

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: P308001

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CP187-W2A-U-4500K**

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: P308001
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP187-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 4500K 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: 3571.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

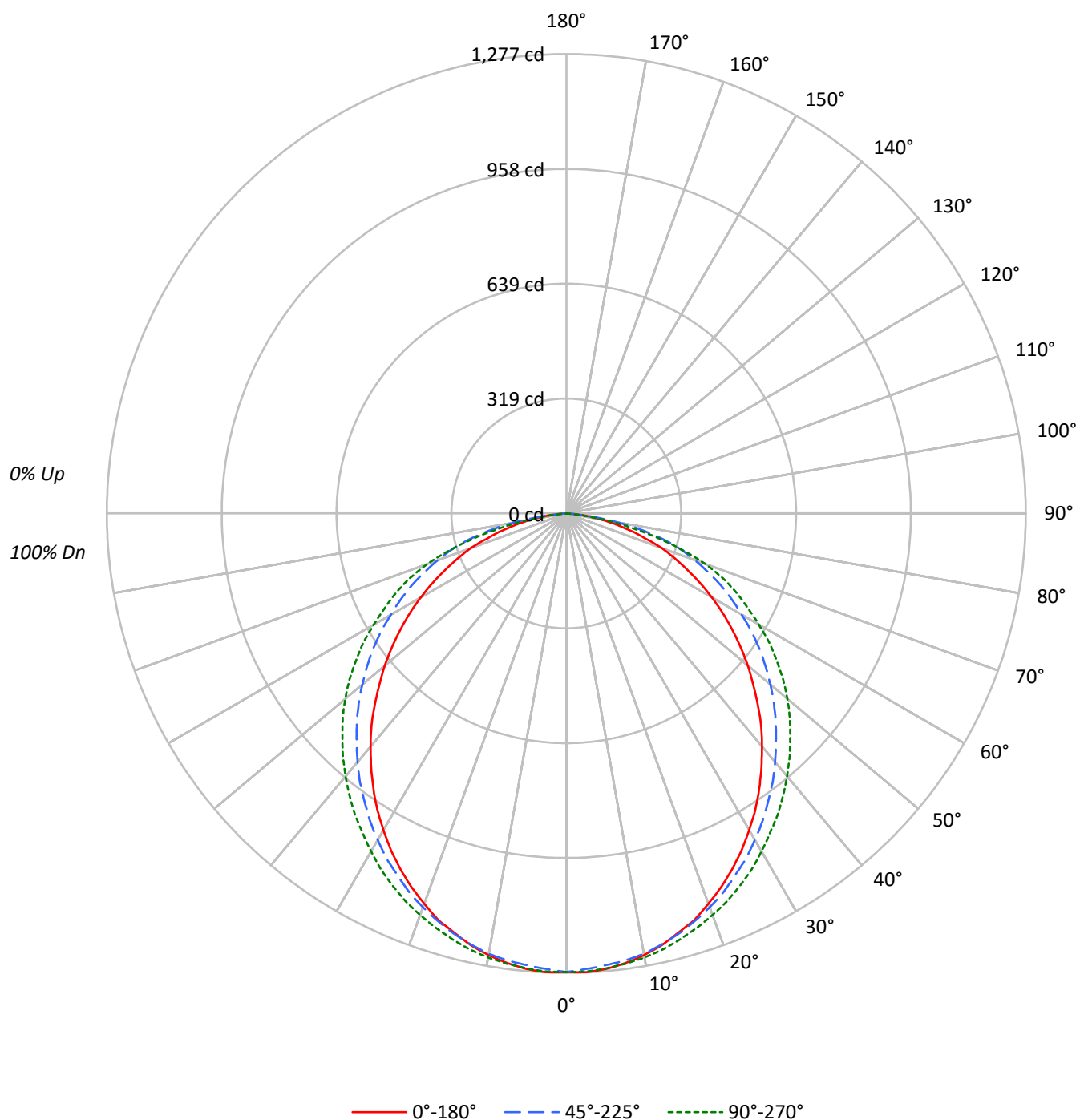
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308001

