

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: P302554

Luminaire Tested: **FSP-22-32-40-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: P302554  
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-22-32-40-CA08  
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"  
Light Source: (168) 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**

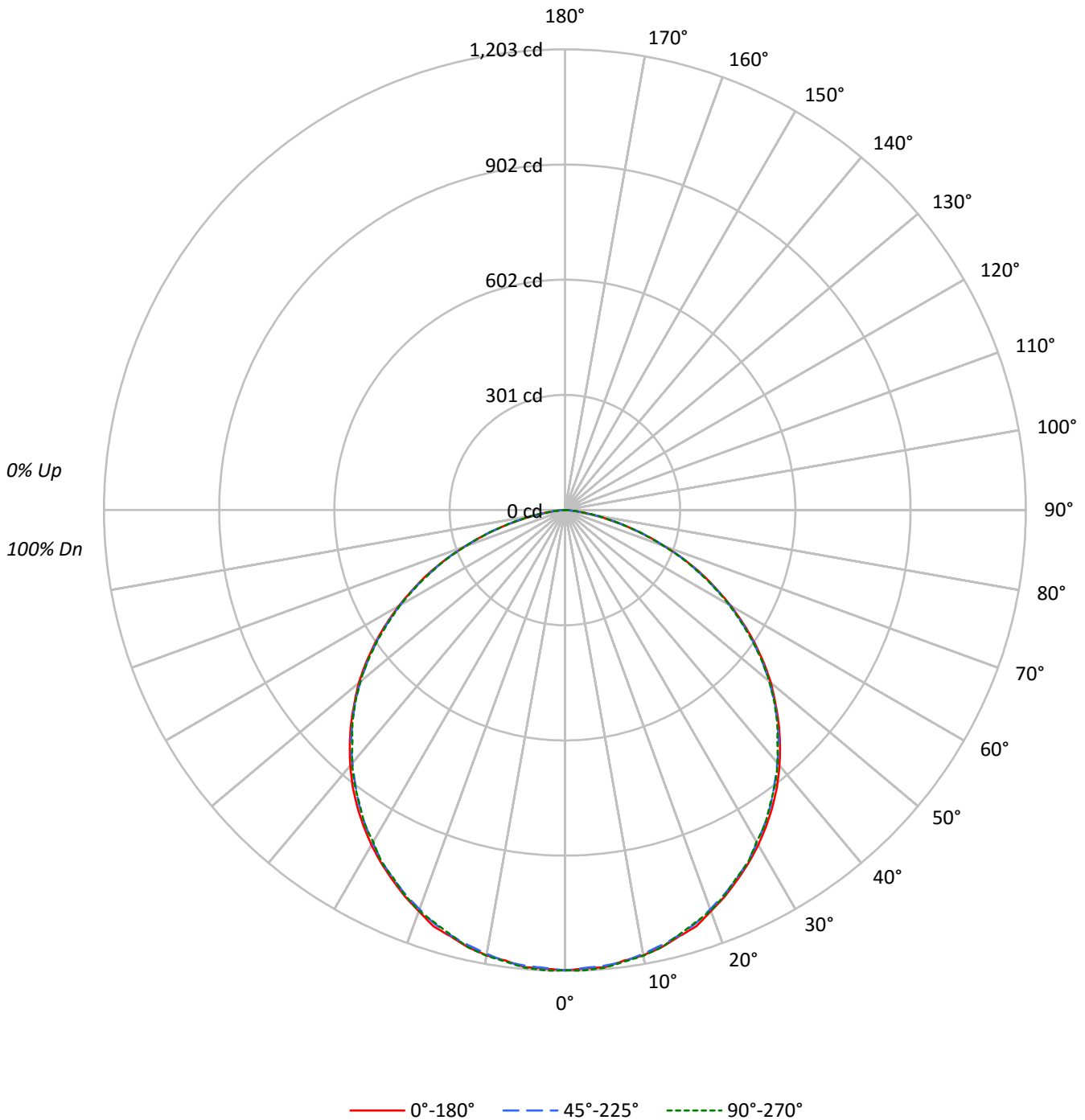
Lumens per Lamp: N/A  
Luminaire Lumens: 3259.5 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.2  
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°	3234	3234	3234
5°	3236	3226	3239
10°	3225	3215	3228
15°	3210	3203	3200
20°	3191	3177	3188
25°	3162	3151	3147
30°	3136	3117	3109
35°	3104	3079	3071
40°	3061	3031	3035
45°	3004	2984	2984
50°	2939	2912	2918
55°	2837	2813	2807
60°	2689	2675	2668
65°	2505	2472	2465
70°	2179	2179	2170
75°	1788	1776	1776
80°	1274	1235	1294
85°	664	664	664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.5	3.5
10°-20°	324.6	10.0
20°-30°	489.8	15.0
30°-40°	588.1	18.0
40°-50°	606.2	18.6
50°-60°	537.0	16.5
60°-70°	384.6	11.8
70°-80°	183.7	5.6
80°-90°	32.0	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°	927.9	28.5
0°-40°	1516.0	46.5
0°-60°	2659.2	81.6
0°-90°	3259.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3259.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1198	1194	1194	1195	1199	114
15°	1152	1154	1150	1147	1148	326
25°	1065	1064	1061	1061	1060	491
35°	945	945	937	940	935	591
45°	789	789	784	783	784	608
