

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: P302543

Luminaire Tested: **FSP-22-25HE-40-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: P302543
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-22-25HE-40-CA125
Description: 2x2 Fail Safe Flat Panel Clear Acrylic 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

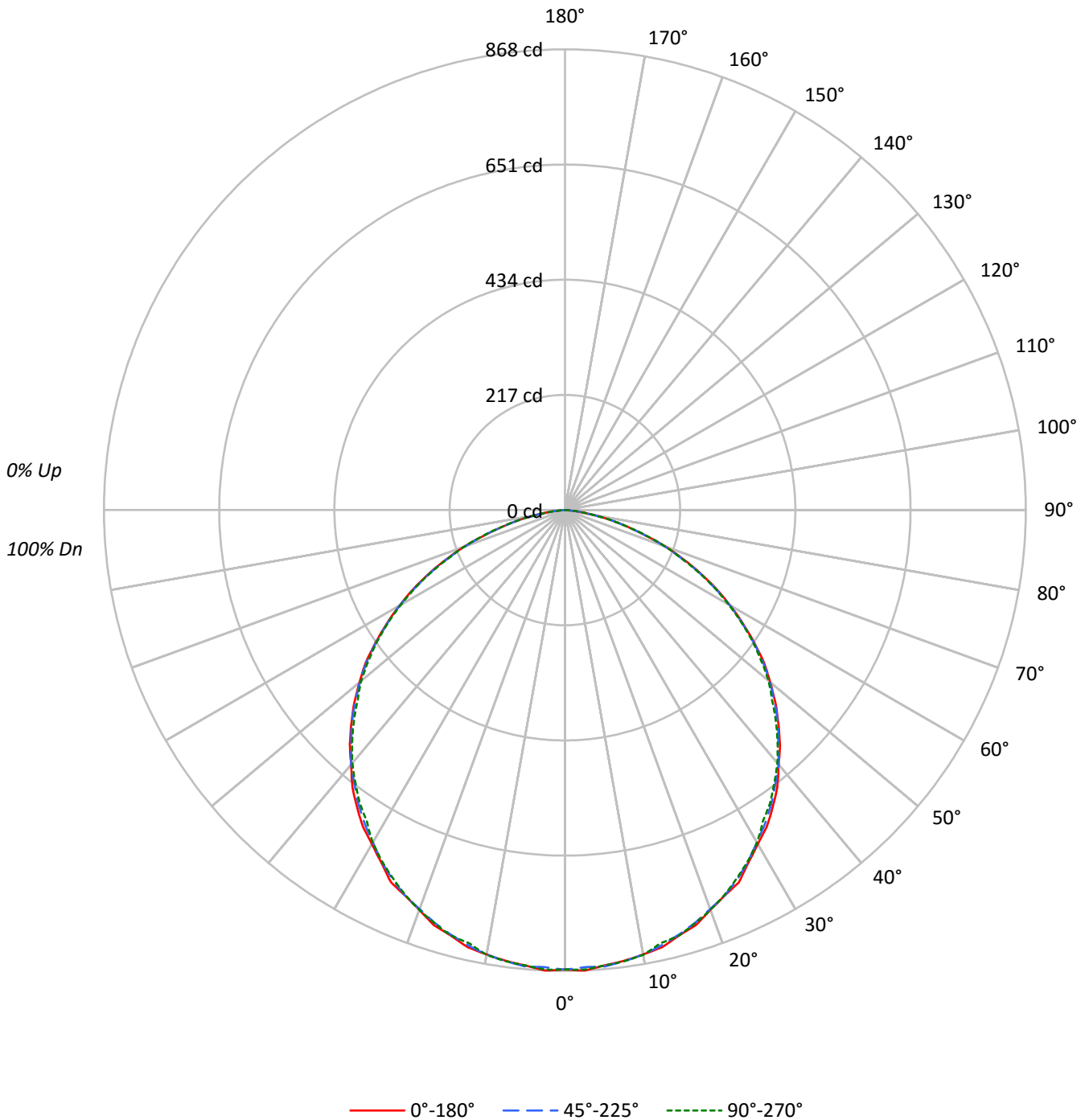
Lumens per Lamp: N/A
Luminaire Lumens: 2346.3 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2329	2329	2329
5°	2326	2331	2326
10°	2323	2323	2325
15°	2312	2307	2312
20°	2296	2290	2296
25°	2299	2280	2274
30°	2258	2247	2249
35°	2243	2225	2213
40°	2199	2199	2186
45°	2163	2160	2139
50°	2112	2108	2097
55°	2041	2032	2024
60°	1933	1928	1919
65°	1792	1781	1775
70°	1596	1568	1589
75°	1283	1274	1283
80°	921	893	893
85°	451	451	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	3.5
10°-20°	233.9	10.0
20°-30°	353.3	15.1
30°-40°	423.6	18.1
40°-50°	436.3	18.6
50°-60°	386.4	16.5
60°-70°	276.3	11.8
70°-80°	132.3	5.6
80°-90°	22.4	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°	669.0	28.5
0°-40°	1092.6	46.6
0°-60°	1915.3	81.6
0°-90°	2346.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2346.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	861	860	863	861	861	82
15°	830	830	828	828	830	235
25°	774	769	768	765	766	355
35°	683	679	677	675	674	427
45°	568	568	568	565	562	439
55°	435	433	433	430	431	389
65°	282	280	280	280	279	278
75°	123	123	122	122	123	133
85°	15	15	15	15	15	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	865.6	865.6	865.6	865.6	865.6
2.5°	868.3	865.6	861.9	864.6	866.5
5°	861.0	860.1	862.8	861.0	861.0
7.5°	856.4	858.2	857.3	857.3	857.3
10°	850.0	850.0	850.0	849.1	850.9
12.5°	843.6	839.1	840.0	840.0	835.4
15°	829.9	829.9	828.1	828.1	829.9
17.5°	819.9	818.0	815.3	815.3	816.2
20°	801.6	801.6	799.8	797.9	801.6
22.5°	786.0	789.7	786.0	782.4	785.1
25°	774.2	768.7	767.8	765.0	765.9
27.5°	748.6	745.8	746.7	744.9	745.8
30°	726.6	724.8	723.0	721.1	723.9
32.5°	707.4	705.6	701.0	700.1	694.6
35°	682.8	679.1	677.3	675.4	673.6
37.5°	657.2	653.5	650.8	649.9	648.0
40°	626.1	624.3	626.1	621.5	622.4
42.5°	599.6	597.8	595.0	593.2	593.2
45°	568.5	567.6	567.6	564.9	562.1
47.5°	538.3	537.4	535.6	532.0	529.2
50°	504.5	505.4	503.6	500.0	500.9
52.5°	473.5	468.0	470.7	467.1	466.1
55°	435.1	433.2	433.2	430.5	431.4
57.5°	397.6	397.6	395.8	395.8	394.8
60°	359.2	358.3	358.3	357.4	356.5
62.5°	321.7	320.8	319.0	319.0	318.1
65°	281.5	279.7	279.7	279.7	278.8
67.5°	241.3	239.5	238.6	238.6	237.6
70°	202.9	200.2	199.3	199.3	202.0
72.5°	160.0	160.9	160.0	160.9	161.8
75°	123.4	123.4	122.5	122.5	123.4
77.5°	89.6	89.6	89.6	89.6	90.5
80°	59.4	57.6	57.6	57.6	57.6
82.5°	32.9	32.9	32.9	33.8	34.7
85°	14.6	14.6	14.6	14.6	14.6
87.5°	5.5	5.5	5.5	5.5	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)