

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: P308400

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-5700K**

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: P308400  
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: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-5700K  
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**

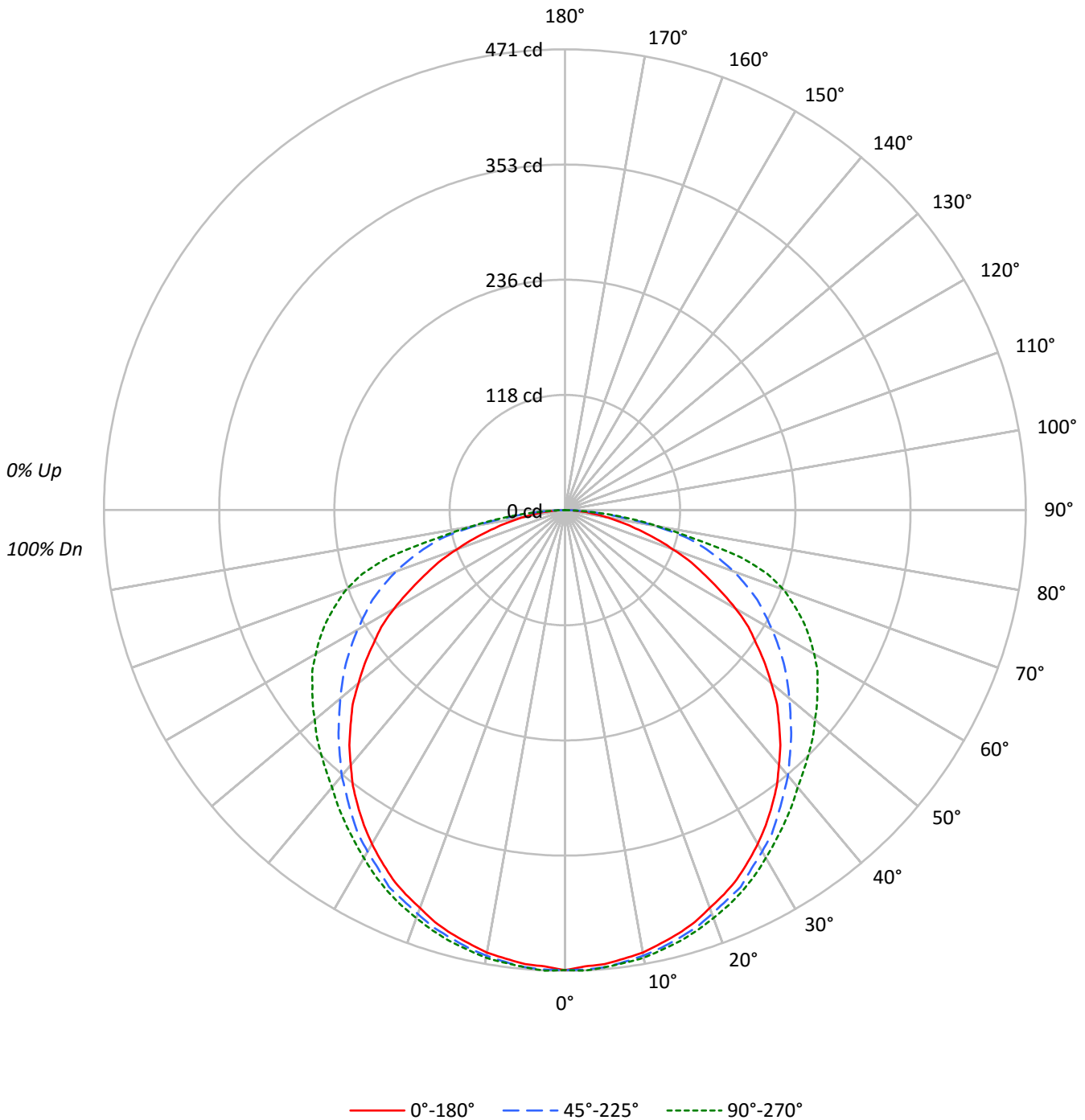
Lumens per Lamp: N/A  
Luminaire Lumens: 1497.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	1265	1265	1265
5°	1258	1267	1267
10°	1255	1264	1270
15°	1249	1261	1270
20°	1239	1258	1271
25°	1236	1262	1275
30°	1225	1253	1276
35°	1212	1248	1284
40°	1195	1246	1300
45°	1178	1245	1341
50°	1153	1254	1397
55°	1121	1281	1478
60°	1084	1316	1582
65°	1010	1381	1711
70°	927	1447	1872
75°	813	1523	1935
80°	700	1450	1519
85°	611	1053	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.5	3.0
10°-20°	127.7	8.5
20°-30°	194.9	13.0
30°-40°	237.9	15.9
40°-50°	254.4	17.0
50°-60°	245.5	16.4
60°-70°	211.4	14.1
70°-80°	143.0	9.6
80°-90°	37.7	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°	367.0	24.5
0°-40°	605.0	40.4
0°-60°	1104.9	73.8
0°-90°	1497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1497.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	466	467	469	469	469	44
15°	448	449	453	455	456	126
25°	416	418	425	427	430	192
35°	369	372	380	388	391	231
45°	310	315	327	344	352	239
55°	239	247	273	301	315	214
65°	159	174	217	251	269	158
75°	78	104	146	176	186	84
85°	20	28	34	35	37	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	470.2	470.2	470.2	470.2	470.2
2.5°	466.9	468.0	470.2	470.2	471.3
5°	465.8	466.9	469.1	469.1	469.1
7.5°	462.5	463.6	465.8	466.9	466.9
10°	459.2	460.3	462.5	463.6	464.7
12.5°	453.7	454.8	458.1	460.3	460.3
15°	448.2	449.3	452.6	454.8	455.9
17.5°	441.6	443.8	447.1	449.3	450.4
20°	432.8	435.0	439.4	442.7	443.8
22.5°	425.1	427.3	431.7	435.0	437.2
25°	416.3	418.5	425.1	427.3	429.5
27.5°	405.3	407.5	413.0	417.4	420.7
30°	394.2	396.5	403.1	408.6	410.8
32.5°	382.1	385.4	393.1	397.6	400.9
35°	368.9	372.2	379.9	387.6	390.9
37.5°	355.7	359.0	366.7	376.6	381.0
40°	340.3	344.7	354.6	367.8	370.0
42.5°	326.0	331.5	340.3	355.7	361.2
45°	309.5	315.0	327.1	343.6	352.4
47.5°	294.0	299.5	312.8	332.6	343.6
50°	275.3	283.0	299.5	322.7	333.7
52.5°	257.7	264.3	286.3	311.7	324.9
55°	239.0	246.7	273.1	300.6	315.0
57.5°	222.5	229.1	258.8	289.6	306.1
60°	201.5	210.3	244.5	277.5	294.0
62.5°	179.5	192.7	230.2	264.3	281.9
65°	158.6	174.0	216.9	251.1	268.7
67.5°	139.9	156.4	200.4	236.8	253.3
70°	117.8	138.8	183.9	219.1	237.9
72.5°	98.0	121.1	165.2	200.4	216.9
75°	78.2	103.5	146.5	176.2	186.1
77.5°	60.6	84.8	125.5	134.4	135.5
80°	45.2	67.2	93.6	94.7	98.0
82.5°	30.8	47.4	60.6	66.1	67.2
85°	19.8	27.5	34.1	35.2	37.4
87.5°	8.8	9.9	12.1	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)