

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: P302602

Luminaire Tested: **FSP-24-38HE-35-CA08**

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: P302602
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-14)
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-CA08
Description: 2x4 Fail Safe Flat Panel Clear Acrylic Lens .08"
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

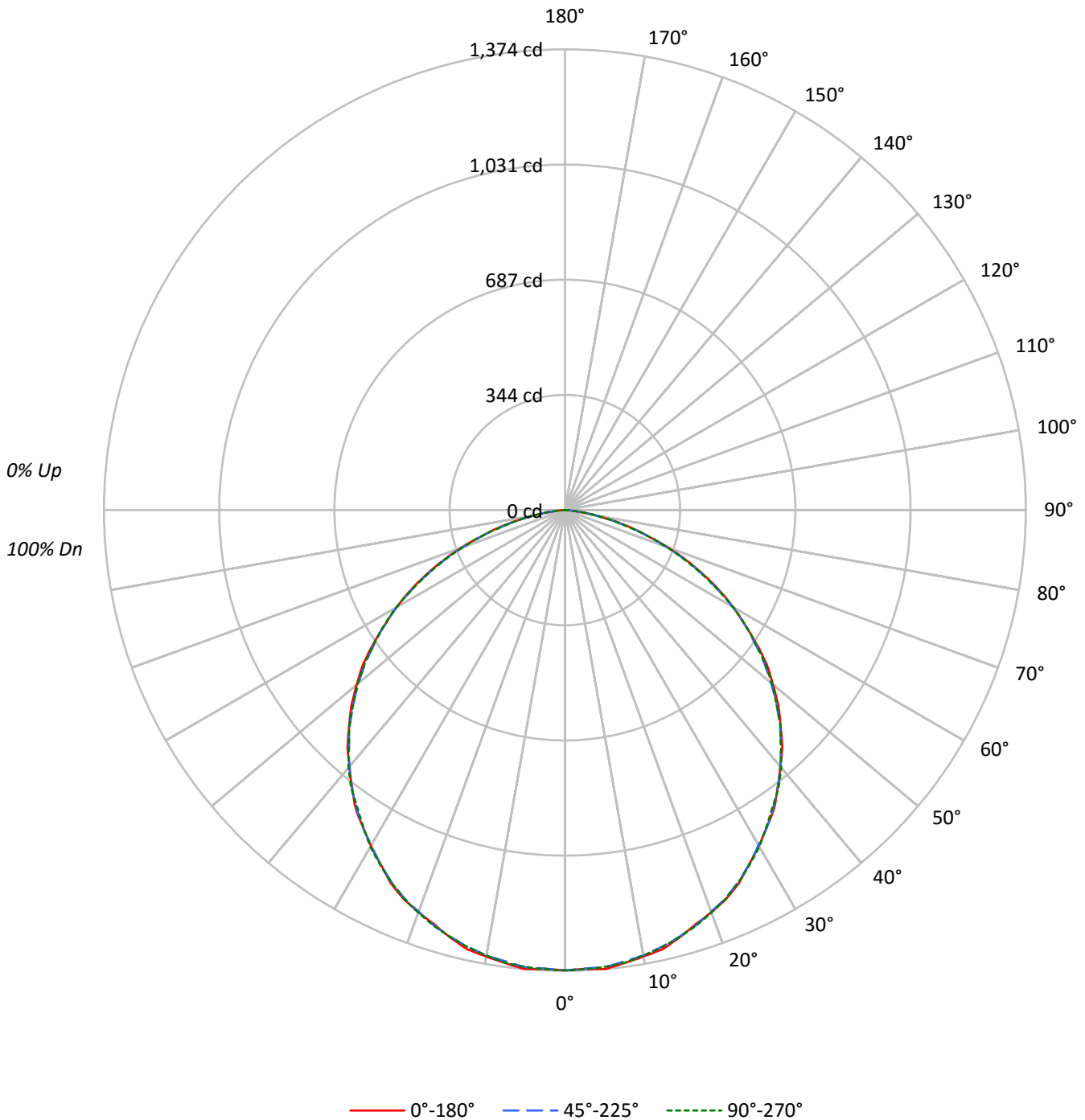
Lumens per Lamp: N/A
Luminaire Lumens: 3763.7 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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	102	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°	1847	1847	1847
5°	1855	1848	1847
10°	1847	1842	1842
15°	1838	1835	1837
20°	1828	1825	1829
25°	1823	1816	1818
30°	1796	1793	1801
35°	1786	1779	1774
40°	1755	1755	1763
45°	1731	1725	1729
50°	1696	1680	1686
55°	1639	1620	1628
60°	1558	1558	1561
65°	1453	1439	1436
70°	1296	1269	1274
75°	1086	1052	1040
80°	745	745	754
85°	392	392	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	3.5
10°-20°	371.9	9.9
20°-30°	563.2	15.0
30°-40°	677.4	18.0
40°-50°	699.2	18.6
50°-60°	621.1	16.5
60°-70°	447.1	11.9
70°-80°	216.3	5.7
80°-90°	37.7	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°	1065.0	28.3
0°-40°	1742.3	46.3
0°-60°	3062.7	81.4
0°-90°	3763.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1374	1370	1368	1364	1367	130
15°	1320	1318	1317	1314	1318	372
25°	1228	1222	1224	1224	1225	564
35°	1088	1084	1083	1084	1080	678
45°	910	908	906	906	908	702
