

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: P302531

Luminaire Tested: **FSP-22-21-40-CA125**

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: P302531  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-9)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-22-21-40-CA125  
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .125"  
Light Source: (126) 4000 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

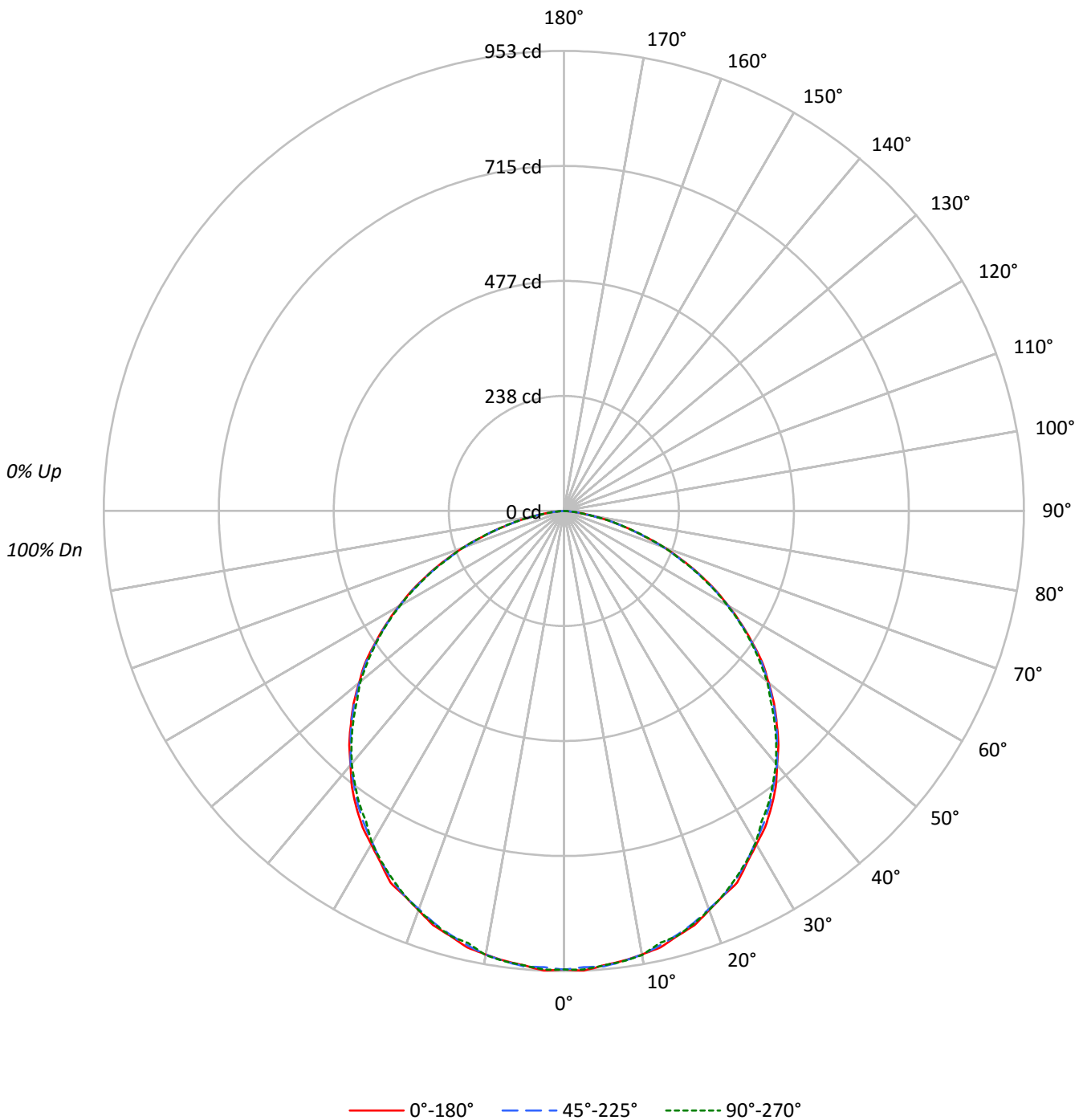
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2574.9 lumens  
Efficiency: N/A  
Efficacy: 125.0 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): 20.6  
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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	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	42	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	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°	2556	2556	2556
5°	2552	2558	2552
10°	2549	2549	2552
15°	2537	2532	2537
20°	2519	2513	2519
25°	2523	2502	2496
30°	2478	2465	2468
35°	2462	2442	2429
40°	2414	2414	2400
45°	2374	2371	2348
50°	2318	2314	2301
55°	2240	2231	2221
60°	2122	2116	2105
65°	1968	1954	1948
70°	1752	1721	1744
75°	1408	1397	1408
80°	1010	979	979
85°	494	494	494



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.9	3.5
10°-20°	256.7	10.0
20°-30°	387.7	15.1
30°-40°	464.9	18.1
40°-50°	478.8	18.6
50°-60°	424.0	16.5
60°-70°	303.3	11.8
70°-80°	145.2	5.6
80°-90°	24.5	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°	734.3	28.5
0°-40°	1199.1	46.6
0°-60°	2102.0	81.6
0°-90°	2574.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2574.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	945	944	947	945	945	90
15°	911	911	909	909	911	257
25°	850	844	843	840	841	389
35°	749	745	743	741	739	468
45°	624	623	623	620	617	481
55°	478	476	476	472	474	426
65°	309	307	307	307	306	305
75°	135	135	134	134	135	146
85°	16	16	16	16	16	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	949.9	949.9	949.9	949.9	949.9
2.5°	952.9	949.9	945.9	948.9	950.9
5°	944.9	943.9	946.9	944.9	944.9
7.5°	939.9	941.9	940.9	940.9	940.9
10°	932.9	932.9	932.9	931.9	933.9
12.5°	925.9	920.8	921.8	921.8	916.8
15°	910.8	910.8	908.8	908.8	910.8
17.5°	899.8	897.8	894.8	894.8	895.8
20°	879.7	879.7	877.7	875.7	879.7
22.5°	862.7	866.7	862.7	858.6	861.7
25°	849.6	843.6	842.6	839.6	840.6
27.5°	821.5	818.5	819.5	817.5	818.5
30°	797.5	795.5	793.4	791.4	794.4
32.5°	776.4	774.4	769.4	768.4	762.4
35°	749.3	745.3	743.3	741.3	739.3
37.5°	721.2	717.2	714.2	713.2	711.2
40°	687.1	685.1	687.1	682.1	683.1
42.5°	658.0	656.0	653.0	651.0	651.0
45°	623.9	622.9	622.9	619.9	616.9
47.5°	590.8	589.8	587.8	583.8	580.8
50°	553.7	554.7	552.7	548.7	549.7
52.5°	519.6	513.6	516.6	512.6	511.6
55°	477.5	475.5	475.5	472.5	473.5
57.5°	436.3	436.3	434.3	434.3	433.3
60°	394.2	393.2	393.2	392.2	391.2
62.5°	353.1	352.1	350.1	350.1	349.1
65°	309.0	306.9	306.9	306.9	305.9
67.5°	264.8	262.8	261.8	261.8	260.8
70°	222.7	219.7	218.7	218.7	221.7
72.5°	175.5	176.5	175.5	176.5	177.5
75°	135.4	135.4	134.4	134.4	135.4
77.5°	98.3	98.3	98.3	98.3	99.3
80°	65.2	63.2	63.2	63.2	63.2
82.5°	36.1	36.1	36.1	37.1	38.1
85°	16.0	16.0	16.0	16.0	16.0
87.5°	6.0	6.0	6.0	6.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)