

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: P307929

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-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: P307929
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-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 3458.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

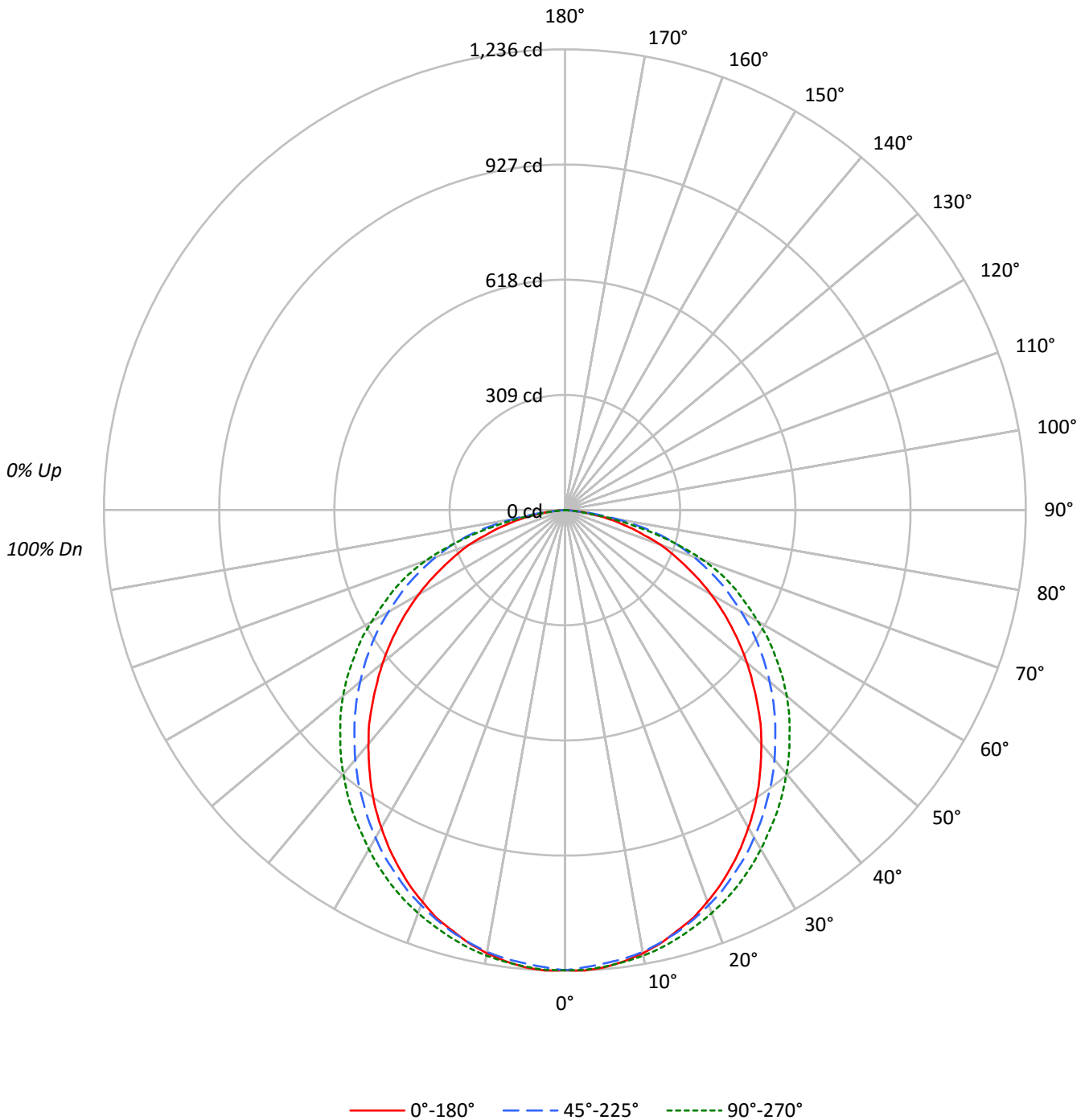
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3322	3322	3322
5°	3325	3297	3321
10°	3298	3289	3317
15°	3253	3262	3305
20°	3201	3231	3294
25°	3136	3192	3284
30°	3058	3154	3266
35°	2974	3109	3256
40°	2879	3072	3246
45°	2773	3034	3243
50°	2670	3000	3252
55°	2558	2976	3241
60°	2436	2934	3221
65°	2292	2926	3221
70°	2158	2900	3130
75°	1871	2834	2674
80°	1514	2284	1781
85°	1007	794	528



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.4
10°-20°	331.7	9.6
20°-30°	497.6	14.4
30°-40°	593.5	17.2
40°-50°	613.6	17.7
50°-60°	560.2	16.2
60°-70°	440.9	12.7
70°-80°	256.6	7.4
80°-90°	47.3	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°	945.8	27.4
0°-40°	1539.4	44.5
0°-60°	2713.2	78.5
0°-90°	3458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1234	1234	1234	1234	1234	
5°	1231	1228	1221	1231	1229	117
15°	1168	1169	1171	1186	1186	329
25°	1056	1061	1075	1101	1106	486
35°	905	917	946	982	991	566
45°	729	753	797	842	852	563
55°	545	574	634	681	691	488
65°	360	398	460	496	506	358
75°	180	223	273	268	257	191
85°	33	46	26	21	17	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.4	1234.4	1234.4	1234.4	1234.4
2.5°	1236.2	1232.7	1227.6	1236.2	1234.4
5°	1231.0	1227.6	1220.7	1231.0	1229.3
7.5°	1220.7	1217.3	1213.9	1224.2	1222.4
10°	1207.0	1205.3	1203.6	1215.6	1213.9
12.5°	1189.9	1189.9	1188.2	1201.9	1201.9
15°	1167.6	1169.3	1171.0	1186.4	1186.4
17.5°	1147.0	1145.3	1150.4	1167.6	1169.3
20°	1117.9	1121.3	1128.1	1148.7	1150.4
22.5°	1088.7	1092.1	1104.1	1124.7	1129.9
25°	1056.1	1061.3	1075.0	1100.7	1105.9
27.5°	1021.8	1028.7	1047.6	1075.0	1080.1
30°	984.1	994.4	1015.0	1045.9	1051.0
32.5°	946.4	956.7	982.4	1013.3	1020.1
35°	905.3	917.3	946.4	982.4	991.0
37.5°	862.4	877.8	912.1	948.1	958.4
40°	819.5	836.7	874.4	912.1	924.1
42.5°	776.7	793.8	835.0	877.8	889.8
45°	728.7	752.7	797.2	841.8	852.1
47.5°	682.4	708.1	757.8	802.4	816.1
50°	637.8	663.5	716.7	763.0	776.7
52.5°	591.5	618.9	675.5	723.5	735.5
55°	545.2	574.4	634.4	680.7	690.9
57.5°	498.9	529.8	591.5	636.1	648.1
60°	452.6	485.2	545.2	589.8	598.4
62.5°	406.3	440.6	502.4	541.8	550.4
65°	360.0	397.8	459.5	495.5	505.8
67.5°	315.5	353.2	413.2	447.5	456.1
70°	274.3	308.6	368.6	394.3	397.8
72.5°	222.9	265.7	324.0	337.8	329.2
75°	180.0	222.9	272.6	267.5	257.2
77.5°	137.2	180.0	212.6	195.5	181.7
80°	97.7	140.6	147.4	121.7	114.9
82.5°	63.4	97.7	82.3	63.4	51.4
85°	32.6	46.3	25.7	20.6	17.1
87.5°	10.3	6.9	3.4	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)