

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: P307159

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP250-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: P307159
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-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 6500K 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: 2479.0 lumens
Efficiency: N/A
Efficacy: 80.5 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

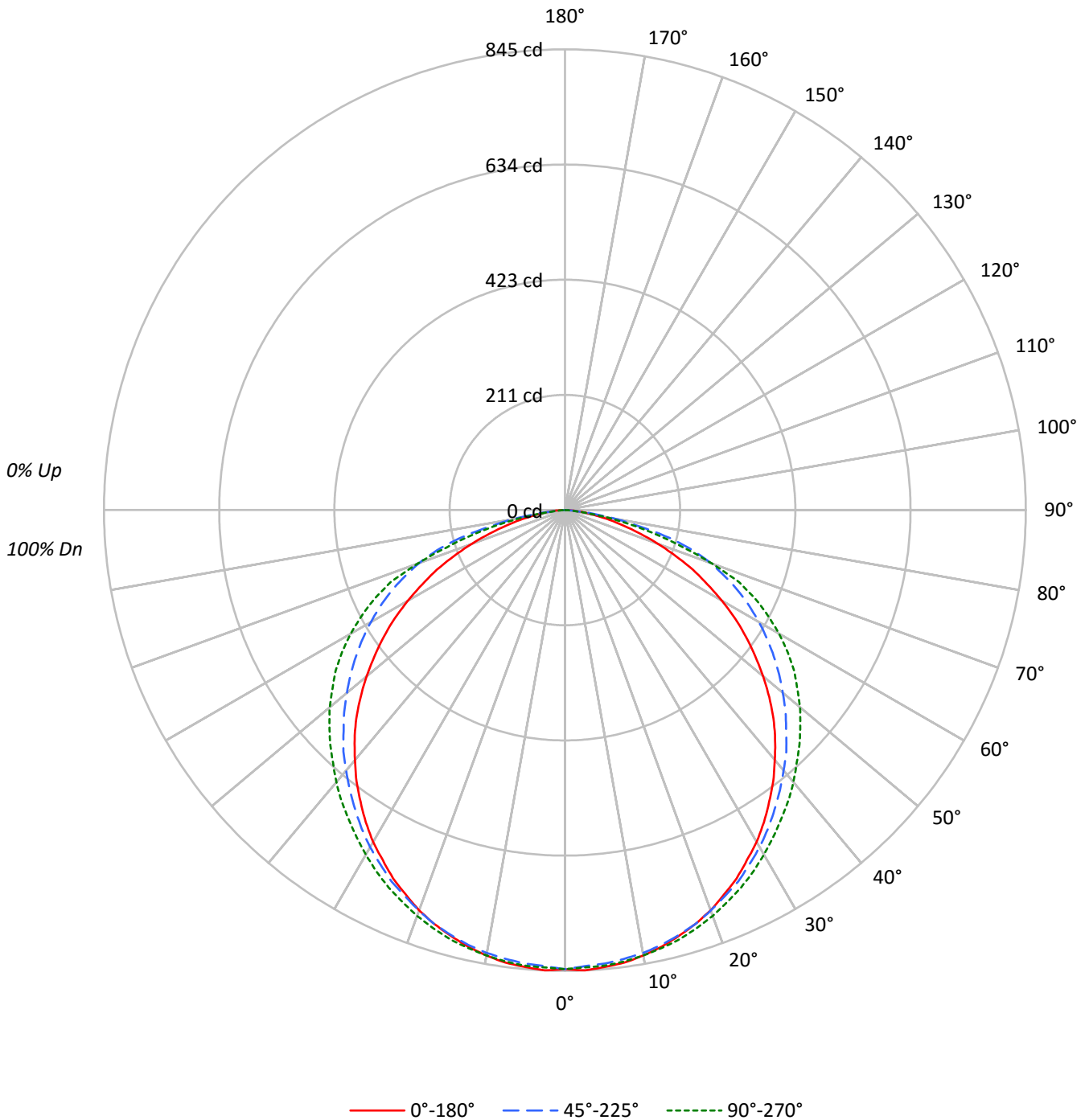
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2266	2266	2266
5°	2272	2255	2266
10°	2266	2253	2266
15°	2252	2248	2269
20°	2237	2239	2268
25°	2213	2231	2268
30°	2185	2219	2267
35°	2146	2202	2271
40°	2103	2191	2289
45°	2059	2183	2314
50°	1987	2183	2356
55°	1902	2194	2406
60°	1787	2211	2437
65°	1648	2234	2452
70°	1435	2238	2257
75°	1183	2083	1824
80°	930	1499	1220
85°	722	577	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	3.2
10°-20°	228.7	9.2
20°-30°	347.3	14.0
30°-40°	420.8	17.0
40°-50°	443.4	17.9
50°-60°	414.0	16.7
60°-70°	330.8	13.3
70°-80°	182.0	7.3
80°-90°	32.1	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°	655.7	26.5
0°-40°	1076.5	43.4
0°-60°	1934.0	78.0
0°-90°	2479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2479.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	841	839	835	840	839	80
15°	808	808	807	815	815	228
25°	745	747	752	762	764	343
35°	653	660	670	688	691	409
45°	541	551	574	600	608	416
55°	405	426	468	500	513	362
65°	259	292	351	380	385	255
75°	114	163	200	180	175	123
85°	23	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°	841.9	841.9	841.9	841.9	841.9
2.5°	845.0	842.7	837.2	841.9	839.5
5°	841.1	838.8	834.9	840.3	838.8
7.5°	837.2	834.1	830.2	836.4	834.9
10°	829.4	827.1	824.7	830.2	829.4
12.5°	820.1	819.3	816.9	823.2	822.4
15°	808.4	808.4	806.8	814.6	814.6
17.5°	795.9	795.1	795.9	804.5	803.7
20°	781.1	781.1	781.9	792.0	792.0
22.5°	763.1	763.9	766.3	778.7	778.0
25°	745.2	746.8	751.5	762.4	763.9
27.5°	723.4	727.3	732.7	746.0	747.6
30°	703.1	705.5	714.0	726.5	729.6
32.5°	679.0	683.6	693.0	707.0	710.9
35°	653.2	659.5	670.4	687.5	691.4
37.5°	627.5	633.0	647.8	665.7	672.7
40°	598.7	608.0	623.6	643.9	651.7
42.5°	570.6	580.0	601.0	622.1	629.1
45°	541.0	551.1	573.7	599.5	608.0
47.5°	508.2	519.9	548.8	576.1	585.4
50°	474.7	489.5	521.5	551.9	562.8
52.5°	439.6	458.4	495.0	527.0	537.1
55°	405.4	425.6	467.7	500.5	512.9
57.5°	370.3	392.1	439.6	477.1	484.1
60°	332.1	358.6	410.8	443.5	452.9
62.5°	294.7	325.1	381.2	412.4	420.2
65°	258.8	291.5	350.8	379.6	385.1
67.5°	219.8	258.8	317.3	343.8	345.3
70°	182.4	227.6	284.5	297.0	286.9
72.5°	145.8	194.1	246.3	236.2	227.6
75°	113.8	162.9	200.3	180.1	175.4
77.5°	84.2	133.3	143.4	132.5	123.9
80°	60.0	105.2	96.7	82.6	78.7
82.5°	41.3	66.3	53.0	41.3	35.9
85°	23.4	29.6	18.7	11.7	9.4
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)