

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: P307155

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-4500K**

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: P307155  
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-4500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
POLYCARB SHEET  
Light Source: (168) 4500K 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**

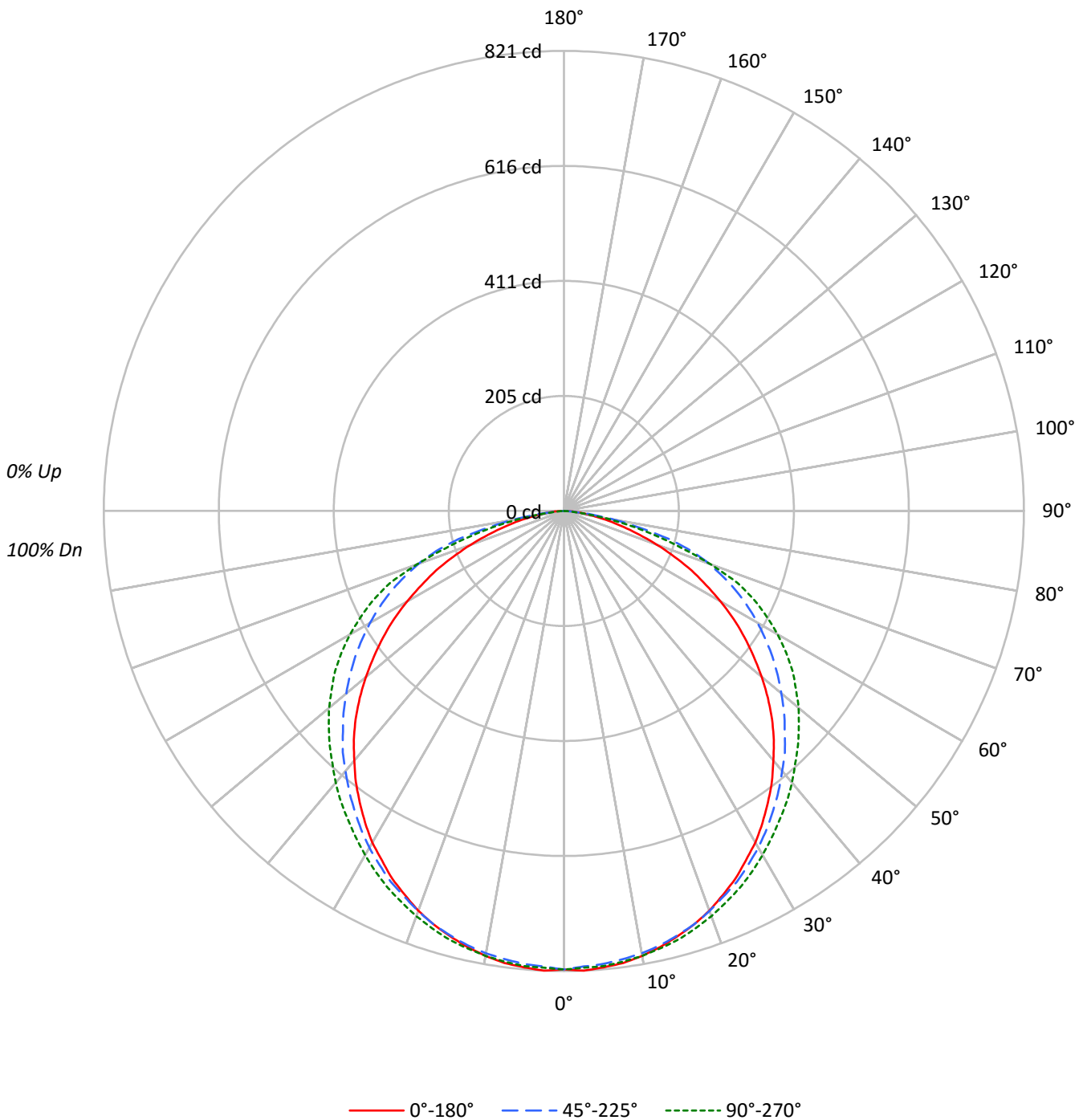
Lumens per Lamp: N/A  
Luminaire Lumens: 2409.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P307155

