

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: P307658

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-W2A-U-4000K**

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: P307658
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-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 4000K 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: 3363.0 lumens
Efficiency: N/A
Efficacy: 112.9 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

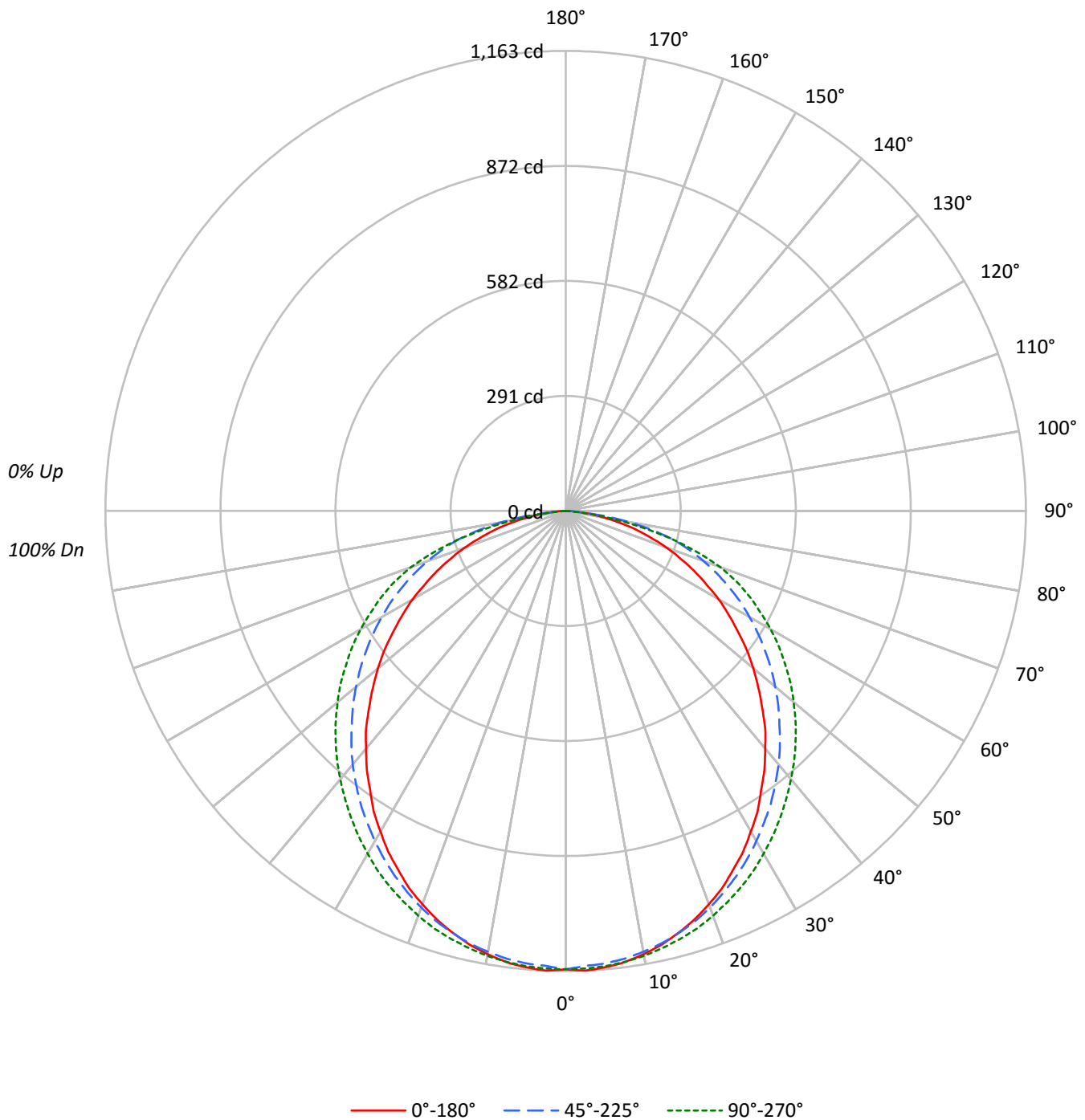
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	3118	3118	3118
5°	3128	3101	3119
10°	3108	3092	3121
15°	3075	3077	3119
20°	3030	3056	3118
25°	2972	3026	3115
30°	2908	2994	3108
35°	2830	2968	3106
40°	2755	2940	3111
45°	2671	2908	3128
50°	2593	2894	3149
55°	2495	2885	3177
60°	2405	2890	3221
65°	2282	2898	3271
70°	2142	2921	3268
75°	1941	2948	2955
80°	1592	2545	2103
85°	1179	1204	485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	3.3
10°-20°	313.2	9.3
20°-30°	471.8	14.0
30°-40°	566.1	16.8
40°-50°	590.1	17.5
50°-60°	546.3	16.2
60°-70°	441.3	13.1
70°-80°	269.1	8.0
80°-90°	55.5	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°	894.6	26.6
0°-40°	1460.7	43.4
0°-60°	2597.0	77.2
0°-90°	3363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3363.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1158	1155	1148	1156	1155	110
15°	1104	1105	1105	1120	1120	311
25°	1001	1007	1019	1045	1049	461
35°	862	875	904	937	946	540
45°	702	723	764	807	822	543
55°	532	559	615	663	677	476
65°	358	394	455	501	514	354
75°	187	228	284	288	284	196
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.6	1158.6	1158.6	1158.6	1158.6
2.5°	1163.1	1159.3	1151.1	1159.3	1157.8
5°	1157.8	1154.8	1148.1	1156.3	1154.8
7.5°	1150.3	1147.3	1141.3	1151.1	1149.6
10°	1137.6	1136.1	1131.6	1142.8	1142.1
12.5°	1122.6	1121.8	1119.6	1132.3	1131.6
15°	1103.8	1104.6	1104.6	1119.6	1119.6
17.5°	1082.8	1084.3	1087.3	1103.8	1106.1
20°	1058.1	1061.1	1067.1	1085.8	1088.8
22.5°	1032.6	1034.8	1043.8	1066.3	1069.3
25°	1001.1	1007.1	1019.1	1044.6	1049.1
27.5°	971.1	976.3	992.8	1019.1	1026.6
30°	935.9	944.1	963.6	992.1	1000.3
32.5°	902.1	911.1	933.6	966.6	974.1
35°	861.6	875.1	903.6	936.6	945.6
37.5°	824.9	837.6	869.9	905.9	916.4
40°	784.4	800.1	836.9	875.1	885.6
42.5°	746.9	761.9	801.6	840.6	854.9
45°	701.9	722.9	764.1	806.9	821.9
47.5°	660.6	681.6	728.9	774.6	788.1
50°	619.4	641.9	691.4	738.6	752.1
52.5°	576.7	600.7	653.9	701.1	716.9
55°	531.7	559.4	614.9	662.9	677.1
57.5°	488.9	517.4	576.7	625.4	639.6
60°	446.9	476.2	536.9	583.4	598.4
62.5°	400.4	434.9	497.9	543.7	554.9
65°	358.4	393.7	455.2	500.9	513.7
67.5°	314.2	352.4	413.9	455.9	467.9
70°	272.2	312.0	371.2	410.2	415.4
72.5°	227.2	267.7	327.7	352.4	352.4
75°	186.7	228.0	283.5	288.0	284.2
77.5°	142.5	188.2	224.2	215.2	206.2
80°	102.7	147.7	164.2	147.7	135.7
82.5°	69.0	107.2	99.0	78.7	69.7
85°	38.2	57.0	39.0	21.7	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)