

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: P307002

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP125-W2A-U-4500K**

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: P307002
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-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB SHEET
Light Source: (168) 4500K 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: 1512.0 lumens
Efficiency: N/A
Efficacy: 90.0 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

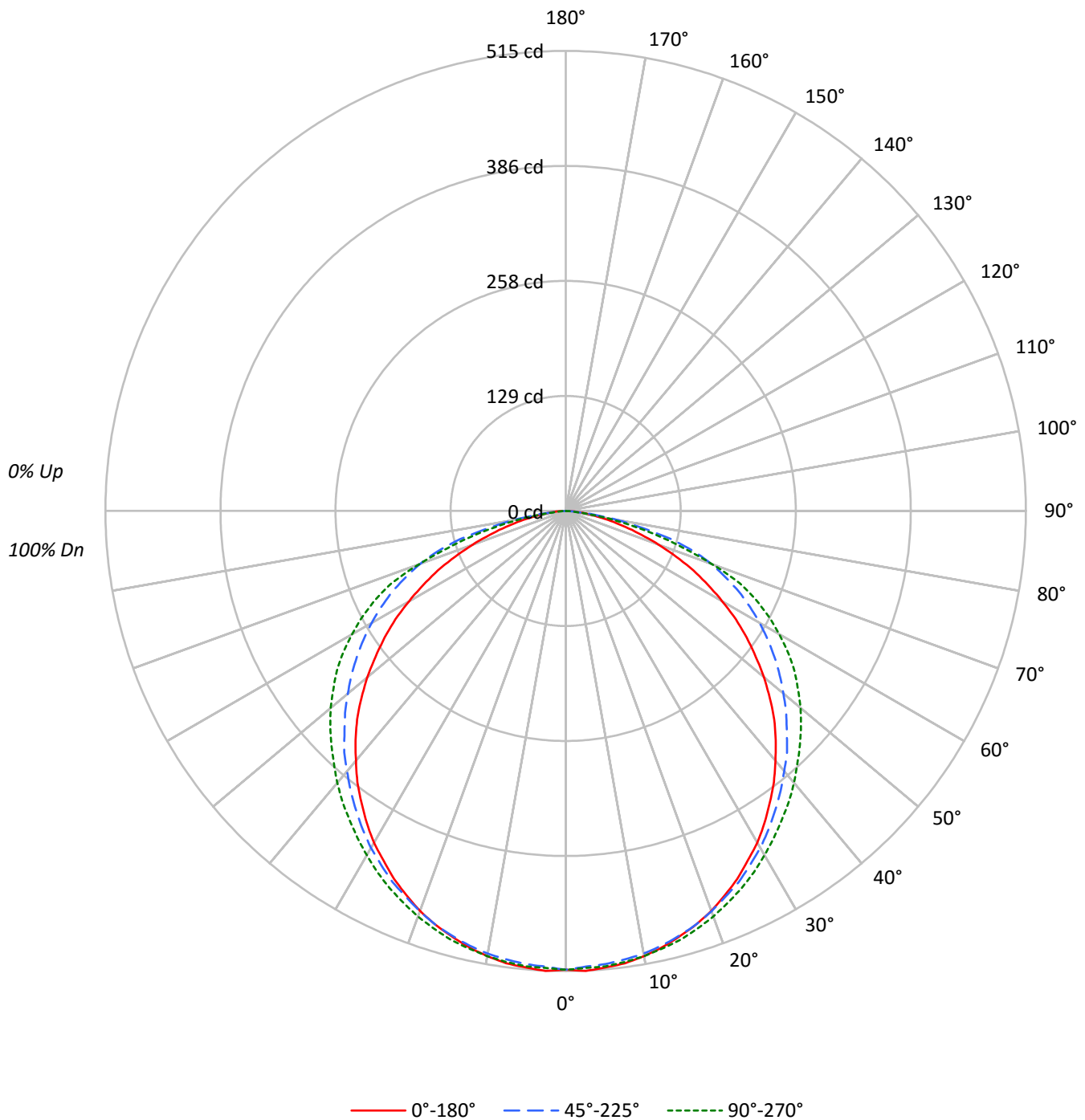
Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1382	1382	1382
5°	1386	1375	1382
10°	1382	1374	1382
15°	1373	1371	1384
20°	1364	1366	1383
25°	1349	1361	1383
30°	1333	1353	1383
35°	1309	1343	1385
40°	1283	1336	1396
45°	1256	1332	1411
50°	1212	1332	1437
55°	1160	1339	1468
60°	1090	1349	1486
65°	1005	1363	1496
70°	876	1365	1377
75°	722	1271	1112
80°	567	914	744
85°	442	352	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	3.2
10°-20°	139.5	9.2
20°-30°	211.8	14.0
30°-40°	256.7	17.0
40°-50°	270.5	17.9
50°-60°	252.5	16.7
60°-70°	201.8	13.3
70°-80°	111.0	7.3
80°-90°	19.6	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°	399.9	26.5
0°-40°	656.6	43.4
0°-60°	1179.6	78.0
0°-90°	1512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1512.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	513	512	509	512	512	49
15°	493	493	492	497	497	139
25°	454	456	458	465	466	209
35°	398	402	409	419	422	249
45°	330	336	350	366	371	254
55°	247	260	285	305	313	221
65°	158	178	214	232	235	155
75°	69	99	122	110	107	75
85°	14	18	11	7	6	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.5	513.5	513.5	513.5	513.5
2.5°	515.4	514.0	510.6	513.5	512.1
5°	513.0	511.6	509.2	512.5	511.6
7.5°	510.6	508.7	506.4	510.2	509.2
10°	505.9	504.4	503.0	506.4	505.9
12.5°	500.2	499.7	498.3	502.1	501.6
15°	493.0	493.0	492.1	496.8	496.8
17.5°	485.4	485.0	485.4	490.7	490.2
20°	476.4	476.4	476.9	483.1	483.1
22.5°	465.5	465.9	467.4	475.0	474.5
25°	454.5	455.5	458.3	465.0	465.9
27.5°	441.2	443.6	446.9	455.0	456.0
30°	428.9	430.3	435.5	443.1	445.0
32.5°	414.1	417.0	422.7	431.2	433.6
35°	398.4	402.2	408.9	419.3	421.7
37.5°	382.7	386.1	395.1	406.0	410.3
40°	365.1	370.8	380.4	392.7	397.5
42.5°	348.0	353.7	366.6	379.4	383.7
45°	330.0	336.1	349.9	365.6	370.8
47.5°	310.0	317.1	334.7	351.4	357.1
50°	289.5	298.6	318.1	336.6	343.3
52.5°	268.2	279.6	301.9	321.4	327.6
55°	247.2	259.6	285.3	305.2	312.8
57.5°	225.8	239.1	268.2	291.0	295.3
60°	202.5	218.7	250.6	270.5	276.2
62.5°	179.7	198.3	232.5	251.5	256.3
65°	157.8	177.8	214.0	231.5	234.9
67.5°	134.1	157.8	193.5	209.7	210.6
70°	111.3	138.8	173.5	181.1	175.0
72.5°	88.9	118.4	150.2	144.1	138.8
75°	69.4	99.4	122.2	109.8	107.0
77.5°	51.3	81.3	87.5	80.8	75.6
80°	36.6	64.2	59.0	50.4	48.0
82.5°	25.2	40.4	32.3	25.2	21.9
85°	14.3	18.1	11.4	7.1	5.7
87.5°	6.2	4.3	2.4	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)