

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: P308078

Luminaire Tested: **22FCZ2-20HE-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: P308078  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
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-HRP-CP125-W2A-U-2700K  
Description: 2'X2' 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**

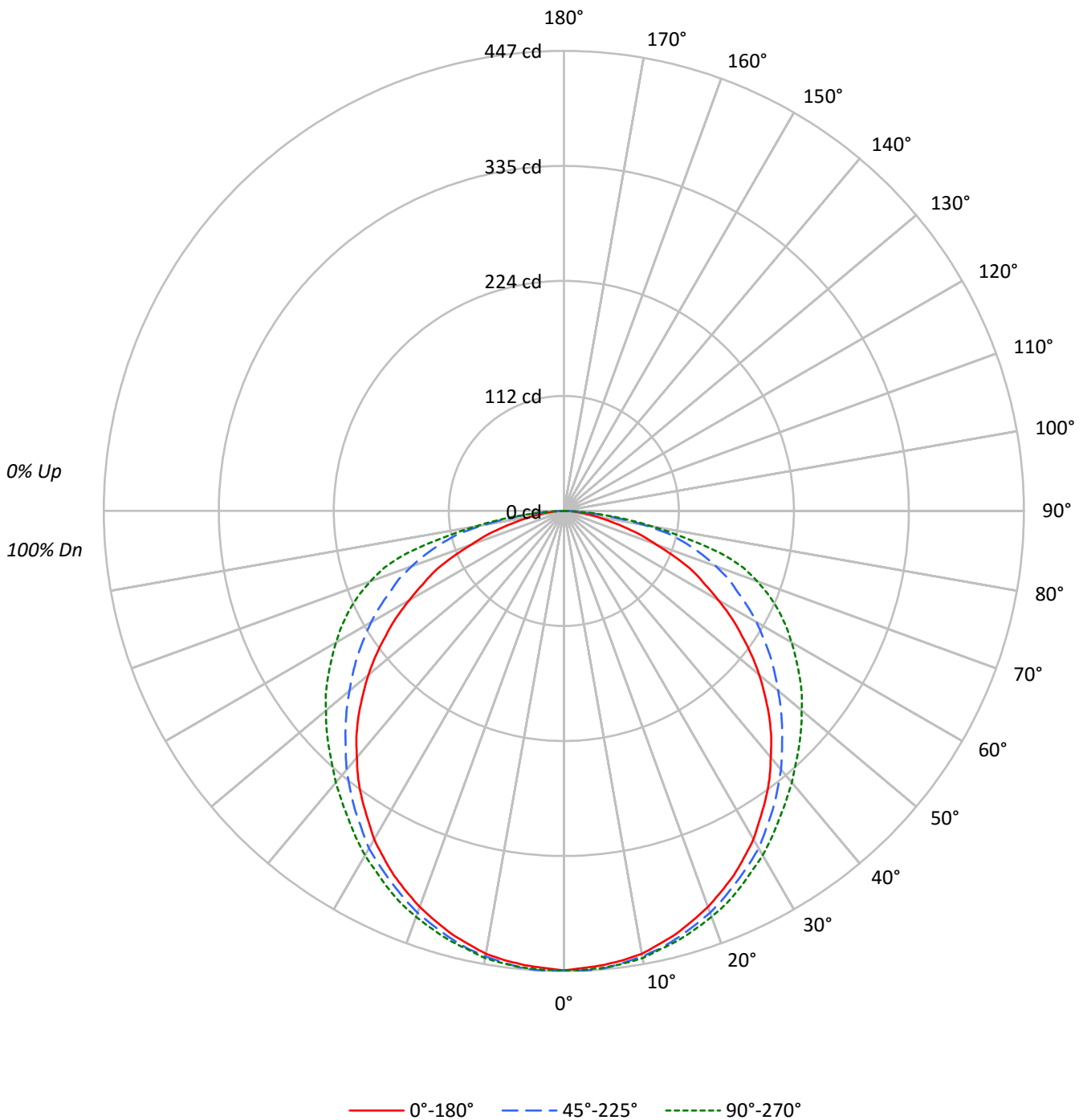
Lumens per Lamp: N/A  
Luminaire Lumens: 1355.0 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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				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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1201	1201	1201
5°	1196	1205	1203
10°	1194	1200	1205
15°	1183	1195	1203
20°	1172	1190	1202
25°	1160	1180	1200
30°	1145	1177	1201
35°	1123	1163	1199
40°	1099	1153	1210
45°	1074	1142	1230
50°	1038	1138	1263
55°	990	1147	1311
60°	934	1164	1376
65°	882	1186	1470
70°	753	1238	1574
75°	631	1288	1635
80°	516	1244	1364
85°	448	923	1003



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.3	3.1
10°-20°	121.0	8.9
20°-30°	183.3	13.5
30°-40°	221.4	16.3
40°-50°	232.6	17.2
50°-60°	218.8	16.2
60°-70°	182.5	13.5
70°-80°	120.9	8.9
80°-90°	32.2	2.4
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°	346.6	25.6
0°-40°	567.9	41.9
0°-60°	1019.4	75.2
0°-90°	1355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1355.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	443	444	446	446	445	42
15°	425	426	429	431	432	120
25°	391	393	398	403	404	180
35°	342	345	354	362	365	214
45°	282	286	300	315	323	217
55°	211	220	244	269	280	189
65°	138	150	186	217	231	135
75°	61	85	124	150	157	66
85°	14	22	30	32	32	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	446.2	446.2	446.2	446.2	446.2
2.5°	444.5	445.3	447.0	447.0	446.2
5°	442.8	443.6	446.2	446.2	445.3
7.5°	440.2	441.1	442.8	444.5	443.6
10°	436.8	437.6	439.3	441.1	441.1
12.5°	430.8	431.7	435.1	435.9	435.9
15°	424.8	426.5	429.1	430.8	431.7
17.5°	417.1	418.8	422.3	425.7	425.7
20°	409.4	411.1	415.4	418.8	419.7
22.5°	400.0	402.6	406.9	411.1	412.9
25°	390.6	393.2	397.5	402.6	404.3
27.5°	379.5	382.1	388.1	394.0	394.9
30°	368.4	371.0	378.7	383.8	386.4
32.5°	354.7	358.1	365.8	373.5	376.1
35°	341.9	345.3	353.9	361.6	365.0
37.5°	328.2	331.6	341.1	350.5	354.7
40°	312.8	317.1	328.2	338.5	344.5
42.5°	298.3	302.6	313.7	327.4	333.4
45°	282.1	286.3	300.0	315.4	323.1
47.5°	265.0	270.1	286.3	305.2	312.8
50°	247.9	253.9	271.8	293.2	301.7
52.5°	229.9	237.6	258.1	281.2	291.5
55°	211.1	220.5	244.5	269.3	279.5
57.5°	193.2	201.7	229.9	256.4	267.5
60°	173.5	184.6	216.3	243.6	255.6
62.5°	154.7	166.7	201.7	230.8	243.6
65°	138.5	150.4	186.3	217.1	230.8
67.5°	117.1	133.3	173.5	202.6	216.3
70°	95.7	118.0	157.3	187.2	200.0
72.5°	79.5	100.9	141.0	171.0	182.9
75°	60.7	84.6	123.9	149.6	157.3
77.5°	45.3	70.1	106.0	118.8	119.7
80°	33.3	53.9	80.3	84.6	88.0
82.5°	23.1	37.6	52.1	57.3	59.0
85°	14.5	22.2	29.9	32.5	32.5
87.5°	7.7	8.5	10.3	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)