

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: P302585

Luminaire Tested: **FSP-24-31-30-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: P302585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-31-30-CA125
Description: 2x4 Fail Safe Flat Panel Clear Acrylic Lens .125"
Light Source: (266) 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

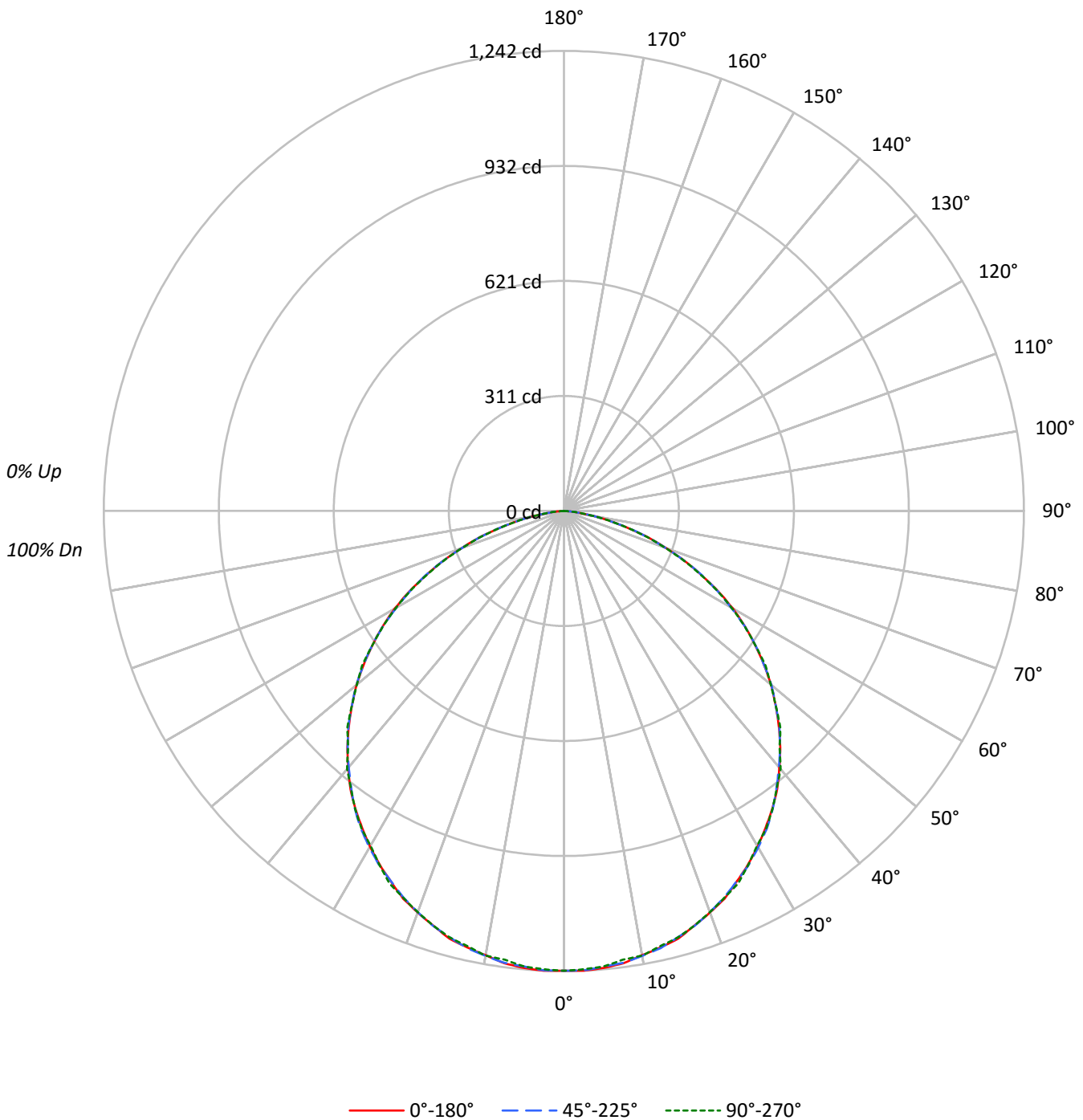
Lumens per Lamp: N/A
Luminaire Lumens: 3406.6 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.6
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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1670	1670	1670
5°	1672	1667	1667
10°	1664	1666	1665
15°	1664	1659	1660
20°	1652	1650	1650
25°	1639	1638	1650
30°	1625	1630	1621
35°	1612	1615	1613
40°	1590	1587	1599
45°	1561	1565	1573
50°	1528	1532	1526
55°	1479	1481	1479
60°	1418	1402	1408
65°	1308	1311	1295
70°	1159	1151	1147
75°	943	952	947
80°	672	672	664
85°	320	320	335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	3.4
10°-20°	336.2	9.9
20°-30°	509.3	14.9
30°-40°	613.5	18.0
40°-50°	633.5	18.6
50°-60°	563.5	16.5
60°-70°	405.3	11.9
70°-80°	195.7	5.7
80°-90°	32.5	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°	962.8	28.3
0°-40°	1576.3	46.3
0°-60°	2773.2	81.4
0°-90°	3406.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3406.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1238	1233	1234	1231	1234	118
15°	1195	1193	1191	1194	1192	336
25°	1104	1104	1103	1103	1111	509
35°	981	980	983	982	982	614
