

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: P302553

Luminaire Tested: **FSP-22-32-35-CP375**

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: P302553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-32-35-CP375
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
Light Source: (210) 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

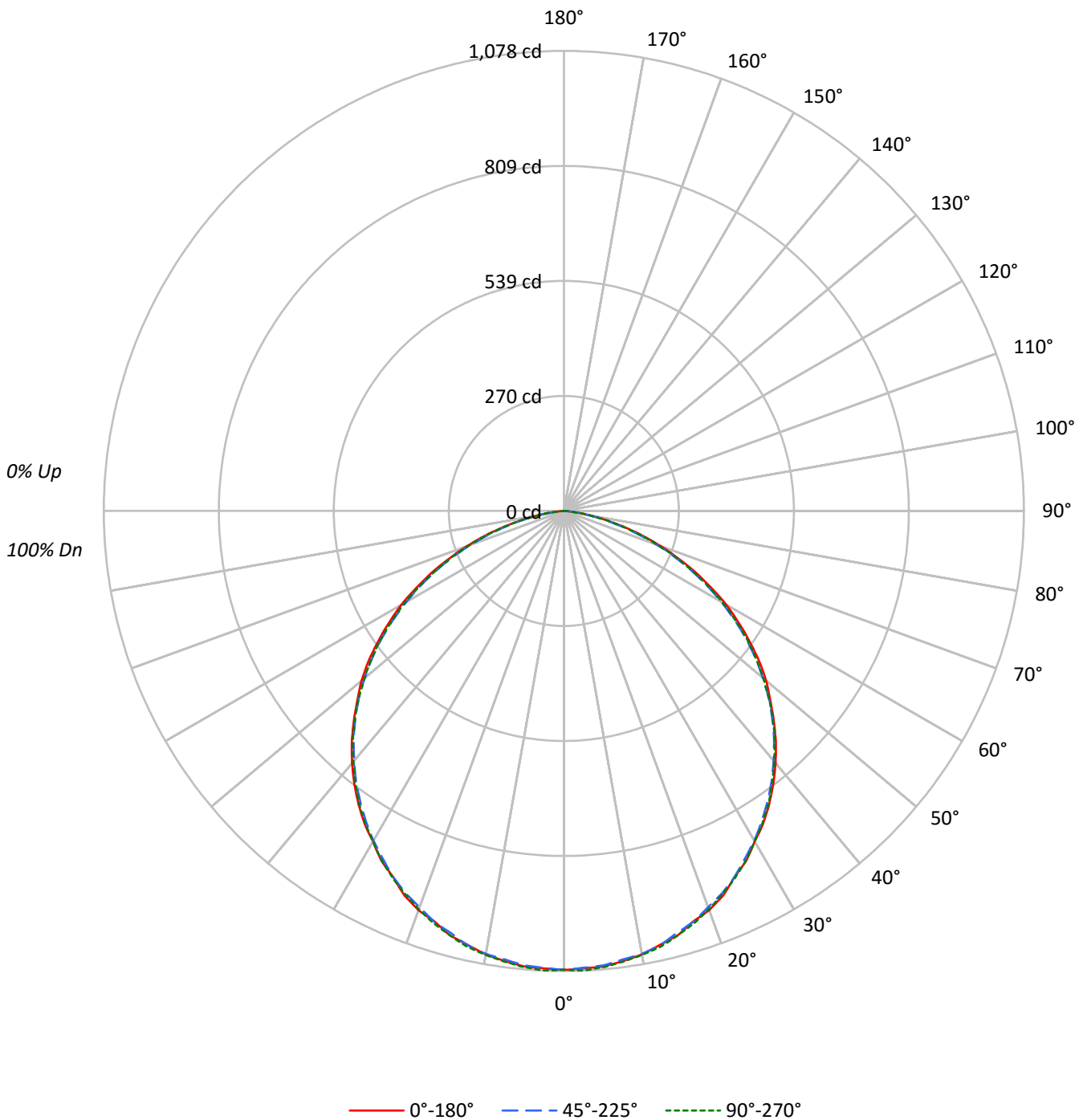
Lumens per Lamp: N/A
Luminaire Lumens: 2854.6 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
Input Voltage (V): NR
Input Current (Ain): 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	99	96	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2893	2893	2893
5°	2894	2887	2898
10°	2883	2879	2886
15°	2869	2851	2869
20°	2851	2829	2844
25°	2810	2810	2817
30°	2779	2772	2779
35°	2756	2731	2748
40°	2712	2685	2694
45°	2649	2630	2640
50°	2592	2550	2555
55°	2489	2442	2460
60°	2366	2292	2319
65°	2172	2092	2108
70°	1909	1829	1859
75°	1537	1445	1497
80°	1038	979	1038
85°	469	429	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	3.6
10°-20°	289.8	10.2
20°-30°	436.2	15.3
30°-40°	521.7	18.3
40°-50°	533.6	18.7
50°-60°	466.6	16.3
60°-70°	328.2	11.5
70°-80°	153.0	5.4
80°-90°	23.8	0.8
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°	827.6	29.0
0°-40°	1349.3	47.3
0°-60°	2349.6	82.3
0°-90°	2854.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1071	1068	1069	1066	1073	102
15°	1030	1028	1023	1026	1030	290
25°	946	948	946	945	949	437
35°	839	838	831	831	836	524
