

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: P308339

Luminaire Tested: **22FCZ2-20HE-UNV-L82765-RDP-CA125-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: P308339
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-CA125-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC 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: 1191.0 lumens
Efficiency: N/A
Efficacy: 71.3 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

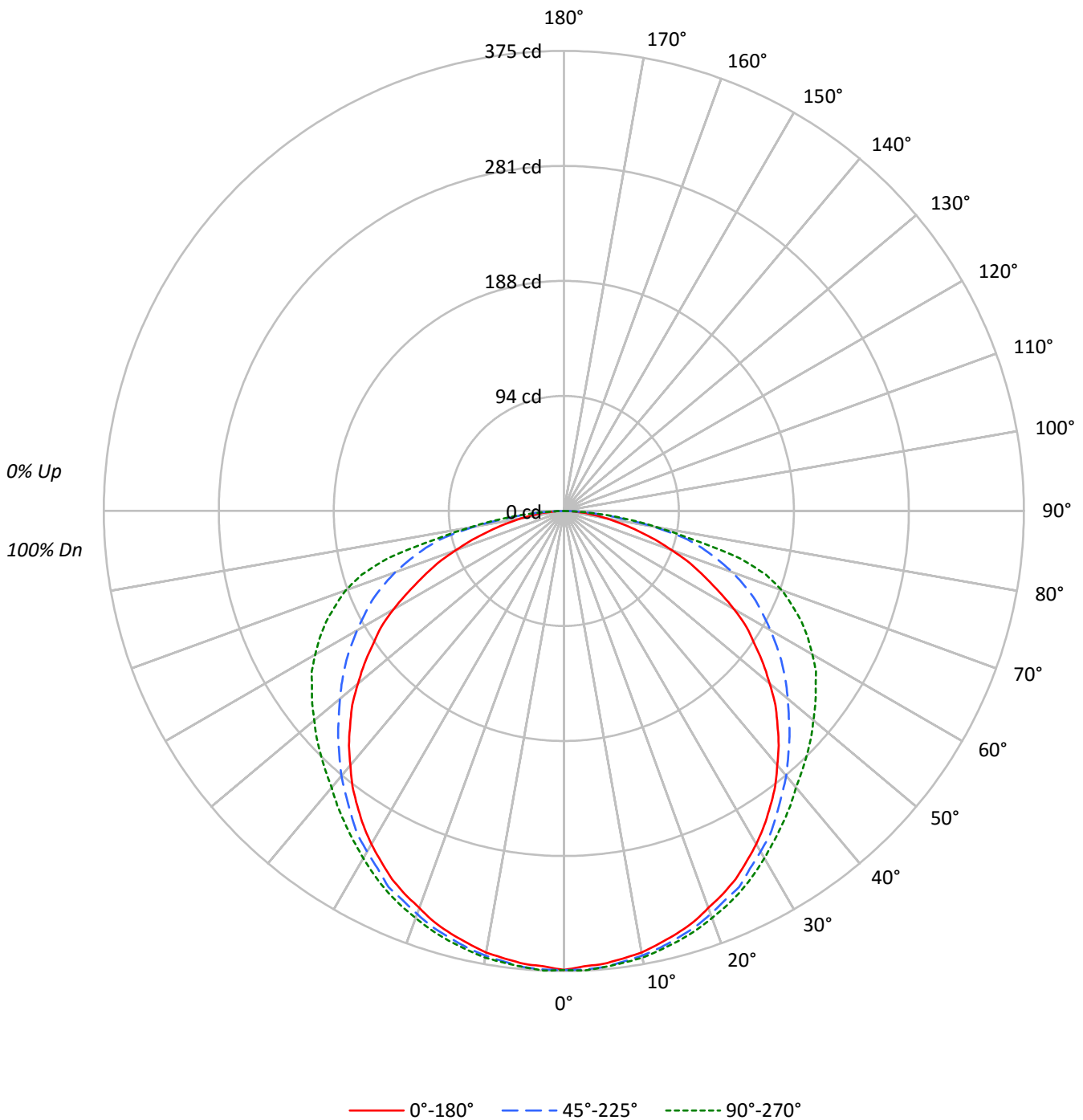
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308339

