

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: P302649

Luminaire Tested: **FSP-24-64-50-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: P302649
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-21)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-64-50-CP375
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
Light Source: (308) 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

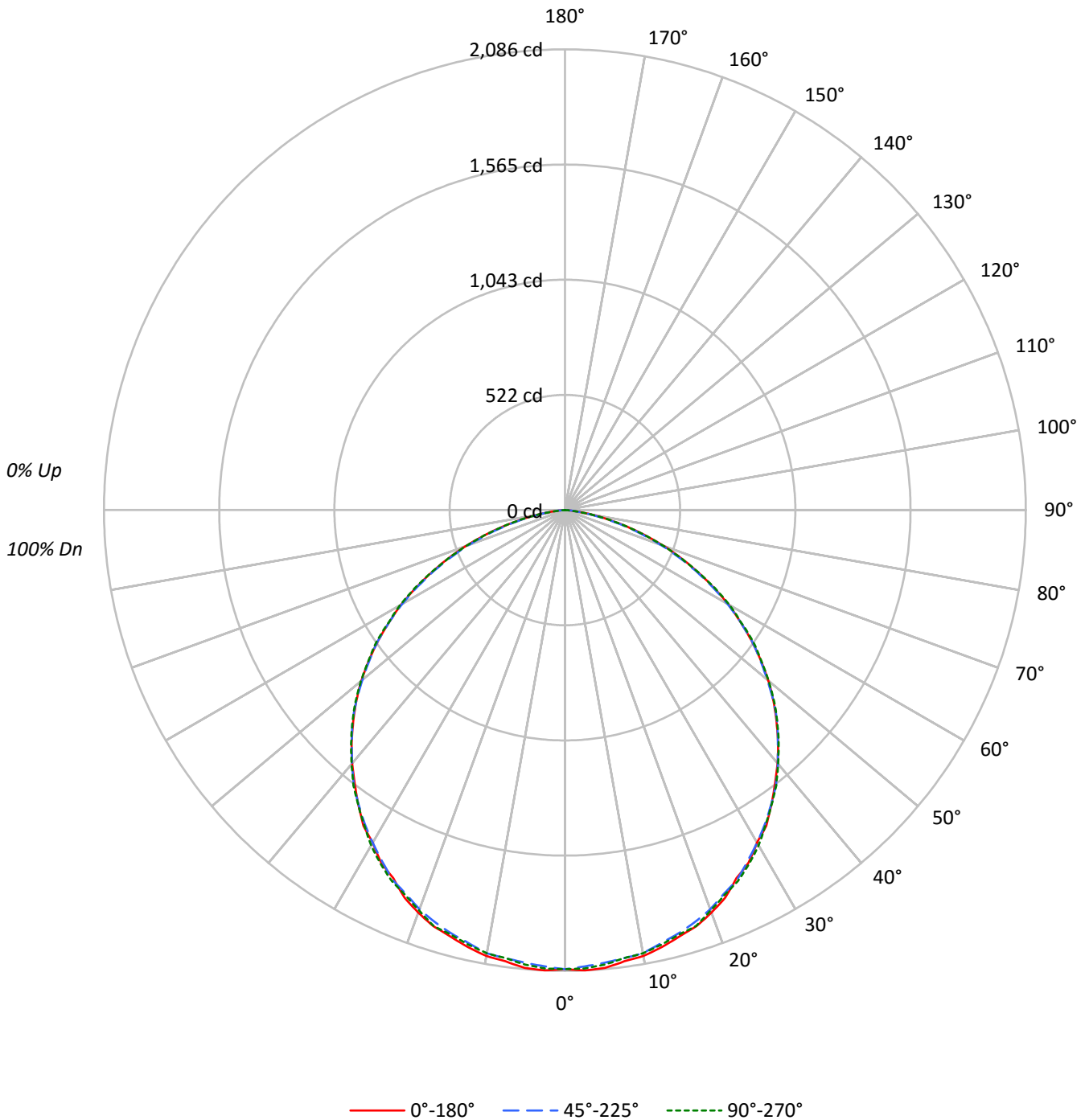
Lumens per Lamp: N/A
Luminaire Lumens: 5592.4 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	64	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2797	2797	2797
5°	2810	2778	2791
10°	2801	2783	2783
15°	2785	2765	2772
20°	2777	2754	2762
25°	2729	2740	2751
30°	2702	2702	2725
35°	2676	2673	2679
40°	2630	2633	2636
45°	2577	2588	2588
50°	2518	2503	2521
55°	2419	2423	2445
60°	2299	2289	2318
65°	2110	2087	2122
70°	1876	1819	1869
75°	1521	1455	1512
80°	1050	979	1050
85°	474	418	446