55°	605	607	600	600	598	539
65°	393	391	388	387	387	387
75°	172	168	171	173	171	184
85°	22	23	22	22	22	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1201.7	1201.7	1201.7	1201.7	1201.7
2.5°	1197.9	1197.9	1196.6	1199.1	1202.9
5°	1197.9	1194.1	1194.1	1195.3	1199.1
7.5°	1186.5	1187.8	1189.0	1186.5	1189.0
10°	1180.2	1177.6	1176.4	1178.9	1181.4
12.5°	1168.8	1166.2	1163.7	1166.2	1168.8
15°	1152.3	1153.6	1149.8	1147.3	1148.5
17.5°	1139.7	1132.1	1132.1	1130.8	1129.6
20°	1114.4	1111.9	1109.3	1110.6	1113.1
22.5°	1091.6	1090.4	1086.6	1087.8	1089.1
25°	1065.1	1063.8	1061.3	1061.3	1060.0
27.5°	1038.5	1037.2	1034.7	1033.4	1036.0
30°	1009.4	1010.7	1003.1	1003.1	1000.5
32.5°	977.8	977.8	971.5	968.9	972.7
35°	944.9	944.9	937.3	939.8	934.8
37.5°	909.5	912.0	899.4	903.1	901.9
40°	871.5	869.0	862.7	870.3	863.9
42.5°	831.0	834.8	826.0	826.0	820.9
45°	789.3	789.3	784.2	783.0	784.2
47.5°	745.0	746.3	742.5	743.8	741.2
50°	702.0	700.8	695.7	694.4	697.0
52.5°	654.0	655.2	648.9	650.2	648.9
55°	604.6	607.2	599.6	599.6	598.3
57.5°	552.8	552.8	549.0	549.0	546.4
60°	499.6	503.4	497.1	497.1	495.8
62.5°	445.2	445.2	442.7	444.0	441.5
65°	393.4	390.9	388.3	387.1	387.1
67.5°	336.5	333.9	336.5	332.7	333.9
70°	277.0	278.3	277.0	277.0	275.8
72.5°	223.9	223.9	225.2	223.9	223.9
75°	172.0	168.2	170.8	173.3	170.8
77.5°	121.4	121.4	124.0	124.0	125.2
80°	82.2	79.7	79.7	82.2	83.5
82.5°	45.5	46.8	46.8	46.8	46.8
85°	21.5	22.8	21.5	21.5	21.5
87.5°	10.1	10.1	8.9	7.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)