

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: P307734

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-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: P307734
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-5700K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.187" POLYCARB 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: 3626.0 lumens
Efficiency: N/A
Efficacy: 106.0 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

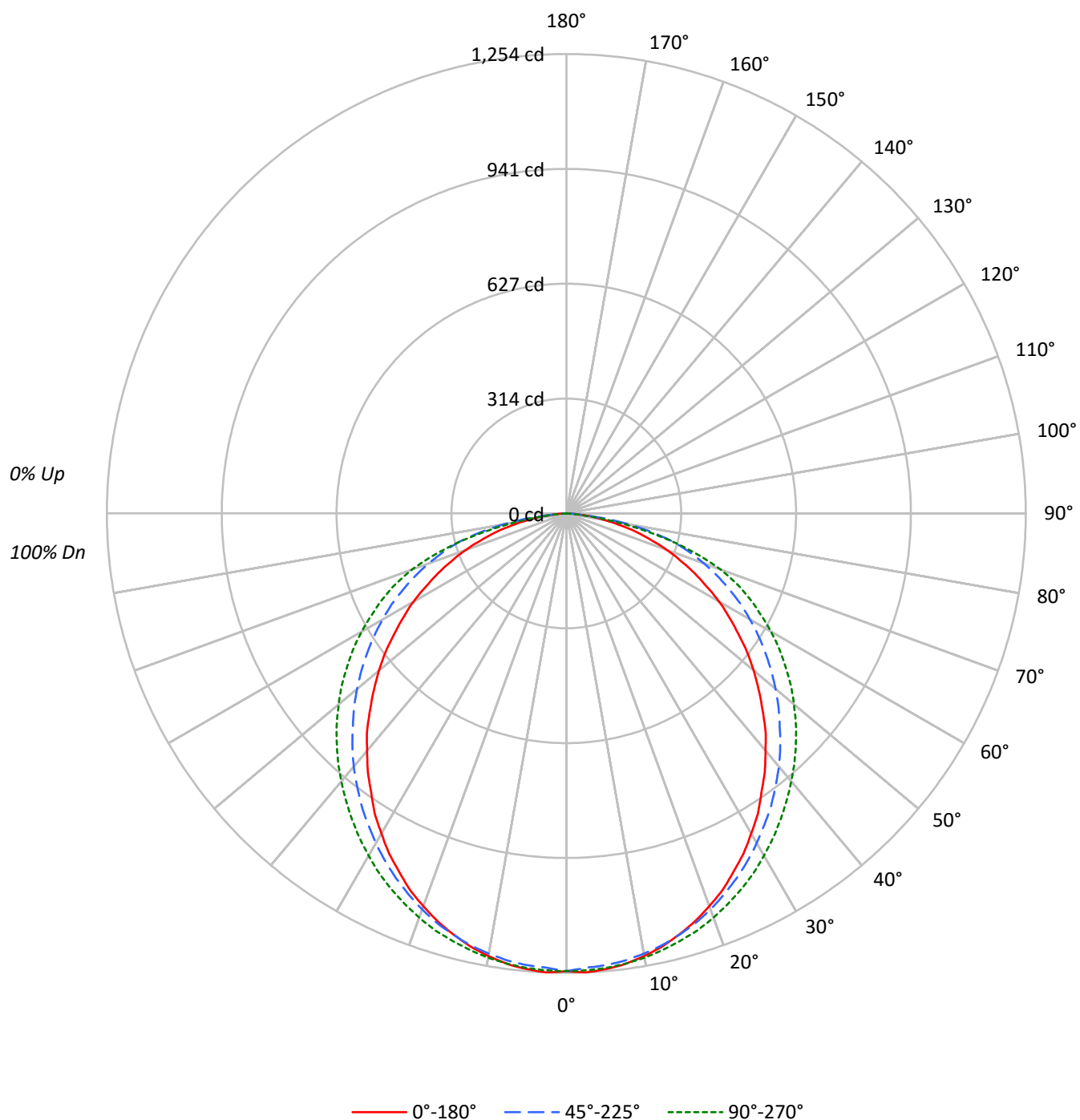
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307734

