

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: P302536

Luminaire Tested: **FSP-22-25HE-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: P302536
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-22-25HE-35-CA08
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"
Light Source: (224) 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

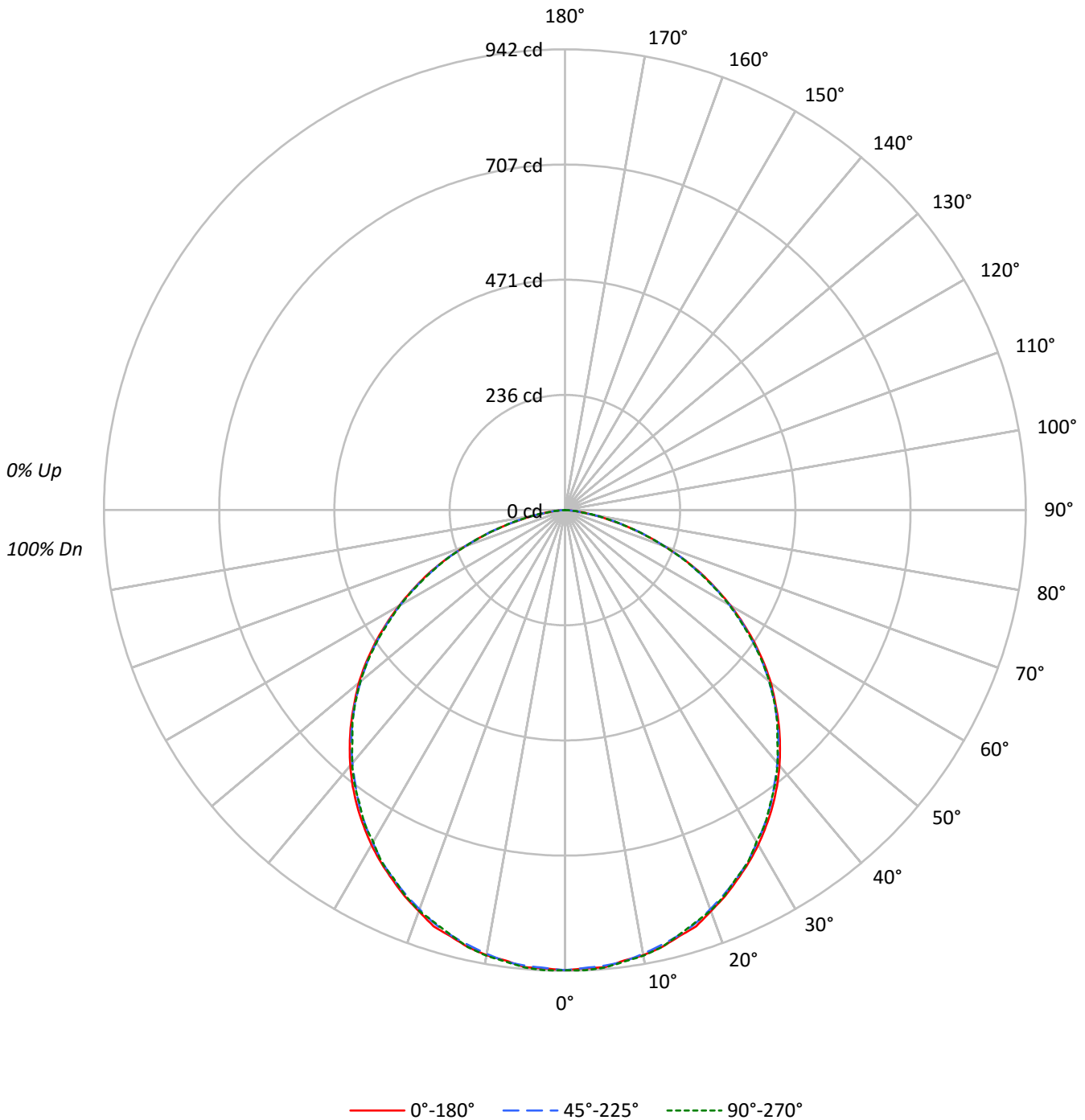
Lumens per Lamp: N/A
Luminaire Lumens: 2552.0 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	2532	2532	2532
5°	2534	2525	2536
10°	2525	2517	2528
15°	2513	2508	2505
20°	2499	2487	2496
25°	2476	2467	2464
30°	2456	2440	2434
35°	2430	2411	2404
40°	2397	2373	2376
45°	2352	2337	2337
50°	2301	2280	2285
55°	2221	2202	2198
60°	2105	2095	2089
65°	1961	1936	1929
70°	1707	1707	1699
75°	1400	1390	1390
80°	998	967	1013
85°	519	519	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	3.5
10°-20°	254.1	10.0
20°-30°	383.5	15.0
30°-40°	460.4	18.0
40°-50°	474.6	18.6
50°-60°	420.4	16.5
60°-70°	301.1	11.8
70°-80°	143.8	5.6
80°-90°	25.0	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°	726.5	28.5
0°-40°	1186.9	46.5
0°-60°	2082.0	81.6
0°-90°	2552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	938	935	935	936	939	89
15°	902	903	900	898	899	255
25°	834	833	831	831	830	385
35°	740	740	734	736	732	463
45°	618	618	614	613	614	476
55°	473	475	469	469	468	422
65°	308	306	304	303	303	303
75°	135	132	134	136	134	144
85°	17	18	17	17	17	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	940.8	940.8	940.8	940.8	940.8
2.5°	937.9	937.9	936.9	938.9	941.8
5°	937.9	934.9	934.9	935.9	938.9
7.5°	928.9	929.9	930.9	928.9	930.9
10°	924.0	922.0	921.0	923.0	925.0
12.5°	915.1	913.1	911.1	913.1	915.1
15°	902.2	903.2	900.2	898.2	899.2
17.5°	892.3	886.4	886.4	885.4	884.4
20°	872.5	870.5	868.5	869.5	871.5
22.5°	854.7	853.7	850.7	851.7	852.7
25°	833.9	832.9	830.9	830.9	829.9
27.5°	813.1	812.1	810.1	809.1	811.1
30°	790.3	791.3	785.3	785.3	783.4
32.5°	765.5	765.5	760.6	758.6	761.6
35°	739.8	739.8	733.9	735.8	731.9
37.5°	712.1	714.0	704.1	707.1	706.1
40°	682.4	680.4	675.4	681.4	676.4
42.5°	650.7	653.6	646.7	646.7	642.7
45°	618.0	618.0	614.0	613.0	614.0
47.5°	583.3	584.3	581.3	582.3	580.3
50°	549.6	548.7	544.7	543.7	545.7
52.5°	512.0	513.0	508.1	509.0	508.1
55°	473.4	475.4	469.4	469.4	468.4
57.5°	432.8	432.8	429.8	429.8	427.8
60°	391.2	394.2	389.2	389.2	388.2
62.5°	348.6	348.6	346.6	347.6	345.6
65°	308.0	306.0	304.0	303.0	303.0
67.5°	263.4	261.5	263.4	260.5	261.5
70°	216.9	217.9	216.9	216.9	215.9
72.5°	175.3	175.3	176.3	175.3	175.3
75°	134.7	131.7	133.7	135.7	133.7
77.5°	95.1	95.1	97.1	97.1	98.0
80°	64.4	62.4	62.4	64.4	65.4
82.5°	35.7	36.6	36.6	36.6	36.6
85°	16.8	17.8	16.8	16.8	16.8
87.5°	7.9	7.9	6.9	5.9	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)