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-S-CP187-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P308001

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-S-CP187-W2A-U-4500K

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	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3430	3430	3430
5°	3434	3405	3429
10°	3406	3396	3425
15°	3359	3369	3413
20°	3306	3336	3402
25°	3238	3296	3391
30°	3158	3257	3372
35°	3071	3211	3362
40°	2973	3172	3352
45°	2864	3133	3349
50°	2757	3098	3358
55°	2641	3073	3347
60°	2516	3030	3326
65°	2367	3021	3326
70°	2229	2995	3232
75°	1933	2927	2761
80°	1564	2360	1838
85°	1037	821	546



TEST NUMBER: P308001

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-S-CP187-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.4
10°-20°	342.5	9.6
20°-30°	513.8	14.4
30°-40°	612.9	17.2
40°-50°	633.7	17.7
50°-60°	578.5	16.2
60°-70°	455.3	12.7
70°-80°	265.0	7.4
80°-90°	48.8	1.4
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°	976.7	27.4
0°-40°	1589.7	44.5
0°-60°	2801.9	78.5
0°-90°	3571.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1275	1275	1275	1275	1275	
5°	1271	1268	1261	1271	1270	121
15°	1206	1208	1209	1225	1225	340
25°	1091	1096	1110	1137	1142	502
35°	935	947	977	1014	1023	584
45°	752	777	823	869	880	581
55°	563	593	655	703	714	503
65°	372	411	474	512	522	369
75°	186	230	282	276	266	198
85°	34	48	27	21	18	44
90°	0	0	0	0	0	



TEST NUMBER: P308001

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-S-CP187-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1274.8	1274.8	1274.8	1274.8	1274.8
2.5°	1276.6	1273.0	1267.7	1276.6	1274.8
5°	1271.2	1267.7	1260.6	1271.2	1269.5
7.5°	1260.6	1257.1	1253.5	1264.2	1262.4
10°	1246.5	1244.7	1242.9	1255.3	1253.5
12.5°	1228.8	1228.8	1227.0	1241.1	1241.1
15°	1205.7	1207.5	1209.3	1225.2	1225.2
17.5°	1184.5	1182.7	1188.0	1205.7	1207.5
20°	1154.4	1157.9	1165.0	1186.3	1188.0
22.5°	1124.3	1127.8	1140.2	1161.5	1166.8
25°	1090.7	1096.0	1110.1	1136.7	1142.0
27.5°	1055.2	1062.3	1081.8	1110.1	1115.4
30°	1016.3	1026.9	1048.2	1080.0	1085.3
32.5°	977.3	988.0	1014.5	1046.4	1053.5
35°	934.8	947.2	977.3	1014.5	1023.4
37.5°	890.6	906.5	941.9	979.1	989.7
40°	846.3	864.0	903.0	941.9	954.3
42.5°	802.1	819.8	862.3	906.5	918.9
45°	752.5	777.3	823.3	869.3	880.0
47.5°	704.7	731.2	782.6	828.6	842.8
50°	658.6	685.2	740.1	787.9	802.1
52.5°	610.8	639.2	697.6	747.2	759.6
55°	563.0	593.1	655.1	702.9	713.5
57.5°	515.2	547.1	610.8	656.9	669.3
60°	467.4	501.1	563.0	609.1	617.9
62.5°	419.6	455.0	518.8	559.5	568.3
65°	371.8	410.8	474.5	511.7	522.3
67.5°	325.8	364.7	426.7	462.1	471.0
70°	283.3	318.7	380.7	407.2	410.8
72.5°	230.2	274.4	334.6	348.8	339.9
75°	185.9	230.2	281.5	276.2	265.6
77.5°	141.6	185.9	219.5	201.8	187.7
80°	100.9	145.2	152.3	125.7	118.6
82.5°	65.5	100.9	85.0	65.5	53.1
85°	33.6	47.8	26.6	21.2	17.7
87.5°	10.6	7.1	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)