

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: P302540

Luminaire Tested: **FSP-22-25HE-35-CP250**

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: P302540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-12)
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-CP250
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
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

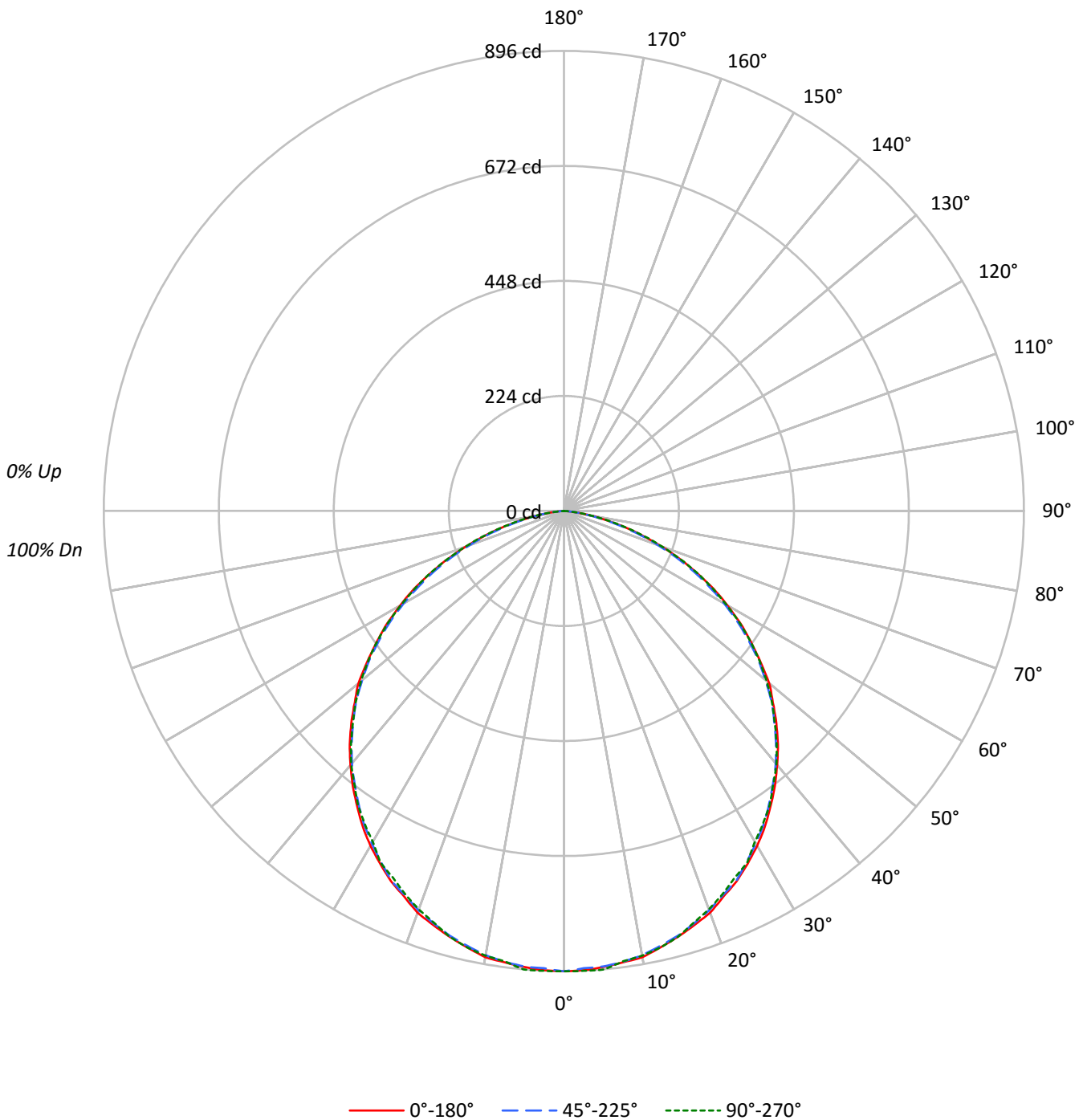
Lumens per Lamp: N/A
Luminaire Lumens: 2402.3 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
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	71	62	56	68	61	56	66	60	55	64	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	43	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	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2412	2412	2412
5°	2408	2405	2422
10°	2411	2400	2403
15°	2392	2386	2392
20°	2385	2370	2365
25°	2363	2360	2339
30°	2339	2324	2312
35°	2306	2290	2296
40°	2270	2256	2263
45°	2228	2205	2209
50°	2187	2146	2158
55°	2086	2059	2082
60°	1981	1938	1970
65°	1822	1778	1829
70°	1600	1545	1608
75°	1295	1224	1316
80°	880	834	911
85°	401	371	401



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	3.5
10°-20°	242.0	10.1
20°-30°	365.0	15.2
30°-40°	437.3	18.2
40°-50°	448.8	18.7
50°-60°	394.6	16.4
60°-70°	279.0	11.6
70°-80°	130.5	5.4
80°-90°	20.4	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°	691.7	28.8
0°-40°	1129.0	47.0
0°-60°	1972.4	82.1
0°-90°	2402.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2402.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	892	892	890	892	896	85
15°	859	859	857	856	859	243
25°	796	794	795	790	788	366
35°	702	702	697	697	699	439
45°	585	583	579	580	580	452
55°	445	442	439	443	444	398
65°	286	282	279	283	287	283
75°	125	120	118	124	127	133
85°	13	13	12	14	13	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.5	896.5	896.5	896.5	896.5
2.5°	895.5	894.5	891.5	894.5	896.5
5°	891.5	892.5	890.5	891.5	896.5
7.5°	886.5	887.5	885.5	885.5	884.5
10°	882.5	882.5	878.5	878.5	879.5
12.5°	870.6	872.5	867.6	869.6	870.6
15°	858.6	858.6	856.6	855.6	858.6
17.5°	845.6	845.6	842.6	842.6	840.6
20°	832.7	830.7	827.7	824.7	825.7
22.5°	812.7	813.7	809.7	809.7	807.7
25°	795.8	793.8	794.8	789.8	787.8
27.5°	774.8	773.8	770.8	770.8	772.8
30°	752.9	749.9	747.9	745.9	743.9
32.5°	728.9	727.0	724.0	723.0	722.0
35°	702.0	702.0	697.0	697.0	699.0
37.5°	675.1	677.1	669.1	670.1	670.1
40°	646.2	647.2	642.2	643.2	644.2
42.5°	617.3	615.3	611.3	614.3	613.3
45°	585.4	583.4	579.4	580.4	580.4
47.5°	552.4	550.5	548.5	548.5	549.5
50°	522.5	516.5	512.6	513.6	515.5
52.5°	482.6	481.6	477.7	478.7	480.6
55°	444.7	441.8	438.8	442.8	443.8
57.5°	407.9	404.9	400.9	402.9	405.9
60°	368.0	363.0	360.0	363.0	366.0
62.5°	329.1	322.1	319.1	323.1	326.1
65°	286.2	282.2	279.2	283.2	287.2
67.5°	245.3	238.3	237.3	243.3	246.3
70°	203.4	196.4	196.4	201.4	204.4
72.5°	162.5	155.6	156.6	162.5	165.5
75°	124.6	119.7	117.7	123.7	126.6
77.5°	88.8	83.8	83.8	89.7	89.7
80°	56.8	53.8	53.8	57.8	58.8
82.5°	31.9	30.9	29.9	31.9	32.9
85°	13.0	13.0	12.0	14.0	13.0
87.5°	3.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)