45°	821	822	823	822	826	633
55°	630	630	632	632	630	563
65°	411	412	412	413	407	407
75°	181	182	183	183	182	196
85°	21	22	21	21	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1241.2	1241.2	1241.2	1241.2	1241.2
2.5°	1242.2	1241.2	1241.2	1235.3	1238.3
5°	1238.3	1233.4	1234.4	1231.4	1234.4
7.5°	1231.4	1228.4	1230.4	1223.5	1221.5
10°	1217.6	1218.6	1219.6	1214.6	1218.6
12.5°	1206.8	1209.7	1208.7	1203.8	1202.8
15°	1194.9	1193.0	1191.0	1194.0	1192.0
17.5°	1173.3	1171.3	1174.3	1173.3	1173.3
20°	1153.6	1152.6	1152.6	1149.6	1152.6
22.5°	1132.9	1129.9	1129.9	1133.9	1130.9
25°	1104.3	1104.3	1103.3	1103.3	1111.2
27.5°	1076.7	1075.7	1078.7	1080.7	1077.7
30°	1046.2	1046.2	1049.1	1047.2	1043.2
32.5°	1013.7	1012.7	1018.6	1015.7	1016.6
35°	981.2	980.2	983.1	982.2	982.2
37.5°	946.7	940.8	942.8	947.7	943.7
40°	905.3	904.3	903.4	905.3	910.2
42.5°	864.9	863.0	863.9	865.9	862.0
45°	820.6	821.6	822.6	821.6	826.5
47.5°	775.3	777.3	775.3	780.2	775.3
50°	730.0	729.0	731.9	731.9	729.0
52.5°	680.7	681.7	680.7	684.7	686.6
55°	630.5	629.5	631.5	632.4	630.5
57.5°	579.2	579.2	578.3	582.2	578.3
60°	527.0	523.1	521.1	523.1	523.1
62.5°	469.9	466.9	466.9	466.9	466.9
65°	410.8	411.8	411.8	412.8	406.9
67.5°	353.7	351.7	353.7	350.7	351.7
70°	294.5	295.5	292.6	294.5	291.6
72.5°	239.4	239.4	239.4	237.4	237.4
75°	181.3	182.2	183.2	183.2	182.2
77.5°	132.0	131.0	132.0	132.0	132.0
80°	86.7	84.7	86.7	85.7	85.7
82.5°	48.3	49.3	49.3	50.2	50.2
85°	20.7	21.7	20.7	20.7	21.7
87.5°	5.9	5.9	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)