

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: P302578

Luminaire Tested: **FSP-22-42-50-CA08**

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: P302578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-42-50-CA08
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"
Light Source: (210) 5000 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

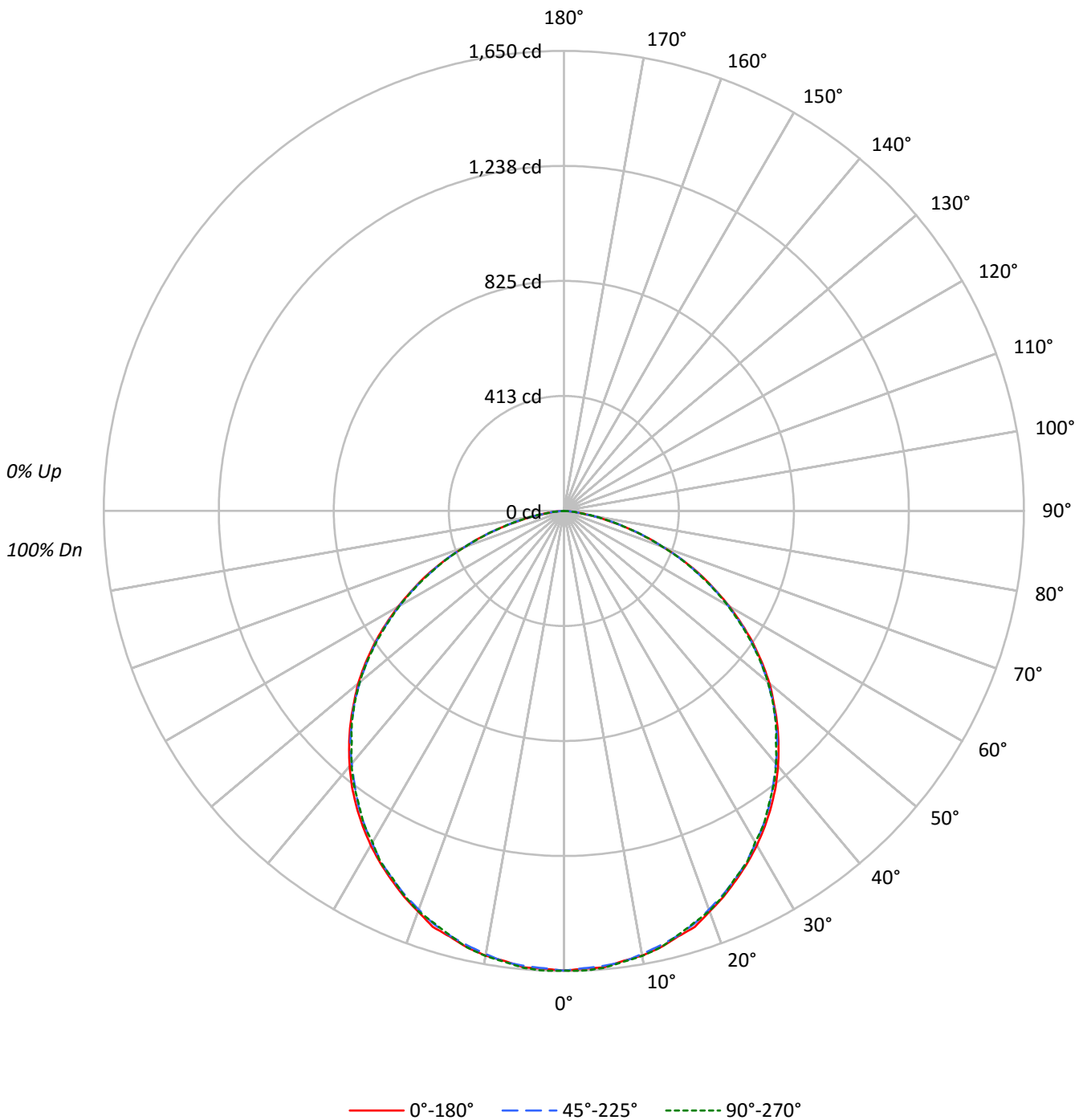
Lumens per Lamp: N/A
Luminaire Lumens: 4470.9 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	63	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	41	52	46	41	39
7	66	52	44	37	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°	4436	4436	4436
5°	4438	4424	4443
10°	4423	4409	4428
15°	4403	4394	4389
20°	4377	4357	4372
25°	4338	4322	4317
30°	4302	4275	4264
35°	4258	4224	4212
40°	4199	4157	4163
45°	4120	4094	4094
50°	4031	3995	4002
55°	3891	3858	3850
60°	3688	3670	3660
65°	3436	3392	3380
70°	2990	2990	2976
75°	2454	2435	2435
80°	1748	1694	1774
85°	911	911	911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	3.5
10°-20°	445.2	10.0
20°-30°	671.8	15.0
30°-40°	806.7	18.0
40°-50°	831.6	18.6
50°-60°	736.5	16.5
60°-70°	527.6	11.8
70°-80°	252.0	5.6
80°-90°	43.9	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°	1272.8	28.5
0°-40°	2079.4	46.5
0°-60°	3647.5	81.6
0°-90°	4470.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4470.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1648	1648	1648	1648	1648	
5°	1643	1638	1638	1640	1645	156
15°	1581	1582	1577	1574	1575	447
25°	1461	1459	1456	1456	1454	674
35°	1296	1296	1286	1289	1282	810
