

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: P307926

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-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: P307926
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: 14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" 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: 3213.0 lumens
Efficiency: N/A
Efficacy: 109.7 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

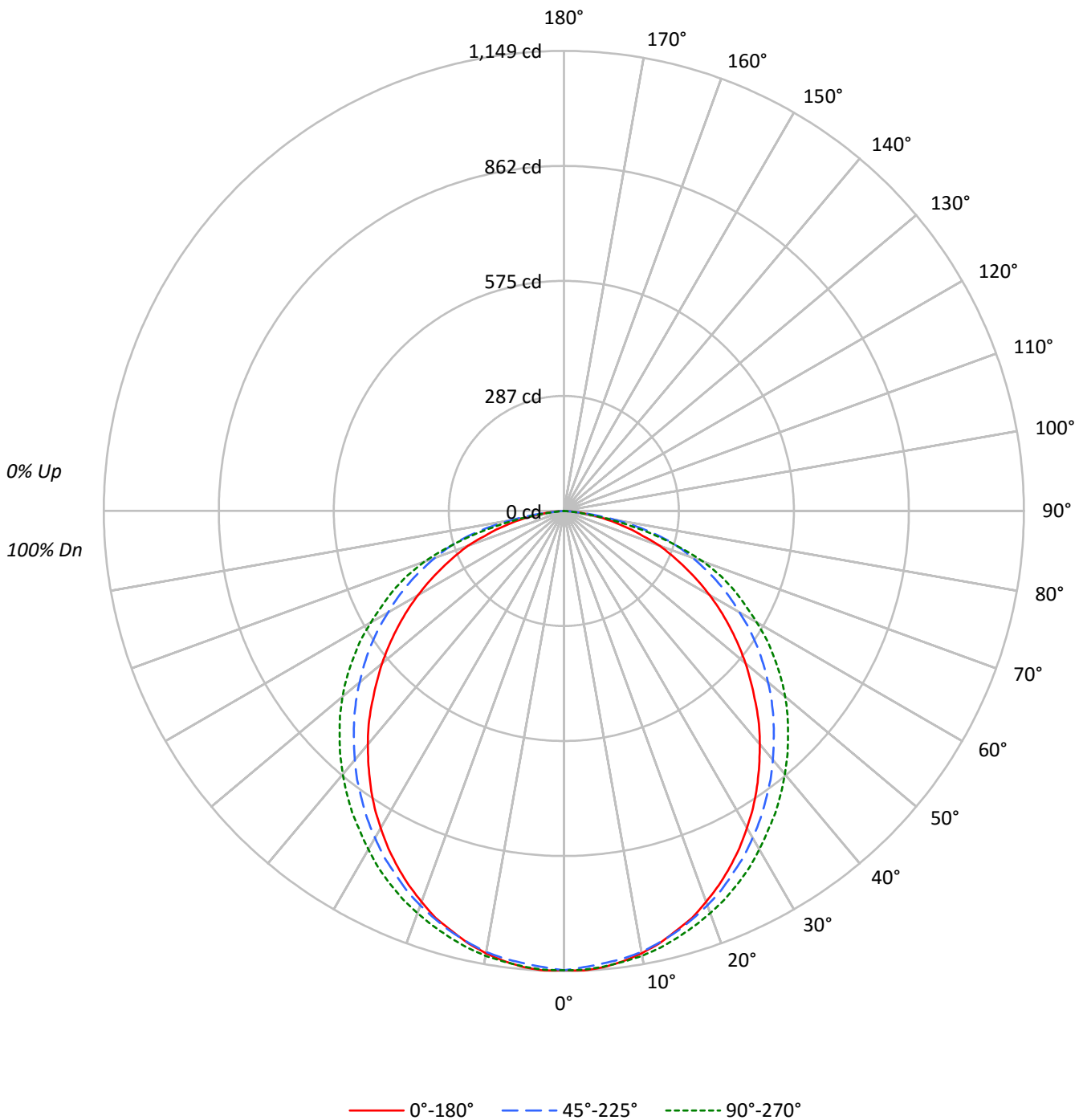
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307926

