

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: P302518

Luminaire Tested: **FSP-22-21-30-CA08**

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: P302518  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-22-21-30-CA08  
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"  
Light Source: (126) 3000 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

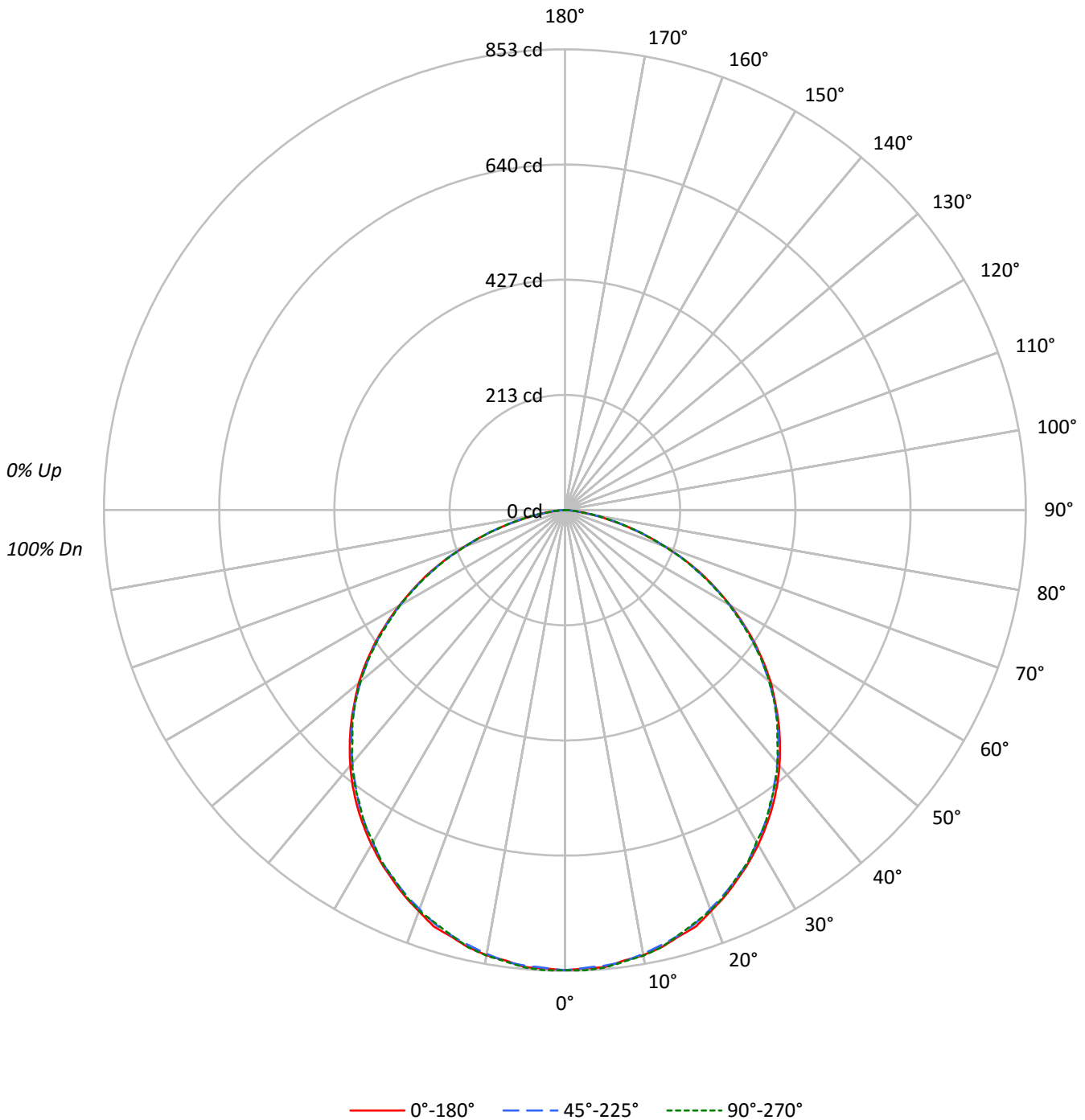
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2310.8 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.7  
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	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	37	35
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	2292	2292	2292
5°	2294	2287	2296
10°	2286	2279	2288
15°	2276	2271	2268
20°	2262	2252	2260
25°	2242	2234	2231
30°	2224	2210	2204
35°	2201	2183	2177
40°	2170	2148	2152
45°	2130	2116	2116
50°	2084	2065	2069
55°	2011	1994	1990
60°	1906	1897	1892
65°	1776	1753	1747
70°	1545	1545	1538
75°	1268	1259	1259
80°	903	876	917
85°	469	469	469



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	3.5
10°-20°	230.1	10.0
20°-30°	347.2	15.0
30°-40°	416.9	18.0
40°-50°	429.8	18.6
50°-60°	380.7	16.5
60°-70°	272.7	11.8
70°-80°	130.2	5.6
80°-90°	22.7	1.0
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°	657.8	28.5
0°-40°	1074.7	46.5
0°-60°	1885.2	81.6
0°-90°	2310.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2310.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	849	846	846	847	850	81
15°	817	818	815	813	814	231
25°	755	754	752	752	752	348
35°	670	670	664	666	663	419
45°	560	560	556	555	556	431
55°	429	430	425	425	424	382
65°	279	277	275	274	274	274
75°	122	119	121	123	121	130
85°	15	16	15	15	15	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	851.9	851.9	851.9	851.9	851.9
2.5°	849.2	849.2	848.3	850.1	852.8
5°	849.2	846.5	846.5	847.4	850.1
7.5°	841.1	842.0	842.9	841.1	842.9
10°	836.7	834.9	834.0	835.8	837.5
12.5°	828.6	826.8	825.0	826.8	828.6
15°	816.9	817.8	815.1	813.3	814.2
17.5°	808.0	802.6	802.6	801.7	800.8
20°	790.0	788.2	786.4	787.3	789.1
22.5°	773.9	773.0	770.3	771.2	772.1
25°	755.0	754.2	752.4	752.4	751.5
27.5°	736.2	735.3	733.5	732.6	734.4
30°	715.6	716.5	711.1	711.1	709.3
32.5°	693.2	693.2	688.7	686.9	689.6
35°	669.9	669.9	664.5	666.3	662.7
37.5°	644.8	646.5	637.6	640.3	639.4
40°	617.8	616.1	611.6	617.0	612.5
42.5°	589.2	591.8	585.6	585.6	582.0
45°	559.6	559.6	556.0	555.1	556.0
47.5°	528.2	529.1	526.4	527.3	525.5
50°	497.7	496.8	493.2	492.3	494.1
52.5°	463.6	464.5	460.0	460.9	460.0
55°	428.6	430.4	425.1	425.1	424.2
57.5°	391.9	391.9	389.2	389.2	387.4
60°	354.2	356.9	352.4	352.4	351.5
62.5°	315.6	315.6	313.9	314.8	313.0
65°	278.9	277.1	275.3	274.4	274.4
67.5°	238.5	236.7	238.5	235.8	236.7
70°	196.4	197.3	196.4	196.4	195.5
72.5°	158.7	158.7	159.6	158.7	158.7
75°	122.0	119.3	121.1	122.9	121.1
77.5°	86.1	86.1	87.9	87.9	88.8
80°	58.3	56.5	56.5	58.3	59.2
82.5°	32.3	33.2	33.2	33.2	33.2
85°	15.2	16.1	15.2	15.2	15.2
87.5°	7.2	7.2	6.3	5.4	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)