

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: P307016

Luminaire Tested: **14FCZ2-20-UNV-L82765-HRP-CP250-W2A-U-2700K**

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: P307016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-HRP-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 2700K 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: 1297.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

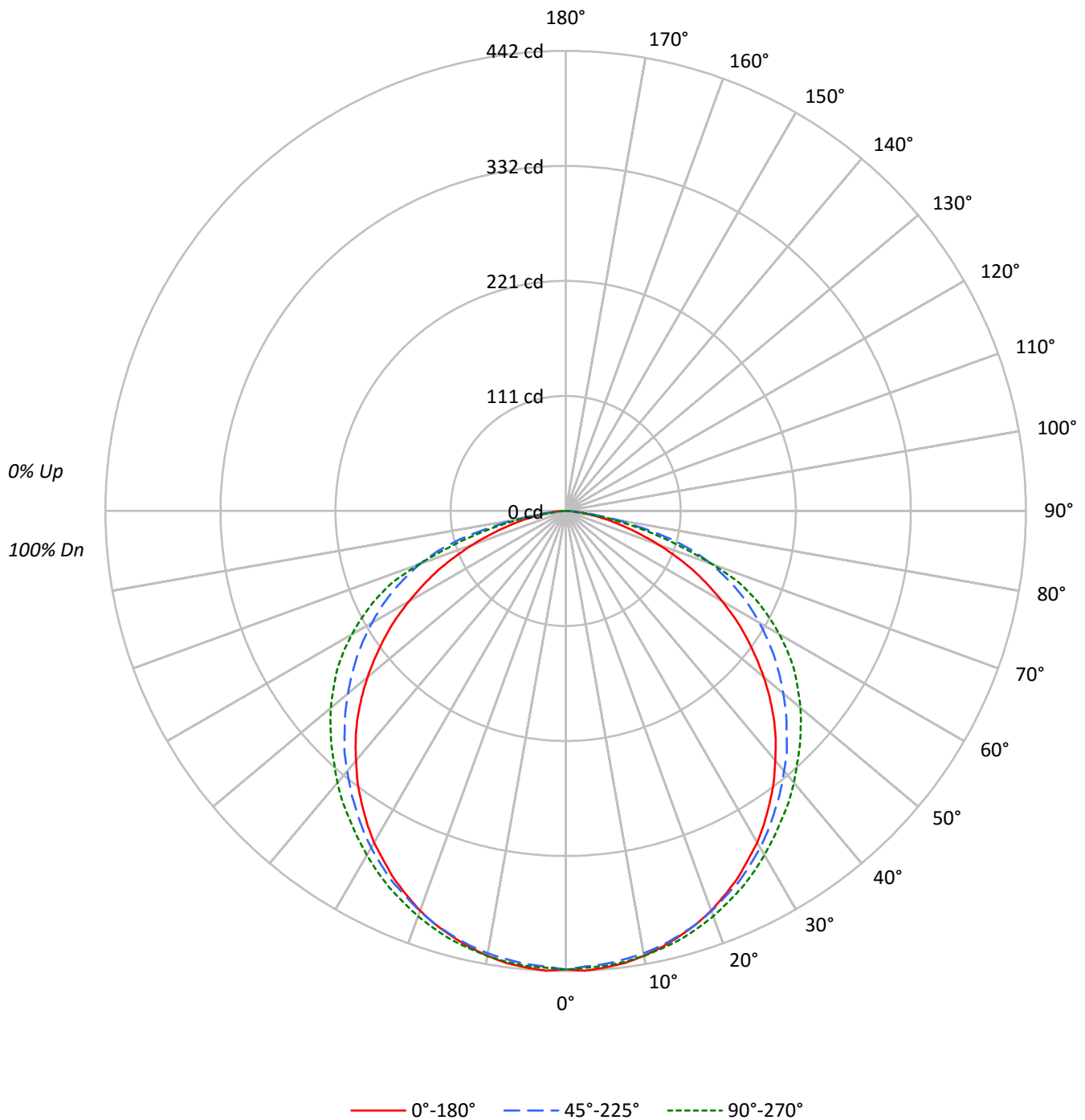
Input Watts (W): 16.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		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		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1185	1185	1185
5°	1189	1180	1185
10°	1186	1179	1186
15°	1178	1176	1187
20°	1170	1172	1187
25°	1158	1167	1187
30°	1143	1161	1186
35°	1123	1152	1189
40°	1100	1146	1198
45°	1077	1142	1211
50°	1040	1142	1233
55°	995	1148	1259
60°	935	1157	1276
65°	862	1168	1283
70°	751	1172	1181
75°	619	1090	954
80°	487	784	638
85°	377	303	151



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	3.2
10°-20°	119.7	9.2
20°-30°	181.7	14.0
30°-40°	220.2	17.0
40°-50°	232.0	17.9
50°-60°	216.6	16.7
60°-70°	173.1	13.3
70°-80°	95.2	7.3
80°-90°	16.8	1.3
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°	343.1	26.5
0°-40°	563.2	43.4
0°-60°	1011.8	78.0
0°-90°	1297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	440	439	437	440	439	42
15°	423	423	422	426	426	119
25°	390	391	393	399	400	179
35°	342	345	351	360	362	214
45°	283	288	300	314	318	218
55°	212	223	245	262	268	189
65°	135	152	184	199	202	133
75°	60	85	105	94	92	64
85°	12	16	10	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	440.5	440.5	440.5	440.5	440.5
2.5°	442.1	440.9	438.0	440.5	439.2
5°	440.1	438.8	436.8	439.7	438.8
7.5°	438.0	436.4	434.4	437.6	436.8
10°	433.9	432.7	431.5	434.4	433.9
12.5°	429.0	428.6	427.4	430.7	430.3
15°	422.9	422.9	422.1	426.2	426.2
17.5°	416.4	416.0	416.4	420.9	420.5
20°	408.7	408.7	409.1	414.4	414.4
22.5°	399.3	399.7	400.9	407.4	407.0
25°	389.9	390.7	393.2	398.9	399.7
27.5°	378.5	380.5	383.4	390.3	391.1
30°	367.9	369.1	373.6	380.1	381.7
32.5°	355.2	357.7	362.6	369.9	372.0
35°	341.8	345.0	350.7	359.7	361.8
37.5°	328.3	331.2	338.9	348.3	352.0
40°	313.2	318.1	326.3	336.9	341.0
42.5°	298.5	303.4	314.4	325.5	329.1
45°	283.0	288.3	300.2	313.6	318.1
47.5°	265.9	272.0	287.1	301.4	306.3
50°	248.4	256.1	272.8	288.8	294.5
52.5°	230.0	239.8	259.0	275.7	281.0
55°	212.1	222.7	244.7	261.8	268.4
57.5°	193.7	205.1	230.0	249.6	253.3
60°	173.7	187.6	214.9	232.1	237.0
62.5°	154.2	170.1	199.4	215.7	219.8
65°	135.4	152.5	183.5	198.6	201.5
67.5°	115.0	135.4	166.0	179.9	180.7
70°	95.4	119.1	148.9	155.4	150.1
72.5°	76.3	101.6	128.9	123.6	119.1
75°	59.5	85.2	104.8	94.2	91.8
77.5°	44.0	69.7	75.0	69.3	64.8
80°	31.4	55.1	50.6	43.2	41.2
82.5°	21.6	34.7	27.7	21.6	18.8
85°	12.2	15.5	9.8	6.1	4.9
87.5°	5.3	3.7	2.0	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)