

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: P308556

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA08-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: P308556  
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: 22FCZ2-44HE-UNV-L82765-RDP-CA08-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" ACRYLIC 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**

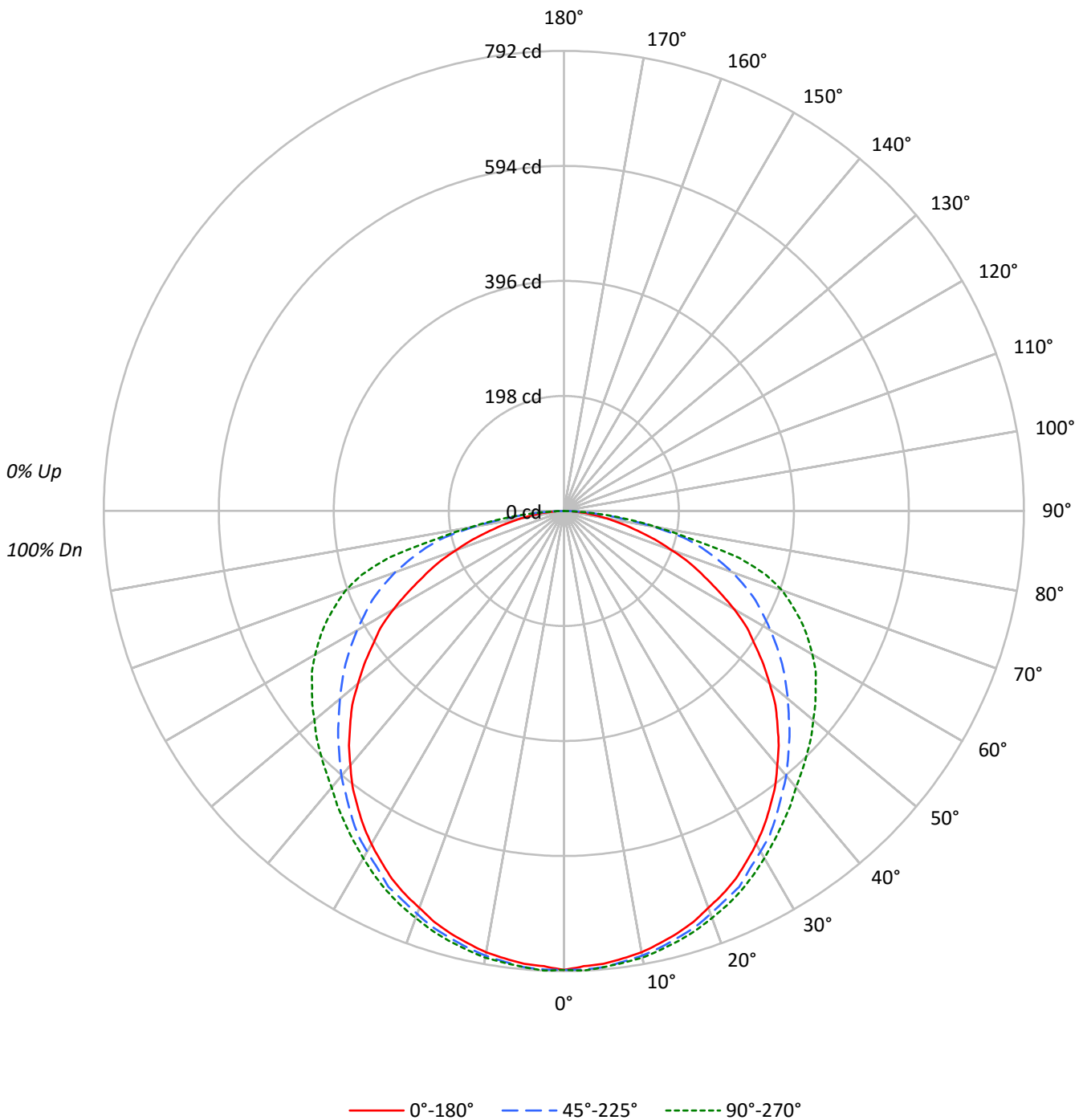
Lumens per Lamp: N/A  
Luminaire Lumens: 2515.0 lumens  
Efficiency: N/A  
Efficacy: 68.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2126	2126	2126
5°	2114	2129	2129
10°	2108	2123	2134
15°	2098	2118	2134
20°	2082	2114	2135
25°	2076	2120	2143
30°	2058	2104	2144
35°	2036	2097	2158
40°	2008	2093	2184
45°	1979	2091	2253
50°	1936	2107	2347
55°	1884	2152	2482
60°	1822	2210	2659
65°	1696	2321	2874
70°	1558	2431	3144
75°	1366	2559	3251
80°	1176	2438	2552
85°	1028	1772	1942



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.7	3.0
10°-20°	214.6	8.5
20°-30°	327.4	13.0
30°-40°	399.7	15.9
40°-50°	427.4	17.0
50°-60°	412.5	16.4
60°-70°	355.1	14.1
70°-80°	240.3	9.6
80°-90°	63.4	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°	616.7	24.5
0°-40°	1016.3	40.4
0°-60°	1856.2	73.8
0°-90°	2515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2515.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	783	784	788	788	788	74
15°	753	755	760	764	766	212
25°	699	703	714	718	722	322
35°	620	625	638	651	657	388
45°	520	529	550	577	592	401
55°	402	414	459	505	529	360
65°	266	292	364	422	451	265
75°	131	174	246	296	313	141
85°	33	46	57	59	63	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	790.0	790.0	790.0	790.0	790.0
2.5°	784.5	786.3	790.0	790.0	791.9
5°	782.6	784.5	788.2	788.2	788.2
7.5°	777.1	778.9	782.6	784.5	784.5
10°	771.5	773.4	777.1	778.9	780.8
12.5°	762.3	764.1	769.7	773.4	773.4
15°	753.0	754.9	760.4	764.1	766.0
17.5°	741.9	745.6	751.2	754.9	756.7
20°	727.1	730.8	738.2	743.8	745.6
22.5°	714.1	717.9	725.3	730.8	734.5
25°	699.3	703.0	714.1	717.9	721.6
27.5°	680.8	684.5	693.8	701.2	706.7
30°	662.3	666.0	677.1	686.4	690.1
32.5°	642.0	647.5	660.5	667.9	673.4
35°	619.8	625.3	638.3	651.2	656.8
37.5°	597.6	603.1	616.1	632.7	640.1
40°	571.7	579.1	595.7	617.9	621.6
42.5°	547.6	556.9	571.7	597.6	606.8
45°	519.9	529.1	549.5	577.2	592.0
47.5°	494.0	503.2	525.4	558.7	577.2
50°	462.5	475.5	503.2	542.1	560.6
52.5°	432.9	444.0	481.0	523.6	545.8
55°	401.5	414.4	458.8	505.1	529.1
57.5°	373.7	384.8	434.8	486.6	514.3
60°	338.6	353.4	410.7	466.2	494.0
62.5°	301.6	323.8	386.7	444.0	473.6
65°	266.4	292.3	364.5	421.8	451.4
67.5°	235.0	262.7	336.7	397.8	425.5
70°	198.0	233.1	309.0	368.2	399.6
72.5°	164.7	203.5	277.5	336.7	364.5
75°	131.4	173.9	246.1	296.0	312.7
77.5°	101.8	142.5	210.9	225.7	227.6
80°	75.9	112.9	157.3	159.1	164.7
82.5°	51.8	79.6	101.8	111.0	112.9
85°	33.3	46.3	57.4	59.2	62.9
87.5°	14.8	16.7	20.4	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)