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307926

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3000K

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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3087	3087	3087
5°	3090	3064	3085
10°	3064	3056	3082
15°	3022	3031	3071
20°	2975	3002	3061
25°	2914	2966	3051
30°	2841	2930	3034
35°	2763	2889	3025
40°	2675	2854	3016
45°	2576	2819	3013
50°	2481	2788	3021
55°	2377	2765	3012
60°	2264	2726	2992
65°	2130	2718	2992
70°	2006	2695	2908
75°	1739	2634	2485
80°	1407	2123	1654
85°	936	738	491



TEST NUMBER: P307926

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	3.4
10°-20°	308.2	9.6
20°-30°	462.3	14.4
30°-40°	551.5	17.2
40°-50°	570.1	17.7
50°-60°	520.5	16.2
60°-70°	409.6	12.7
70°-80°	238.4	7.4
80°-90°	43.9	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°	878.8	27.4
0°-40°	1430.3	44.5
0°-60°	2521.0	78.5
0°-90°	3213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3213.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1147	1147	1147	1147	1147	
5°	1144	1141	1134	1144	1142	108
15°	1085	1086	1088	1102	1102	306
25°	981	986	999	1023	1028	452
35°	841	852	879	913	921	526
45°	677	699	741	782	792	523
55°	507	534	589	632	642	453
65°	334	370	427	460	470	332
75°	167	207	253	248	239	178
85°	30	43	24	19	16	39
90°	0	0	0	0	0	



TEST NUMBER: P307926

CATALOG NUMBER: 14FCZ2-35-UNV-L82765-S-CA08-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1147.0	1147.0	1147.0	1147.0	1147.0
2.5°	1148.6	1145.4	1140.6	1148.6	1147.0
5°	1143.8	1140.6	1134.2	1143.8	1142.2
7.5°	1134.2	1131.1	1127.9	1137.4	1135.8
10°	1121.5	1119.9	1118.3	1129.5	1127.9
12.5°	1105.6	1105.6	1104.0	1116.7	1116.7
15°	1084.9	1086.5	1088.0	1102.4	1102.4
17.5°	1065.7	1064.1	1068.9	1084.9	1086.5
20°	1038.7	1041.8	1048.2	1067.3	1068.9
22.5°	1011.6	1014.8	1025.9	1045.0	1049.8
25°	981.3	986.1	998.8	1022.7	1027.5
27.5°	949.5	955.8	973.3	998.8	1003.6
30°	914.4	924.0	943.1	971.8	976.5
32.5°	879.4	888.9	912.8	941.5	947.9
35°	841.1	852.3	879.4	912.8	920.8
37.5°	801.3	815.6	847.5	881.0	890.5
40°	761.5	777.4	812.4	847.5	858.6
42.5°	721.6	737.6	775.8	815.6	826.8
45°	677.0	699.3	740.8	782.2	791.7
47.5°	634.0	657.9	704.1	745.5	758.3
50°	592.6	616.5	665.9	708.9	721.6
52.5°	549.6	575.1	627.7	672.3	683.4
55°	506.6	533.7	589.4	632.4	642.0
57.5°	463.6	492.2	549.6	591.0	602.2
60°	420.6	450.8	506.6	548.0	556.0
62.5°	377.6	409.4	466.8	503.4	511.4
65°	334.5	369.6	426.9	460.4	469.9
67.5°	293.1	328.2	383.9	415.8	423.7
70°	254.9	286.7	342.5	366.4	369.6
72.5°	207.1	246.9	301.1	313.8	305.9
75°	167.3	207.1	253.3	248.5	239.0
77.5°	127.4	167.3	197.5	181.6	168.9
80°	90.8	130.6	137.0	113.1	106.7
82.5°	58.9	90.8	76.5	58.9	47.8
85°	30.3	43.0	23.9	19.1	15.9
87.5°	9.6	6.4	3.2	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)