

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: P307153

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-3500K**

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: P307153
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-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 3500K 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: 2317.0 lumens
Efficiency: N/A
Efficacy: 78.3 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

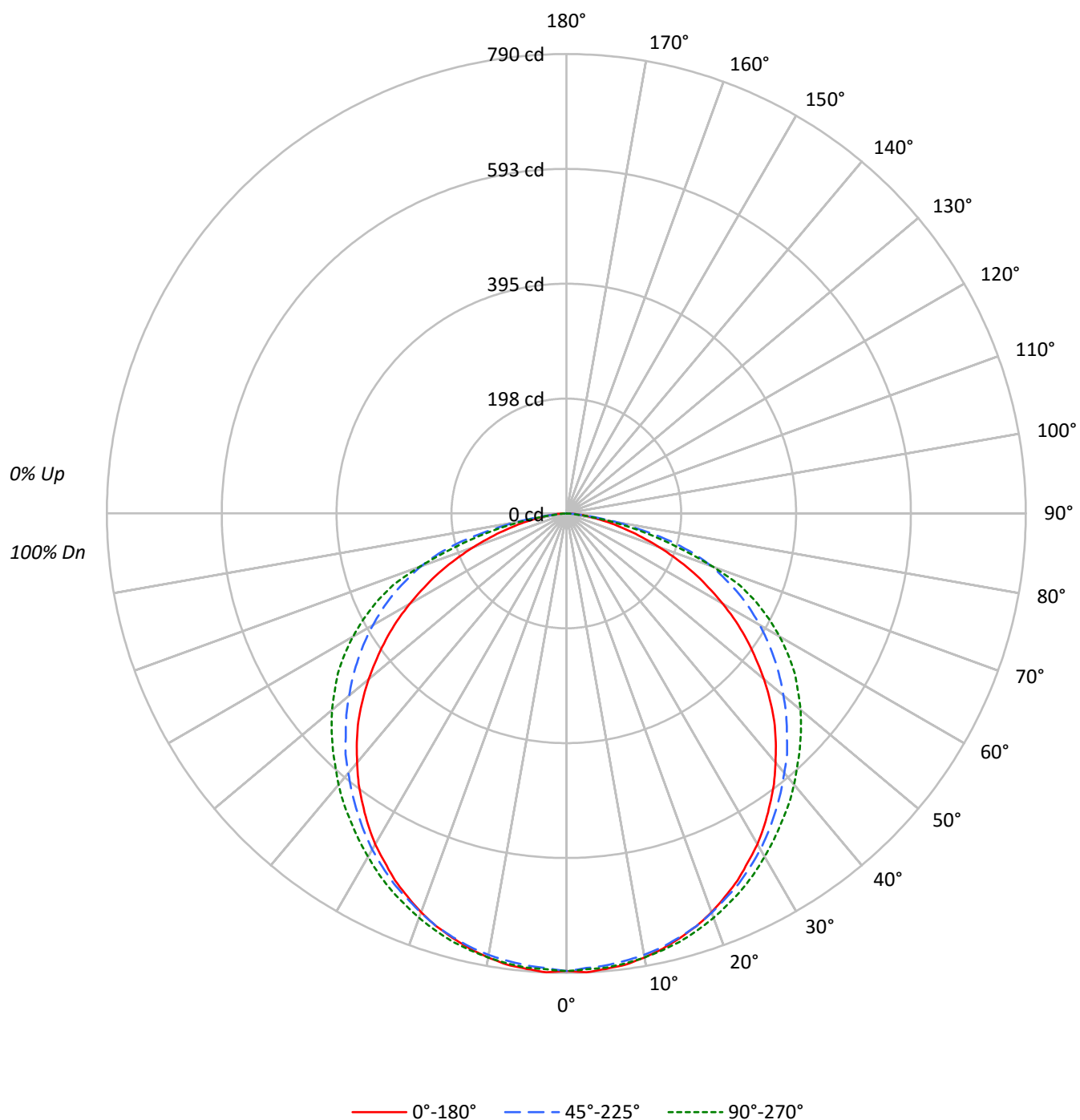
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2118	2118	2118
5°	2123	2108	2118
10°	2118	2106	2118
15°	2105	2101	2121
20°	2090	2093	2120
25°	2068	2085	2120
30°	2042	2074	2119
35°	2006	2058	2123
40°	1965	2048	2140
45°	1924	2041	2163
50°	1858	2040	2202
55°	1778	2051	2249
60°	1671	2067	2278
65°	1540	2088	2292
70°	1341	2092	2109
75°	1106	1946	1704
80°	869	1399	1141
85°	676	540	269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	3.2
10°-20°	213.8	9.2
20°-30°	324.6	14.0
30°-40°	393.3	17.0
40°-50°	414.5	17.9
50°-60°	386.9	16.7
60°-70°	309.2	13.3
70°-80°	170.1	7.3
80°-90°	30.0	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°	612.9	26.5
0°-40°	1006.2	43.4
0°-60°	1807.6	78.0
0°-90°	2317.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2317.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	786	784	780	785	784	75
15°	756	756	754	761	761	213
25°	696	698	702	712	714	321
35°	610	616	627	643	646	382
45°	506	515	536	560	568	389
55°	379	398	437	468	479	338
65°	242	272	328	355	360	238
75°	106	152	187	168	164	114
85°	22	28	18	11	9	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	786.9	786.9	786.9	786.9	786.9
2.5°	789.8	787.6	782.5	786.9	784.7
5°	786.1	784.0	780.3	785.4	784.0
7.5°	782.5	779.6	775.9	781.8	780.3
10°	775.2	773.0	770.8	775.9	775.2
12.5°	766.5	765.7	763.6	769.4	768.7
15°	755.5	755.5	754.1	761.4	761.4
17.5°	743.9	743.2	743.9	751.9	751.2
20°	730.0	730.0	730.8	740.2	740.2
22.5°	713.3	714.0	716.2	727.9	727.1
25°	696.5	698.0	702.3	712.5	714.0
27.5°	676.1	679.8	684.9	697.2	698.7
30°	657.2	659.4	667.4	679.0	681.9
32.5°	634.6	639.0	647.7	660.8	664.5
35°	610.5	616.4	626.6	642.6	646.2
37.5°	586.5	591.6	605.4	622.2	628.8
40°	559.5	568.3	582.9	601.8	609.1
42.5°	533.3	542.1	561.7	581.4	588.0
45°	505.6	515.1	536.2	560.3	568.3
47.5°	475.0	486.0	512.9	538.4	547.2
50°	443.7	457.5	487.4	515.8	526.0
52.5°	410.9	428.4	462.6	492.5	502.0
55°	378.9	397.8	437.1	467.7	479.4
57.5°	346.1	366.5	410.9	445.9	452.4
60°	310.4	335.1	384.0	414.6	423.3
62.5°	275.4	303.8	356.3	385.4	392.7
65°	241.9	272.5	327.9	354.8	359.9
67.5°	205.5	241.9	296.5	321.3	322.8
70°	170.5	212.7	265.9	277.6	268.1
72.5°	136.2	181.4	230.2	220.8	212.7
75°	106.4	152.3	187.2	168.3	163.9
77.5°	78.7	124.6	134.1	123.9	115.8
80°	56.1	98.4	90.3	77.2	73.6
82.5°	38.6	61.9	49.5	38.6	33.5
85°	21.9	27.7	17.5	10.9	8.7
87.5°	9.5	6.6	3.6	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)