

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: P306998

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-2700K**

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: P306998
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: 14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 1366.0 lumens
Efficiency: N/A
Efficacy: 82.8 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

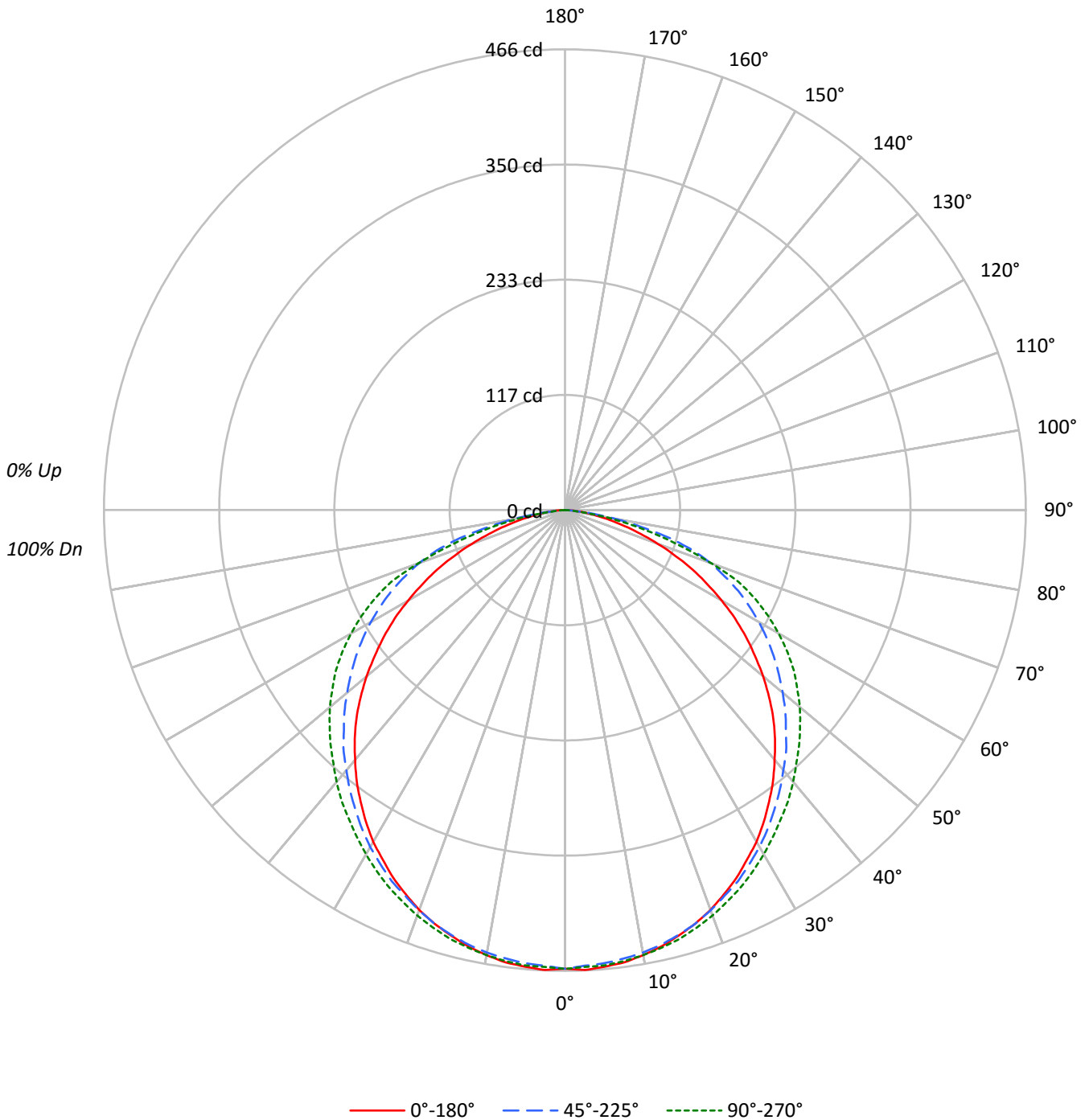
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP125-W2A-U-2700K

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	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°	1248	1248	1248
5°	1252	1243	1249
10°	1249	1242	1249
15°	1241	1239	1251
20°	1233	1234	1250
25°	1219	1230	1250
30°	1204	1223	1249
35°	1183	1214	1252
40°	1159	1207	1261
45°	1134	1203	1275
50°	1095	1203	1298
55°	1048	1209	1326
60°	985	1218	1343
65°	908	1231	1351
70°	791	1234	1244
75°	652	1148	1004
80°	513	826	673
85°	398	318	161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	3.2
10°-20°	126.0	9.2
20°-30°	191.4	14.0
30°-40°	231.9	17.0
40°-50°	244.3	17.9
50°-60°	228.1	16.7
60°-70°	182.3	13.3
70°-80°	100.3	7.3
80°-90°	17.7	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°	361.3	26.5
0°-40°	593.2	43.4
0°-60°	1065.7	78.0
0°-90°	1366.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1366.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	464	462	460	463	462	44
15°	445	445	445	449	449	126
25°	411	412	414	420	421	189
35°	360	363	369	379	381	225
45°	298	304	316	330	335	229
55°	223	234	258	276	283	199
65°	143	161	193	209	212	140
75°	63	90	110	99	97	67
85°	13	16	10	6	5	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	463.9	463.9	463.9	463.9	463.9
2.5°	465.6	464.3	461.3	463.9	462.6
5°	463.5	462.2	460.0	463.0	462.2
7.5°	461.3	459.6	457.5	460.9	460.0
10°	457.0	455.7	454.5	457.5	457.0
12.5°	451.9	451.4	450.2	453.6	453.2
15°	445.4	445.4	444.6	448.9	448.9
17.5°	438.6	438.1	438.6	443.3	442.9
20°	430.4	430.4	430.8	436.4	436.4
22.5°	420.5	420.9	422.2	429.1	428.7
25°	410.6	411.5	414.1	420.1	420.9
27.5°	398.6	400.8	403.8	411.1	411.9
30°	387.4	388.7	393.5	400.3	402.0
32.5°	374.1	376.7	381.9	389.6	391.7
35°	360.0	363.4	369.4	378.9	381.0
37.5°	345.8	348.8	356.9	366.8	370.7
40°	329.9	335.0	343.6	354.8	359.1
42.5°	314.4	319.6	331.2	342.8	346.6
45°	298.1	303.7	316.1	330.3	335.0
47.5°	280.1	286.5	302.4	317.4	322.6
50°	261.6	269.7	287.4	304.1	310.1
52.5°	242.3	252.6	272.8	290.4	296.0
55°	223.4	234.5	257.7	275.8	282.6
57.5°	204.0	216.1	242.3	262.9	266.7
60°	183.0	197.6	226.4	244.4	249.6
62.5°	162.4	179.1	210.0	227.2	231.5
65°	142.6	160.6	193.3	209.2	212.2
67.5°	121.1	142.6	174.8	189.4	190.3
70°	100.5	125.4	156.8	163.7	158.1
72.5°	80.3	107.0	135.7	130.1	125.4
75°	62.7	89.8	110.4	99.2	96.6
77.5°	46.4	73.5	79.0	73.0	68.3
80°	33.1	58.0	53.3	45.5	43.4
82.5°	22.8	36.5	29.2	22.8	19.8
85°	12.9	16.3	10.3	6.4	5.2
87.5°	5.6	3.9	2.1	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)