

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: P302547

Luminaire Tested: **FSP-22-25HE-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: P302547
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-22-25HE-40-CP375
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
Light Source: (266) 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

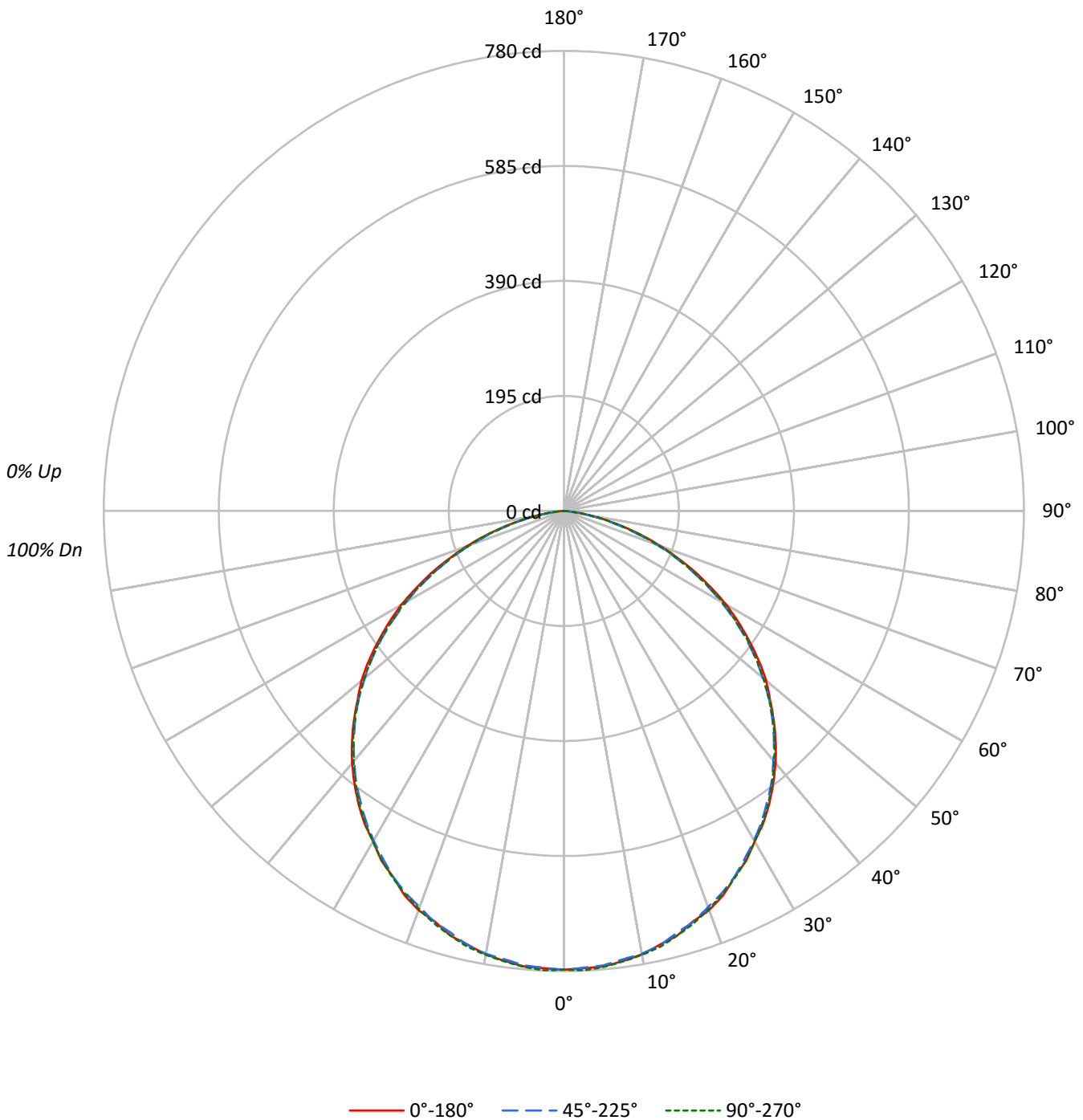
Lumens per Lamp: N/A
Luminaire Lumens: 2064.8 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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



