

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: P302548

Luminaire Tested: **FSP-22-32-35-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: P302548  
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-22-32-35-CA08  
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"  
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

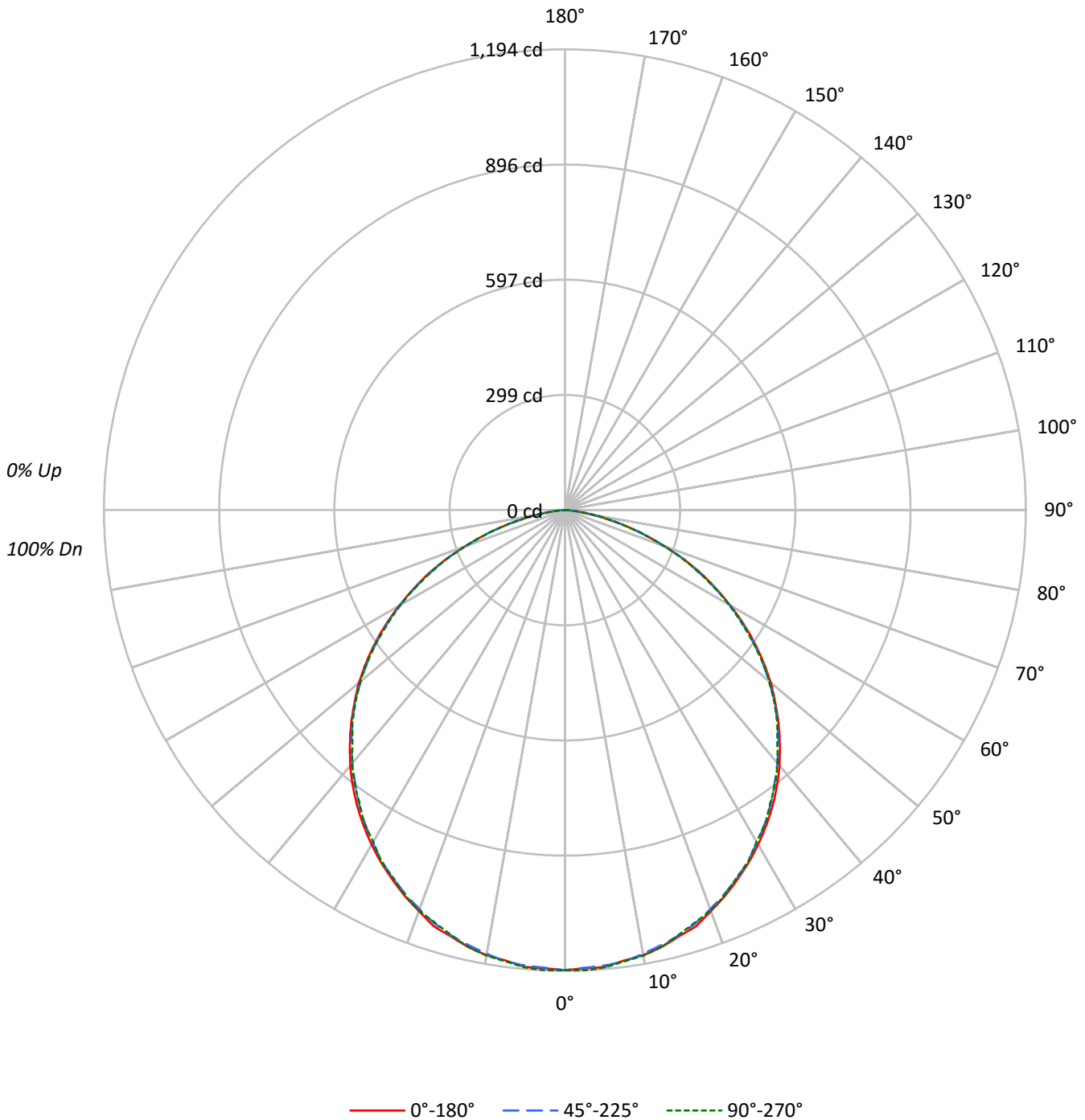
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3233.9 lumens  
Efficiency: N/A  
Efficacy: 112.3 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): 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	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°	3208	3208	3208
5°	3210	3200	3214
10°	3199	3189	3203
15°	3185	3178	3175
20°	3166	3152	3163
25°	3138	3126	3123
30°	3112	3092	3085
35°	3080	3055	3047
40°	3038	3007	3011
45°	2980	2961	2961
50°	2916	2889	2895
55°	2814	2791	2785
60°	2668	2654	2647
65°	2485	2453	2445
70°	2162	2162	2153
75°	1775	1761	1761
80°	1265	1226	1283
85°	658	658	658