45°	1083	1083	1076	1074	1076	835
55°	829	833	822	822	821	740
65°	540	536	533	531	531	530
75°	236	231	234	238	234	252
85°	30	31	30	30	30	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1648.3	1648.3	1648.3	1648.3	1648.3
2.5°	1643.1	1643.1	1641.3	1644.8	1650.0
5°	1643.1	1637.9	1637.9	1639.6	1644.8
7.5°	1627.5	1629.2	1630.9	1627.5	1630.9
10°	1618.8	1615.3	1613.6	1617.0	1620.5
12.5°	1603.2	1599.7	1596.2	1599.7	1603.2
15°	1580.6	1582.3	1577.1	1573.7	1575.4
17.5°	1563.3	1552.8	1552.8	1551.1	1549.4
20°	1528.6	1525.1	1521.6	1523.3	1526.8
22.5°	1497.3	1495.6	1490.4	1492.1	1493.9
25°	1460.9	1459.2	1455.7	1455.7	1453.9
27.5°	1424.5	1422.7	1419.2	1417.5	1421.0
30°	1384.5	1386.3	1375.9	1375.9	1372.4
32.5°	1341.2	1341.2	1332.5	1329.0	1334.2
35°	1296.1	1296.1	1285.7	1289.1	1282.2
37.5°	1247.5	1251.0	1233.6	1238.8	1237.1
40°	1195.4	1192.0	1183.3	1193.7	1185.0
42.5°	1139.9	1145.1	1133.0	1133.0	1126.0
45°	1082.7	1082.7	1075.7	1074.0	1075.7
47.5°	1021.9	1023.7	1018.5	1020.2	1016.7
50°	962.9	961.2	954.3	952.5	956.0
52.5°	897.0	898.7	890.1	891.8	890.1
55°	829.3	832.8	822.4	822.4	820.7
57.5°	758.2	758.2	753.0	753.0	749.5
60°	685.3	690.5	681.9	681.9	680.1
62.5°	610.7	610.7	607.3	609.0	605.5
65°	539.6	536.1	532.7	530.9	530.9
67.5°	461.5	458.0	461.5	456.3	458.0
70°	380.0	381.7	380.0	380.0	378.2
72.5°	307.1	307.1	308.8	307.1	307.1
75°	236.0	230.8	234.2	237.7	234.2
77.5°	166.6	166.6	170.0	170.0	171.8
80°	112.8	109.3	109.3	112.8	114.5
82.5°	62.5	64.2	64.2	64.2	64.2
85°	29.5	31.2	29.5	29.5	29.5
87.5°	13.9	13.9	12.1	10.4	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)