

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: P302643

Luminaire Tested: **FSP-24-64-40-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: P302643
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-24-64-40-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

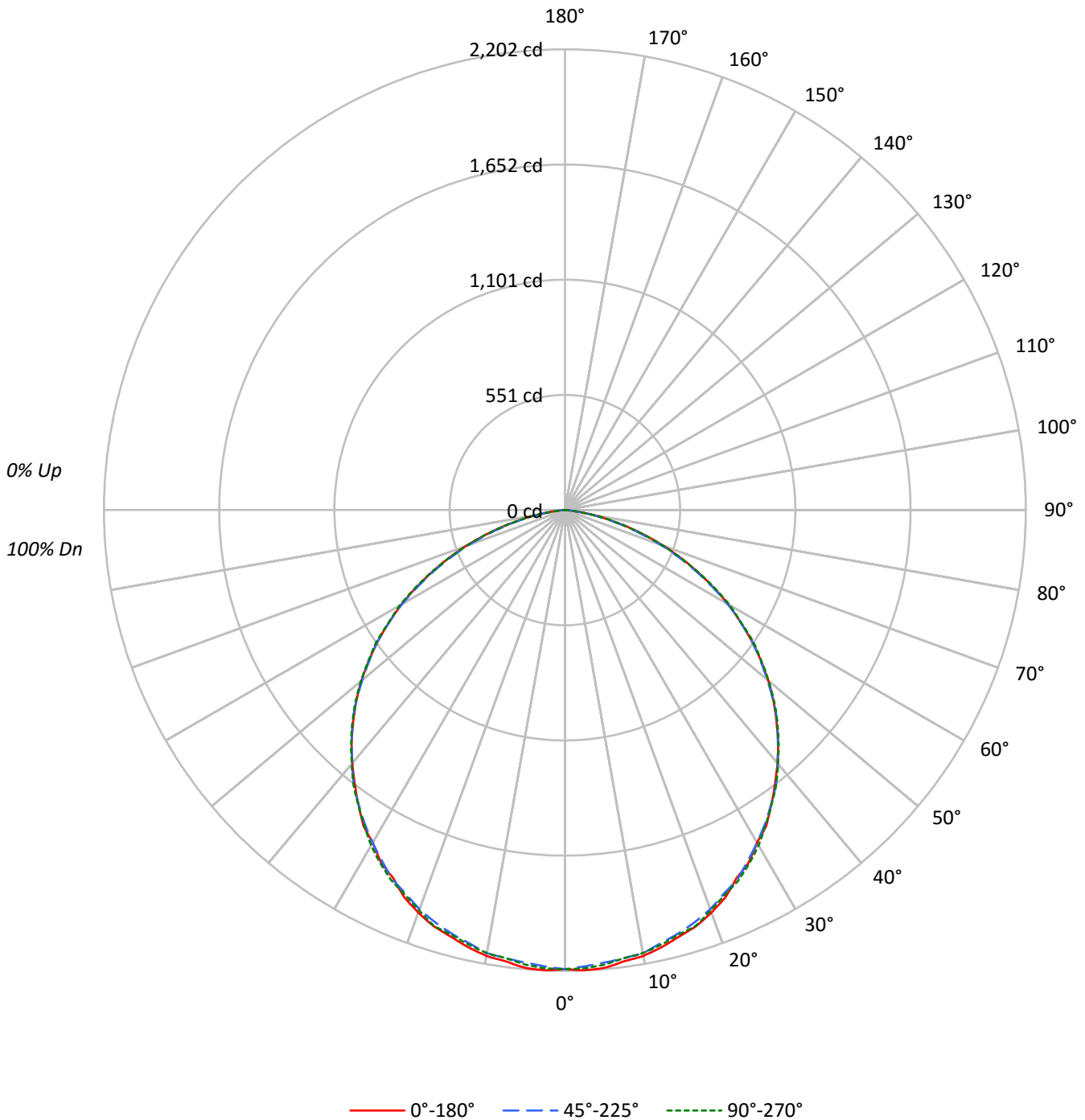
Lumens per Lamp: N/A
Luminaire Lumens: 5902.6 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 62.2
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°	2952	2952	2952
5°	2966	2932	2945
10°	2956	2938	2938
15°	2939	2918	2926
20°	2931	2907	2915
25°	2881	2892	2904
30°	2852	2852	2876
35°	2824	2821	2827
40°	2775	2779	2782
45°	2720	2731	2731
50°	2657	2641	2661
55°	2553	2558	2580
60°	2426	2416	2447
65°	2227	2203	2239
70°	1980	1920	1972
75°	1605	1536	1595
80°	1108	1034	1108
85°	500	442	471



