

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: P302544

Luminaire Tested: **FSP-22-25HE-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: P302544
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-22-25HE-40-CP125
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .125"
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

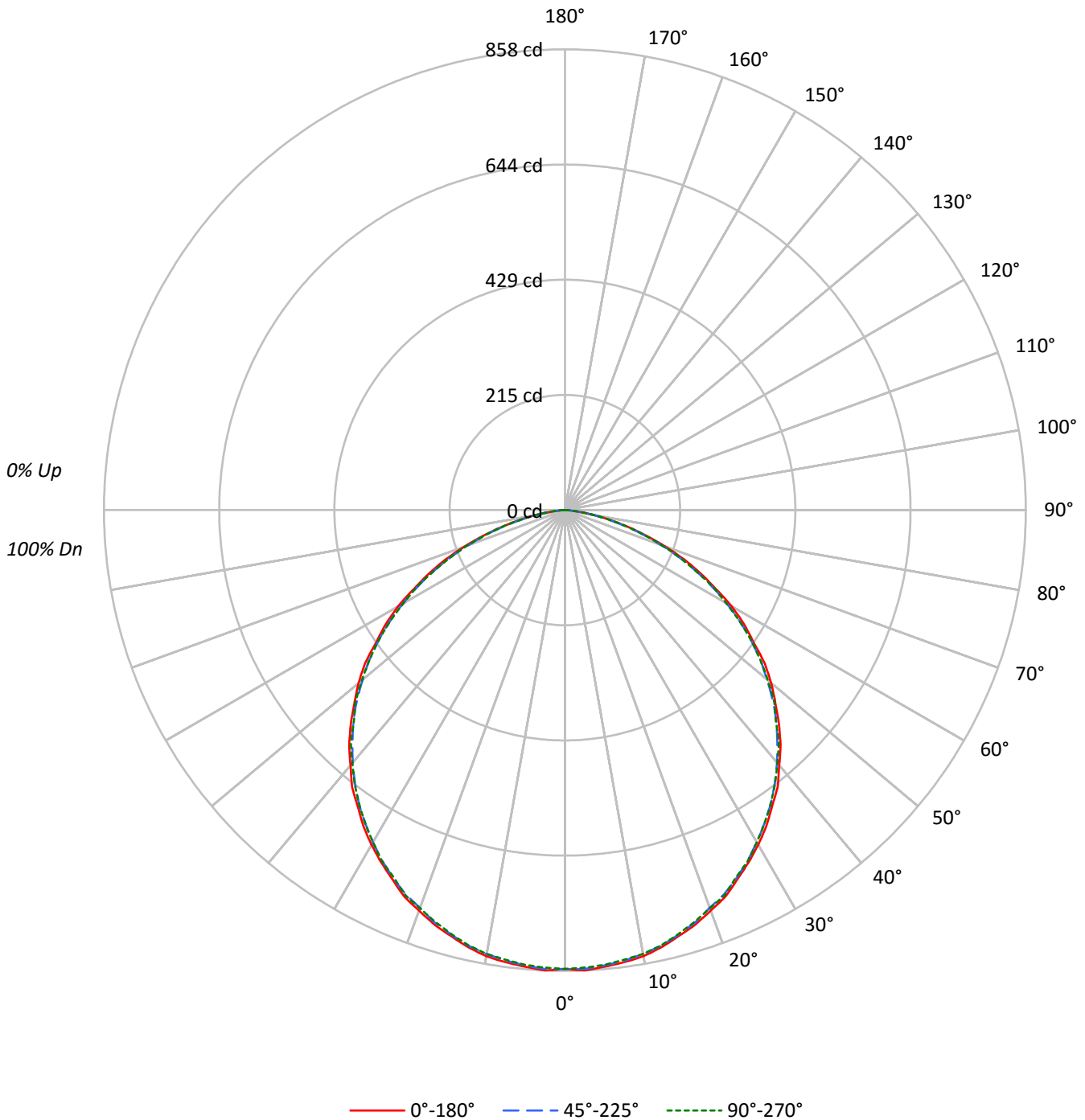
Lumens per Lamp: N/A
Luminaire Lumens: 2303.5 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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°	2299	2299	2299
5°	2306	2299	2296
10°	2305	2293	2293
15°	2287	2279	2277
20°	2273	2257	2259
25°	2254	2245	2240
30°	2237	2220	2220
35°	2209	2194	2194
40°	2180	2158	2161
45°	2144	2119	2112
50°	2099	2057	2065
55°	2011	1985	1985
60°	1930	1876	1866
65°	1773	1721	1715
70°	1561	1504	1518
75°	1278	1221	1258
80°	888	846	888
85°	423	392	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	3.5
10°-20°	230.9	10.0
20°-30°	348.8	15.1
30°-40°	418.2	18.2
40°-50°	429.9	18.7
50°-60°	379.0	16.5
60°-70°	268.3	11.6
70°-80°	127.0	5.5
80°-90°	20.5	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°	660.6	28.7
0°-40°	1078.8	46.8
0°-60°	1887.7	81.9
0°-90°	2303.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	854	853	851	850	850	81
15°	821	817	818	817	817	232
25°	759	756	756	755	754	350
35°	672	670	668	667	668	421
45°	563	558	557	555	555	434
55°	429	425	423	425	423	385
65°	278	269	270	271	269	275
75°	123	116	117	117	121	131
85°	14	13	13	14	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	854.5	854.5	854.5	854.5	854.5
2.5°	858.2	853.6	855.4	853.6	852.7
5°	853.6	852.7	850.9	850.0	850.0
7.5°	849.1	846.3	846.3	844.5	844.5
10°	843.6	839.1	839.1	839.1	839.1
12.5°	833.6	829.0	830.9	828.1	830.0
15°	820.9	817.2	818.1	817.2	817.2
17.5°	809.0	805.4	805.4	804.5	803.6
20°	793.6	793.6	788.1	790.8	789.0
22.5°	779.9	779.0	774.4	772.6	776.3
25°	759.0	756.2	756.2	755.3	754.4
27.5°	739.9	739.0	736.2	737.1	737.1
30°	719.8	716.2	714.4	712.6	714.4
32.5°	698.0	691.6	691.6	691.6	691.6
35°	672.5	669.8	668.0	667.1	668.0
37.5°	650.7	646.1	641.6	640.7	642.5
40°	620.6	617.0	614.3	615.2	615.2
42.5°	594.3	588.8	585.2	587.9	589.7
45°	563.3	557.9	556.9	555.1	555.1
47.5°	531.5	527.8	525.1	524.2	528.7
50°	501.4	494.2	491.4	491.4	493.2
52.5°	468.7	461.4	458.7	459.6	458.7
55°	428.6	425.0	423.2	425.0	423.2
57.5°	395.0	388.6	386.8	386.8	385.9
60°	358.6	349.5	348.5	347.6	346.7
62.5°	315.8	310.3	309.4	309.4	311.2
65°	278.5	269.4	270.3	271.2	269.4
67.5°	240.2	231.1	231.1	232.1	231.1
70°	198.4	190.2	191.1	192.9	192.9
72.5°	160.2	153.8	154.7	154.7	155.6
75°	122.9	115.6	117.4	117.4	121.0
77.5°	88.3	82.8	83.7	85.5	86.5
80°	57.3	53.7	54.6	55.5	57.3
82.5°	31.9	30.9	30.9	31.9	31.9
85°	13.7	12.7	12.7	13.7	13.7
87.5°	3.6	3.6	2.7	2.7	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)