

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: P307275

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-5700K**

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: P307275
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-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 5700K 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: 1313.0 lumens
Efficiency: N/A
Efficacy: 77.2 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

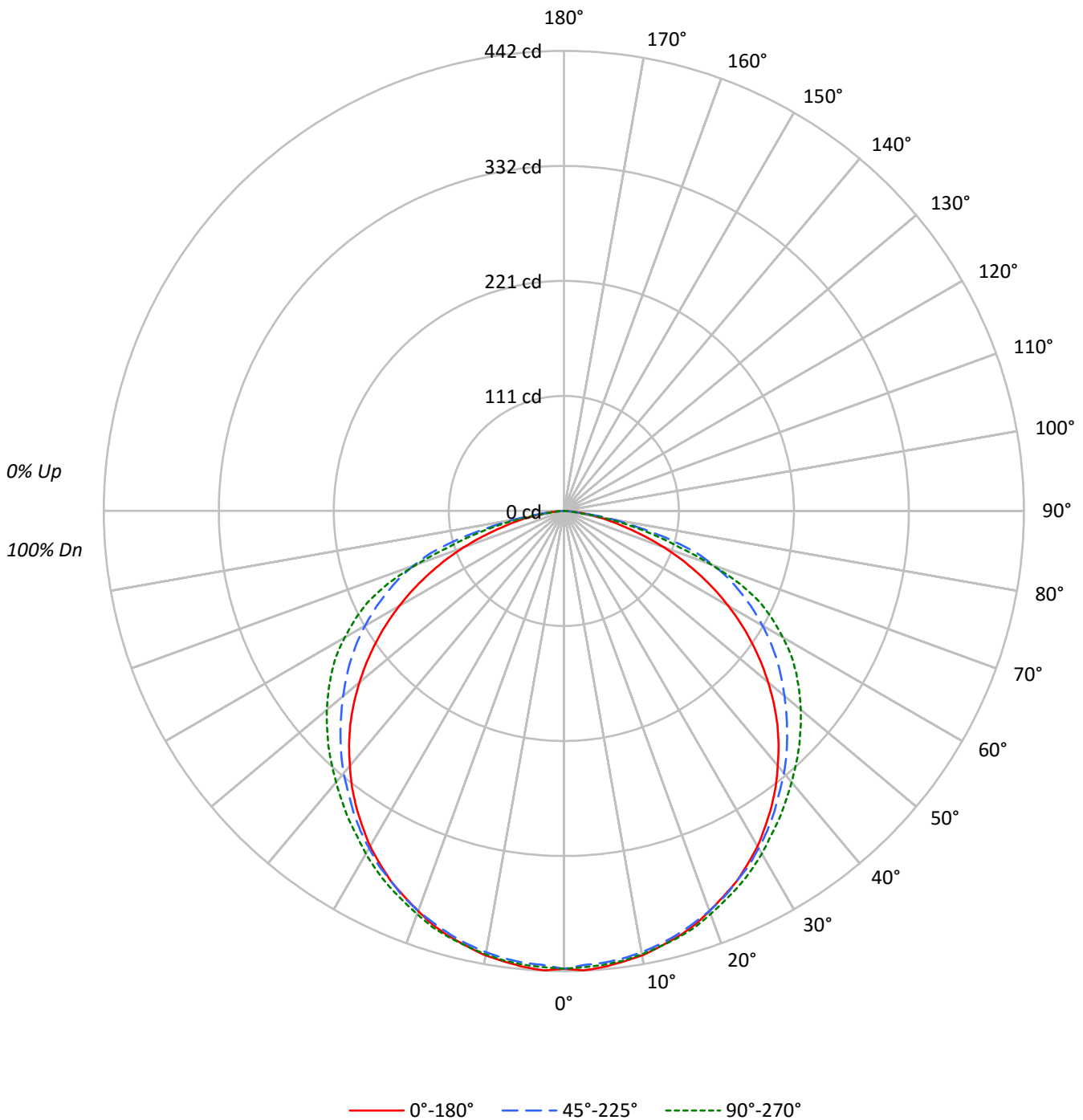
Input Watts (W): 17
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-RDP-CP125-W2A-U-5700K

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°	1183	1183	1183
5°	1188	1177	1182
10°	1185	1176	1182
15°	1180	1174	1182
20°	1171	1171	1180
25°	1166	1166	1181
30°	1156	1163	1182
35°	1142	1158	1185
40°	1123	1156	1195
45°	1104	1155	1217
50°	1073	1159	1245
55°	1034	1173	1279
60°	982	1186	1307
65°	907	1201	1325
70°	806	1210	1186
75°	650	1088	948
80°	508	762	620
85°	349	222	157



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	3.2
10°-20°	119.4	9.1
20°-30°	181.8	13.8
30°-40°	221.5	16.9
40°-50°	235.0	17.9
50°-60°	221.8	16.9
60°-70°	179.0	13.6
70°-80°	97.1	7.4
80°-90°	15.7	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°	342.9	26.1
0°-40°	564.4	43.0
0°-60°	1021.1	77.8
0°-90°	1313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	440	439	436	439	438	42
15°	423	422	421	424	424	119
25°	393	392	393	397	398	181
35°	348	350	353	360	361	217
45°	290	294	303	315	320	223
55°	220	230	250	266	273	197
65°	142	160	189	204	208	141
75°	62	91	105	94	91	68
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°	439.8	439.8	439.8	439.8	439.8
2.5°	441.8	439.8	436.7	439.8	438.7
5°	439.8	438.7	435.7	438.7	437.7
7.5°	436.7	436.7	433.6	435.7	435.7
10°	433.6	432.6	430.5	433.6	432.6
12.5°	428.5	427.5	426.4	429.5	428.5
15°	423.4	422.3	421.3	424.4	424.4
17.5°	417.2	416.2	415.2	419.3	419.3
20°	409.0	409.0	409.0	413.1	412.1
22.5°	400.8	400.8	401.8	405.9	404.9
25°	392.6	391.6	392.6	396.7	397.7
27.5°	382.4	383.4	384.4	388.5	389.5
30°	372.1	373.1	374.2	379.3	380.3
32.5°	359.8	361.9	363.9	370.1	370.1
35°	347.5	349.6	352.6	359.8	360.8
37.5°	334.2	336.2	340.3	348.5	350.6
40°	319.8	322.9	329.0	337.2	340.3
42.5°	305.5	309.6	316.7	326.0	330.1
45°	290.1	294.2	303.4	314.7	319.8
47.5°	273.7	278.8	290.1	304.4	308.5
50°	256.3	263.4	276.8	292.1	297.3
52.5°	238.8	247.0	263.4	279.8	285.0
55°	220.4	229.6	250.1	266.5	272.7
57.5°	201.9	212.2	235.8	253.2	259.3
60°	182.5	194.8	220.4	237.8	242.9
62.5°	163.0	177.3	205.0	222.4	226.5
65°	142.5	159.9	188.6	204.0	208.1
67.5°	123.0	143.5	172.2	183.5	183.5
70°	102.5	125.1	153.8	156.8	150.7
72.5°	82.0	107.6	133.3	122.0	116.9
75°	62.5	91.2	104.6	94.3	91.2
77.5°	47.2	73.8	73.8	67.7	65.6
80°	32.8	56.4	49.2	43.1	40.0
82.5°	21.5	31.8	25.6	20.5	17.4
85°	11.3	12.3	7.2	6.2	5.1
87.5°	4.1	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)