

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: P302560

Luminaire Tested: **FSP-22-32-50-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: P302560
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-22-32-50-CA08
Description: 2x2 Fail Safe Flat Panel Clear Acrylic Lens .08"
Light Source: (168) 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

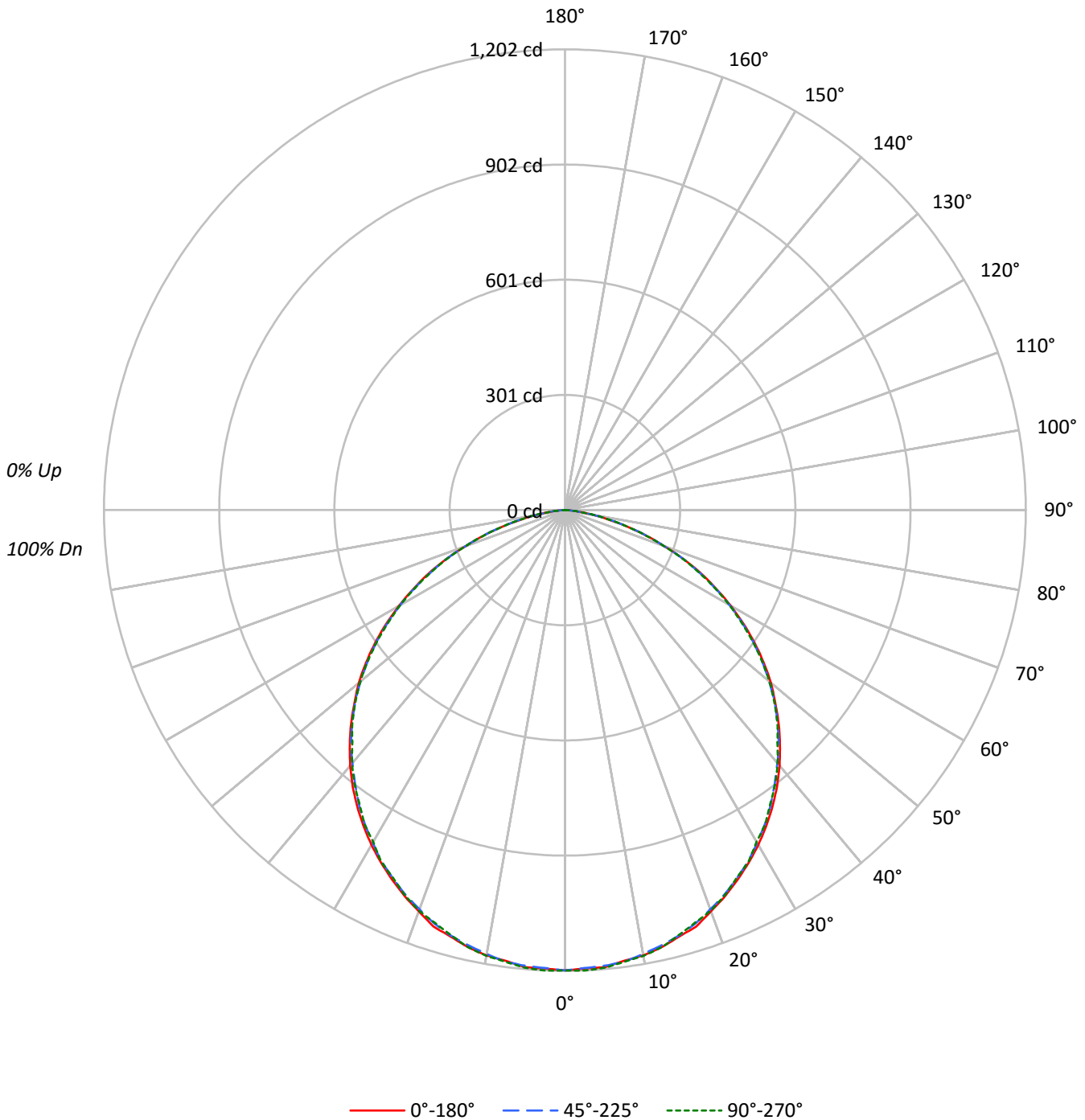
Lumens per Lamp: N/A
Luminaire Lumens: 3257.4 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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°	3232	3232	3232
5°	3234	3223	3237
10°	3223	3212	3226
15°	3208	3201	3198
20°	3189	3175	3186
25°	3160	3149	3145
30°	3135	3115	3107
35°	3102	3077	3069
40°	3060	3028	3033
45°	3002	2983	2983
50°	2937	2911	2916
55°	2835	2811	2805
60°	2687	2674	2667
65°	2503	2471	2463
70°	2178	2178	2168
75°	1787	1775	1775
80°	1274	1234	1292
85°	664	664	664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.5
10°-20°	324.4	10.0
20°-30°	489.5	15.0
30°-40°	587.7	18.0
40°-50°	605.9	18.6
50°-60°	536.6	16.5
60°-70°	384.4	11.8
70°-80°	183.6	5.6
80°-90°	32.0	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°	927.3	28.5
0°-40°	1515.0	46.5
0°-60°	2657.5	81.6
0°-90°	3257.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3257.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1201	1201	1201	1201	1201	
5°	1197	1193	1193	1195	1198	114
15°	1152	1153	1149	1147	1148	325
25°	1064	1063	1061	1061	1059	491
35°	944	944	937	939	934	590
45°	789	789	784	782	784	608