45°	696	694	691	691	694	537
55°	531	526	520	518	524	474
65°	341	335	328	327	331	336
75°	148	144	139	140	144	159
85°	15	14	14	15	15	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1075.2	1075.2	1075.2	1075.2	1075.2
2.5°	1072.7	1075.2	1071.4	1070.1	1077.7
5°	1071.4	1067.6	1068.9	1066.3	1072.7
7.5°	1063.8	1063.8	1060.0	1061.3	1065.1
10°	1055.0	1052.4	1053.7	1053.7	1056.2
12.5°	1041.1	1043.6	1042.3	1042.3	1046.1
15°	1029.7	1028.4	1023.4	1025.9	1029.7
17.5°	1008.2	1012.0	1009.5	1009.5	1013.3
20°	995.6	993.1	988.0	990.5	993.1
22.5°	975.4	972.8	969.1	970.3	971.6
25°	946.3	947.6	946.3	945.0	948.8
27.5°	924.8	921.0	918.5	918.5	923.6
30°	894.5	897.0	892.0	892.0	894.5
32.5°	869.2	868.0	862.9	864.2	866.7
35°	838.9	837.7	831.3	831.3	836.4
37.5°	806.1	803.5	799.8	797.2	802.3
40°	772.0	772.0	764.4	761.8	766.9
42.5°	735.3	730.3	729.0	730.3	731.5
45°	696.2	693.6	691.1	691.1	693.6
47.5°	655.7	654.5	651.9	649.4	651.9
50°	619.1	611.5	609.0	609.0	610.2
52.5°	576.1	568.5	566.0	563.5	567.3
55°	530.6	525.6	520.5	518.0	524.3
57.5°	485.2	478.8	473.8	475.1	476.3
60°	439.7	430.8	425.8	424.5	430.8
62.5°	389.1	384.1	377.8	377.8	380.3
65°	341.1	334.8	328.5	327.2	331.0
67.5°	289.3	286.8	280.5	278.0	285.5
70°	242.6	235.0	232.5	229.9	236.3
72.5°	194.6	187.0	184.5	185.7	190.8
75°	147.8	144.0	139.0	140.2	144.0
77.5°	104.9	102.3	98.5	101.1	104.9
80°	67.0	65.7	63.2	64.4	67.0
82.5°	39.2	37.9	35.4	36.6	36.6
85°	15.2	13.9	13.9	15.2	15.2
87.5°	3.8	3.8	3.8	2.5	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)