

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: P302606

Luminaire Tested: **FSP-24-38HE-35-CP250**

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: P302606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-38HE-35-CP250
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
Light Source: (266) 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

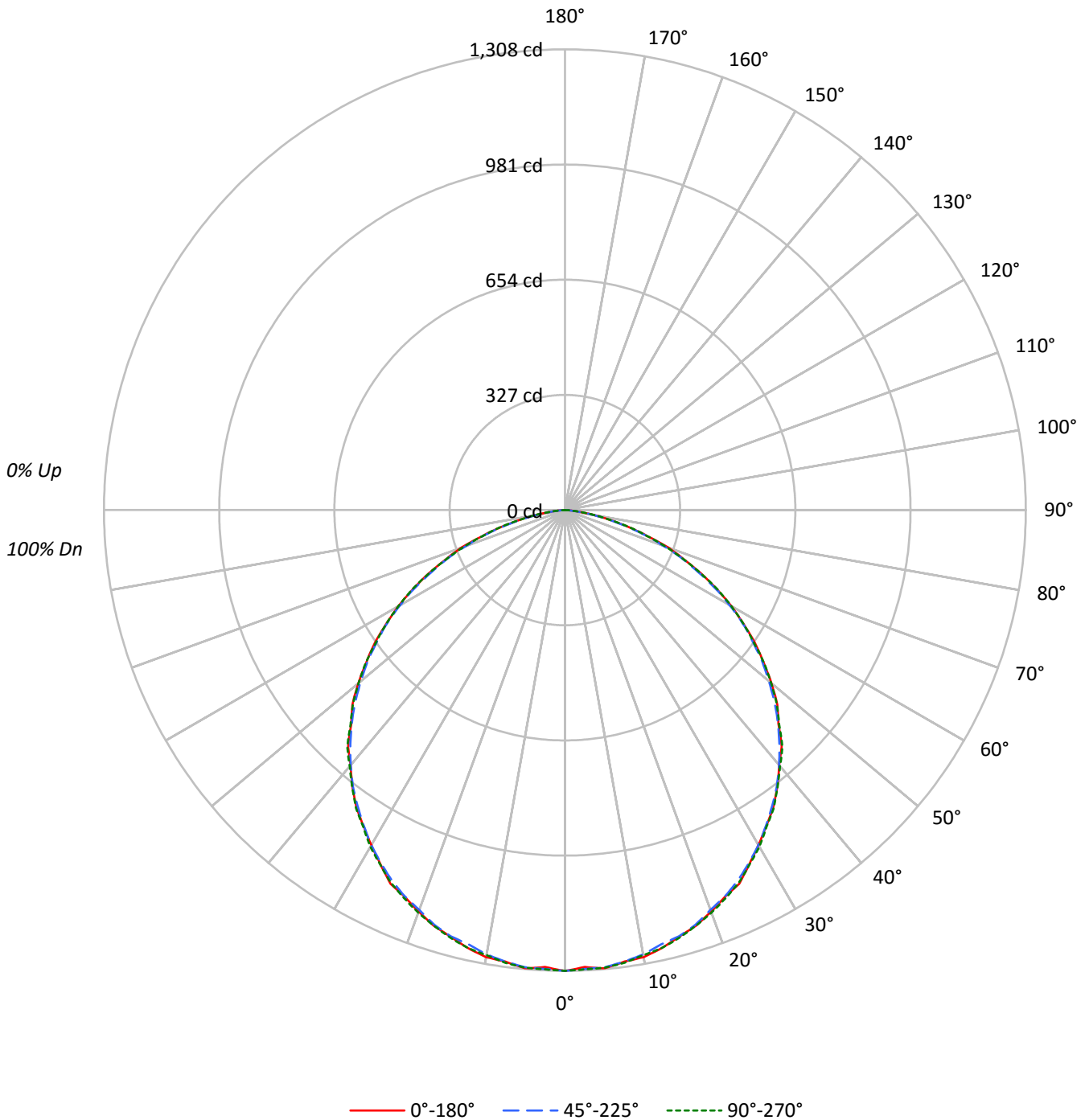
Lumens per Lamp: N/A
Luminaire Lumens: 3543.0 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	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°	1760	1760	1760
5°	1764	1759	1761
10°	1760	1750	1753
15°	1746	1745	1751
20°	1737	1729	1742
25°	1738	1723	1733
30°	1707	1707	1715
35°	1693	1684	1697
40°	1661	1661	1669
45°	1631	1627	1637
50°	1602	1582	1600
55°	1544	1527	1534
60°	1466	1452	1466
65°	1359	1331	1356
70°	1233	1173	1203
75°	988	948	1005
80°	693	652	702
85°	337	304	337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	3.5
10°-20°	353.9	10.0
20°-30°	535.7	15.1
30°-40°	642.8	18.1
40°-50°	661.7	18.7
50°-60°	582.8	16.4
60°-70°	414.4	11.7
70°-80°	196.6	5.5
80°-90°	31.3	0.9
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°	1013.3	28.6
0°-40°	1656.1	46.7
0°-60°	2900.7	81.9
0°-90°	3543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3543.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1304	1303	1306	1304	124
15°	1254	1255	1252	1254	1257	354
25°	1170	1166	1161	1163	1167	536
35°	1031	1030	1025	1029	1033	643
45°	857	858	855	858	860	664
