

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: P302604

Luminaire Tested: **FSP-24-38HE-35-CP125**

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: P302604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-16)
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-CP125
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .125"
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

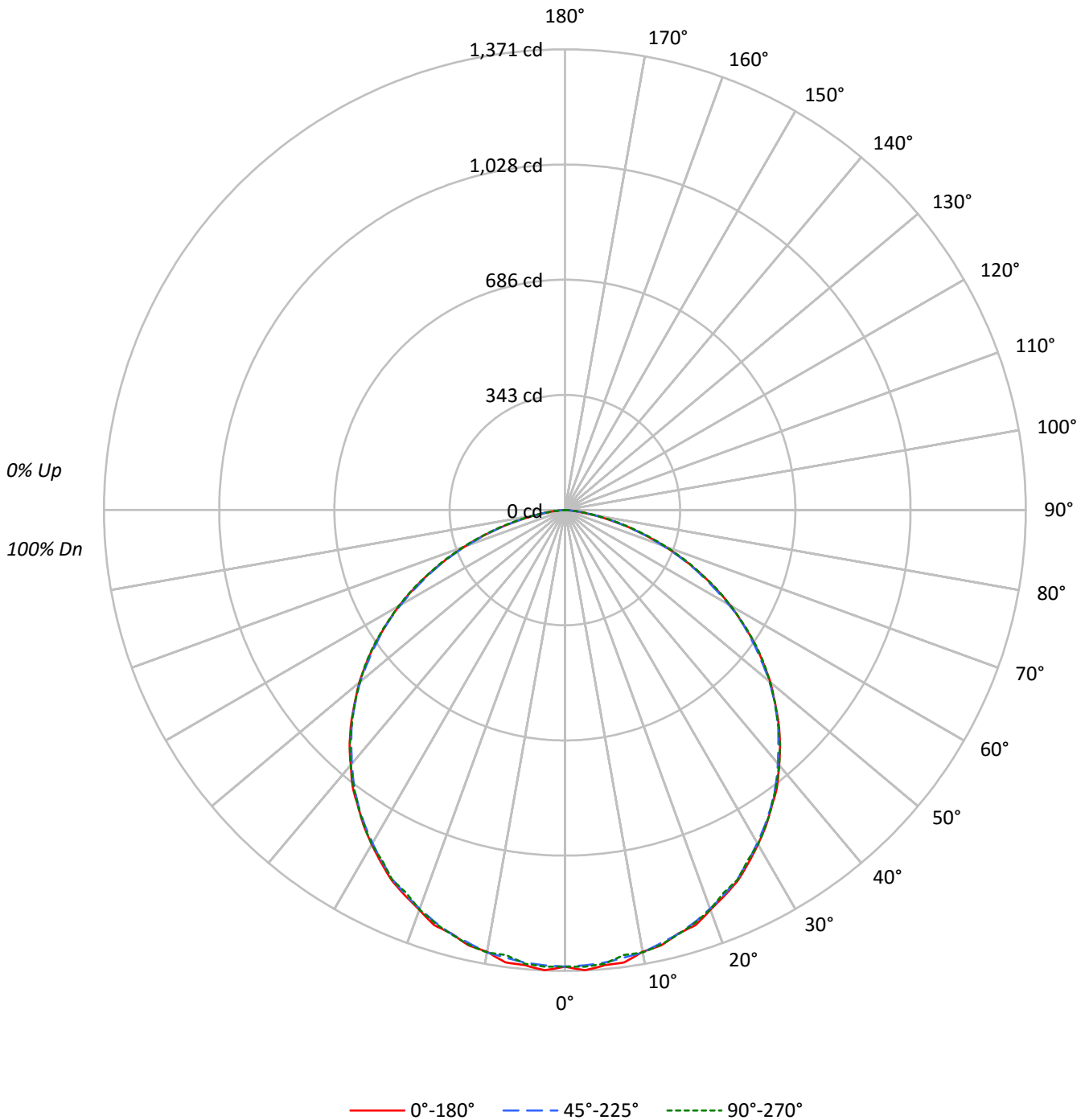
Lumens per Lamp: N/A
Luminaire Lumens: 3706.5 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	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	42	52	46	41	39
7	66	52	44	38	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°	1828	1828	1828
5°	1836	1826	1830
10°	1823	1826	1826
15°	1817	1819	1820
20°	1812	1808	1811
25°	1807	1801	1802
30°	1785	1778	1785
35°	1764	1760	1762
40°	1741	1731	1741
45°	1711	1705	1705
50°	1670	1663	1665
55°	1610	1597	1615
60°	1532	1517	1532
65°	1412	1395	1416
70°	1246	1224	1263
75°	1010	1010	1044
80°	701	701	744
85°	341	341	375