55°	698	697	691	694	694	623
65°	456	453	452	448	451	451
75°	209	204	202	201	200	219
85°	25	25	25	25	28	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.7	1372.7	1372.7	1372.7	1372.7
2.5°	1369.4	1369.4	1368.3	1369.4	1370.5
5°	1373.8	1370.5	1368.3	1363.8	1367.2
7.5°	1362.7	1359.4	1357.2	1353.9	1361.6
10°	1351.7	1351.7	1348.4	1342.9	1348.4
12.5°	1341.7	1335.1	1334.0	1332.9	1335.1
15°	1319.6	1318.5	1317.4	1314.1	1318.5
17.5°	1295.3	1298.6	1298.6	1298.6	1299.7
20°	1276.5	1274.3	1274.3	1274.3	1277.6
22.5°	1255.5	1251.1	1252.2	1247.8	1253.3
25°	1227.9	1222.4	1223.5	1223.5	1224.6
27.5°	1190.3	1190.3	1190.3	1191.4	1192.5
30°	1156.1	1158.3	1153.9	1152.8	1159.4
32.5°	1120.7	1120.7	1121.8	1117.4	1118.5
35°	1087.5	1084.2	1083.1	1084.2	1079.8
37.5°	1042.2	1044.4	1043.3	1042.2	1045.5
40°	999.1	1002.4	999.1	998.0	1003.5
42.5°	959.3	956.0	952.7	950.5	952.7
45°	909.6	908.5	906.3	906.3	908.5
47.5°	863.2	861.0	855.4	854.3	855.4
50°	810.1	807.9	802.4	806.8	805.7
52.5°	759.3	754.9	749.3	751.6	751.6
55°	698.5	697.4	690.8	694.1	694.1
57.5°	635.5	639.9	637.7	636.6	637.7
60°	579.1	582.5	579.1	575.8	580.2
62.5°	520.6	518.4	513.9	513.9	513.9
65°	456.5	453.1	452.0	447.6	450.9
67.5°	393.5	390.1	387.9	386.8	386.8
70°	329.4	327.1	322.7	321.6	323.8
72.5°	263.0	264.1	261.9	259.7	263.0
75°	208.9	204.5	202.3	201.2	200.0
77.5°	148.1	145.9	144.8	144.8	145.9
80°	96.2	96.2	96.2	96.2	97.3
82.5°	55.3	56.4	55.3	57.5	58.6
85°	25.4	25.4	25.4	25.4	27.6
87.5°	8.8	7.7	7.7	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)