CATALOG NUMBER: 22FCZ2-20HE-UNV-L82765-RDP-CA125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P308339

CATALOG NUMBER: 22FCZ2-20HE-UNV-L82765-RDP-CA125-W2A-U-2700K

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°	1007	1007	1007
5°	1001	1008	1008
10°	998	1006	1010
15°	993	1003	1010
20°	986	1001	1011
25°	983	1004	1015
30°	975	997	1015
35°	964	993	1022
40°	951	991	1034
45°	937	990	1067
50°	917	998	1111
55°	892	1019	1176
60°	863	1047	1259
65°	804	1099	1361
70°	737	1151	1489
75°	647	1211	1540
80°	556	1155	1209
85°	488	840	920



TEST NUMBER: P308339

CATALOG NUMBER: 22FCZ2-20HE-UNV-L82765-RDP-CA125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	3.0
10°-20°	101.6	8.5
20°-30°	155.0	13.0
30°-40°	189.3	15.9
40°-50°	202.4	17.0
50°-60°	195.3	16.4
60°-70°	168.2	14.1
70°-80°	113.8	9.6
80°-90°	30.0	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°	292.0	24.5
0°-40°	481.3	40.4
0°-60°	879.0	73.8
0°-90°	1191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1191.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	371	372	373	373	373	35
15°	357	358	360	362	363	101
25°	331	333	338	340	342	152
35°	294	296	302	308	311	184
45°	246	251	260	273	280	190
55°	190	196	217	239	251	170
65°	126	138	173	200	214	125
75°	62	82	116	140	148	67
85°	16	22	27	28	30	18
90°	0	0	0	0	0	



TEST NUMBER: P308339

CATALOG NUMBER: 22FCZ2-20HE-UNV-L82765-RDP-CA125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	374.1	374.1	374.1	374.1	374.1
2.5°	371.5	372.4	374.1	374.1	375.0
5°	370.6	371.5	373.2	373.2	373.2
7.5°	368.0	368.9	370.6	371.5	371.5
10°	365.4	366.2	368.0	368.9	369.7
12.5°	361.0	361.8	364.5	366.2	366.2
15°	356.6	357.5	360.1	361.8	362.7
17.5°	351.3	353.1	355.7	357.5	358.3
20°	344.3	346.1	349.6	352.2	353.1
22.5°	338.2	339.9	343.4	346.1	347.8
25°	331.2	332.9	338.2	339.9	341.7
27.5°	322.4	324.2	328.6	332.1	334.7
30°	313.7	315.4	320.7	325.0	326.8
32.5°	304.0	306.7	312.8	316.3	318.9
35°	293.5	296.1	302.3	308.4	311.0
37.5°	283.0	285.6	291.8	299.6	303.1
40°	270.7	274.2	282.1	292.6	294.4
42.5°	259.3	263.7	270.7	283.0	287.4
45°	246.2	250.6	260.2	273.4	280.4
47.5°	233.9	238.3	248.8	264.6	273.4
50°	219.0	225.2	238.3	256.7	265.5
52.5°	205.0	210.3	227.8	247.9	258.5
55°	190.1	196.3	217.3	239.2	250.6
57.5°	177.0	182.2	205.9	230.4	243.6
60°	160.3	167.3	194.5	220.8	233.9
62.5°	142.8	153.3	183.1	210.3	224.3
65°	126.2	138.4	172.6	199.8	213.8
67.5°	111.3	124.4	159.5	188.4	201.5
70°	93.7	110.4	146.3	174.4	189.2
72.5°	78.0	96.4	131.4	159.5	172.6
75°	62.2	82.4	116.5	140.2	148.1
77.5°	48.2	67.5	99.9	106.9	107.8
80°	35.9	53.4	74.5	75.3	78.0
82.5°	24.5	37.7	48.2	52.6	53.4
85°	15.8	21.9	27.2	28.0	29.8
87.5°	7.0	7.9	9.6	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)