

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: P302609

Luminaire Tested: **FSP-24-38HE-40-CA125**

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: P302609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-15)
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-40-CA125
Description: 2x4 Fail Safe Flat Panel Clear Acrylic Lens .125"
Light Source: (224) 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

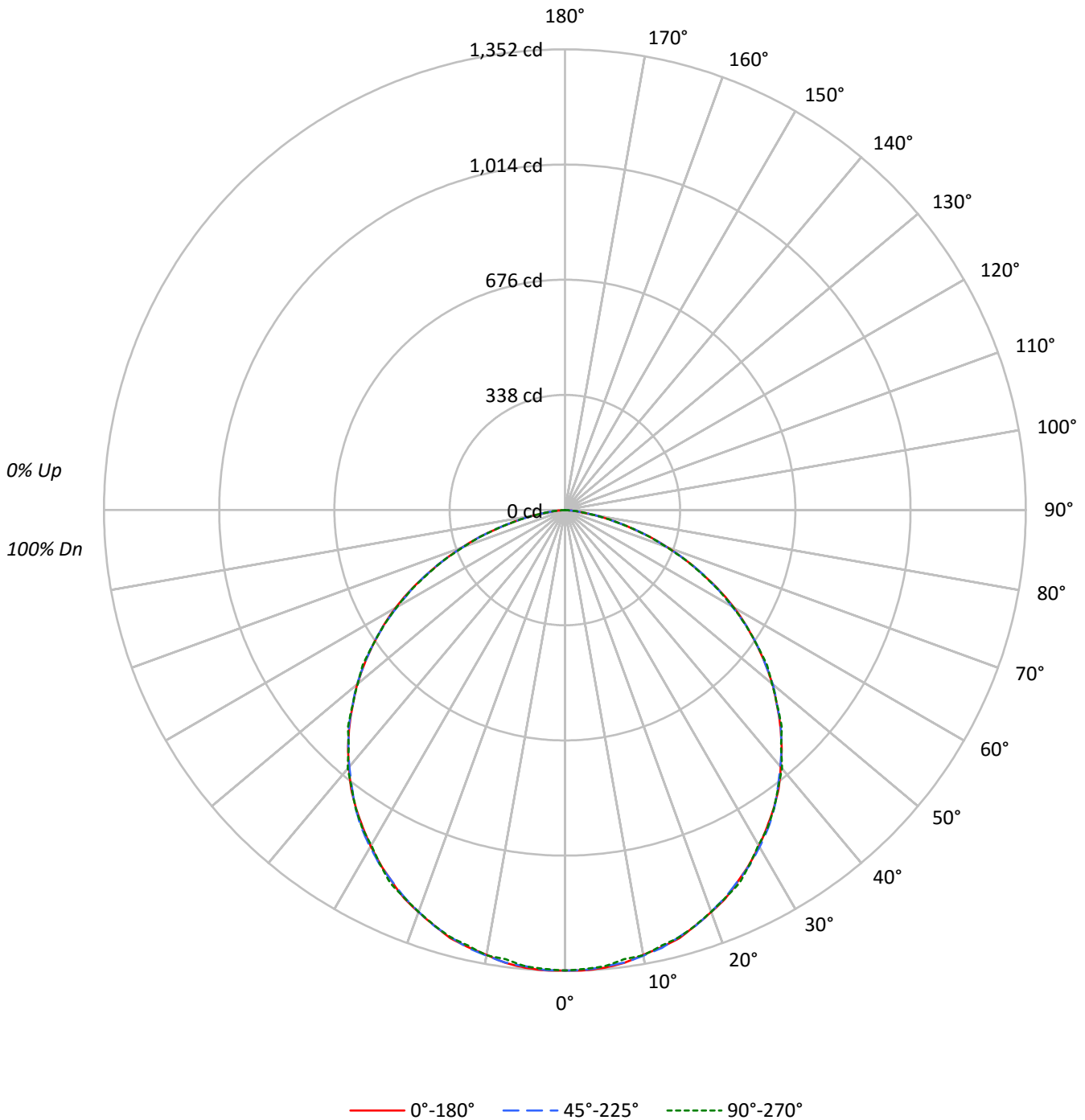
Lumens per Lamp: N/A
Luminaire Lumens: 3707.8 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.9
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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1818	1818	1818
5°	1820	1815	1815
10°	1811	1814	1812
15°	1812	1806	1807
20°	1798	1796	1796
25°	1784	1783	1795
30°	1769	1774	1764
35°	1754	1758	1756
40°	1731	1727	1740
45°	1699	1704	1712
50°	1663	1667	1661
55°	1610	1612	1610
60°	1544	1526	1532
65°	1423	1427	1410
70°	1261	1253	1249
75°	1026	1037	1031
80°	731	731	723
85°	347	347	364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.7	3.4
10°-20°	365.9	9.9
20°-30°	554.3	14.9
30°-40°	667.7	18.0
40°-50°	689.4	18.6
50°-60°	613.3	16.5
60°-70°	441.2	11.9
70°-80°	213.0	5.7
80°-90°	35.3	1.0
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°	1047.9	28.3
0°-40°	1715.6	46.3
0°-60°	3018.3	81.4
0°-90°	3707.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3707.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1348	1342	1344	1340	1344	128
15°	1301	1298	1296	1300	1297	366
25°	1202	1202	1201	1201	1209	554
