

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: P302607

Luminaire Tested: **FSP-24-38HE-35-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: P302607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-21)
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-CP375
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
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

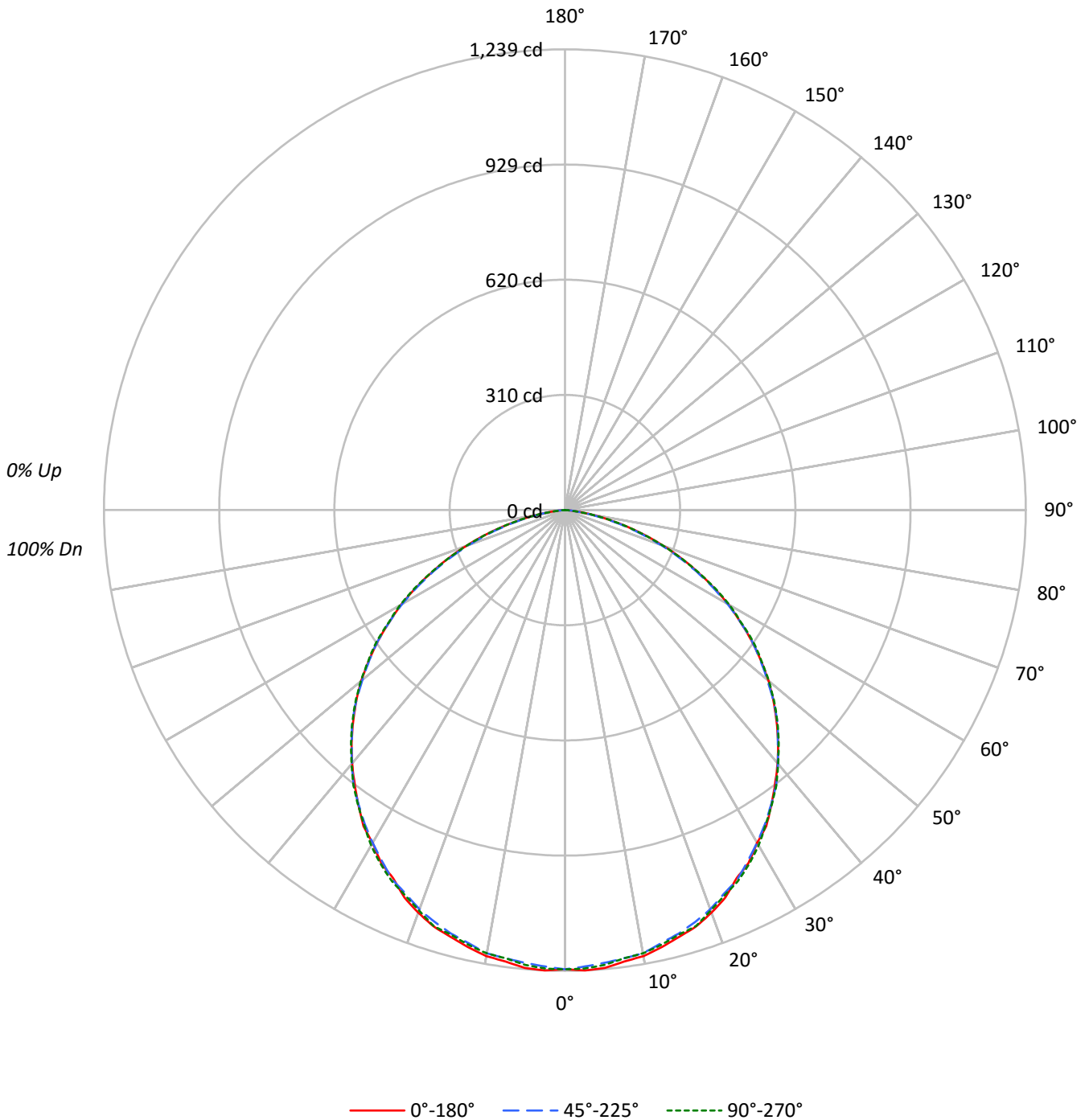
Lumens per Lamp: N/A
Luminaire Lumens: 3322.4 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	64	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1662	1662	1662
5°	1669	1651	1658
10°	1664	1654	1654
15°	1654	1642	1647
20°	1650	1636	1641
25°	1621	1628	1634
30°	1605	1605	1619
35°	1590	1588	1591
40°	1562	1564	1566
45°	1531	1537	1537
50°	1496	1487	1498
55°	1437	1440	1452
60°	1366	1360	1377
65°	1254	1240	1260
70°	1114	1081	1110
75°	904	865	898
80°	624	582	624
85°	281	249	266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.7	3.5
10°-20°	334.1	10.1
20°-30°	504.5	15.2
30°-40°	604.7	18.2
40°-50°	620.8	18.7
50°-60°	546.1	16.4
60°-70°	386.3	11.6
70°-80°	181.3	5.5
80°-90°	28.0	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°	955.2	28.8
0°-40°	1559.9	47.0
0°-60°	2726.8	82.1
0°-90°	3322.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3322.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1236	1233	1222	1227	1227	117
15°	1188	1184	1179	1180	1182	336
25°	1092	1092	1096	1093	1101	506
35°	968	965	967	968	969	605
45°	805	802	808	809	808	621
