

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: P307157

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP250-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: P307157
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-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
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: 2466.0 lumens
Efficiency: N/A
Efficacy: 81.4 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

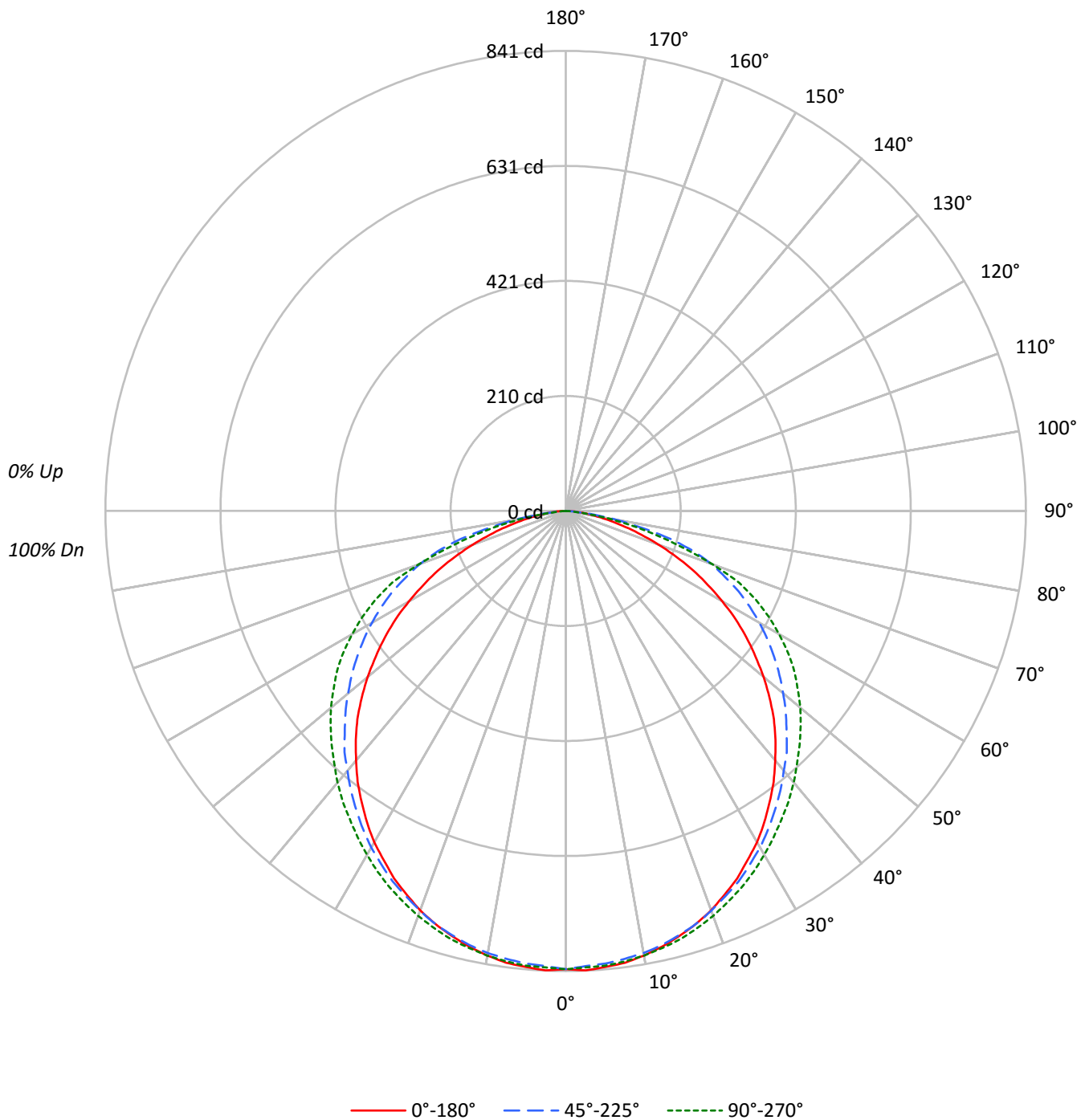
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2254	2254	2254
5°	2260	2243	2254
10°	2255	2242	2255
15°	2240	2236	2257
20°	2225	2227	2256
25°	2201	2219	2256
30°	2173	2207	2255
35°	2135	2191	2259
40°	2092	2179	2277
45°	2048	2172	2302
50°	1977	2172	2344
55°	1892	2183	2394
60°	1778	2200	2425
65°	1639	2222	2439
70°	1428	2227	2245
75°	1177	2072	1814
80°	925	1491	1213
85°	719	574	287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.3	3.2
10°-20°	227.5	9.2
20°-30°	345.5	14.0
30°-40°	418.6	17.0
40°-50°	441.1	17.9
50°-60°	411.8	16.7
60°-70°	329.1	13.3
70°-80°	181.1	7.3
80°-90°	32.0	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°	652.3	26.5
0°-40°	1070.9	43.4
0°-60°	1923.8	78.0
0°-90°	2466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	837	834	830	836	834	80
15°	804	804	803	810	810	227
25°	741	743	748	758	760	341
35°	650	656	667	684	688	407
45°	538	548	571	596	605	414
55°	403	423	465	498	510	360
65°	257	290	349	378	383	253
75°	113	162	199	179	174	122
85°	23	30	19	12	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	837.5	837.5	837.5	837.5	837.5
2.5°	840.6	838.2	832.8	837.5	835.1
5°	836.7	834.4	830.5	835.9	834.4
7.5°	832.8	829.7	825.8	832.0	830.5
10°	825.1	822.7	820.4	825.8	825.1
12.5°	815.8	815.0	812.7	818.9	818.1
15°	804.1	804.1	802.6	810.3	810.3
17.5°	791.7	790.9	791.7	800.2	799.5
20°	777.0	777.0	777.8	787.8	787.8
22.5°	759.1	759.9	762.2	774.7	773.9
25°	741.3	742.9	747.5	758.4	759.9
27.5°	719.6	723.5	728.9	742.1	743.6
30°	699.4	701.8	710.3	722.7	725.8
32.5°	675.4	680.1	689.4	703.3	707.2
35°	649.8	656.0	666.9	683.9	687.8
37.5°	624.2	629.7	644.4	662.2	669.2
40°	595.5	604.8	620.3	640.5	648.3
42.5°	567.6	576.9	597.9	618.8	625.8
45°	538.1	548.2	570.7	596.3	604.8
47.5°	505.6	517.2	545.9	573.0	582.3
50°	472.2	487.0	518.8	549.0	559.9
52.5°	437.3	456.0	492.4	524.2	534.3
55°	403.2	423.4	465.3	497.8	510.2
57.5°	368.3	390.0	437.3	474.6	481.5
60°	330.3	356.7	408.7	441.2	450.5
62.5°	293.1	323.4	379.2	410.2	418.0
65°	257.4	290.0	348.9	377.6	383.1
67.5°	218.7	257.4	315.6	342.0	343.5
70°	181.5	226.4	283.0	295.4	285.4
72.5°	145.0	193.1	245.0	235.0	226.4
75°	113.2	162.1	199.3	179.1	174.5
77.5°	83.7	132.6	142.7	131.8	123.3
80°	59.7	104.7	96.2	82.2	78.3
82.5°	41.1	65.9	52.7	41.1	35.7
85°	23.3	29.5	18.6	11.6	9.3
87.5°	10.1	7.0	3.9	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)