

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: P302595

Luminaire Tested: **FSP-24-31-35-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: P302595
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-24-31-35-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

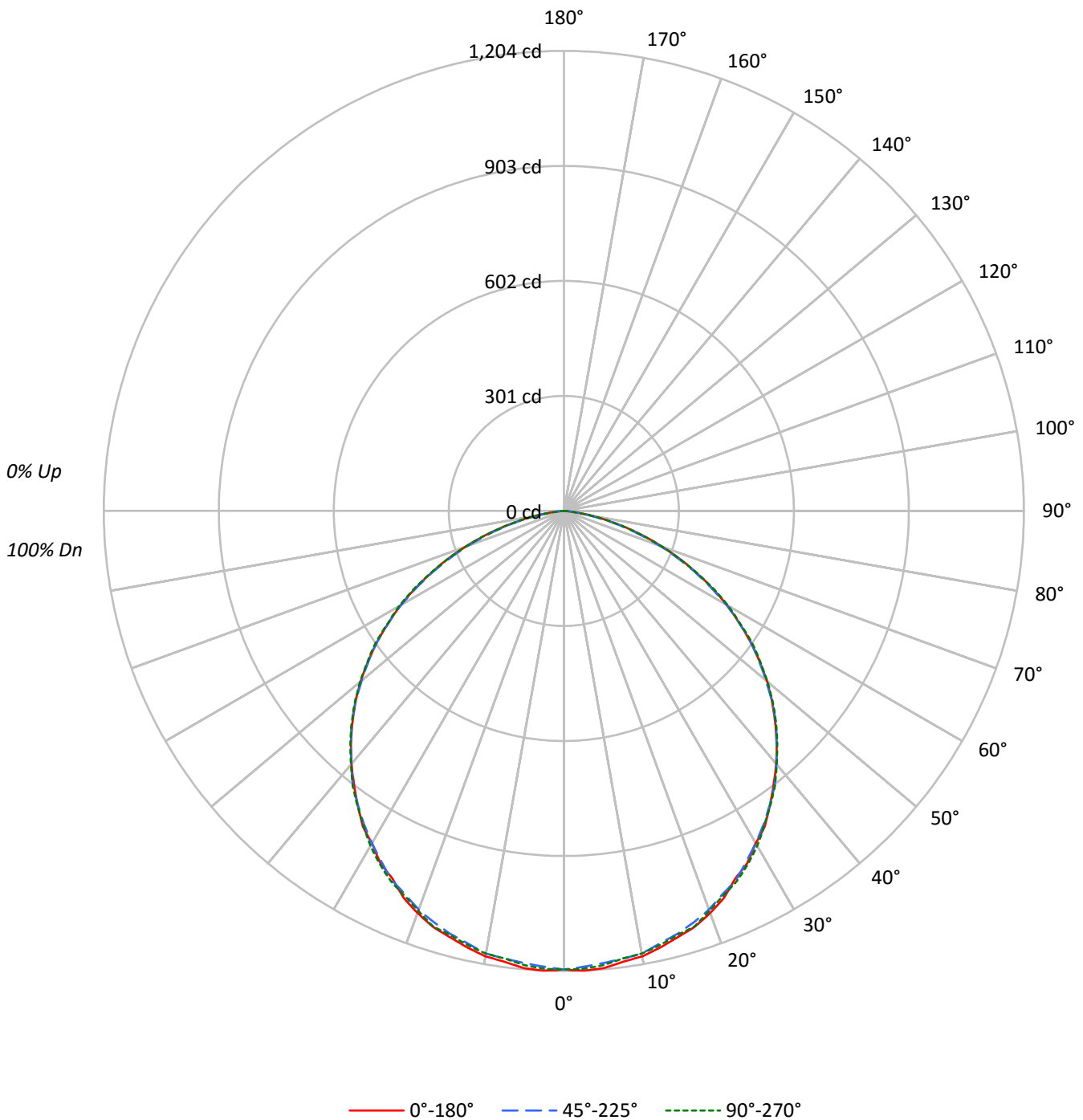
Lumens per Lamp: N/A
Luminaire Lumens: 3228.5 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.3
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°	1615	1615	1615
5°	1622	1604	1611
10°	1617	1607	1607
15°	1608	1596	1601
20°	1603	1590	1594
25°	1576	1582	1588
30°	1560	1560	1573
35°	1545	1543	1546
40°	1518	1520	1522
45°	1488	1494	1494
50°	1454	1445	1456
55°	1396	1399	1411
60°	1327	1322	1338
65°	1218	1205	1225
70°	1083	1050	1079
75°	878	840	873
80°	606	566	606
85°	273	241	258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	3.5
10°-20°	324.6	10.1
20°-30°	490.2	15.2
30°-40°	587.6	18.2
40°-50°	603.3	18.7
50°-60°	530.6	16.4
60°-70°	375.4	11.6
70°-80°	176.2	5.5
80°-90°	27.2	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°	928.2	28.8
0°-40°	1515.9	47.0
0°-60°	2649.8	82.1
0°-90°	3228.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3228.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1201	1198	1188	1193	1193	114
15°	1154	1151	1146	1147	1149	326
25°	1061	1061	1066	1062	1070	491
35°	940	937	939	940	942	588
45°	782	780	785	786	785	603
55°	595	595	596	593	602	532
65°	383	377	378	376	385	379