55°	604	607	599	599	598	539
65°	393	391	388	387	387	386
75°	172	168	171	173	171	183
85°	22	23	22	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.9	1200.9	1200.9	1200.9	1200.9
2.5°	1197.1	1197.1	1195.9	1198.4	1202.2
5°	1197.1	1193.3	1193.3	1194.6	1198.4
7.5°	1185.7	1187.0	1188.3	1185.7	1188.3
10°	1179.4	1176.9	1175.6	1178.2	1180.7
12.5°	1168.0	1165.5	1163.0	1165.5	1168.0
15°	1151.6	1152.9	1149.1	1146.6	1147.8
17.5°	1139.0	1131.4	1131.4	1130.1	1128.9
20°	1113.7	1111.2	1108.6	1109.9	1112.4
22.5°	1090.9	1089.7	1085.9	1087.1	1088.4
25°	1064.4	1063.1	1060.6	1060.6	1059.3
27.5°	1037.8	1036.6	1034.1	1032.8	1035.3
30°	1008.8	1010.0	1002.4	1002.4	999.9
32.5°	977.2	977.2	970.8	968.3	972.1
35°	944.3	944.3	936.7	939.2	934.2
37.5°	908.9	911.4	898.8	902.6	901.3
40°	871.0	868.5	862.1	869.7	863.4
42.5°	830.5	834.3	825.5	825.5	820.4
45°	788.8	788.8	783.8	782.5	783.8
47.5°	744.6	745.8	742.0	743.3	740.8
50°	701.6	700.3	695.3	694.0	696.5
52.5°	653.6	654.8	648.5	649.8	648.5
55°	604.3	606.8	599.2	599.2	597.9
57.5°	552.4	552.4	548.6	548.6	546.1
60°	499.3	503.1	496.8	496.8	495.5
62.5°	445.0	445.0	442.4	443.7	441.2
65°	393.1	390.6	388.1	386.8	386.8
67.5°	336.3	333.7	336.3	332.5	333.7
70°	276.8	278.1	276.8	276.8	275.6
72.5°	223.7	223.7	225.0	223.7	223.7
75°	171.9	168.1	170.7	173.2	170.7
77.5°	121.4	121.4	123.9	123.9	125.1
80°	82.2	79.6	79.6	82.2	83.4
82.5°	45.5	46.8	46.8	46.8	46.8
85°	21.5	22.8	21.5	21.5	21.5
87.5°	10.1	10.1	8.8	7.6	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)