

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: P302605

Luminaire Tested: **FSP-24-38HE-35-CP187**

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: P302605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-17)
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-CP187
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .187"
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

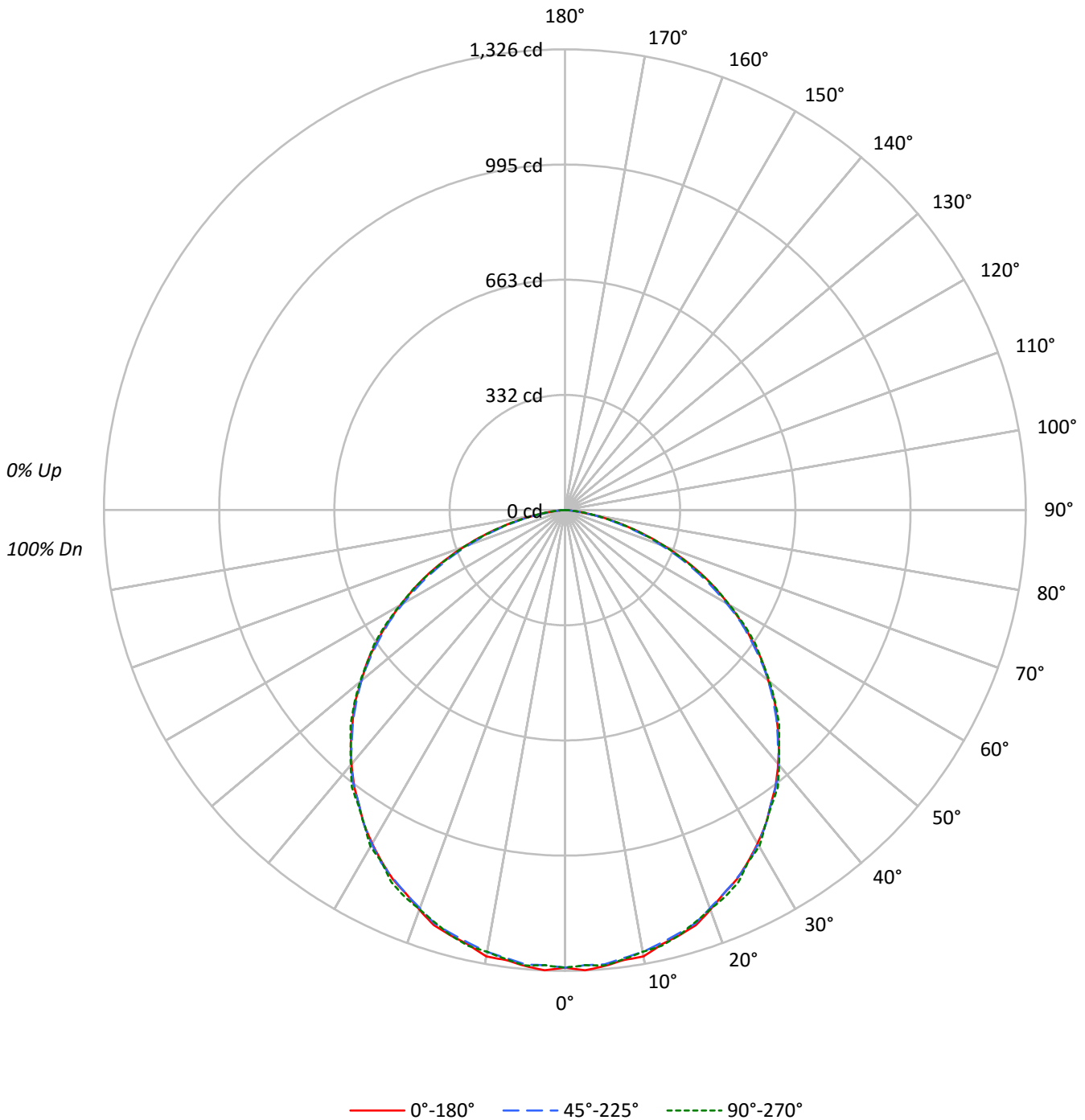
Lumens per Lamp: N/A
Luminaire Lumens: 3572.4 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	56	81	70	62	56	68	61	55	66	59	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	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°	1772	1772	1772
5°	1779	1772	1777
10°	1782	1764	1764
15°	1766	1758	1766
20°	1752	1746	1751
25°	1740	1737	1753
30°	1722	1725	1737
35°	1697	1697	1702
40°	1676	1681	1682
45°	1643	1641	1658
50°	1599	1599	1611
55°	1544	1534	1566
60°	1467	1446	1473
65°	1371	1329	1360
70°	1214	1161	1214
75°	997	933	986
80°	687	652	704
85°	329	312	329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.5
10°-20°	356.9	10.0
20°-30°	539.8	15.1
30°-40°	648.3	18.1
40°-50°	666.0	18.6
50°-60°	587.6	16.4
60°-70°	418.2	11.7
70°-80°	199.0	5.6
80°-90°	32.1	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°	1021.2	28.6
0°-40°	1669.5	46.7
0°-60°	2923.1	81.8
0°-90°	3572.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3572.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1317	1316	1312	1309	1316	125
15°	1268	1264	1262	1266	1268	358
25°	1172	1170	1170	1172	1181	539
