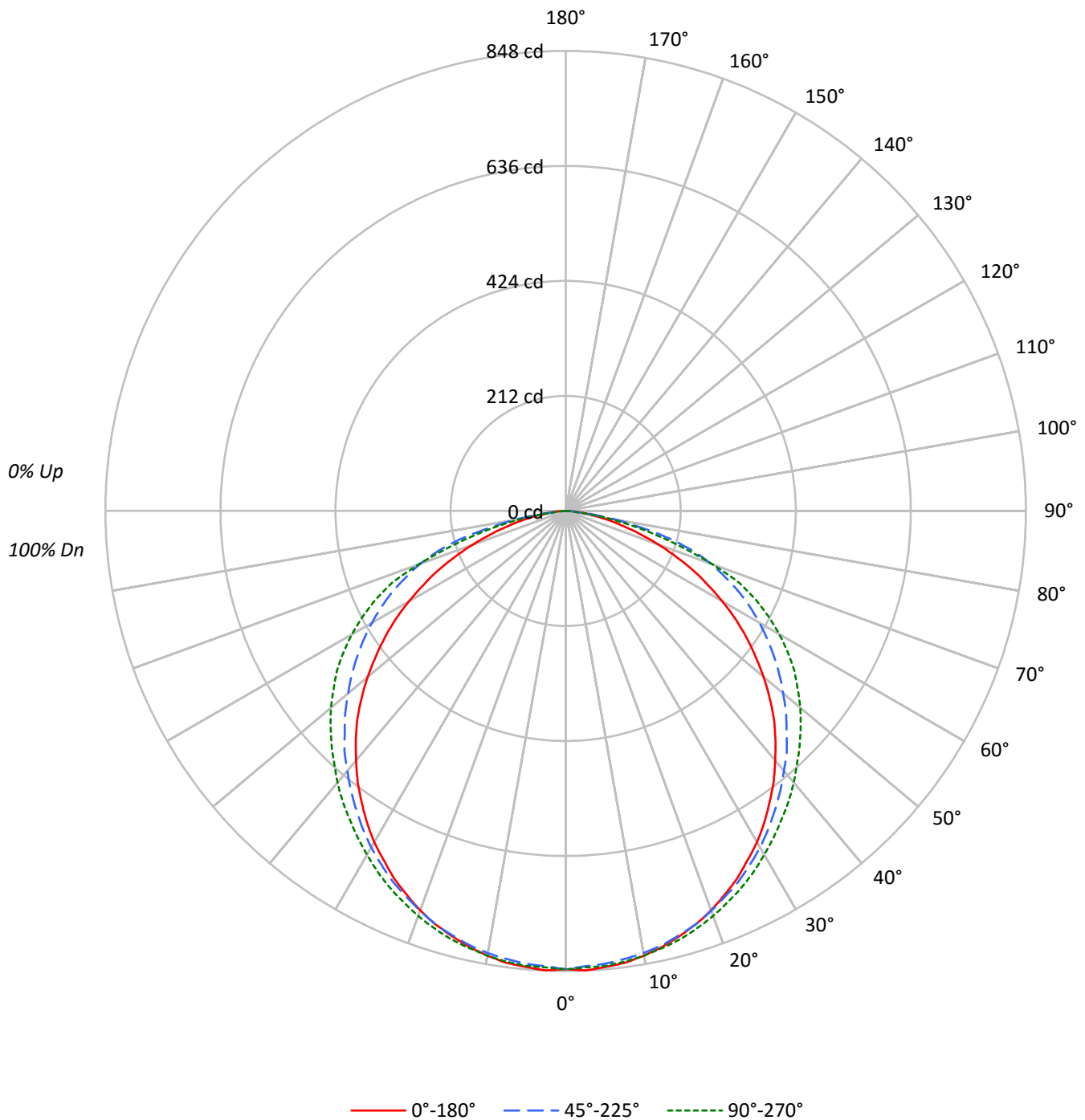
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2273	2273	2273
5°	2279	2263	2273
10°	2274	2261	2274
15°	2259	2255	2277
20°	2244	2246	2275
25°	2220	2238	2276
30°	2192	2226	2275
35°	2153	2210	2279
40°	2110	2198	2297
45°	2065	2191	2321
50°	1994	2190	2364
55°	1908	2201	2414
60°	1793	2218	2446
65°	1653	2241	2460
70°	1440	2245	2264
75°	1187	2090	1830
80°	933	1503	1224
85°	726	580	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	3.2
10°-20°	229.4	9.2
20°-30°	348.4	14.0
30°-40°	422.2	17.0
40°-50°	444.9	17.9
50°-60°	415.3	16.7
60°-70°	331.9	13.3
70°-80°	182.6	7.3
80°-90°	32.2	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°	657.8	26.5
0°-40°	1080.0	43.4
0°-60°	1940.2	78.0
0°-90°	2487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	844	842	838	843	842	80
15°	811	811	809	817	817	229
25°	748	749	754	765	766	344
35°	655	662	673	690	694	410
45°	543	553	576	601	610	418
55°	407	427	469	502	515	363
65°	260	292	352	381	386	256
75°	114	163	201	181	176	123
85°	24	30	19	12	9	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	844.6	844.6	844.6	844.6	844.6
2.5°	847.7	845.4	839.9	844.6	842.3
5°	843.8	841.5	837.6	843.0	841.5
7.5°	839.9	836.8	832.9	839.1	837.6
10°	832.1	829.7	827.4	832.9	832.1
12.5°	822.7	821.9	819.6	825.8	825.0
15°	811.0	811.0	809.4	817.2	817.2
17.5°	798.5	797.7	798.5	807.1	806.3
20°	783.6	783.6	784.4	794.5	794.5
22.5°	765.6	766.4	768.7	781.3	780.5
25°	747.6	749.2	753.9	764.8	766.4
27.5°	725.7	729.6	735.1	748.4	750.0
30°	705.4	707.7	716.3	728.9	732.0
32.5°	681.2	685.8	695.2	709.3	713.2
35°	655.3	661.6	672.6	689.8	693.7
37.5°	629.5	635.0	649.9	667.9	674.9
40°	600.6	610.0	625.6	646.0	653.8
42.5°	572.4	581.8	602.9	624.1	631.1
45°	542.7	552.9	575.6	601.4	610.0
47.5°	509.9	521.6	550.6	577.9	587.3
50°	476.3	491.1	523.2	553.7	564.6
52.5°	441.1	459.8	496.6	528.7	538.8
55°	406.7	427.0	469.2	502.1	514.6
57.5°	371.5	393.4	441.1	478.6	485.6
60°	333.1	359.7	412.1	445.0	454.4
62.5°	295.6	326.1	382.4	413.7	421.5
65°	259.6	292.5	351.9	380.9	386.3
67.5°	220.5	259.6	318.3	344.9	346.4
70°	183.0	228.4	285.4	298.0	287.8
72.5°	146.2	194.7	247.1	237.0	228.4
75°	114.2	163.4	201.0	180.7	176.0
77.5°	84.5	133.7	143.9	132.9	124.3
80°	60.2	105.6	97.0	82.9	79.0
82.5°	41.4	66.5	53.2	41.4	36.0
85°	23.5	29.7	18.8	11.7	9.4
87.5°	10.2	7.0	3.9	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)