

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: P302594

Luminaire Tested: **FSP-24-31-35-CP250**

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: P302594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-31-35-CP250
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
Light Source: (266) 3500 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

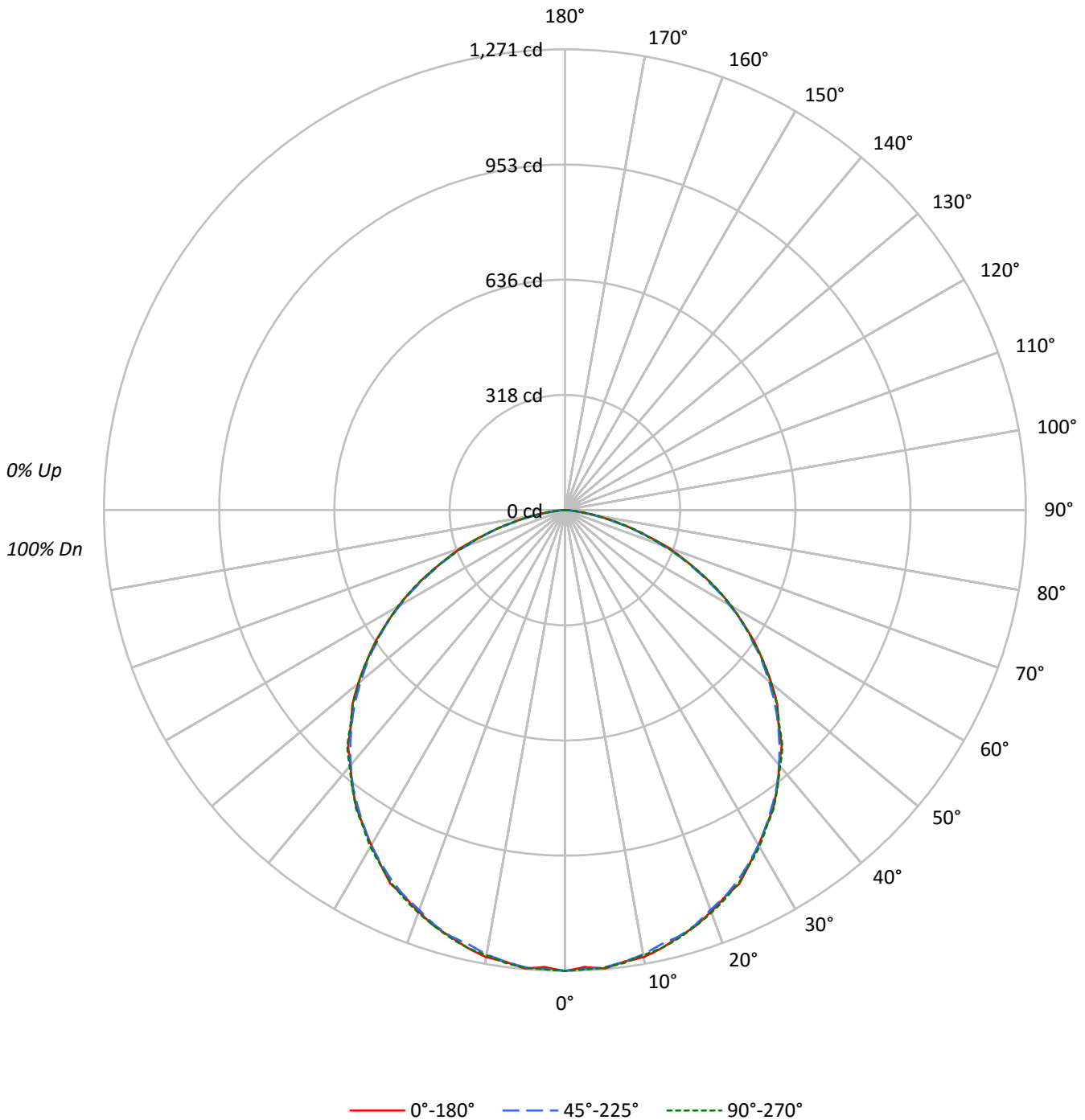
Lumens per Lamp: N/A
Luminaire Lumens: 3442.9 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.3
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	60	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	35	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°	1710	1710	1710
5°	1714	1710	1711
10°	1711	1700	1703
15°	1697	1695	1701
20°	1688	1680	1692
25°	1689	1674	1684
30°	1658	1658	1667
35°	1645	1637	1649
40°	1614	1614	1621
45°	1585	1581	1591
50°	1557	1537	1555
55°	1501	1483	1491
60°	1425	1411	1425
65°	1321	1294	1317
70°	1198	1140	1169
75°	960	921	976
80°	674	633	683
85°	327	295	327



