

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: P307665

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA125-W2A-U-3000K**

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: P307665
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-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3000K 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

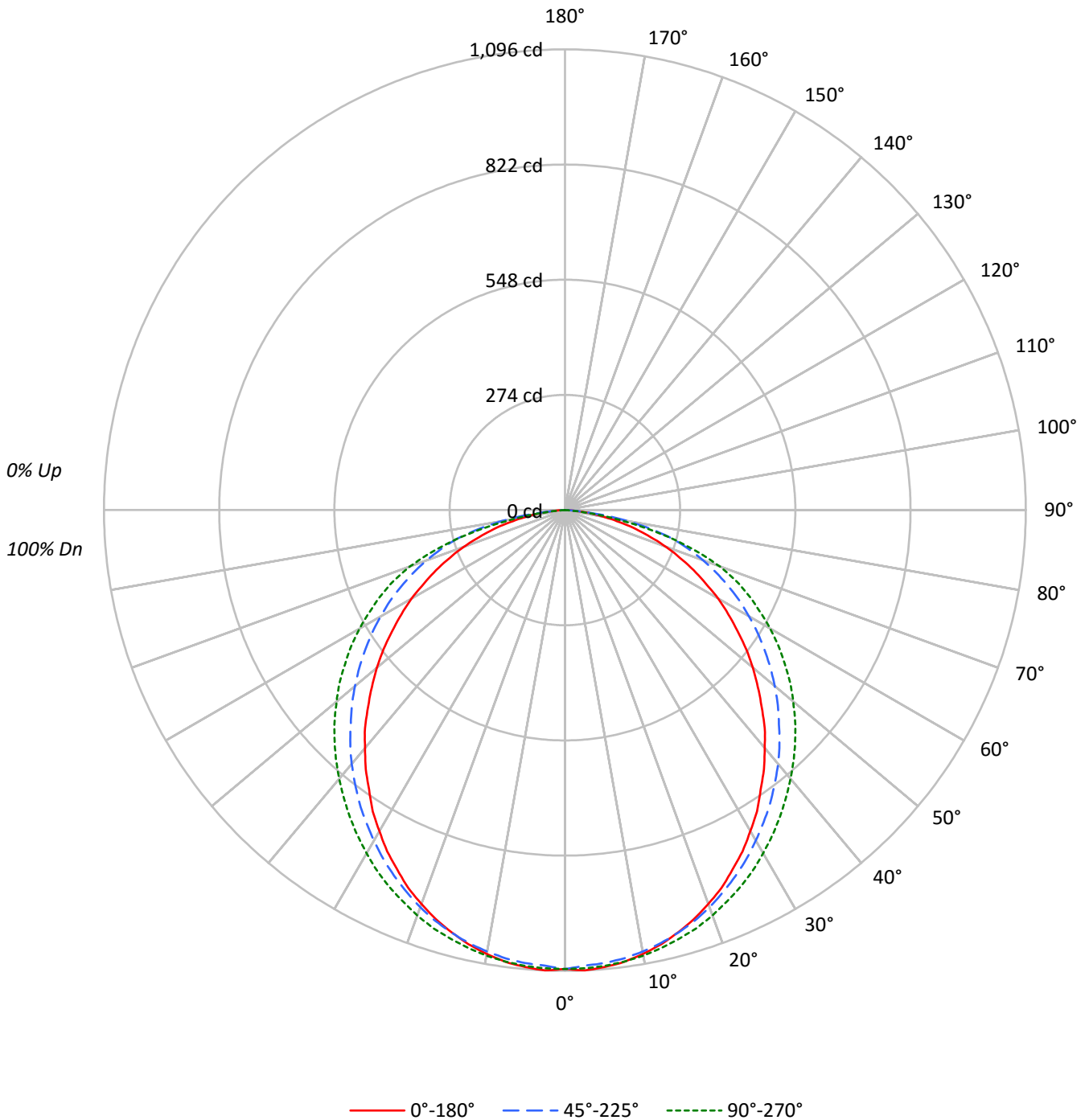
Lumens per Lamp: N/A
Luminaire Lumens: 3169.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2938	2938	2938
5°	2947	2922	2940
10°	2929	2914	2941
15°	2898	2900	2939
20°	2855	2879	2938
25°	2801	2851	2935
30°	2740	2821	2929
35°	2667	2797	2927
40°	2596	2770	2931
45°	2517	2740	2947
50°	2444	2727	2967
55°	2350	2718	2994
60°	2266	2723	3035
65°	2151	2731	3082
70°	2018	2752	3080
75°	1829	2777	2784
80°	1500	2399	1982
85°	1112	1133	457



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	3.3
10°-20°	295.1	9.3
20°-30°	444.5	14.0
30°-40°	533.5	16.8
40°-50°	556.0	17.5
50°-60°	514.7	16.2
60°-70°	415.9	13.1
70°-80°	253.6	8.0
80°-90°	52.3	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°	843.0	26.6
0°-40°	1376.4	43.4
0°-60°	2447.2	77.2
0°-90°	3169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3169.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1091	1088	1082	1090	1088	104
15°	1040	1041	1041	1055	1055	293
25°	943	949	960	984	989	435
35°	812	825	852	883	891	509
45°	661	681	720	760	774	511
55°	501	527	579	625	638	449
65°	338	371	429	472	484	334
75°	176	215	267	271	268	185
85°	36	54	37	20	15	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1091.7	1091.7	1091.7	1091.7	1091.7
2.5°	1096.0	1092.4	1084.7	1092.4	1091.0
5°	1091.0	1088.2	1081.8	1089.6	1088.2
7.5°	1084.0	1081.1	1075.5	1084.7	1083.3
10°	1071.9	1070.5	1066.3	1076.9	1076.2
12.5°	1057.8	1057.1	1055.0	1067.0	1066.3
15°	1040.1	1040.9	1040.9	1055.0	1055.0
17.5°	1020.4	1021.8	1024.6	1040.1	1042.3
20°	997.0	999.9	1005.5	1023.2	1026.0
22.5°	973.0	975.1	983.6	1004.8	1007.6
25°	943.3	949.0	960.3	984.3	988.6
27.5°	915.1	920.0	935.6	960.3	967.4
30°	881.9	889.6	908.0	934.9	942.6
32.5°	850.1	858.5	879.7	910.8	917.9
35°	811.9	824.6	851.5	882.6	891.1
37.5°	777.3	789.3	819.7	853.6	863.5
40°	739.1	754.0	788.6	824.6	834.5
42.5°	703.8	717.9	755.4	792.1	805.5
45°	661.4	681.2	720.0	760.3	774.5
47.5°	622.5	642.3	686.8	729.9	742.7
50°	583.7	604.9	651.5	696.0	708.7
52.5°	543.4	566.0	616.2	660.7	675.5
55°	501.0	527.1	579.4	624.7	638.1
57.5°	460.7	487.6	543.4	589.3	602.7
60°	421.1	448.7	505.9	549.8	563.9
62.5°	377.3	409.8	469.2	512.3	522.9
65°	337.8	371.0	428.9	472.0	484.0
67.5°	296.1	332.1	390.1	429.6	440.9
70°	256.5	294.0	349.8	386.5	391.5
72.5°	214.1	252.3	308.8	332.1	332.1
75°	175.9	214.8	267.1	271.3	267.8
77.5°	134.3	177.4	211.3	202.8	194.3
80°	96.8	139.2	154.8	139.2	127.9
82.5°	65.0	101.0	93.3	74.2	65.7
85°	36.0	53.7	36.7	20.5	14.8
87.5°	13.4	12.0	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)