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.3	3.5
10°-20°	593.5	10.1
20°-30°	896.3	15.2
30°-40°	1074.4	18.2
40°-50°	1103.0	18.7
50°-60°	970.1	16.4
60°-70°	686.3	11.6
70°-80°	322.2	5.5
80°-90°	49.6	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°	1697.1	28.8
0°-40°	2771.4	47.0
0°-60°	4844.5	82.1
0°-90°	5902.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5902.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2194	2194	2194	2194	2194	
5°	2196	2190	2171	2181	2181	208
15°	2110	2104	2095	2097	2101	596
25°	1940	1940	1948	1942	1956	898
35°	1719	1714	1718	1719	1721	1075
45°	1430	1426	1435	1437	1435	1103
55°	1088	1088	1090	1085	1100	972
65°	700	690	692	688	703	694
75°	309	299	296	299	307	331
85°	32	32	29	30	30	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2194.0	2194.0	2194.0	2194.0	2194.0
2.5°	2201.7	2197.8	2182.6	2186.4	2192.1
5°	2195.9	2190.2	2171.2	2180.7	2180.7
7.5°	2175.0	2169.3	2159.7	2165.4	2159.7
10°	2163.5	2161.6	2150.2	2148.3	2150.2
12.5°	2138.8	2133.0	2119.7	2129.2	2127.3
15°	2110.2	2104.4	2094.9	2096.8	2100.6
17.5°	2085.4	2081.6	2064.4	2070.1	2083.5
20°	2047.3	2033.9	2030.1	2032.0	2035.8
22.5°	2003.4	1993.9	1984.4	1988.2	1992.0
25°	1940.5	1940.5	1948.1	1942.4	1955.8
27.5°	1900.5	1896.7	1890.9	1890.9	1906.2
30°	1835.7	1835.7	1835.7	1841.4	1850.9
32.5°	1789.9	1782.3	1778.5	1780.4	1784.2
35°	1719.4	1713.7	1717.5	1719.4	1721.3
37.5°	1648.9	1647.0	1656.5	1650.8	1658.4
40°	1580.2	1576.4	1582.1	1578.3	1584.0
42.5°	1507.8	1500.2	1505.9	1509.7	1511.6
45°	1429.6	1425.8	1435.4	1437.3	1435.4
47.5°	1351.5	1345.8	1351.5	1357.2	1357.2
50°	1269.5	1261.9	1261.9	1267.6	1271.4
52.5°	1179.9	1172.3	1176.1	1181.8	1183.7
55°	1088.4	1088.4	1090.3	1084.6	1099.9
57.5°	993.1	985.5	993.1	989.3	996.9
60°	901.6	895.9	897.8	890.2	909.3
62.5°	800.6	794.9	793.0	791.1	808.2
65°	699.6	690.0	691.9	688.1	703.4
67.5°	602.4	592.8	589.0	589.0	600.5
70°	503.2	488.0	488.0	484.2	501.3
72.5°	404.1	392.7	387.0	390.8	404.1
75°	308.8	299.3	295.5	299.3	306.9
77.5°	219.2	215.4	209.7	213.5	221.1
80°	143.0	139.2	133.4	139.2	143.0
82.5°	78.2	76.2	72.4	76.2	76.2
85°	32.4	32.4	28.6	30.5	30.5
87.5°	9.5	7.6	7.6	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)