

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: P302551

Luminaire Tested: **FSP-22-32-35-CP187**

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: P302551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-22-32-35-CP187  
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .187"  
Light Source: (210) 3500 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

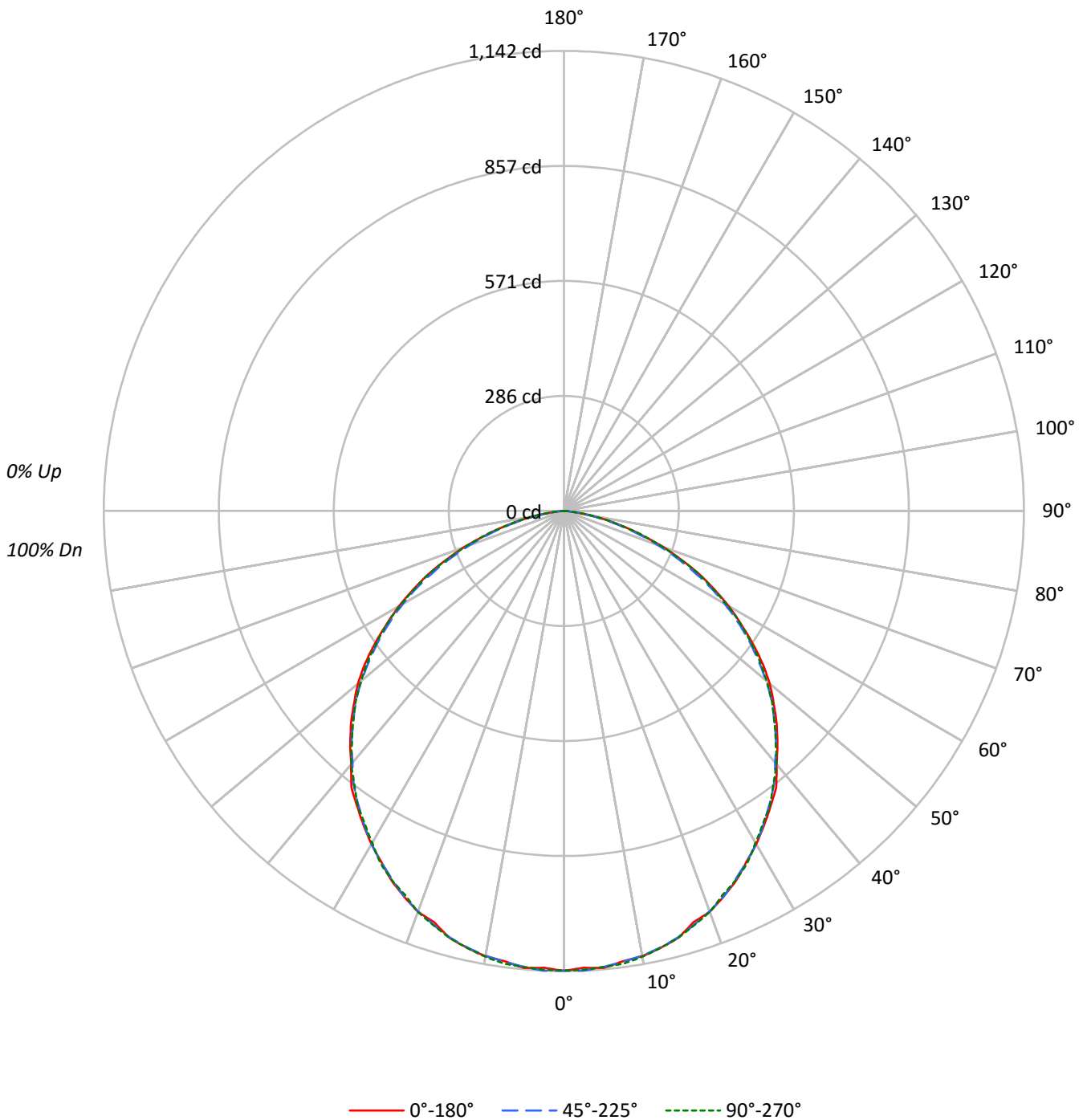
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3069.4 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.8  
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	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	3071	3071	3071
5°	3076	3069	3069
10°	3066	3063	3070
15°	3056	3052	3056
20°	3033	3029	3033
25°	3005	2994	3002
30°	2968	2968	2957
35°	2939	2922	2931
40°	2885	2868	2885
45°	2842	2813	2813
50°	2793	2745	2751
55°	2680	2632	2656
60°	2544	2482	2523
65°	2358	2261	2358
70°	2068	1969	2058
75°	1695	1576	1655
80°	1156	1097	1175
85°	506	546	546



