

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: P307270

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307270
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-L82765-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: 1230.0 lumens
Efficiency: N/A
Efficacy: 74.1 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

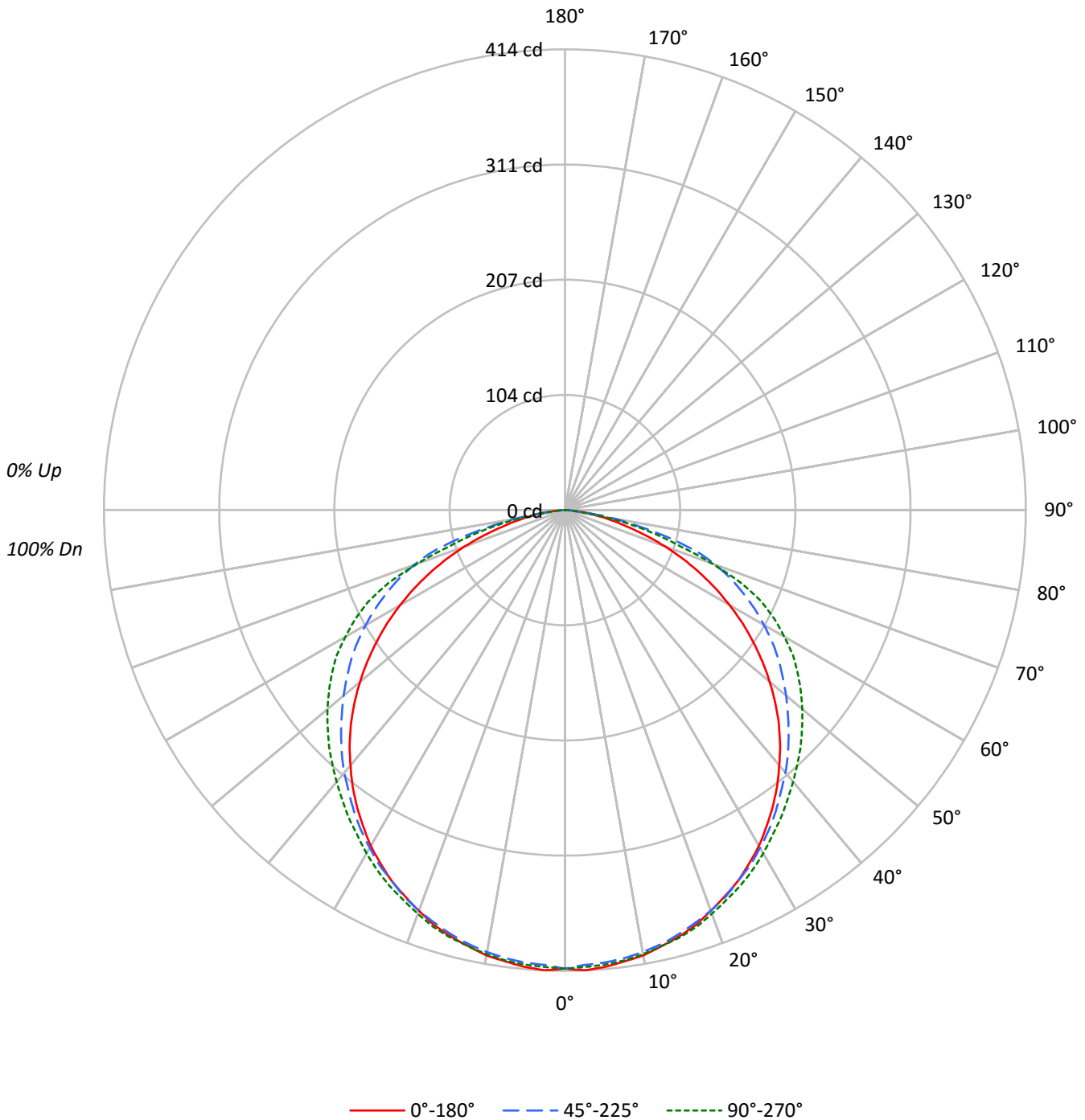
Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P307270

CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CP125-W2A-U-3500K

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°	1109	1109	1109
5°	1113	1102	1108
10°	1110	1102	1107
15°	1105	1100	1108
20°	1097	1097	1105
25°	1092	1092	1106
30°	1083	1089	1107
35°	1069	1085	1110
40°	1052	1083	1120
45°	1034	1082	1140
50°	1005	1086	1166
55°	969	1099	1198
60°	920	1111	1225
65°	850	1125	1241
70°	755	1133	1111
75°	609	1018	889
80°	476	714	581
85°	327	207	148



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	3.2
10°-20°	111.9	9.1
20°-30°	170.3	13.8
30°-40°	207.5	16.9
40°-50°	220.1	17.9
50°-60°	207.8	16.9
60°-70°	167.7	13.6
70°-80°	91.0	7.4
80°-90°	14.7	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°	321.2	26.1
0°-40°	528.7	43.0
0°-60°	956.6	77.8
0°-90°	1230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	412	411	408	411	410	39
15°	397	396	395	398	398	112
25°	368	367	368	372	373	169
35°	326	328	330	337	338	204
45°	272	276	284	295	300	209
55°	206	215	234	250	255	184
65°	134	150	177	191	195	132
75°	59	86	98	88	86	64
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°	412.0	412.0	412.0	412.0	412.0
2.5°	413.9	412.0	409.1	412.0	411.0
5°	412.0	411.0	408.1	411.0	410.0
7.5°	409.1	409.1	406.2	408.1	408.1
10°	406.2	405.2	403.3	406.2	405.2
12.5°	401.4	400.4	399.5	402.4	401.4
15°	396.6	395.6	394.7	397.6	397.6
17.5°	390.8	389.9	388.9	392.8	392.8
20°	383.2	383.2	383.2	387.0	386.0
22.5°	375.5	375.5	376.4	380.3	379.3
25°	367.8	366.8	367.8	371.6	372.6
27.5°	358.2	359.1	360.1	363.9	364.9
30°	348.6	349.5	350.5	355.3	356.3
32.5°	337.1	339.0	340.9	346.7	346.7
35°	325.5	327.5	330.3	337.1	338.0
37.5°	313.0	315.0	318.8	326.5	328.4
40°	299.6	302.5	308.2	315.9	318.8
42.5°	286.2	290.0	296.7	305.4	309.2
45°	271.8	275.6	284.2	294.8	299.6
47.5°	256.4	261.2	271.8	285.2	289.0
50°	240.1	246.8	259.3	273.7	278.5
52.5°	223.7	231.4	246.8	262.2	267.0
55°	206.5	215.1	234.3	249.7	255.4
57.5°	189.2	198.8	220.9	237.2	242.9
60°	170.9	182.5	206.5	222.8	227.6
62.5°	152.7	166.1	192.1	208.4	212.2
65°	133.5	149.8	176.7	191.1	194.9
67.5°	115.2	134.4	161.3	171.9	171.9
70°	96.0	117.2	144.0	146.9	141.2
72.5°	76.8	100.8	124.8	114.3	109.5
75°	58.6	85.5	97.9	88.3	85.5
77.5°	44.2	69.1	69.1	63.4	61.5
80°	30.7	52.8	46.1	40.3	37.5
82.5°	20.2	29.8	24.0	19.2	16.3
85°	10.6	11.5	6.7	5.8	4.8
87.5°	3.8	1.9	1.0	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)