

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: P312001

Luminaire Tested: **14FCZ2-20-UNV-L83050-RDP-CP125-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: P312001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L83050-RDP-CP125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" 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: 1260.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

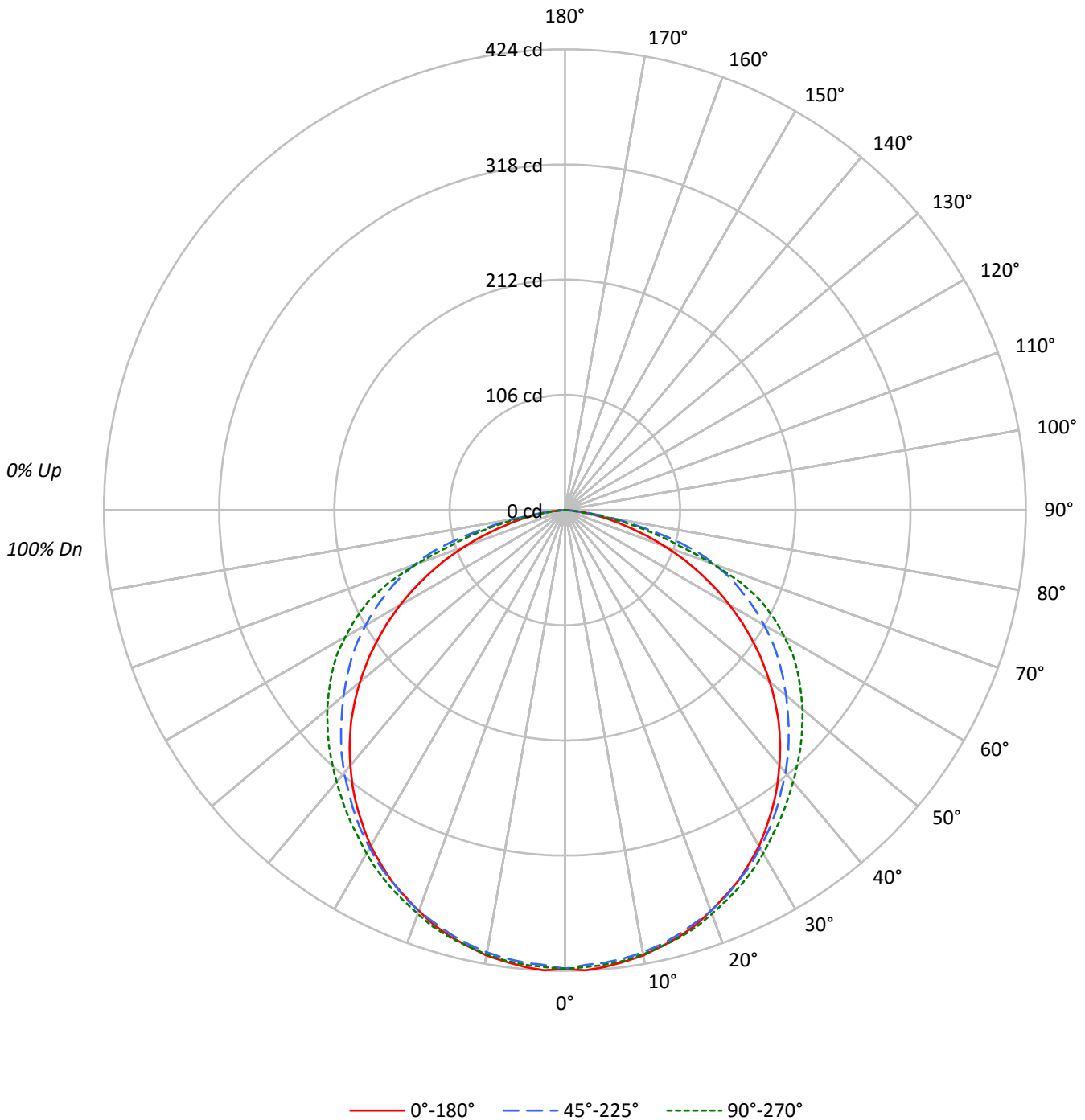
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1136	1136	1136
5°	1140	1129	1135
10°	1137	1129	1134
15°	1132	1126	1135
20°	1124	1124	1132
25°	1119	1119	1133
30°	1110	1116	1134
35°	1096	1112	1138
40°	1078	1109	1147
45°	1059	1108	1168
50°	1029	1112	1194
55°	992	1126	1228
60°	942	1138	1255
65°	870	1152	1272
70°	774	1161	1138
75°	624	1043	910
80°	488	731	595
85°	333	213	151



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	3.2
10°-20°	114.6	9.1
20°-30°	174.5	13.8
30°-40°	212.5	16.9
40°-50°	225.5	17.9
50°-60°	212.8	16.9
60°-70°	171.8	13.6
70°-80°	93.2	7.4
80°-90°	15.1	1.2
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°	329.0	26.1
0°-40°	541.6	43.0
0°-60°	979.9	77.8
0°-90°	1260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1260.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	422	421	418	421	420	40
15°	406	405	404	407	407	115
25°	377	376	377	381	382	173
35°	334	335	338	345	346	209
45°	278	282	291	302	307	214
55°	212	220	240	256	262	189
65°	137	154	181	196	200	135
75°	60	88	100	90	88	66
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	422.0	422.0	422.0	422.0	422.0
2.5°	424.0	422.0	419.1	422.0	421.0
5°	422.0	421.0	418.1	421.0	420.0
7.5°	419.1	419.1	416.1	418.1	418.1
10°	416.1	415.1	413.2	416.1	415.1
12.5°	411.2	410.2	409.2	412.2	411.2
15°	406.3	405.3	404.3	407.3	407.3
17.5°	400.4	399.4	398.4	402.3	402.3
20°	392.5	392.5	392.5	396.4	395.4
22.5°	384.6	384.6	385.6	389.5	388.6
25°	376.8	375.8	376.8	380.7	381.7
27.5°	366.9	367.9	368.9	372.8	373.8
30°	357.1	358.1	359.0	364.0	365.0
32.5°	345.3	347.2	349.2	355.1	355.1
35°	333.5	335.4	338.4	345.3	346.3
37.5°	320.7	322.7	326.6	334.5	336.4
40°	306.9	309.9	315.8	323.6	326.6
42.5°	293.1	297.1	304.0	312.8	316.8
45°	278.4	282.3	291.2	302.0	306.9
47.5°	262.6	267.6	278.4	292.2	296.1
50°	245.9	252.8	265.6	280.4	285.3
52.5°	229.2	237.1	252.8	268.5	273.5
55°	211.5	220.3	240.0	255.8	261.7
57.5°	193.8	203.6	226.3	243.0	248.9
60°	175.1	186.9	211.5	228.2	233.1
62.5°	156.4	170.2	196.7	213.5	217.4
65°	136.7	153.5	181.0	195.8	199.7
67.5°	118.0	137.7	165.3	176.1	176.1
70°	98.4	120.0	147.6	150.5	144.6
72.5°	78.7	103.3	127.9	117.1	112.1
75°	60.0	87.5	100.3	90.5	87.5
77.5°	45.3	70.8	70.8	64.9	63.0
80°	31.5	54.1	47.2	41.3	38.4
82.5°	20.7	30.5	24.6	19.7	16.7
85°	10.8	11.8	6.9	5.9	4.9
87.5°	3.9	2.0	1.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)