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307734

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5700K

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°	3362	3362	3362
5°	3372	3344	3363
10°	3351	3334	3365
15°	3316	3318	3363
20°	3267	3295	3362
25°	3205	3263	3358
30°	3135	3228	3352
35°	3052	3201	3349
40°	2971	3170	3354
45°	2880	3135	3372
50°	2796	3121	3395
55°	2689	3111	3425
60°	2594	3116	3472
65°	2461	3125	3526
70°	2309	3149	3524
75°	2093	3177	3186
80°	1717	2744	2267
85°	1272	1297	525



TEST NUMBER: P307734

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	3.3
10°-20°	337.7	9.3
20°-30°	508.7	14.0
30°-40°	610.4	16.8
40°-50°	636.2	17.5
50°-60°	589.0	16.2
60°-70°	475.9	13.1
70°-80°	290.1	8.0
80°-90°	59.9	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°	964.5	26.6
0°-40°	1574.9	43.4
0°-60°	2800.1	77.2
0°-90°	3626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1249	1249	1249	1249	1249	
5°	1248	1245	1238	1247	1245	118
15°	1190	1191	1191	1207	1207	335
25°	1079	1086	1099	1126	1131	497
35°	929	944	974	1010	1020	582
45°	757	779	824	870	886	585
55°	573	603	663	715	730	514
65°	386	424	491	540	554	382
75°	201	246	306	310	306	211
85°	41	61	42	23	17	51
90°	0	0	0	0	0	



TEST NUMBER: P307734

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP187-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.2	1249.2	1249.2	1249.2	1249.2
2.5°	1254.0	1250.0	1241.1	1250.0	1248.4
5°	1248.4	1245.1	1237.8	1246.7	1245.1
7.5°	1240.3	1237.0	1230.6	1241.1	1239.5
10°	1226.5	1224.9	1220.1	1232.2	1231.4
12.5°	1210.4	1209.6	1207.1	1220.9	1220.1
15°	1190.1	1191.0	1191.0	1207.1	1207.1
17.5°	1167.5	1169.1	1172.4	1190.1	1192.6
20°	1140.8	1144.1	1150.5	1170.7	1174.0
22.5°	1113.3	1115.8	1125.5	1149.7	1153.0
25°	1079.4	1085.8	1098.8	1126.3	1131.1
27.5°	1047.0	1052.7	1070.5	1098.8	1106.9
30°	1009.0	1017.9	1039.0	1069.7	1078.6
32.5°	972.7	982.4	1006.6	1042.2	1050.3
35°	929.0	943.5	974.3	1009.8	1019.5
37.5°	889.4	903.1	937.9	976.7	988.0
40°	845.7	862.7	902.3	943.5	954.9
42.5°	805.3	821.5	864.3	906.4	921.7
45°	756.8	779.4	823.9	870.0	886.1
47.5°	712.3	734.9	785.9	835.2	849.8
50°	667.8	692.1	745.5	796.4	810.9
52.5°	621.8	647.6	705.0	756.0	772.9
55°	573.2	603.2	663.0	714.7	730.1
57.5°	527.2	557.9	621.8	674.3	689.7
60°	481.9	513.4	578.9	629.0	645.2
62.5°	431.8	468.9	536.9	586.2	598.3
65°	386.5	424.5	490.8	540.1	553.8
67.5°	338.8	380.0	446.3	491.6	504.5
70°	293.5	336.3	400.2	442.3	447.9
72.5°	245.0	288.6	353.3	380.0	380.0
75°	201.3	245.8	305.6	310.5	306.4
77.5°	153.6	202.9	241.7	232.0	222.3
80°	110.8	159.3	177.1	159.3	146.3
82.5°	74.4	115.6	106.7	84.9	75.2
85°	41.2	61.4	42.0	23.4	17.0
87.5°	15.4	13.7	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)