

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: P302532

Luminaire Tested: **FSP-22-21-40-CP125**

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: P302532
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-10)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-21-40-CP125
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .125"
Light Source: (126) 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

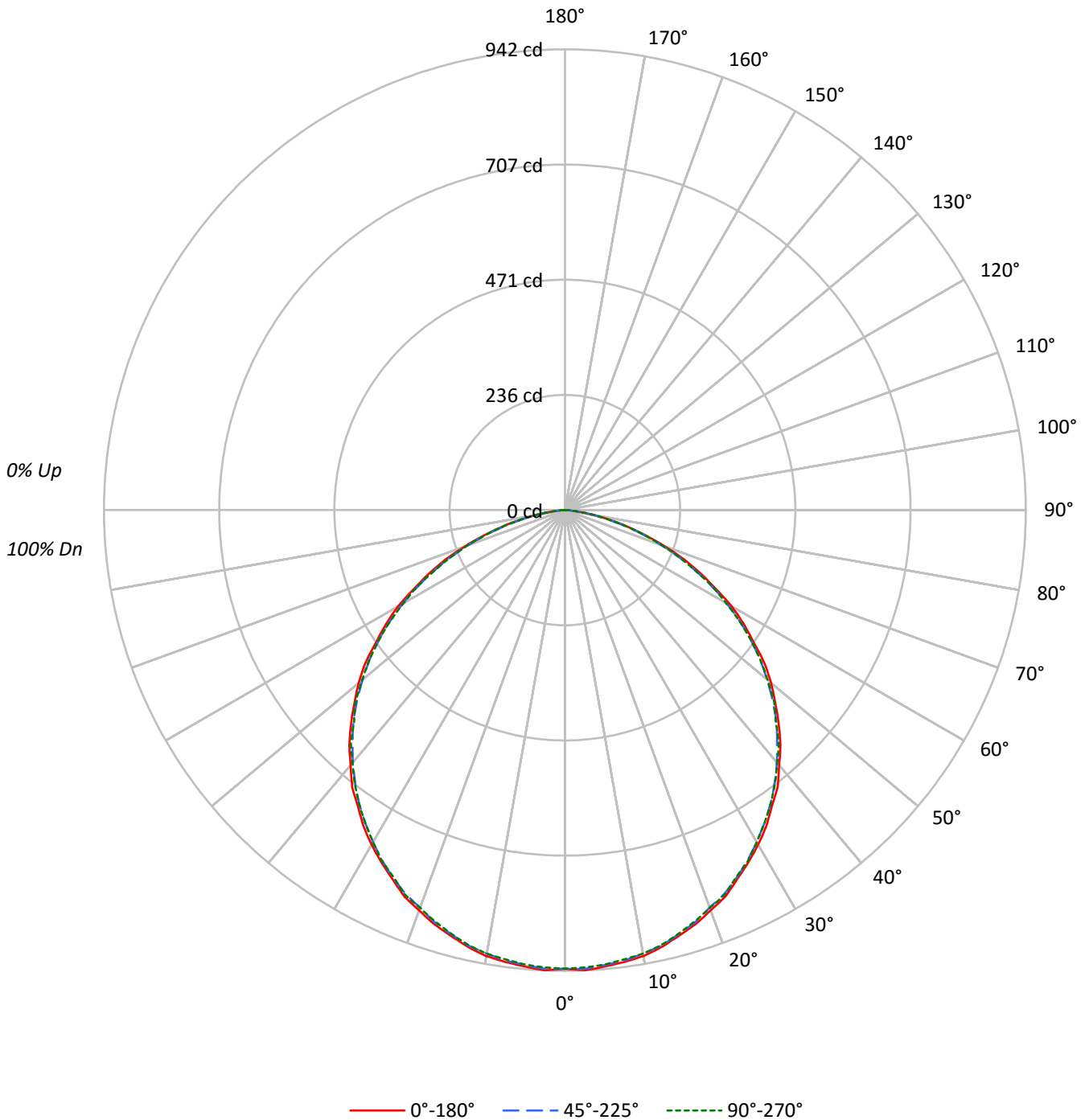
Lumens per Lamp: N/A
Luminaire Lumens: 2528.1 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 20.6
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