35°	1068	1067	1070	1069	1069	668
45°	893	894	895	894	900	689
55°	686	685	687	688	686	613
65°	447	448	448	449	443	443
75°	197	198	199	199	198	213
85°	22	24	22	22	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.0	1351.0	1351.0	1351.0	1351.0
2.5°	1352.0	1351.0	1351.0	1344.5	1347.8
5°	1347.8	1342.4	1343.5	1340.2	1343.5
7.5°	1340.2	1337.0	1339.2	1331.7	1329.5
10°	1325.2	1326.3	1327.4	1322.0	1326.3
12.5°	1313.4	1316.7	1315.6	1310.2	1309.2
15°	1300.6	1298.4	1296.3	1299.5	1297.4
17.5°	1277.0	1274.8	1278.1	1277.0	1277.0
20°	1255.5	1254.5	1254.5	1251.3	1254.5
22.5°	1233.0	1229.8	1229.8	1234.1	1230.9
25°	1201.9	1201.9	1200.9	1200.9	1209.4
27.5°	1171.9	1170.8	1174.1	1176.2	1173.0
30°	1138.7	1138.7	1141.9	1139.7	1135.5
32.5°	1103.3	1102.2	1108.7	1105.4	1106.5
35°	1067.9	1066.8	1070.1	1069.0	1069.0
37.5°	1030.4	1023.9	1026.1	1031.5	1027.2
40°	985.3	984.3	983.2	985.3	990.7
42.5°	941.4	939.2	940.3	942.5	938.2
45°	893.1	894.2	895.3	894.2	899.6
47.5°	843.8	846.0	843.8	849.2	843.8
50°	794.5	793.4	796.6	796.6	793.4
52.5°	740.9	742.0	740.9	745.2	747.3
55°	686.2	685.1	687.3	688.4	686.2
57.5°	630.5	630.5	629.4	633.7	629.4
60°	573.6	569.3	567.2	569.3	569.3
62.5°	511.4	508.2	508.2	508.2	508.2
65°	447.1	448.2	448.2	449.3	442.8
67.5°	384.9	382.8	384.9	381.7	382.8
70°	320.6	321.7	318.4	320.6	317.4
72.5°	260.5	260.5	260.5	258.4	258.4
75°	197.3	198.4	199.4	199.4	198.4
77.5°	143.7	142.6	143.7	143.7	143.7
80°	94.4	92.2	94.4	93.3	93.3
82.5°	52.5	53.6	53.6	54.7	54.7
85°	22.5	23.6	22.5	22.5	23.6
87.5°	6.4	6.4	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)