55°	613	613	614	610	619	547
65°	394	388	390	387	396	390
75°	174	168	166	168	173	186
85°	18	18	16	17	17	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.9	1234.9	1234.9	1234.9	1234.9
2.5°	1239.2	1237.1	1228.5	1230.6	1233.9
5°	1236.0	1232.8	1222.1	1227.4	1227.4
7.5°	1224.2	1221.0	1215.6	1218.8	1215.6
10°	1217.8	1216.7	1210.3	1209.2	1210.3
12.5°	1203.8	1200.6	1193.1	1198.5	1197.4
15°	1187.7	1184.5	1179.1	1180.2	1182.4
17.5°	1173.8	1171.6	1162.0	1165.2	1172.7
20°	1152.3	1144.8	1142.7	1143.7	1145.9
22.5°	1127.6	1122.3	1116.9	1119.1	1121.2
25°	1092.2	1092.2	1096.5	1093.3	1100.8
27.5°	1069.7	1067.6	1064.3	1064.3	1072.9
30°	1033.2	1033.2	1033.2	1036.4	1041.8
32.5°	1007.5	1003.2	1001.0	1002.1	1004.3
35°	967.8	964.6	966.7	967.8	968.8
37.5°	928.1	927.0	932.4	929.2	933.4
40°	889.5	887.3	890.5	888.4	891.6
42.5°	848.7	844.4	847.6	849.8	850.8
45°	804.7	802.5	807.9	809.0	807.9
47.5°	760.7	757.5	760.7	763.9	763.9
50°	714.6	710.3	710.3	713.5	715.6
52.5°	664.1	659.8	662.0	665.2	666.3
55°	612.6	612.6	613.7	610.5	619.1
57.5°	559.0	554.7	559.0	556.8	561.1
60°	507.5	504.3	505.3	501.1	511.8
62.5°	450.6	447.4	446.3	445.3	454.9
65°	393.8	388.4	389.5	387.3	395.9
67.5°	339.0	333.7	331.5	331.5	338.0
70°	283.3	274.7	274.7	272.5	282.2
72.5°	227.5	221.0	217.8	219.9	227.5
75°	173.8	168.4	166.3	168.4	172.7
77.5°	123.4	121.2	118.0	120.2	124.5
80°	80.5	78.3	75.1	78.3	80.5
82.5°	44.0	42.9	40.8	42.9	42.9
85°	18.2	18.2	16.1	17.2	17.2
87.5°	5.4	4.3	4.3	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)