TEST NUMBER: P302547
CATALOG NUMBER: FSP-22-25HE-40-CP375

Luminous Intensity Polar Plot





TEST NUMBER: P302547

CATALOG NUMBER: FSP-22-25HE-40-CP375

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°	2093	2093	2093
5°	2093	2088	2096
10°	2085	2083	2088
15°	2075	2062	2075
20°	2062	2046	2057
25°	2032	2032	2038
30°	2010	2005	2010
35°	1993	1975	1987
40°	1962	1942	1949
45°	1916	1902	1909
50°	1875	1844	1848
55°	1801	1766	1780
60°	1711	1658	1677
65°	1571	1513	1524
70°	1381	1323	1345
75°	1111	1045	1083
80°	750	708	750
85°	340	312	340



TEST NUMBER: P302547

CATALOG NUMBER: FSP-22-25HE-40-CP375

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	3.6
10°-20°	209.6	10.2
20°-30°	315.5	15.3
30°-40°	377.4	18.3
40°-50°	386.0	18.7
50°-60°	337.5	16.3
60°-70°	237.4	11.5
70°-80°	110.7	5.4
80°-90°	17.2	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°	598.6	29.0
0°-40°	976.0	47.3
0°-60°	1699.5	82.3
0°-90°	2064.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	775	772	773	771	776	74
15°	745	744	740	742	745	210
25°	684	685	684	684	686	316
35°	607	606	601	601	605	379
45°	504	502	500	500	502	389
55°	384	380	376	375	379	343
65°	247	242	238	237	239	243
75°	107	104	100	101	104	115
85°	11	10	10	11	11	18
90°	0	0	0	0	0	



TEST NUMBER: P302547

CATALOG NUMBER: FSP-22-25HE-40-CP375

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.7	777.7	777.7	777.7	777.7
2.5°	775.9	777.7	775.0	774.0	779.5
5°	775.0	772.2	773.1	771.3	775.9
7.5°	769.5	769.5	766.7	767.6	770.4
10°	763.1	761.2	762.2	762.2	764.0
12.5°	753.0	754.8	753.9	753.9	756.7
15°	744.8	743.9	740.2	742.1	744.8
17.5°	729.3	732.0	730.2	730.2	732.9
20°	720.1	718.3	714.6	716.5	718.3
22.5°	705.5	703.7	700.9	701.8	702.8
25°	684.5	685.4	684.5	683.6	686.3
27.5°	668.9	666.2	664.4	664.4	668.0
30°	647.0	648.8	645.2	645.2	647.0
32.5°	628.7	627.8	624.2	625.1	626.9
35°	606.8	605.9	601.3	601.3	605.0
37.5°	583.0	581.2	578.5	576.6	580.3
40°	558.4	558.4	552.9	551.1	554.7
42.5°	531.9	528.2	527.3	528.2	529.1
45°	503.5	501.7	499.9	499.9	501.7
47.5°	474.3	473.4	471.6	469.7	471.6
50°	447.8	442.3	440.5	440.5	441.4
52.5°	416.7	411.2	409.4	407.6	410.3
55°	383.8	380.2	376.5	374.7	379.3
57.5°	350.9	346.4	342.7	343.6	344.5
60°	318.0	311.6	308.0	307.1	311.6
62.5°	281.5	277.8	273.2	273.2	275.1
65°	246.7	242.2	237.6	236.7	239.4
67.5°	209.3	207.4	202.9	201.0	206.5
70°	175.5	170.0	168.1	166.3	170.9
72.5°	140.7	135.3	133.4	134.3	138.0
75°	106.9	104.2	100.5	101.4	104.2
77.5°	75.9	74.0	71.3	73.1	75.9
80°	48.4	47.5	45.7	46.6	48.4
82.5°	28.3	27.4	25.6	26.5	26.5
85°	11.0	10.1	10.1	11.0	11.0
87.5°	2.7	2.7	2.7	1.8	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)