

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: P307662

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-W2A-U-5700K**

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: P307662
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-35-UNV-L82765-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5700K TUNABLE 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: 3512.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

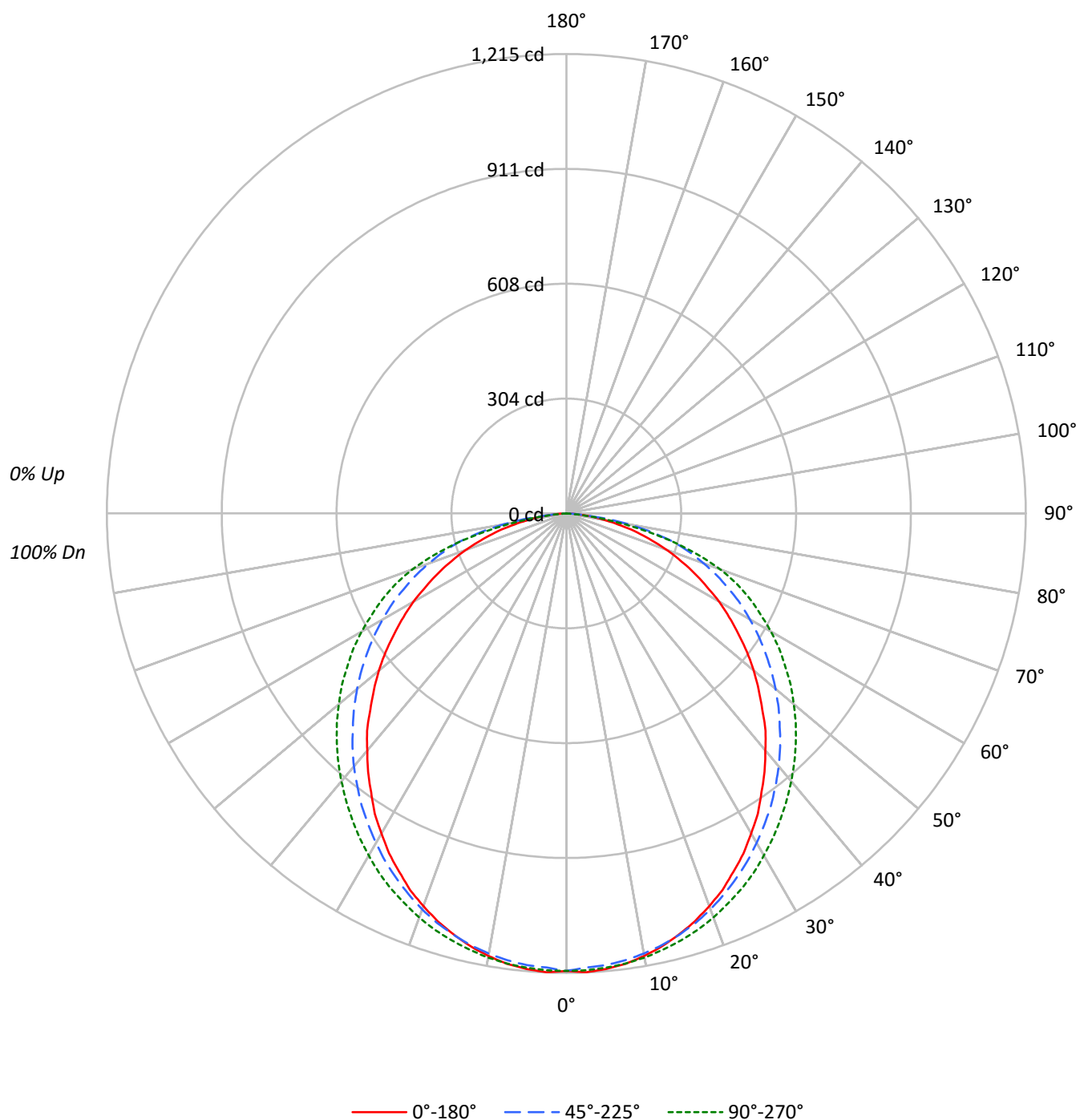
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3256	3256	3256
5°	3266	3239	3258
10°	3246	3229	3259
15°	3211	3214	3257
20°	3164	3191	3256
25°	3104	3160	3253
30°	3037	3127	3246
35°	2956	3100	3244
40°	2877	3070	3249
45°	2790	3037	3266
50°	2708	3023	3288
55°	2605	3012	3317
60°	2512	3018	3363
65°	2383	3026	3415
70°	2237	3050	3413
75°	2027	3078	3086
80°	1663	2658	2196
85°	1232	1257	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.3
10°-20°	327.0	9.3
20°-30°	492.7	14.0
30°-40°	591.2	16.8
40°-50°	616.2	17.5
50°-60°	570.5	16.2
60°-70°	460.9	13.1
70°-80°	281.0	8.0
80°-90°	58.0	1.7
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°	934.2	26.6
0°-40°	1525.4	43.4
0°-60°	2712.0	77.2
0°-90°	3512.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3512.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1209	1206	1199	1208	1206	115
15°	1153	1154	1154	1169	1169	325
25°	1045	1052	1064	1091	1096	482
35°	900	914	944	978	988	564
45°	733	755	798	843	858	567
55°	555	584	642	692	707	497
65°	374	411	475	523	536	370
75°	195	238	296	301	297	205
85°	40	60	41	23	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.9	1209.9	1209.9	1209.9	1209.9
2.5°	1214.6	1210.7	1202.1	1210.7	1209.1
5°	1209.1	1206.0	1198.9	1207.5	1206.0
7.5°	1201.3	1198.1	1191.9	1202.1	1200.5
10°	1188.0	1186.4	1181.7	1193.5	1192.7
12.5°	1172.3	1171.5	1169.2	1182.5	1181.7
15°	1152.7	1153.5	1153.5	1169.2	1169.2
17.5°	1130.8	1132.4	1135.5	1152.7	1155.1
20°	1105.0	1108.1	1114.4	1133.9	1137.1
22.5°	1078.3	1080.7	1090.1	1113.6	1116.7
25°	1045.4	1051.7	1064.2	1090.9	1095.6
27.5°	1014.1	1019.6	1036.8	1064.2	1072.1
30°	977.3	985.9	1006.3	1036.0	1044.7
32.5°	942.1	951.5	975.0	1009.4	1017.3
35°	899.8	913.9	943.6	978.1	987.5
37.5°	861.4	874.7	908.4	946.0	957.0
40°	819.1	835.6	873.9	913.9	924.8
42.5°	780.0	795.6	837.1	877.9	892.7
45°	733.0	754.9	798.0	842.6	858.3
47.5°	689.9	711.8	761.2	808.9	823.0
50°	646.8	670.3	722.0	771.4	785.5
52.5°	602.2	627.3	682.9	732.2	748.6
55°	555.2	584.2	642.1	692.3	707.1
57.5°	510.6	540.3	602.2	653.1	668.0
60°	466.7	497.3	560.7	609.3	624.9
62.5°	418.2	454.2	520.0	567.8	579.5
65°	374.3	411.1	475.3	523.1	536.4
67.5°	328.1	368.1	432.3	476.1	488.7
70°	284.3	325.8	387.6	428.4	433.8
72.5°	237.3	279.6	342.2	368.1	368.1
75°	195.0	238.1	296.0	300.7	296.8
77.5°	148.8	196.6	234.1	224.8	215.4
80°	107.3	154.3	171.5	154.3	141.7
82.5°	72.0	112.0	103.4	82.2	72.8
85°	39.9	59.5	40.7	22.7	16.4
87.5°	14.9	13.3	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)