

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: P311925

Luminaire Tested: **14FCZ2-35-UNV-L83050-HRP-CP125-W2A-U-3000K**

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: P311925
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-L83050-HRP-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 2359.0 lumens
Efficiency: N/A
Efficacy: 80.2 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

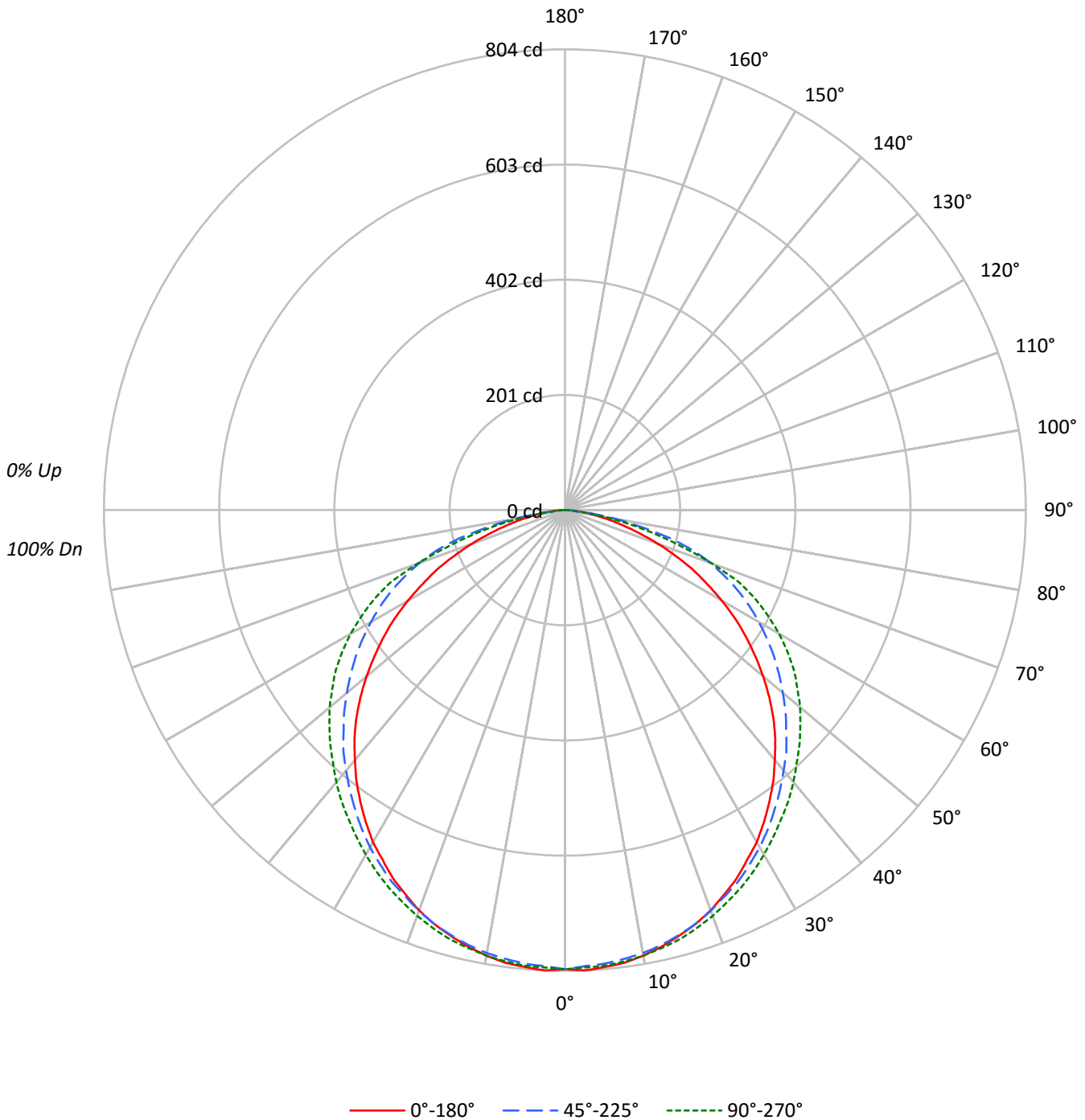
Input Watts (W): 29.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2156	2156	2156
5°	2162	2146	2156
10°	2157	2144	2157
15°	2143	2139	2160
20°	2129	2131	2158
25°	2105	2123	2158
30°	2079	2111	2157
35°	2042	2096	2162
40°	2001	2085	2178
45°	1959	2078	2202
50°	1891	2078	2242
55°	1810	2088	2290
60°	1701	2104	2320
65°	1568	2125	2333
70°	1366	2131	2148
75°	1126	1982	1735
80°	885	1426	1161
85°	689	550	275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	3.2
10°-20°	217.6	9.2
20°-30°	330.5	14.0
30°-40°	400.4	17.0
40°-50°	422.0	17.9
50°-60°	393.9	16.7
60°-70°	314.8	13.3
70°-80°	173.2	7.3
80°-90°	30.6	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°	624.0	26.5
0°-40°	1024.4	43.4
0°-60°	1840.3	78.0
0°-90°	2359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	800	798	794	800	798	76
15°	769	769	768	775	775	217
25°	709	711	715	726	727	326
35°	622	628	638	654	658	389
45°	515	524	546	570	579	396
55°	386	405	445	476	488	344
65°	246	277	334	361	366	242
75°	108	155	191	171	167	117
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°	801.1	801.1	801.1	801.1	801.1
2.5°	804.1	801.9	796.7	801.1	798.9
5°	800.4	798.2	794.5	799.6	798.2
7.5°	796.7	793.7	790.0	795.9	794.5
10°	789.3	787.0	784.8	790.0	789.3
12.5°	780.4	779.6	777.4	783.3	782.6
15°	769.2	769.2	767.7	775.2	775.2
17.5°	757.4	756.6	757.4	765.5	764.8
20°	743.3	743.3	744.0	753.7	753.7
22.5°	726.2	726.9	729.2	741.0	740.3
25°	709.1	710.6	715.1	725.5	726.9
27.5°	688.4	692.1	697.3	709.9	711.4
30°	669.1	671.3	679.5	691.3	694.3
32.5°	646.1	650.5	659.4	672.8	676.5
35°	621.6	627.6	637.9	654.3	658.0
37.5°	597.1	602.3	616.4	633.5	640.2
40°	569.7	578.6	593.4	612.7	620.1
42.5°	543.0	551.9	571.9	591.9	598.6
45°	514.8	524.4	546.0	570.4	578.6
47.5°	483.6	494.8	522.2	548.2	557.1
50°	451.7	465.8	496.3	525.2	535.6
52.5°	418.4	436.2	471.0	501.4	511.1
55°	385.7	405.0	445.1	476.2	488.1
57.5°	352.3	373.1	418.4	454.0	460.6
60°	316.0	341.2	390.9	422.1	431.0
62.5°	280.4	309.3	362.7	392.4	399.8
65°	246.3	277.4	333.8	361.2	366.4
67.5°	209.2	246.3	301.9	327.1	328.6
70°	173.6	216.6	270.8	282.6	273.0
72.5°	138.7	184.7	234.4	224.8	216.6
75°	108.3	155.0	190.6	171.4	166.9
77.5°	80.1	126.8	136.5	126.1	117.9
80°	57.1	100.1	92.0	78.6	74.9
82.5°	39.3	63.1	50.4	39.3	34.1
85°	22.3	28.2	17.8	11.1	8.9
87.5°	9.6	6.7	3.7	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)