

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: P302542

Luminaire Tested: **FSP-22-25HE-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: P302542  
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-40-CA08  
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"  
Light Source: (266) 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

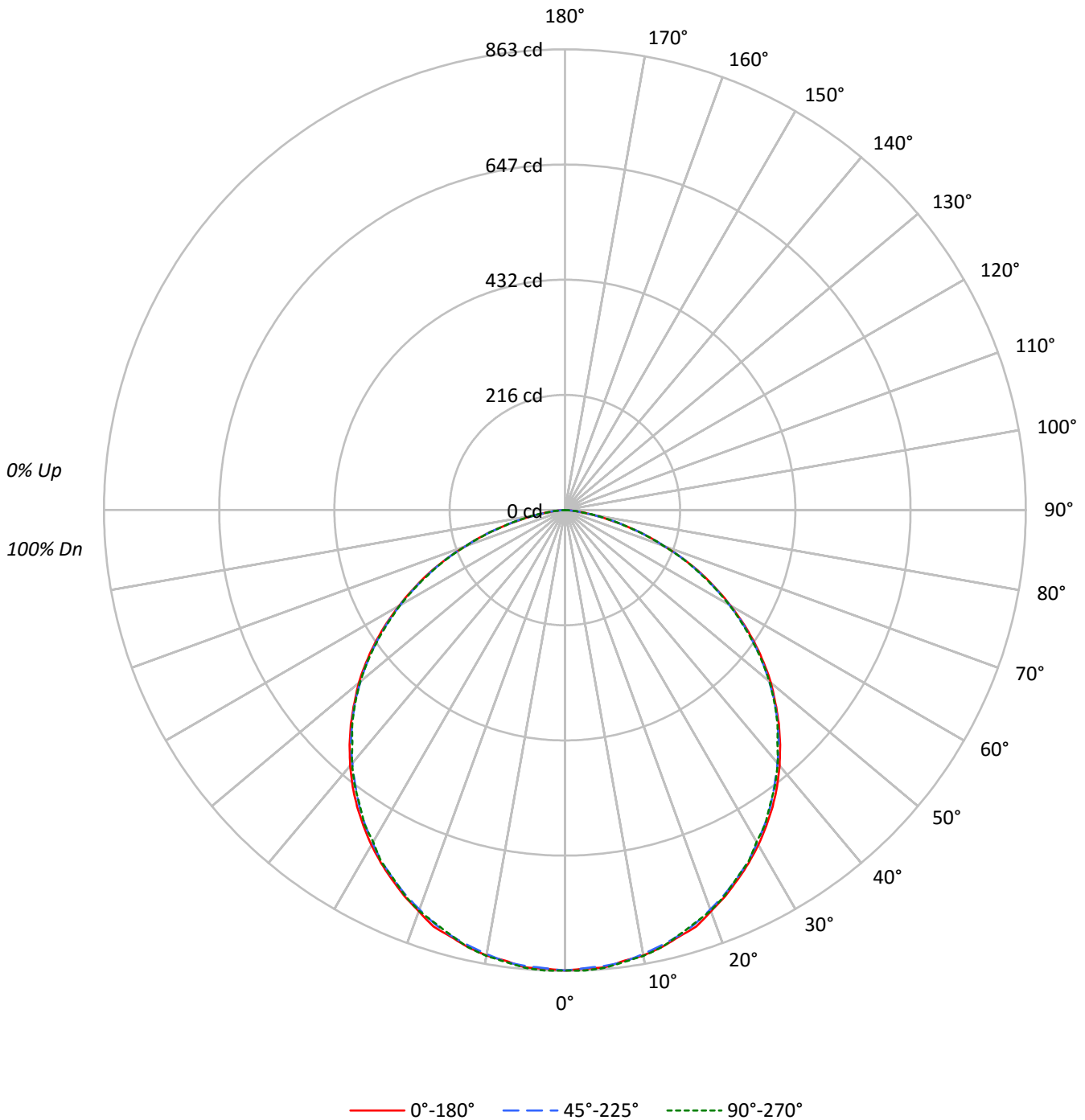
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2339.1 lumens  
Efficiency: N/A  
Efficacy: 119.3 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): 19.6  
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°	2321	2321	2321
5°	2322	2315	2324
10°	2314	2307	2317
15°	2304	2299	2296
20°	2290	2280	2288
25°	2269	2261	2259
30°	2251	2237	2231
35°	2228	2210	2204
40°	2197	2175	2178
45°	2156	2142	2142
50°	2109	2090	2094
55°	2036	2019	2015
60°	1930	1920	1915
65°	1798	1775	1769
70°	1564	1564	1557
75°	1284	1274	1274
80°	914	886	928
85°	475	475	475



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	3.5
10°-20°	232.9	10.0
20°-30°	351.5	15.0
30°-40°	422.0	18.0
40°-50°	435.1	18.6
50°-60°	385.3	16.5
60°-70°	276.0	11.8
70°-80°	131.8	5.6
80°-90°	23.0	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°	665.9	28.5
0°-40°	1087.9	46.5
0°-60°	1908.3	81.6
0°-90°	2339.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2339.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	860	857	857	858	860	82
15°	827	828	825	823	824	234
25°	764	763	762	762	761	352
35°	678	678	673	674	671	424
45°	566	566	563	562	563	437
55°	434	436	430	430	429	387
65°	282	280	279	278	278	277
75°	124	121	122	124	122	132
85°	15	16	15	15	15	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	862.4	862.4	862.4	862.4	862.4
2.5°	859.6	859.6	858.7	860.5	863.3
5°	859.6	856.9	856.9	857.8	860.5
7.5°	851.5	852.4	853.3	851.5	853.3
10°	846.9	845.1	844.2	846.0	847.8
12.5°	838.7	836.9	835.1	836.9	838.7
15°	826.9	827.9	825.1	823.3	824.2
17.5°	817.9	812.4	812.4	811.5	810.6
20°	799.7	797.9	796.1	797.0	798.8
22.5°	783.4	782.5	779.7	780.7	781.6
25°	764.3	763.4	761.6	761.6	760.7
27.5°	745.3	744.3	742.5	741.6	743.4
30°	724.4	725.3	719.8	719.8	718.0
32.5°	701.7	701.7	697.1	695.3	698.0
35°	678.1	678.1	672.6	674.4	670.8
37.5°	652.7	654.5	645.4	648.1	647.2
40°	625.4	623.6	619.1	624.5	620.0
42.5°	596.4	599.1	592.8	592.8	589.1
45°	566.4	566.4	562.8	561.9	562.8
47.5°	534.7	535.6	532.8	533.7	531.9
50°	503.8	502.9	499.3	498.3	500.2
52.5°	469.3	470.2	465.7	466.6	465.7
55°	433.9	435.7	430.3	430.3	429.4
57.5°	396.7	396.7	394.0	394.0	392.1
60°	358.6	361.3	356.7	356.7	355.8
62.5°	319.5	319.5	317.7	318.6	316.8
65°	282.3	280.5	278.7	277.8	277.8
67.5°	241.5	239.6	241.5	238.7	239.6
70°	198.8	199.7	198.8	198.8	197.9
72.5°	160.7	160.7	161.6	160.7	160.7
75°	123.5	120.7	122.5	124.4	122.5
77.5°	87.1	87.1	89.0	89.0	89.9
80°	59.0	57.2	57.2	59.0	59.9
82.5°	32.7	33.6	33.6	33.6	33.6
85°	15.4	16.3	15.4	15.4	15.4
87.5°	7.3	7.3	6.4	5.4	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)