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.5
10°-20°	343.9	10.0
20°-30°	520.5	15.1
30°-40°	624.6	18.1
40°-50°	643.1	18.7
50°-60°	566.3	16.4
60°-70°	402.7	11.7
70°-80°	191.0	5.5
80°-90°	30.4	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°	984.7	28.6
0°-40°	1609.3	46.7
0°-60°	2818.7	81.9
0°-90°	3442.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3442.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1269	1267	1266	1269	1267	120
15°	1218	1219	1217	1218	1221	344
25°	1138	1133	1128	1130	1134	521
35°	1002	1001	996	1000	1004	625
45°	833	834	831	834	836	646
55°	640	631	632	636	636	571
65°	415	396	406	408	414	410
75°	185	169	177	180	188	197
85°	21	18	19	20	21	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1271.2	1271.2	1271.2	1271.2	1271.2
2.5°	1261.6	1272.2	1266.9	1268.0	1268.0
5°	1269.1	1266.9	1265.9	1269.1	1266.9
7.5°	1256.3	1261.6	1256.3	1259.5	1259.5
10°	1252.1	1248.9	1244.6	1243.6	1246.8
12.5°	1237.2	1235.1	1226.6	1236.2	1237.2
15°	1218.1	1219.2	1217.1	1218.1	1221.3
17.5°	1202.2	1202.2	1199.0	1201.1	1202.2
20°	1178.9	1184.2	1173.6	1178.9	1182.0
22.5°	1154.5	1156.6	1153.4	1154.5	1158.7
25°	1137.5	1133.2	1127.9	1130.1	1134.3
27.5°	1101.4	1103.5	1098.2	1099.3	1102.5
30°	1067.4	1066.4	1067.4	1067.4	1072.8
32.5°	1033.5	1033.5	1032.4	1032.4	1035.6
35°	1001.7	1000.6	996.4	999.5	1003.8
37.5°	962.4	961.3	960.3	961.3	963.5
40°	918.9	922.1	918.9	920.0	923.1
42.5°	884.9	880.7	875.4	881.8	888.1
45°	832.9	834.0	830.8	834.0	836.1
47.5°	794.7	784.1	784.1	788.4	792.6
50°	743.8	736.4	734.3	739.6	742.8
52.5°	690.8	684.4	685.5	687.6	691.8
55°	639.8	631.3	632.4	635.6	635.6
57.5°	584.7	574.0	581.5	582.5	583.6
60°	529.5	516.7	524.2	525.2	529.5
62.5°	472.2	456.3	467.9	469.0	475.4
65°	414.9	395.8	406.4	408.5	413.8
67.5°	355.5	339.5	351.2	348.0	354.4
70°	304.5	281.2	289.7	291.8	297.1
72.5°	238.7	222.8	235.6	234.5	238.7
75°	184.6	168.7	177.2	180.4	187.8
77.5°	130.5	119.9	127.3	130.5	132.6
80°	87.0	78.5	81.7	84.9	88.1
82.5°	49.9	43.5	46.7	46.7	47.7
85°	21.2	18.0	19.1	20.2	21.2
87.5°	5.3	4.2	4.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)