

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: P307732

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K**

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: P307732
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: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 3582.0 lumens
Efficiency: N/A
Efficacy: 105.0 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

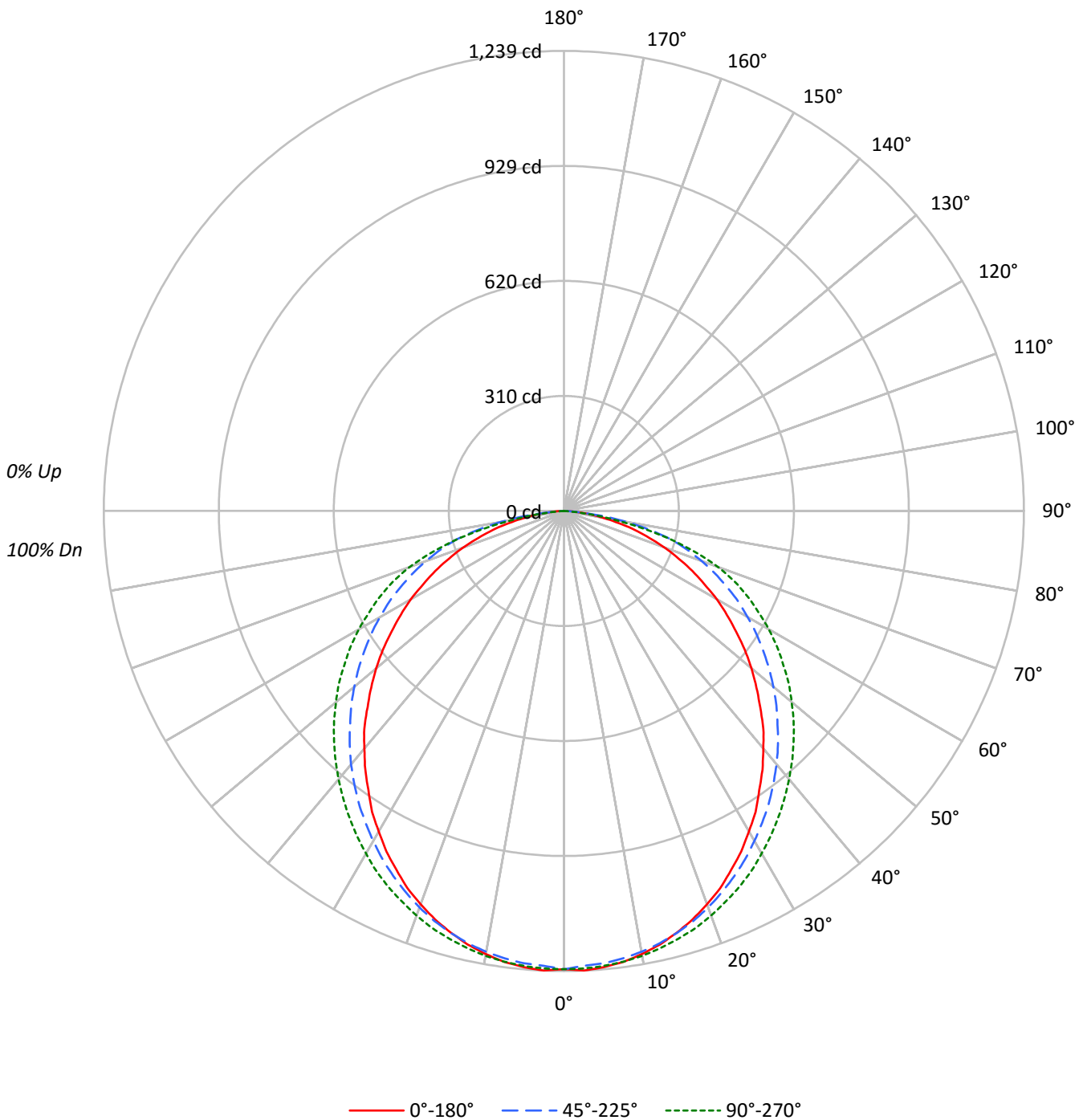
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307732

