

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: P302509

Luminaire Tested: **FSP-14-42-40-CP187**

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: P302509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-14-42-40-CP187
Description: 1x4 Fail Safe Flat Panel Clear Polycarbonate Lens .187"
Light Source: (210) 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

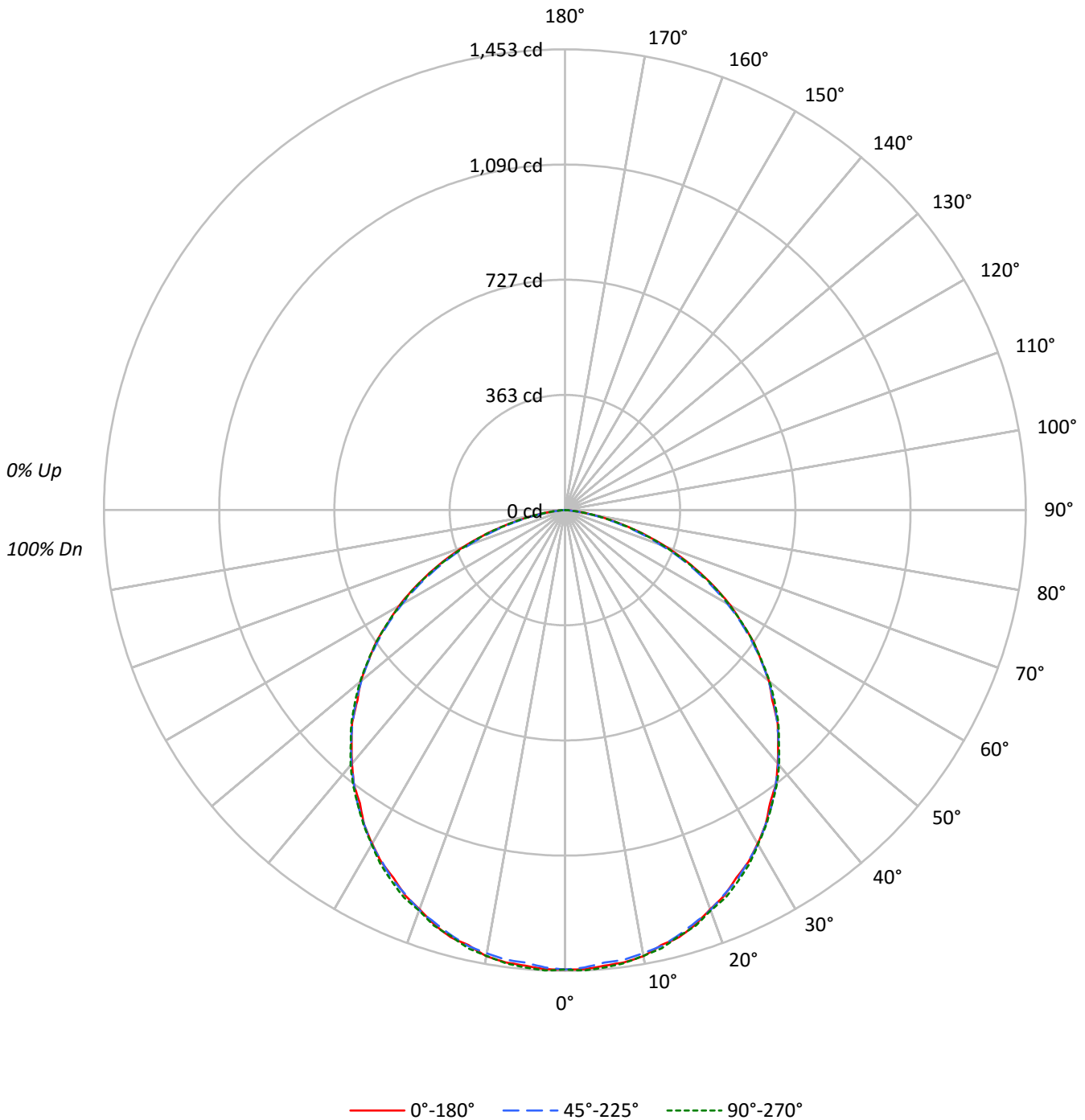
Lumens per Lamp: N/A
Luminaire Lumens: 3922.4 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	59	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	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°	3899	3899	3899
5°	3896	3870	3911
10°	3903	3877	3900
15°	3884	3865	3873
20°	3836	3844	3848
25°	3799	3819	3835
30°	3776	3784	3784
35°	3704	3735	3735
40°	3667	3677	3692
45°	3608	3604	3624
50°	3517	3506	3529
55°	3409	3370	3402
60°	3247	3189	3225
65°	3006	2910	2980
70°	2681	2541	2627
75°	2177	2048	2148
80°	1505	1399	1485
85°	719	633	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.5
10°-20°	392.1	10.0
20°-30°	592.6	15.1
30°-40°	711.3	18.1
40°-50°	731.7	18.7
50°-60°	645.2	16.4
60°-70°	460.0	11.7
70°-80°	218.5	5.6
80°-90°	34.0	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°	1121.7	28.6
0°-40°	1833.0	46.7
0°-60°	3209.9	81.8
0°-90°	3922.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3922.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1442	1442	1433	1444	1448	137
15°	1394	1389	1388	1392	1390	392
25°	1279	1284	1286	1289	1292	591
35°	1128	1136	1137	1142	1137	709