55°	658	650	651	654	654	587
65°	427	407	418	420	426	422
75°	190	174	182	186	193	203
85°	22	19	20	21	22	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.1	1308.1	1308.1	1308.1	1308.1
2.5°	1298.3	1309.2	1303.8	1304.8	1304.8
5°	1305.9	1303.8	1302.7	1305.9	1303.8
7.5°	1292.8	1298.3	1292.8	1296.1	1296.1
10°	1288.5	1285.2	1280.8	1279.7	1283.0
12.5°	1273.2	1271.0	1262.3	1272.1	1273.2
15°	1253.5	1254.6	1252.4	1253.5	1256.8
17.5°	1237.1	1237.1	1233.9	1236.1	1237.1
20°	1213.1	1218.6	1207.7	1213.1	1216.4
22.5°	1188.0	1190.2	1186.9	1188.0	1192.4
25°	1170.5	1166.2	1160.7	1162.9	1167.3
27.5°	1133.4	1135.6	1130.1	1131.2	1134.5
30°	1098.5	1097.4	1098.5	1098.5	1103.9
32.5°	1063.5	1063.5	1062.4	1062.4	1065.7
35°	1030.8	1029.7	1025.3	1028.6	1033.0
37.5°	990.4	989.3	988.2	989.3	991.5
40°	945.6	948.9	945.6	946.7	950.0
42.5°	910.7	906.3	900.8	907.4	913.9
45°	857.2	858.2	855.0	858.2	860.4
47.5°	817.8	806.9	806.9	811.3	815.7
50°	765.4	757.8	755.6	761.1	764.3
52.5°	710.8	704.3	705.4	707.6	711.9
55°	658.4	649.7	650.8	654.1	654.1
57.5°	601.6	590.7	598.4	599.5	600.6
60°	544.9	531.8	539.4	540.5	544.9
62.5°	485.9	469.5	481.5	482.6	489.2
65°	426.9	407.3	418.2	420.4	425.8
67.5°	365.8	349.4	361.4	358.2	364.7
70°	313.4	289.4	298.1	300.3	305.7
72.5°	245.7	229.3	242.4	241.3	245.7
75°	190.0	173.6	182.4	185.6	193.3
77.5°	134.3	123.4	131.0	134.3	136.5
80°	89.5	80.8	84.1	87.4	90.6
82.5°	51.3	44.8	48.0	48.0	49.1
85°	21.8	18.6	19.7	20.7	21.8
87.5°	5.5	4.4	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)