

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: P306999

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P306999
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-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: 1406.0 lumens
Efficiency: N/A
Efficacy: 85.7 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

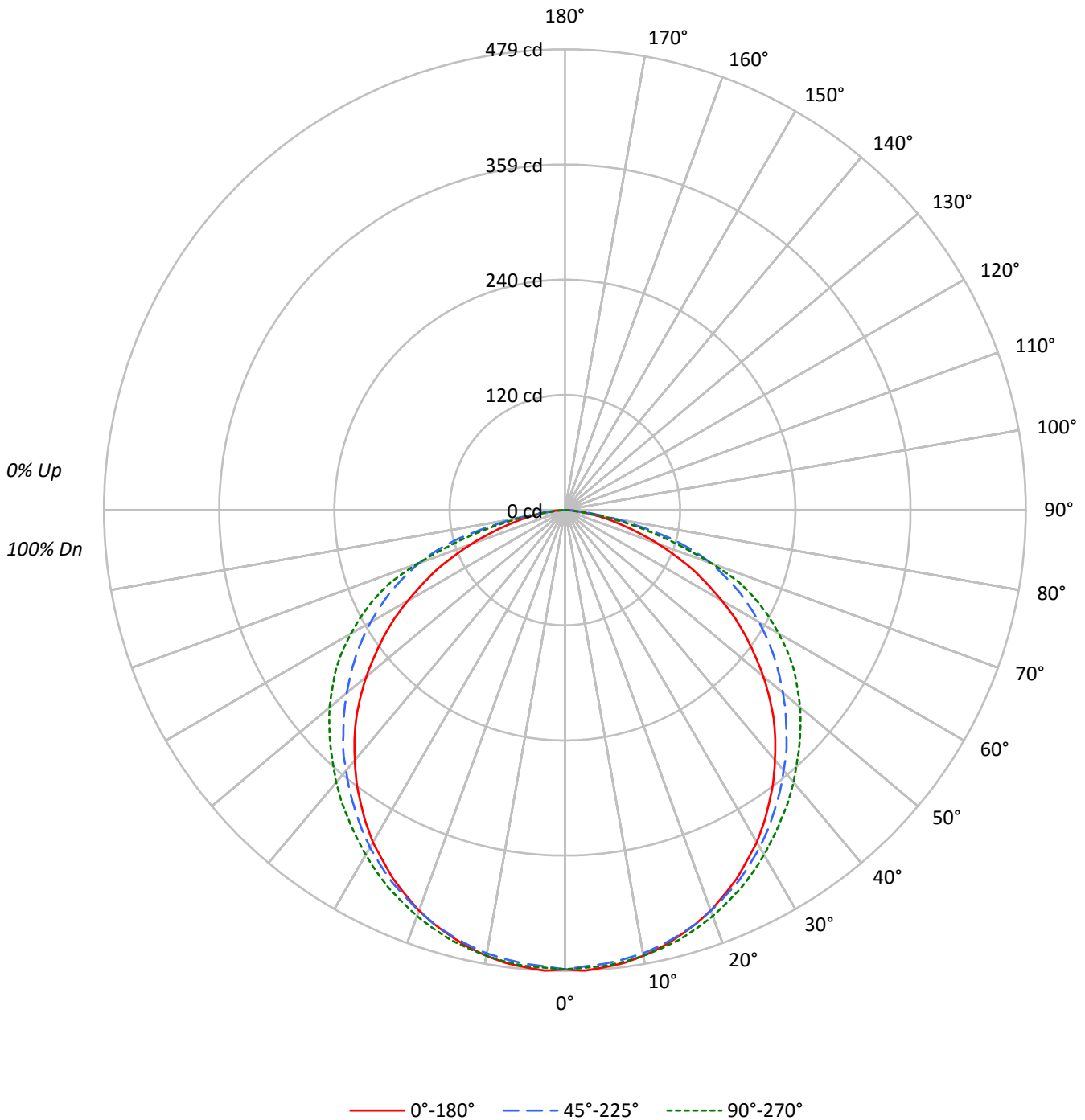
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-20-UNV-L82765-HRP-CP125-W2A-U-3000K

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°	1285	1285	1285
5°	1289	1279	1285
10°	1285	1278	1285
15°	1277	1275	1287
20°	1269	1270	1286
25°	1255	1265	1287
30°	1239	1258	1286
35°	1217	1249	1288
40°	1193	1242	1298
45°	1168	1238	1313
50°	1127	1238	1336
55°	1079	1245	1365
60°	1013	1254	1383
65°	935	1267	1391
70°	814	1270	1280
75°	671	1181	1035
80°	527	849	693
85°	411	327	164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	3.2
10°-20°	129.7	9.2
20°-30°	197.0	14.0
30°-40°	238.7	17.0
40°-50°	251.5	17.9
50°-60°	234.8	16.7
60°-70°	187.7	13.3
70°-80°	103.2	7.3
80°-90°	18.2	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°	371.9	26.5
0°-40°	610.6	43.4
0°-60°	1096.9	78.0
0°-90°	1406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1406.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	477	476	474	477	476	45
15°	458	458	458	462	462	129
25°	423	424	426	432	433	195
35°	370	374	380	390	392	232
45°	307	313	325	340	345	236
55°	230	241	265	284	291	205
65°	147	165	199	215	218	145
75°	64	92	114	102	100	69
85°	13	17	11	7	5	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	477.5	477.5	477.5	477.5	477.5
2.5°	479.3	477.9	474.8	477.5	476.2
5°	477.0	475.7	473.5	476.6	475.7
7.5°	474.8	473.1	470.9	474.4	473.5
10°	470.4	469.1	467.8	470.9	470.4
12.5°	465.1	464.7	463.3	466.9	466.4
15°	458.5	458.5	457.6	462.0	462.0
17.5°	451.4	451.0	451.4	456.3	455.8
20°	443.0	443.0	443.4	449.2	449.2
22.5°	432.8	433.3	434.6	441.7	441.2
25°	422.7	423.5	426.2	432.4	433.3
27.5°	410.3	412.5	415.6	423.1	424.0
30°	398.8	400.1	405.0	412.1	413.8
32.5°	385.1	387.7	393.0	401.0	403.2
35°	370.5	374.0	380.2	389.9	392.2
37.5°	355.9	359.0	367.4	377.6	381.5
40°	339.5	344.9	353.7	365.2	369.6
42.5°	323.6	328.9	340.9	352.8	356.8
45°	306.8	312.6	325.4	340.0	344.9
47.5°	288.3	294.9	311.2	326.7	332.0
50°	269.2	277.6	295.8	313.0	319.2
52.5°	249.4	260.0	280.7	298.9	304.6
55°	229.9	241.4	265.3	283.8	290.9
57.5°	210.0	222.4	249.4	270.6	274.6
60°	188.3	203.4	233.0	251.6	256.9
62.5°	167.1	184.4	216.2	233.9	238.3
65°	146.8	165.4	199.0	215.3	218.4
67.5°	124.7	146.8	179.9	195.0	195.9
70°	103.5	129.1	161.4	168.4	162.7
72.5°	82.7	110.1	139.7	134.0	129.1
75°	64.5	92.4	113.6	102.1	99.5
77.5°	47.7	75.6	81.3	75.2	70.3
80°	34.0	59.7	54.8	46.9	44.7
82.5°	23.4	37.6	30.1	23.4	20.3
85°	13.3	16.8	10.6	6.6	5.3
87.5°	5.7	4.0	2.2	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)