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.6	3.5
10°-20°	322.0	10.0
20°-30°	485.9	15.0
30°-40°	583.5	18.0
40°-50°	601.5	18.6
50°-60°	532.7	16.5
60°-70°	381.6	11.8
70°-80°	182.2	5.6
80°-90°	31.7	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°	920.6	28.5
0°-40°	1504.1	46.5
0°-60°	2638.3	81.6
0°-90°	3233.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3233.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1188	1185	1185	1186	1190	113
15°	1143	1144	1141	1138	1140	323
25°	1057	1055	1053	1053	1052	487
35°	938	938	930	932	927	586
45°	783	783	778	777	778	604
55°	600	602	595	595	594	535
65°	390	388	385	384	384	384
75°	171	167	169	172	169	182
85°	21	23	21	21	21	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1192.2	1192.2	1192.2	1192.2	1192.2
2.5°	1188.5	1188.5	1187.2	1189.7	1193.5
5°	1188.5	1184.7	1184.7	1185.9	1189.7
7.5°	1177.2	1178.4	1179.7	1177.2	1179.7
10°	1170.9	1168.4	1167.1	1169.6	1172.1
12.5°	1159.6	1157.1	1154.6	1157.1	1159.6
15°	1143.3	1144.5	1140.8	1138.3	1139.5
17.5°	1130.7	1123.2	1123.2	1121.9	1120.7
20°	1105.6	1103.1	1100.6	1101.9	1104.4
22.5°	1083.0	1081.8	1078.0	1079.3	1080.5
25°	1056.7	1055.4	1052.9	1052.9	1051.7
27.5°	1030.3	1029.1	1026.6	1025.3	1027.8
30°	1001.5	1002.7	995.2	995.2	992.7
32.5°	970.1	970.1	963.8	961.3	965.1
35°	937.5	937.5	929.9	932.4	927.4
37.5°	902.3	904.8	892.3	896.0	894.8
40°	864.7	862.2	855.9	863.4	857.1
42.5°	824.5	828.3	819.5	819.5	814.5
45°	783.1	783.1	778.1	776.8	778.1
47.5°	739.2	740.4	736.7	737.9	735.4
50°	696.5	695.3	690.2	689.0	691.5
52.5°	648.8	650.1	643.8	645.1	643.8
55°	599.9	602.4	594.9	594.9	593.6
57.5°	548.4	548.4	544.7	544.7	542.1
60°	495.7	499.5	493.2	493.2	491.9
62.5°	441.7	441.7	439.2	440.5	438.0
65°	390.3	387.8	385.3	384.0	384.0
67.5°	333.8	331.3	333.8	330.1	331.3
70°	274.8	276.1	274.8	274.8	273.6
72.5°	222.1	222.1	223.4	222.1	222.1
75°	170.7	166.9	169.4	171.9	169.4
77.5°	120.5	120.5	123.0	123.0	124.2
80°	81.6	79.1	79.1	81.6	82.8
82.5°	45.2	46.4	46.4	46.4	46.4
85°	21.3	22.6	21.3	21.3	21.3
87.5°	10.0	10.0	8.8	7.5	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)