75°	169	164	162	164	168	181
85°	18	18	16	17	17	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.1	1200.1	1200.1	1200.1	1200.1
2.5°	1204.2	1202.1	1193.8	1195.9	1199.0
5°	1201.1	1198.0	1187.5	1192.8	1192.8
7.5°	1189.6	1186.5	1181.3	1184.4	1181.3
10°	1183.4	1182.3	1176.1	1175.0	1176.1
12.5°	1169.8	1166.7	1159.4	1164.6	1163.6
15°	1154.2	1151.1	1145.8	1146.9	1149.0
17.5°	1140.6	1138.5	1129.2	1132.3	1139.6
20°	1119.8	1112.5	1110.4	1111.4	1113.5
22.5°	1095.8	1090.6	1085.4	1087.5	1089.5
25°	1061.4	1061.4	1065.6	1062.4	1069.7
27.5°	1039.5	1037.4	1034.3	1034.3	1042.6
30°	1004.0	1004.0	1004.0	1007.2	1012.4
32.5°	979.0	974.8	972.8	973.8	975.9
35°	940.4	937.3	939.4	940.4	941.5
37.5°	901.9	900.8	906.0	902.9	907.1
40°	864.3	862.2	865.4	863.3	866.4
42.5°	824.7	820.5	823.7	825.8	826.8
45°	782.0	779.9	785.1	786.1	785.1
47.5°	739.2	736.1	739.2	742.3	742.3
50°	694.4	690.2	690.2	693.3	695.4
52.5°	645.4	641.2	643.3	646.4	647.5
55°	595.3	595.3	596.4	593.3	601.6
57.5°	543.2	539.0	543.2	541.1	545.3
60°	493.2	490.0	491.1	486.9	497.3
62.5°	437.9	434.8	433.7	432.7	442.1
65°	382.6	377.4	378.5	376.4	384.7
67.5°	329.5	324.3	322.2	322.2	328.4
70°	275.3	266.9	266.9	264.8	274.2
72.5°	221.0	214.8	211.7	213.7	221.0
75°	168.9	163.7	161.6	163.7	167.9
77.5°	119.9	117.8	114.7	116.8	120.9
80°	78.2	76.1	73.0	76.1	78.2
82.5°	42.7	41.7	39.6	41.7	41.7
85°	17.7	17.7	15.6	16.7	16.7
87.5°	5.2	4.2	4.2	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)