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307732

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K

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°	3321	3321	3321
5°	3331	3303	3323
10°	3311	3293	3324
15°	3275	3278	3322
20°	3227	3255	3321
25°	3166	3223	3318
30°	3097	3189	3311
35°	3015	3162	3309
40°	2935	3131	3314
45°	2845	3097	3331
50°	2762	3083	3354
55°	2657	3073	3384
60°	2562	3078	3430
65°	2431	3087	3484
70°	2281	3111	3482
75°	2068	3139	3147
80°	1695	2710	2241
85°	1257	1281	519



TEST NUMBER: P307732

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	3.3
10°-20°	333.6	9.3
20°-30°	502.5	14.0
30°-40°	603.0	16.8
40°-50°	628.5	17.5
50°-60°	581.8	16.2
60°-70°	470.1	13.1
70°-80°	286.6	8.0
80°-90°	59.2	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°	952.8	26.6
0°-40°	1555.8	43.4
0°-60°	2766.1	77.2
0°-90°	3582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3582.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1234	1234	1234	1234	1234	
5°	1233	1230	1223	1232	1230	117
15°	1176	1176	1176	1192	1192	331
25°	1066	1073	1086	1113	1117	491
35°	918	932	962	998	1007	575
45°	748	770	814	859	875	578
55°	566	596	655	706	721	507
65°	382	419	485	534	547	378
75°	199	243	302	307	303	209
85°	41	61	42	23	17	50
90°	0	0	0	0	0	



TEST NUMBER: P307732

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.0	1234.0	1234.0	1234.0	1234.0
2.5°	1238.8	1234.8	1226.0	1234.8	1233.2
5°	1233.2	1230.0	1222.8	1231.6	1230.0
7.5°	1225.2	1222.0	1215.6	1226.0	1224.4
10°	1211.6	1210.0	1205.3	1217.2	1216.4
12.5°	1195.7	1194.9	1192.5	1206.1	1205.3
15°	1175.7	1176.5	1176.5	1192.5	1192.5
17.5°	1153.3	1154.9	1158.1	1175.7	1178.1
20°	1127.0	1130.2	1136.6	1156.5	1159.7
22.5°	1099.8	1102.2	1111.8	1135.8	1139.0
25°	1066.3	1072.7	1085.5	1112.6	1117.4
27.5°	1034.3	1039.9	1057.5	1085.5	1093.4
30°	996.8	1005.6	1026.3	1056.7	1065.5
32.5°	960.9	970.4	994.4	1029.5	1037.5
35°	917.7	932.1	962.4	997.6	1007.2
37.5°	878.6	892.2	926.5	964.8	976.0
40°	835.5	852.2	891.4	932.1	943.3
42.5°	795.5	811.5	853.8	895.4	910.5
45°	747.6	770.0	813.9	859.4	875.4
47.5°	703.7	726.0	776.3	825.1	839.4
50°	659.7	683.7	736.4	786.7	801.1
52.5°	614.2	639.8	696.5	746.8	763.6
55°	566.3	595.8	654.9	706.1	721.2
57.5°	520.8	551.1	614.2	666.1	681.3
60°	476.0	507.2	571.9	621.4	637.4
62.5°	426.5	463.3	530.3	579.1	591.0
65°	381.8	419.3	484.8	533.5	547.1
67.5°	334.7	375.4	440.9	485.6	498.4
70°	289.9	332.3	395.4	436.9	442.5
72.5°	242.0	285.1	349.0	375.4	375.4
75°	198.9	242.8	301.9	306.7	302.7
77.5°	151.8	200.5	238.8	229.2	219.6
80°	109.4	157.3	174.9	157.3	144.6
82.5°	73.5	114.2	105.4	83.9	74.3
85°	40.7	60.7	41.5	23.2	16.8
87.5°	15.2	13.6	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)