45°	948	952	947	952	952	728
55°	727	727	718	722	725	646
65°	472	469	457	464	468	467
75°	209	208	197	200	207	225
85°	23	22	20	20	22	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.0	1449.0	1449.0	1449.0	1449.0
2.5°	1449.0	1446.3	1443.6	1447.7	1453.1
5°	1442.2	1442.2	1432.6	1443.6	1447.7
7.5°	1438.1	1429.9	1429.9	1435.4	1440.8
10°	1428.5	1420.3	1418.9	1424.4	1427.1
12.5°	1405.3	1405.3	1408.0	1409.4	1414.8
15°	1394.3	1388.8	1387.5	1391.6	1390.2
17.5°	1369.7	1365.6	1364.2	1372.4	1373.8
20°	1339.6	1340.9	1342.3	1343.7	1343.7
22.5°	1314.9	1316.3	1312.2	1325.9	1323.2
25°	1279.4	1283.5	1286.2	1288.9	1291.7
27.5°	1252.0	1249.3	1249.3	1254.7	1258.8
30°	1215.1	1213.7	1217.8	1220.5	1217.8
32.5°	1176.7	1178.1	1176.7	1180.8	1179.5
35°	1127.5	1135.7	1137.1	1142.5	1137.1
37.5°	1091.9	1091.9	1091.9	1096.0	1096.0
40°	1044.0	1048.1	1046.8	1055.0	1050.9
42.5°	994.8	998.9	997.5	1007.1	998.9
45°	948.2	952.3	946.9	952.3	952.3
47.5°	886.7	893.5	892.1	901.7	897.6
50°	840.1	845.6	837.4	841.5	842.9
52.5°	779.9	785.4	779.9	782.7	782.7
55°	726.6	726.6	718.4	722.5	725.2
57.5°	660.9	665.0	656.8	659.5	662.3
60°	603.4	602.1	592.5	593.8	599.3
62.5°	537.7	536.4	526.8	528.2	536.4
65°	472.1	469.3	457.0	463.9	468.0
67.5°	406.4	405.0	392.7	394.1	399.5
70°	340.7	339.3	322.9	328.4	333.9
72.5°	273.7	272.3	260.0	264.1	270.9
75°	209.4	208.0	197.0	199.8	206.6
77.5°	151.9	147.8	140.9	145.0	149.1
80°	97.1	97.1	90.3	94.4	95.8
82.5°	53.4	53.4	50.6	52.0	53.4
85°	23.3	21.9	20.5	20.5	21.9
87.5°	4.1	4.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)