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	3.5
10°-20°	368.5	9.9
20°-30°	558.1	15.1
30°-40°	670.9	18.1
40°-50°	691.7	18.7
50°-60°	610.8	16.5
60°-70°	435.6	11.8
70°-80°	207.9	5.6
80°-90°	34.4	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°	1055.2	28.5
0°-40°	1726.1	46.6
0°-60°	3028.6	81.7
0°-90°	3706.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3706.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1360	1353	1352	1350	1355	129
15°	1304	1308	1306	1304	1307	369
25°	1217	1213	1213	1211	1214	560
35°	1074	1070	1072	1073	1073	673
45°	899	897	896	897	896	693
55°	686	684	681	683	689	612
65°	444	446	438	437	445	438
75°	194	196	194	190	201	208
85°	22	22	22	23	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1358.4	1358.4	1358.4	1358.4	1358.4
2.5°	1370.6	1358.4	1356.2	1358.4	1359.6
5°	1359.6	1352.9	1351.8	1349.6	1355.1
7.5°	1357.3	1348.5	1343.0	1343.0	1335.3
10°	1334.2	1338.6	1336.4	1332.0	1336.4
12.5°	1326.4	1322.0	1319.8	1319.8	1324.2
15°	1304.4	1307.7	1305.5	1304.4	1306.6
17.5°	1294.4	1288.9	1285.6	1284.5	1287.8
20°	1265.8	1262.4	1262.4	1263.5	1264.6
22.5°	1241.5	1237.1	1238.2	1241.5	1232.6
25°	1217.2	1212.8	1212.8	1210.6	1213.9
27.5°	1183.0	1180.8	1178.6	1180.8	1176.4
30°	1148.8	1145.5	1144.4	1147.7	1148.8
32.5°	1113.5	1111.3	1109.0	1110.2	1112.4
35°	1073.7	1070.4	1071.5	1072.6	1072.6
37.5°	1037.3	1031.8	1030.7	1034.0	1032.9
40°	991.0	993.2	985.5	989.9	991.0
42.5°	947.9	943.5	940.2	950.1	946.8
45°	899.4	897.2	896.1	897.2	896.1
47.5°	847.5	848.6	845.3	849.7	846.4
50°	797.9	799.0	794.5	794.5	795.6
52.5°	742.7	746.0	737.2	736.1	744.9
55°	686.4	684.2	680.9	683.1	688.6
57.5°	626.8	627.9	625.7	626.8	629.0
60°	569.4	567.2	563.9	558.4	569.4
62.5°	506.5	508.7	498.8	498.8	509.8
65°	443.6	445.8	438.1	437.0	444.7
67.5°	379.6	379.6	376.3	370.8	385.1
70°	316.7	316.7	311.2	311.2	321.1
72.5°	253.8	252.7	251.6	248.3	259.3
75°	194.2	196.4	194.2	189.8	200.8
77.5°	139.0	141.3	137.9	139.0	144.6
80°	90.5	90.5	90.5	89.4	96.0
82.5°	53.0	51.9	51.9	53.0	55.2
85°	22.1	22.1	22.1	23.2	24.3
87.5°	5.5	5.5	6.6	5.5	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)