35°	1033	1034	1033	1043	1036	648
45°	864	862	862	868	872	667
55°	658	660	654	658	667	589
65°	431	427	417	421	427	424
75°	192	187	180	183	190	205
85°	21	20	20	21	21	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.8	1316.8	1316.8	1316.8	1316.8
2.5°	1325.8	1315.7	1311.2	1309.0	1311.2
5°	1316.8	1315.7	1312.3	1309.0	1315.7
7.5°	1305.6	1303.3	1300.0	1297.7	1303.3
10°	1304.5	1295.5	1291.0	1292.1	1291.0
12.5°	1280.9	1282.0	1276.4	1278.7	1284.3
15°	1267.5	1264.1	1261.8	1266.3	1267.5
17.5°	1252.9	1251.8	1247.3	1240.5	1243.9
20°	1223.7	1222.6	1219.2	1224.8	1222.6
22.5°	1194.5	1201.3	1194.5	1202.4	1204.6
25°	1172.1	1169.9	1169.9	1172.1	1181.1
27.5°	1140.7	1137.3	1144.1	1138.5	1141.8
30°	1108.2	1104.8	1110.4	1110.4	1118.3
32.5°	1074.5	1071.2	1074.5	1072.3	1073.4
35°	1033.0	1034.2	1033.0	1043.1	1036.4
37.5°	997.1	994.9	998.3	998.3	1006.1
40°	954.5	954.5	956.8	954.5	957.9
42.5°	911.9	905.2	907.4	910.8	911.9
45°	863.7	862.5	862.5	868.2	871.5
47.5°	818.8	814.3	813.2	815.4	821.0
50°	763.8	763.8	763.8	767.2	769.4
52.5°	716.7	713.4	710.0	712.2	714.5
55°	658.4	659.5	653.9	658.4	667.4
57.5°	604.6	603.4	600.1	600.1	609.1
60°	545.1	545.1	537.3	542.9	547.4
62.5°	489.0	487.9	476.7	480.1	490.2
65°	430.7	427.3	417.3	420.6	427.3
67.5°	369.0	365.7	356.7	358.9	364.5
70°	308.5	306.2	295.0	298.4	308.5
72.5°	249.0	244.5	237.8	238.9	245.6
75°	191.8	187.3	179.5	182.8	189.6
77.5°	138.0	135.7	130.1	131.2	138.0
80°	88.6	87.5	84.1	86.4	90.9
82.5°	51.6	49.4	46.0	48.2	50.5
85°	21.3	20.2	20.2	21.3	21.3
87.5°	4.5	4.5	5.6	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)