

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: P307931

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-W2A-U-5500K**

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: P307931
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-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 3540.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

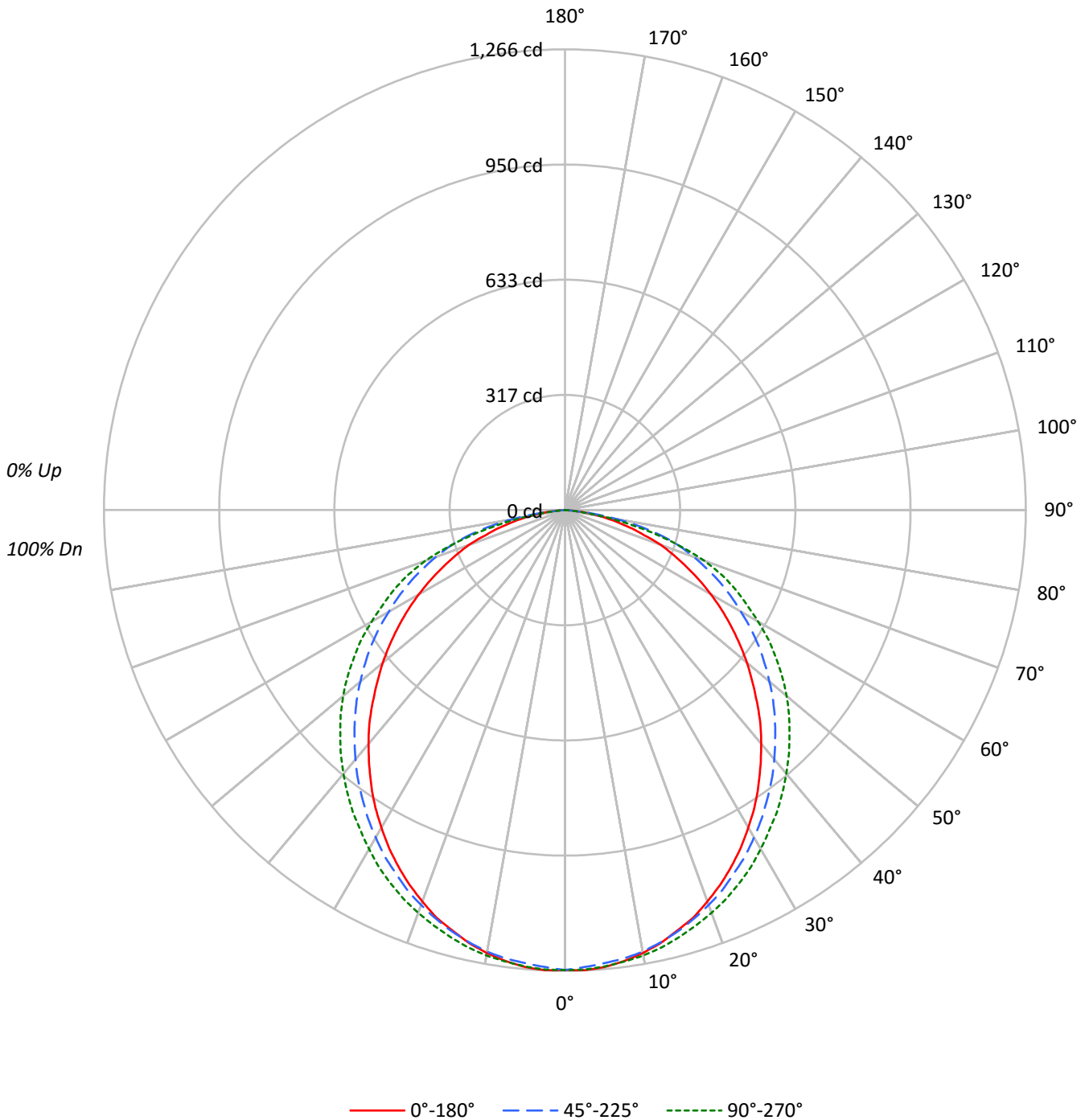
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3401	3401	3401
5°	3404	3376	3400
10°	3376	3367	3396
15°	3330	3340	3384
20°	3277	3307	3373
25°	3210	3268	3361
30°	3131	3229	3343
35°	3044	3183	3333
40°	2947	3144	3323
45°	2839	3106	3320
50°	2733	3072	3329
55°	2618	3047	3318
60°	2494	3004	3297
65°	2347	2995	3297
70°	2209	2969	3204
75°	1916	2902	2738
80°	1550	2338	1822
85°	1028	812	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.3	3.4
10°-20°	339.6	9.6
20°-30°	509.4	14.4
30°-40°	607.6	17.2
40°-50°	628.2	17.7
50°-60°	573.5	16.2
60°-70°	451.3	12.7
70°-80°	262.7	7.4
80°-90°	48.4	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°	968.3	27.4
0°-40°	1575.9	44.5
0°-60°	2777.5	78.5
0°-90°	3540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3540.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1260	1257	1250	1260	1258	119
15°	1195	1197	1199	1215	1215	337
25°	1081	1086	1100	1127	1132	498
35°	927	939	969	1006	1014	579
45°	746	770	816	862	872	576
55°	558	588	649	697	707	499
65°	369	407	470	507	518	366
75°	184	228	279	274	263	196
85°	33	47	26	21	18	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1263.7	1263.7	1263.7	1263.7	1263.7
2.5°	1265.5	1262.0	1256.7	1265.5	1263.7
5°	1260.2	1256.7	1249.7	1260.2	1258.5
7.5°	1249.7	1246.2	1242.7	1253.2	1251.4
10°	1235.6	1233.9	1232.1	1244.4	1242.7
12.5°	1218.1	1218.1	1216.3	1230.4	1230.4
15°	1195.3	1197.0	1198.8	1214.6	1214.6
17.5°	1174.2	1172.5	1177.7	1195.3	1197.0
20°	1144.4	1147.9	1154.9	1176.0	1177.7
22.5°	1114.5	1118.0	1130.3	1151.4	1156.7
25°	1081.2	1086.4	1100.5	1126.8	1132.1
27.5°	1046.1	1053.1	1072.4	1100.5	1105.8
30°	1007.5	1018.0	1039.1	1070.7	1075.9
32.5°	968.9	979.4	1005.7	1037.3	1044.3
35°	926.7	939.0	968.9	1005.7	1014.5
37.5°	882.8	898.6	933.7	970.6	981.1
40°	839.0	856.5	895.1	933.7	946.0
42.5°	795.1	812.6	854.8	898.6	910.9
45°	745.9	770.5	816.2	861.8	872.3
47.5°	698.6	724.9	775.8	821.4	835.5
50°	652.9	679.3	733.7	781.0	795.1
52.5°	605.5	633.6	691.5	740.7	753.0
55°	558.1	588.0	649.4	696.8	707.3
57.5°	510.8	542.3	605.5	651.2	663.5
60°	463.4	496.7	558.1	603.8	612.6
62.5°	416.0	451.1	514.3	554.6	563.4
65°	368.6	407.2	470.4	507.2	517.8
67.5°	323.0	361.6	423.0	458.1	466.9
70°	280.8	315.9	377.4	403.7	407.2
72.5°	228.2	272.1	331.7	345.8	337.0
75°	184.3	228.2	279.1	273.8	263.3
77.5°	140.4	184.3	217.6	200.1	186.0
80°	100.0	143.9	150.9	124.6	117.6
82.5°	64.9	100.0	84.2	64.9	52.7
85°	33.3	47.4	26.3	21.1	17.6
87.5°	10.5	7.0	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)