

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: P308356

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-RDP-CP125-W2A-U-6500K**

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: P308356  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-20HE-UNV-L82765-RDP-CP125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

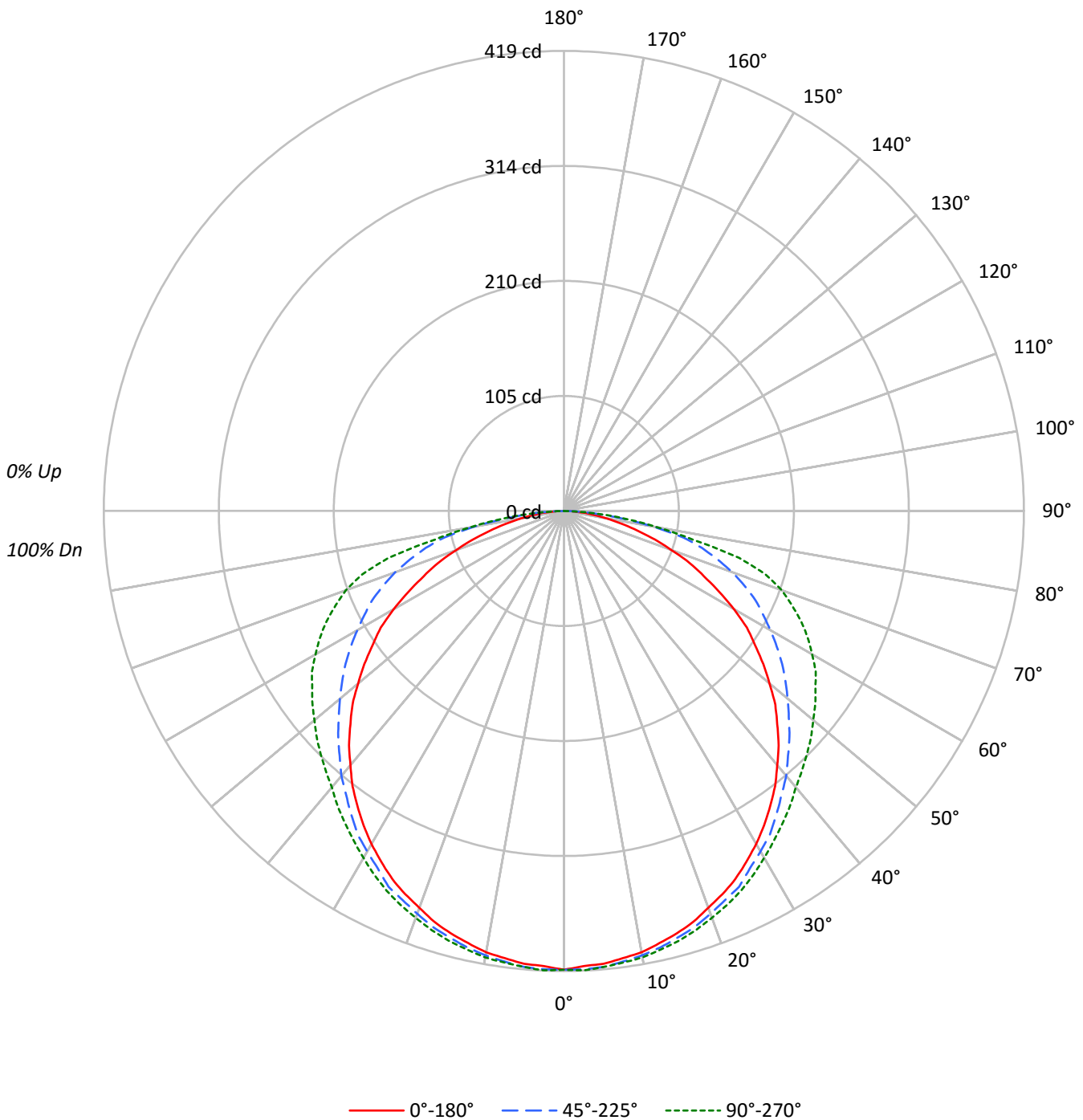
Lumens per Lamp: N/A  
Luminaire Lumens: 1330.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1124	1124	1124
5°	1118	1126	1126
10°	1115	1123	1128
15°	1109	1120	1129
20°	1101	1118	1129
25°	1098	1121	1133
30°	1088	1113	1134
35°	1077	1109	1141
40°	1062	1107	1155
45°	1046	1106	1192
50°	1024	1114	1241
55°	996	1138	1313
60°	963	1169	1406
65°	897	1227	1520
70°	824	1286	1662
75°	723	1353	1719
80°	621	1289	1350
85°	543	936	1028



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.5	3.0
10°-20°	113.5	8.5
20°-30°	173.1	13.0
30°-40°	211.4	15.9
40°-50°	226.0	17.0
50°-60°	218.1	16.4
60°-70°	187.8	14.1
70°-80°	127.1	9.6
80°-90°	33.5	2.5
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°	326.1	24.5
0°-40°	537.5	40.4
0°-60°	981.6	73.8
0°-90°	1330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1330.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	414	415	417	417	417	39
15°	398	399	402	404	405	112
25°	370	372	378	380	382	170
35°	328	331	338	344	347	205
45°	275	280	291	305	313	212
55°	212	219	243	267	280	190
65°	141	155	193	223	239	140
75°	70	92	130	156	165	75
85°	18	24	30	31	33	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	417.8	417.8	417.8	417.8	417.8
2.5°	414.8	415.8	417.8	417.8	418.8
5°	413.9	414.8	416.8	416.8	416.8
7.5°	410.9	411.9	413.9	414.8	414.8
10°	408.0	409.0	410.9	411.9	412.9
12.5°	403.1	404.1	407.0	409.0	409.0
15°	398.2	399.2	402.1	404.1	405.1
17.5°	392.3	394.3	397.2	399.2	400.2
20°	384.5	386.5	390.4	393.3	394.3
22.5°	377.7	379.6	383.5	386.5	388.4
25°	369.8	371.8	377.7	379.6	381.6
27.5°	360.1	362.0	366.9	370.8	373.7
30°	350.3	352.2	358.1	363.0	364.9
32.5°	339.5	342.4	349.3	353.2	356.1
35°	327.8	330.7	337.5	344.4	347.3
37.5°	316.0	319.0	325.8	334.6	338.5
40°	302.3	306.2	315.0	326.8	328.7
42.5°	289.6	294.5	302.3	316.0	320.9
45°	274.9	279.8	290.6	305.3	313.1
47.5°	261.2	266.1	277.9	295.5	305.3
50°	244.6	251.4	266.1	286.7	296.5
52.5°	228.9	234.8	254.4	276.9	288.6
55°	212.3	219.2	242.6	267.1	279.8
57.5°	197.6	203.5	229.9	257.3	272.0
60°	179.0	186.9	217.2	246.6	261.2
62.5°	159.5	171.2	204.5	234.8	250.5
65°	140.9	154.6	192.7	223.1	238.7
67.5°	124.3	138.9	178.1	210.4	225.0
70°	104.7	123.3	163.4	194.7	211.3
72.5°	87.1	107.6	146.8	178.1	192.7
75°	69.5	92.0	130.1	156.5	165.3
77.5°	53.8	75.3	111.5	119.4	120.3
80°	40.1	59.7	83.2	84.1	87.1
82.5°	27.4	42.1	53.8	58.7	59.7
85°	17.6	24.5	30.3	31.3	33.3
87.5°	7.8	8.8	10.8	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)