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P307155

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-4500K

**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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2201	2201	2201
5°	2208	2192	2202
10°	2202	2190	2202
15°	2188	2184	2205
20°	2174	2176	2204
25°	2150	2168	2204
30°	2123	2156	2203
35°	2085	2140	2207
40°	2044	2129	2225
45°	2001	2122	2249
50°	1931	2122	2290
55°	1848	2132	2338
60°	1737	2148	2369
65°	1601	2171	2383
70°	1395	2175	2194
75°	1150	2024	1772
80°	903	1455	1185
85°	701	562	281



TEST NUMBER: P307155

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.5	3.2
10°-20°	222.2	9.2
20°-30°	337.5	14.0
30°-40°	408.9	17.0
40°-50°	430.9	17.9
50°-60°	402.3	16.7
60°-70°	321.5	13.3
70°-80°	176.9	7.3
80°-90°	31.2	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°	637.2	26.5
0°-40°	1046.1	43.4
0°-60°	1879.4	78.0
0°-90°	2409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2409.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	817	815	811	817	815	78
15°	786	786	784	792	792	222
25°	724	726	730	741	742	333
35°	635	641	652	668	672	397
45°	526	536	558	582	591	404
55°	394	414	454	486	498	352
65°	252	283	341	369	374	248
75°	111	158	195	175	170	119
85°	23	29	18	11	9	28
90°	0	0	0	0	0	



TEST NUMBER: P307155

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-HRP-CP250-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.1	818.1	818.1	818.1	818.1
2.5°	821.1	818.9	813.6	818.1	815.8
5°	817.4	815.1	811.3	816.6	815.1
7.5°	813.6	810.5	806.7	812.8	811.3
10°	806.0	803.7	801.4	806.7	806.0
12.5°	796.9	796.1	793.9	799.9	799.2
15°	785.5	785.5	784.0	791.6	791.6
17.5°	773.4	772.7	773.4	781.7	781.0
20°	759.0	759.0	759.8	769.6	769.6
22.5°	741.6	742.4	744.6	756.8	756.0
25°	724.2	725.7	730.2	740.8	742.4
27.5°	703.0	706.8	712.1	724.9	726.5
30°	683.3	685.5	693.9	706.0	709.0
32.5°	659.8	664.3	673.4	687.1	690.8
35°	634.8	640.9	651.5	668.1	671.9
37.5°	609.8	615.1	629.5	646.9	653.7
40°	581.8	590.9	606.0	625.7	633.3
42.5°	554.5	563.6	584.0	604.5	611.3
45°	525.7	535.6	557.5	582.5	590.9
47.5°	493.9	505.3	533.3	559.8	568.9
50°	461.3	475.7	506.8	536.3	546.9
52.5°	427.2	445.4	481.0	512.1	521.9
55°	393.9	413.6	454.5	486.3	498.4
57.5°	359.8	381.0	427.2	463.6	470.4
60°	322.7	348.5	399.2	431.0	440.1
62.5°	286.3	315.9	370.4	400.7	408.3
65°	251.5	283.3	340.9	368.9	374.2
67.5°	213.6	251.5	308.3	334.1	335.6
70°	177.3	221.2	276.5	288.6	278.8
72.5°	141.7	188.6	239.4	229.5	221.2
75°	110.6	158.3	194.7	175.0	170.4
77.5°	81.8	129.5	139.4	128.8	120.4
80°	58.3	102.3	93.9	80.3	76.5
82.5°	40.1	64.4	51.5	40.1	34.8
85°	22.7	28.8	18.2	11.4	9.1
87.5°	9.8	6.8	3.8	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)