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.0	3.5
10°-20°	309.1	10.1
20°-30°	465.4	15.2
30°-40°	557.5	18.2
40°-50°	572.4	18.6
50°-60°	504.2	16.4
60°-70°	357.7	11.7
70°-80°	168.5	5.5
80°-90°	26.6	0.9
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°	882.5	28.8
0°-40°	1440.0	46.9
0°-60°	2516.6	82.0
0°-90°	3069.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3069.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1139	1141	1136	1136	1136	108
15°	1097	1094	1096	1096	1097	309
25°	1012	1012	1008	1011	1011	466
35°	895	892	890	890	892	560
45°	747	744	739	743	739	576
55°	571	566	561	565	566	510
65°	370	360	355	364	370	364
75°	163	155	152	159	159	173
85°	16	16	18	18	18	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1141.1	1141.1	1141.1	1141.1	1141.1
2.5°	1134.8	1143.6	1142.4	1139.8	1139.8
5°	1138.6	1141.1	1136.0	1136.0	1136.0
7.5°	1127.2	1132.3	1128.5	1128.5	1133.5
10°	1122.1	1124.7	1120.9	1120.9	1123.4
12.5°	1110.8	1112.0	1109.5	1109.5	1110.8
15°	1096.9	1094.3	1095.6	1095.6	1096.9
17.5°	1070.3	1080.4	1076.7	1080.4	1077.9
20°	1059.0	1060.2	1057.7	1056.4	1059.0
22.5°	1036.2	1032.4	1036.2	1033.7	1031.2
25°	1012.2	1012.2	1008.4	1010.9	1010.9
27.5°	981.9	983.1	981.9	981.9	985.7
30°	955.3	955.3	955.3	954.1	951.5
32.5°	925.0	925.0	922.5	923.7	920.0
35°	894.7	892.2	889.6	889.6	892.2
37.5°	865.6	860.6	856.8	856.8	854.2
40°	821.4	823.9	816.3	817.6	821.4
42.5°	784.7	784.7	779.7	783.5	778.4
45°	746.8	744.3	739.2	743.0	739.2
47.5°	706.4	702.6	700.1	698.8	701.3
50°	667.2	658.4	655.8	657.1	657.1
52.5°	621.7	612.9	607.8	611.6	614.1
55°	571.2	566.1	561.1	564.9	566.1
57.5°	520.6	515.6	511.8	514.3	519.4
60°	472.6	465.0	461.2	466.3	468.8
62.5°	420.8	413.2	409.4	417.0	415.7
65°	370.3	360.1	355.1	363.9	370.3
67.5°	314.7	308.3	302.0	310.9	312.1
70°	262.8	252.7	250.2	261.6	261.6
72.5°	208.5	204.7	199.7	208.5	211.0
75°	163.0	155.4	151.6	159.2	159.2
77.5°	115.0	111.2	108.7	115.0	117.5
80°	74.6	70.8	70.8	73.3	75.8
82.5°	40.4	40.4	39.2	41.7	43.0
85°	16.4	16.4	17.7	17.7	17.7
87.5°	3.8	3.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)