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.4	3.5
10°-20°	562.3	10.1
20°-30°	849.2	15.2
30°-40°	1017.9	18.2
40°-50°	1045.0	18.7
50°-60°	919.2	16.4
60°-70°	650.2	11.6
70°-80°	305.3	5.5
80°-90°	47.0	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°	1607.9	28.8
0°-40°	2625.8	47.0
0°-60°	4590.0	82.1
0°-90°	5592.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5592.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2081	2075	2057	2066	2066	197
15°	1999	1994	1985	1987	1990	565
25°	1838	1838	1846	1840	1853	851
35°	1629	1624	1627	1629	1631	1019
45°	1354	1351	1360	1362	1360	1045
55°	1031	1031	1033	1028	1042	921
65°	663	654	656	652	666	657
75°	293	284	280	284	291	313
85°	31	31	27	29	29	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2086.0	2082.4	2067.9	2071.5	2076.9
5°	2080.6	2075.1	2057.1	2066.1	2066.1
7.5°	2060.7	2055.3	2046.2	2051.7	2046.2
10°	2049.8	2048.0	2037.2	2035.4	2037.2
12.5°	2026.4	2021.0	2008.3	2017.3	2015.5
15°	1999.3	1993.9	1984.8	1986.6	1990.3
17.5°	1975.8	1972.2	1955.9	1961.4	1974.0
20°	1939.7	1927.0	1923.4	1925.2	1928.8
22.5°	1898.1	1889.1	1880.1	1883.7	1887.3
25°	1838.5	1838.5	1845.8	1840.3	1853.0
27.5°	1800.6	1797.0	1791.6	1791.6	1806.0
30°	1739.2	1739.2	1739.2	1744.6	1753.7
32.5°	1695.9	1688.6	1685.0	1686.8	1690.4
35°	1629.0	1623.6	1627.2	1629.0	1630.8
37.5°	1562.2	1560.4	1569.4	1564.0	1571.3
40°	1497.2	1493.6	1499.0	1495.4	1500.8
42.5°	1428.6	1421.3	1426.8	1430.4	1432.2
45°	1354.5	1350.9	1359.9	1361.8	1359.9
47.5°	1280.5	1275.1	1280.5	1285.9	1285.9
50°	1202.8	1195.6	1195.6	1201.0	1204.6
52.5°	1117.9	1110.7	1114.3	1119.7	1121.5
55°	1031.2	1031.2	1033.1	1027.6	1042.1
57.5°	940.9	933.7	940.9	937.3	944.6
60°	854.3	848.8	850.6	843.4	861.5
62.5°	758.5	753.1	751.3	749.5	765.8
65°	662.8	653.8	655.6	652.0	666.4
67.5°	570.7	561.7	558.1	558.1	568.9
70°	476.8	462.3	462.3	458.7	475.0
72.5°	382.9	372.0	366.6	370.2	382.9
75°	292.6	283.5	279.9	283.5	290.8
77.5°	207.7	204.1	198.7	202.3	209.5
80°	135.5	131.8	126.4	131.8	135.5
82.5°	74.0	72.2	68.6	72.2	72.2
85°	30.7	30.7	27.1	28.9	28.9
87.5°	9.0	7.2	7.2	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)