

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: P308348

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-RDP-CP125-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: P308348
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-20HE-UNV-L82765-RDP-CP125-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB 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: 1167.0 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

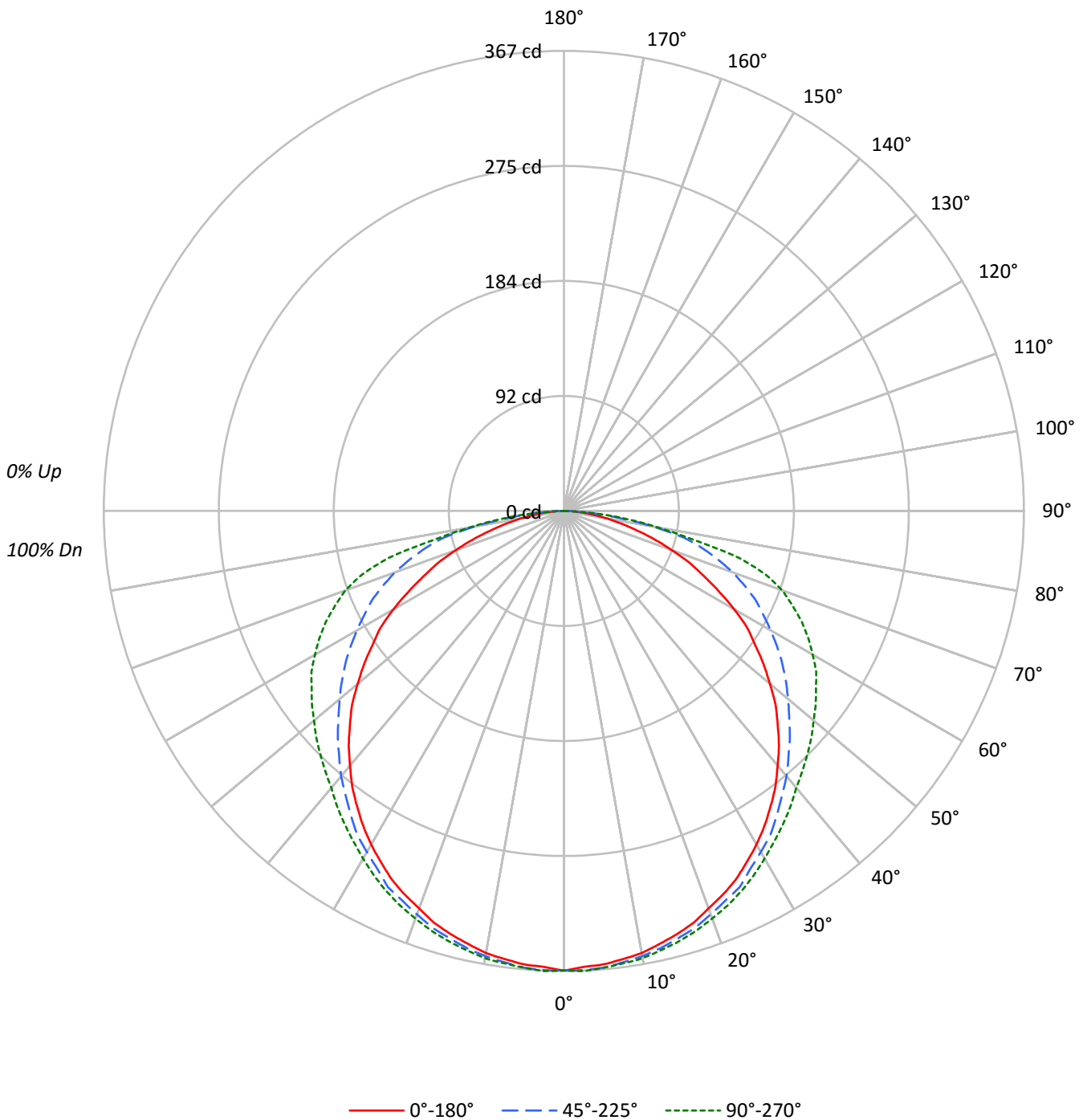
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	987	987	987
5°	981	988	988
10°	978	985	990
15°	973	983	990
20°	966	981	991
25°	963	984	994
30°	955	976	995
35°	945	973	1001
40°	932	971	1013
45°	918	970	1045
50°	898	978	1089
55°	874	999	1152
60°	846	1026	1234
65°	787	1077	1334
70°	723	1128	1459
75°	634	1187	1509
80°	545	1131	1184
85°	479	821	902



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	3.0
10°-20°	99.6	8.5
20°-30°	151.9	13.0
30°-40°	185.5	15.9
40°-50°	198.3	17.0
50°-60°	191.4	16.4
60°-70°	164.8	14.1
70°-80°	111.5	9.6
80°-90°	29.4	2.5
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°	286.1	24.5
0°-40°	471.6	40.4
0°-60°	861.3	73.8
0°-90°	1167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	363	364	366	366	366	34
15°	349	350	353	355	355	99
25°	324	326	331	333	335	149
35°	288	290	296	302	305	180
45°	241	246	255	268	275	186
55°	186	192	213	234	246	167
65°	124	136	169	196	210	123
75°	61	81	114	137	145	65
85°	16	22	27	28	29	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	366.6	366.6	366.6	366.6	366.6
2.5°	364.0	364.9	366.6	366.6	367.4
5°	363.1	364.0	365.7	365.7	365.7
7.5°	360.6	361.4	363.1	364.0	364.0
10°	358.0	358.8	360.6	361.4	362.3
12.5°	353.7	354.6	357.1	358.8	358.8
15°	349.4	350.3	352.8	354.6	355.4
17.5°	344.3	346.0	348.5	350.3	351.1
20°	337.4	339.1	342.5	345.1	346.0
22.5°	331.4	333.1	336.5	339.1	340.8
25°	324.5	326.2	331.4	333.1	334.8
27.5°	315.9	317.6	321.9	325.4	327.9
30°	307.3	309.1	314.2	318.5	320.2
32.5°	297.9	300.5	306.5	309.9	312.5
35°	287.6	290.2	296.2	302.2	304.8
37.5°	277.3	279.9	285.9	293.6	297.0
40°	265.3	268.7	276.4	286.7	288.5
42.5°	254.1	258.4	265.3	277.3	281.6
45°	241.2	245.5	255.0	267.8	274.7
47.5°	229.2	233.5	243.8	259.3	267.8
50°	214.6	220.6	233.5	251.5	260.1
52.5°	200.9	206.0	223.2	243.0	253.3
55°	186.3	192.3	212.9	234.4	245.5
57.5°	173.4	178.6	201.7	225.8	238.7
60°	157.1	164.0	190.6	216.3	229.2
62.5°	139.9	150.2	179.4	206.0	219.8
65°	123.6	135.6	169.1	195.7	209.5
67.5°	109.0	121.9	156.2	184.6	197.5
70°	91.9	108.2	143.4	170.8	185.4
72.5°	76.4	94.4	128.8	156.2	169.1
75°	61.0	80.7	114.2	137.4	145.1
77.5°	47.2	66.1	97.9	104.7	105.6
80°	35.2	52.4	73.0	73.8	76.4
82.5°	24.0	36.9	47.2	51.5	52.4
85°	15.5	21.5	26.6	27.5	29.2
87.5°	6.9	7.7	9.4	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)