

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: P308397

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-RDP-CP125-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: P308397
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: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-4500K
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: 1458.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

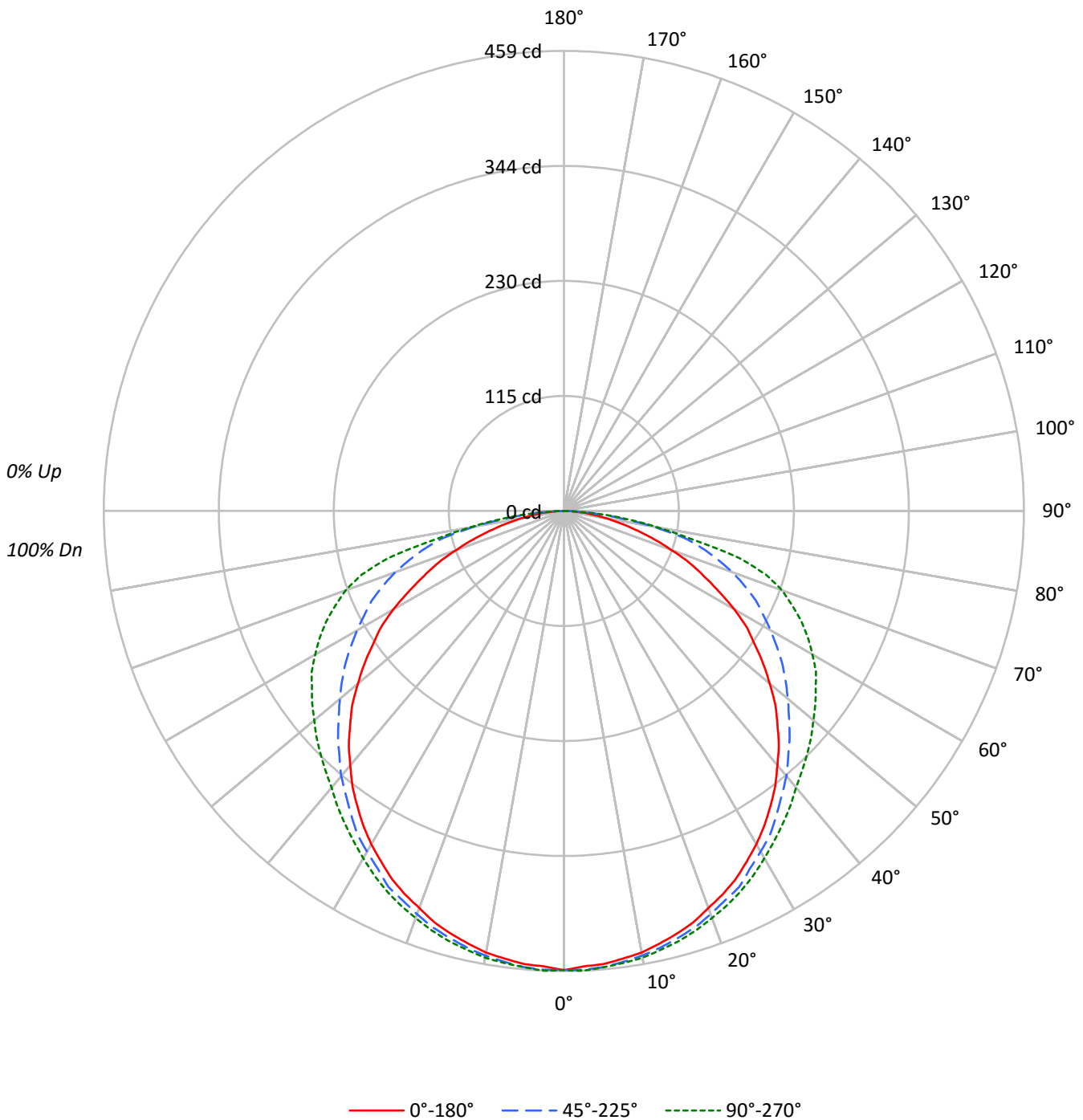
Input Watts (W): 19.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308397

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P308397

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-4500K

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°	1232	1232	1232
5°	1226	1234	1234
10°	1222	1231	1237
15°	1216	1228	1237
20°	1207	1226	1238
25°	1204	1229	1242
30°	1193	1220	1243
35°	1180	1215	1251
40°	1164	1213	1266
45°	1147	1212	1306
50°	1122	1221	1361
55°	1092	1248	1439
60°	1056	1281	1541
65°	983	1345	1666
70°	903	1409	1823
75°	792	1484	1885
80°	682	1413	1480
85°	596	1025	1127



TEST NUMBER: P308397

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	3.0
10°-20°	124.4	8.5
20°-30°	189.8	13.0
30°-40°	231.7	15.9
40°-50°	247.8	17.0
50°-60°	239.2	16.4
60°-70°	205.9	14.1
70°-80°	139.3	9.6
80°-90°	36.7	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°	357.5	24.5
0°-40°	589.2	40.4
0°-60°	1076.1	73.8
0°-90°	1458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	458	458	458	458	458	
5°	454	455	457	457	457	43
15°	436	438	441	443	444	123
25°	405	408	414	416	418	187
35°	359	362	370	378	381	225
45°	301	307	319	335	343	233
55°	233	240	266	293	307	209
65°	154	170	211	244	262	154
75°	76	101	143	172	181	82
85°	19	27	33	34	36	22
90°	0	0	0	0	0	



TEST NUMBER: P308397

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-RDP-CP125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	458.0	458.0	458.0	458.0	458.0
2.5°	454.8	455.8	458.0	458.0	459.1
5°	453.7	454.8	456.9	456.9	456.9
7.5°	450.5	451.5	453.7	454.8	454.8
10°	447.3	448.3	450.5	451.5	452.6
12.5°	441.9	443.0	446.2	448.3	448.3
15°	436.5	437.6	440.8	443.0	444.0
17.5°	430.1	432.2	435.5	437.6	438.7
20°	421.5	423.7	428.0	431.2	432.2
22.5°	414.0	416.2	420.4	423.7	425.8
25°	405.4	407.6	414.0	416.2	418.3
27.5°	394.7	396.8	402.2	406.5	409.7
30°	384.0	386.1	392.6	397.9	400.1
32.5°	372.2	375.4	382.9	387.2	390.4
35°	359.3	362.5	370.0	377.5	380.8
37.5°	346.4	349.7	357.2	366.8	371.1
40°	331.4	335.7	345.4	358.2	360.4
42.5°	317.5	322.8	331.4	346.4	351.8
45°	301.4	306.8	318.6	334.6	343.2
47.5°	286.4	291.7	304.6	323.9	334.6
50°	268.1	275.6	291.7	314.3	325.0
52.5°	251.0	257.4	278.9	303.5	316.4
55°	232.7	240.3	266.0	292.8	306.8
57.5°	216.7	223.1	252.1	282.1	298.2
60°	196.3	204.9	238.1	270.3	286.4
62.5°	174.8	187.7	224.2	257.4	274.6
65°	154.4	169.5	211.3	244.5	261.7
67.5°	136.2	152.3	195.2	230.6	246.7
70°	114.8	135.1	179.1	213.4	231.7
72.5°	95.5	118.0	160.9	195.2	211.3
75°	76.2	100.8	142.7	171.6	181.3
77.5°	59.0	82.6	122.3	130.9	131.9
80°	44.0	65.4	91.2	92.2	95.5
82.5°	30.0	46.1	59.0	64.4	65.4
85°	19.3	26.8	33.2	34.3	36.5
87.5°	8.6	9.7	11.8	10.7	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)