

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: P302519

Luminaire Tested: **FSP-22-21-30-CA125**

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: P302519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-21-30-CA125
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .125"
Light Source: (126) 3000 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

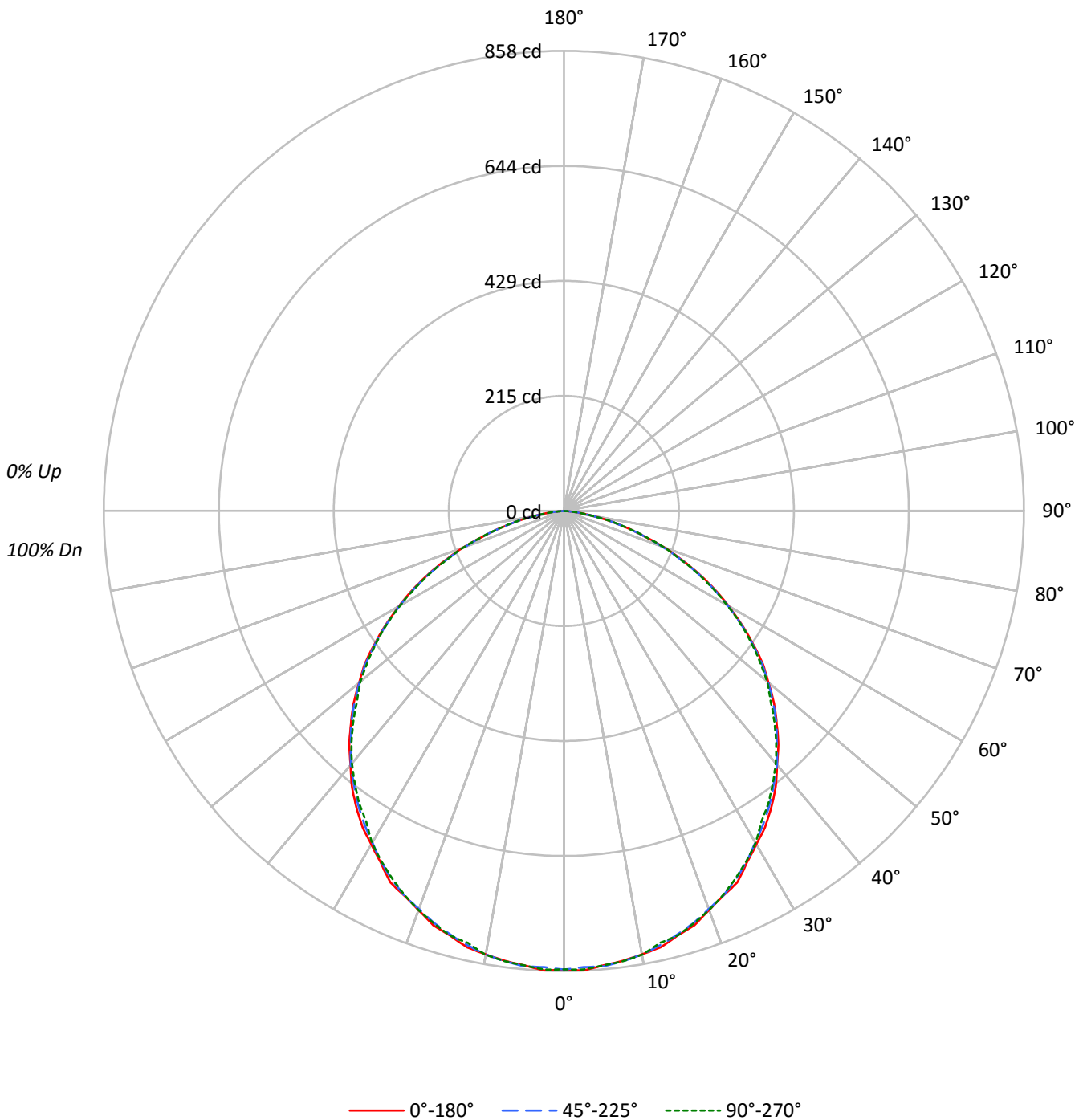
Lumens per Lamp: N/A
Luminaire Lumens: 2317.8 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 20.7
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	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	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	42	52	46	41	39
7	66	52	44	38	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°	2301	2301	2301
5°	2298	2303	2298
10°	2294	2294	2297
15°	2284	2279	2284
20°	2268	2263	2268
25°	2271	2252	2246
30°	2230	2219	2222
35°	2216	2198	2186
40°	2173	2173	2160
45°	2137	2134	2113
50°	2087	2083	2071
55°	2016	2008	2000
60°	1910	1905	1895
65°	1771	1759	1754
70°	1577	1548	1570
75°	1267	1258	1267
80°	910	882	882
85°	445	445	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	3.5
10°-20°	231.1	10.0
20°-30°	349.0	15.1
30°-40°	418.5	18.1
40°-50°	431.0	18.6
50°-60°	381.7	16.5
60°-70°	273.0	11.8
70°-80°	130.7	5.6
80°-90°	22.1	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°	660.9	28.5
0°-40°	1079.4	46.6
0°-60°	1892.1	81.6
0°-90°	2317.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2317.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	851	850	852	851	851	81
15°	820	820	818	818	820	232
25°	765	759	758	756	757	350
35°	674	671	669	667	666	421
45°	562	561	561	558	555	433
55°	430	428	428	425	426	384
65°	278	276	276	276	275	275
75°	122	122	121	121	122	131
85°	14	14	14	14	14	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.1	855.1	855.1	855.1	855.1
2.5°	857.8	855.1	851.5	854.2	856.0
5°	850.6	849.7	852.4	850.6	850.6
7.5°	846.0	847.8	846.9	846.9	846.9
10°	839.7	839.7	839.7	838.8	840.6
12.5°	833.4	828.9	829.8	829.8	825.3
15°	819.9	819.9	818.0	818.0	819.9
17.5°	809.9	808.1	805.4	805.4	806.3
20°	791.9	791.9	790.1	788.3	791.9
22.5°	776.5	780.1	776.5	772.9	775.6
25°	764.8	759.4	758.5	755.7	756.6
27.5°	739.5	736.8	737.7	735.9	736.8
30°	717.8	716.0	714.2	712.4	715.1
32.5°	698.9	697.1	692.5	691.6	686.2
35°	674.5	670.9	669.1	667.3	665.5
37.5°	649.2	645.6	642.9	642.0	640.2
40°	618.5	616.7	618.5	614.0	614.9
42.5°	592.3	590.5	587.8	586.0	586.0
45°	561.6	560.7	560.7	558.0	555.3
47.5°	531.8	530.9	529.1	525.5	522.8
50°	498.4	499.3	497.5	493.9	494.8
52.5°	467.7	462.3	465.0	461.4	460.5
55°	429.8	428.0	428.0	425.3	426.2
57.5°	392.8	392.8	391.0	391.0	390.1
60°	354.8	353.9	353.9	353.0	352.1
62.5°	317.8	316.9	315.1	315.1	314.2
65°	278.1	276.3	276.3	276.3	275.4
67.5°	238.4	236.6	235.7	235.7	234.8
70°	200.4	197.7	196.8	196.8	199.5
72.5°	158.0	158.9	158.0	158.9	159.8
75°	121.9	121.9	121.0	121.0	121.9
77.5°	88.5	88.5	88.5	88.5	89.4
80°	58.7	56.9	56.9	56.9	56.9
82.5°	32.5	32.5	32.5	33.4	34.3
85°	14.4	14.4	14.4	14.4	14.4
87.5°	5.4	5.4	5.4	5.4	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)