TEST NUMBER: P302532
CATALOG NUMBER: FSP-22-21-40-CP125

Luminous Intensity Polar Plot





TEST NUMBER: P302532

CATALOG NUMBER: FSP-22-21-40-CP125

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	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	51	47	45
6	71	58	49	43	69	57	49	42	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	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2524	2524	2524
5°	2531	2522	2520
10°	2530	2516	2516
15°	2510	2501	2499
20°	2494	2477	2480
25°	2473	2464	2458
30°	2455	2436	2436
35°	2425	2408	2408
40°	2393	2368	2372
45°	2353	2326	2318
50°	2304	2258	2266
55°	2207	2179	2179
60°	2118	2059	2048
65°	1946	1889	1882
70°	1713	1650	1666
75°	1402	1339	1381
80°	975	928	975
85°	463	432	463



TEST NUMBER: P302532

CATALOG NUMBER: FSP-22-21-40-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	3.5
10°-20°	253.4	10.0
20°-30°	382.8	15.1
30°-40°	459.0	18.2
40°-50°	471.9	18.7
50°-60°	415.9	16.5
60°-70°	294.5	11.6
70°-80°	139.3	5.5
80°-90°	22.5	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°	725.0	28.7
0°-40°	1183.9	46.8
0°-60°	2071.7	81.9
0°-90°	2528.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2528.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	937	936	934	933	933	89
15°	901	897	898	897	897	254
25°	833	830	830	829	828	384
35°	738	735	733	732	733	463
45°	618	612	611	609	609	477
55°	470	466	464	466	464	423
65°	306	296	297	298	296	302
75°	135	127	129	129	133	144
85°	15	14	14	15	15	23
90°	0	0	0	0	0	



TEST NUMBER: P302532

CATALOG NUMBER: FSP-22-21-40-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	937.8	937.8	937.8	937.8	937.8
2.5°	941.8	936.8	938.8	936.8	935.8
5°	936.8	935.8	933.8	932.8	932.8
7.5°	931.8	928.8	928.8	926.8	926.8
10°	925.8	920.8	920.8	920.8	920.8
12.5°	914.8	909.9	911.8	908.9	910.8
15°	900.9	896.9	897.9	896.9	896.9
17.5°	887.9	883.9	883.9	882.9	881.9
20°	870.9	870.9	864.9	867.9	865.9
22.5°	855.9	854.9	849.9	847.9	851.9
25°	832.9	830.0	830.0	829.0	828.0
27.5°	812.0	811.0	808.0	809.0	809.0
30°	790.0	786.0	784.0	782.0	784.0
32.5°	766.0	759.0	759.0	759.0	759.0
35°	738.1	735.1	733.1	732.1	733.1
37.5°	714.1	709.1	704.1	703.1	705.1
40°	681.1	677.1	674.1	675.1	675.1
42.5°	652.2	646.2	642.2	645.2	647.2
45°	618.2	612.2	611.2	609.2	609.2
47.5°	583.3	579.3	576.3	575.3	580.3
50°	550.3	542.3	539.3	539.3	541.3
52.5°	514.4	506.4	503.4	504.4	503.4
55°	470.4	466.4	464.4	466.4	464.4
57.5°	433.5	426.5	424.5	424.5	423.5
60°	393.5	383.5	382.5	381.5	380.5
62.5°	346.6	340.6	339.6	339.6	341.6
65°	305.6	295.6	296.6	297.6	295.6
67.5°	263.7	253.7	253.7	254.7	253.7
70°	217.7	208.7	209.7	211.7	211.7
72.5°	175.8	168.8	169.8	169.8	170.8
75°	134.8	126.8	128.8	128.8	132.8
77.5°	96.9	90.9	91.9	93.9	94.9
80°	62.9	58.9	59.9	60.9	62.9
82.5°	35.0	34.0	34.0	35.0	35.0
85°	15.0	14.0	14.0	15.0	15.0
87.5°	4.0	4.0	3.0	3.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)