

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: P308566

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K**

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: P308566
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: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K
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: 2592.0 lumens
Efficiency: N/A
Efficacy: 69.3 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

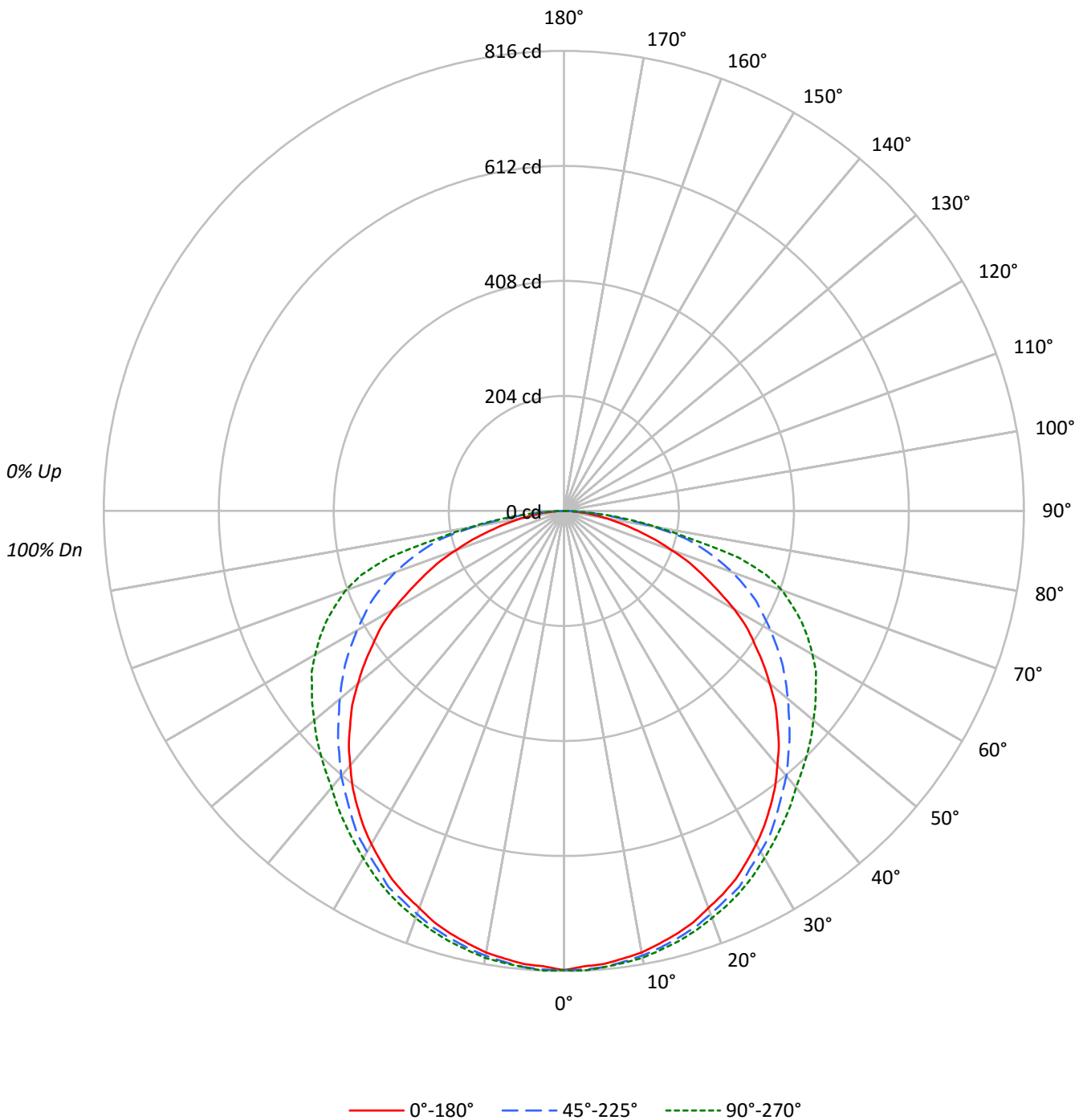
Input Watts (W): 37.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308566

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P308566

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K

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°	2191	2191	2191
5°	2179	2194	2194
10°	2173	2188	2199
15°	2162	2183	2199
20°	2146	2179	2200
25°	2140	2185	2208
30°	2121	2169	2210
35°	2099	2161	2224
40°	2070	2157	2251
45°	2039	2155	2322
50°	1996	2171	2419
55°	1941	2219	2558
60°	1878	2278	2740
65°	1748	2392	2963
70°	1605	2505	3241
75°	1408	2637	3350
80°	1212	2512	2630
85°	1059	1825	2001



TEST NUMBER: P308566

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.0
10°-20°	221.1	8.5
20°-30°	337.4	13.0
30°-40°	411.9	15.9
40°-50°	440.5	17.0
50°-60°	425.1	16.4
60°-70°	366.0	14.1
70°-80°	247.6	9.6
80°-90°	65.3	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°	635.5	24.5
0°-40°	1047.5	40.4
0°-60°	1913.1	73.8
0°-90°	2592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2592.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	807	808	812	812	812	77
15°	776	778	784	788	789	219
25°	721	725	736	740	744	332
35°	639	644	658	671	677	400
45°	536	545	566	595	610	414
55°	414	427	473	520	545	371
65°	275	301	376	435	465	273
75°	135	179	254	305	322	145
85°	34	48	59	61	65	39
90°	0	0	0	0	0	



TEST NUMBER: P308566

CATALOG NUMBER: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.2	814.2	814.2	814.2	814.2
2.5°	808.5	810.4	814.2	814.2	816.1
5°	806.6	808.5	812.3	812.3	812.3
7.5°	800.8	802.8	806.6	808.5	808.5
10°	795.1	797.0	800.8	802.8	804.7
12.5°	785.6	787.5	793.2	797.0	797.0
15°	776.1	778.0	783.7	787.5	789.4
17.5°	764.6	768.4	774.2	778.0	779.9
20°	749.4	753.2	760.8	766.5	768.4
22.5°	736.0	739.8	747.5	753.2	757.0
25°	720.8	724.6	736.0	739.8	743.6
27.5°	701.7	705.5	715.0	722.7	728.4
30°	682.6	686.4	697.9	707.4	711.2
32.5°	661.7	667.4	680.7	688.3	694.1
35°	638.8	644.5	657.8	671.2	676.9
37.5°	615.9	621.6	635.0	652.1	659.7
40°	589.2	596.8	614.0	636.9	640.7
42.5°	564.4	573.9	589.2	615.9	625.4
45°	535.8	545.3	566.3	594.9	610.2
47.5°	509.1	518.6	541.5	575.8	594.9
50°	476.7	490.0	518.6	558.7	577.8
52.5°	446.2	457.6	495.8	539.6	562.5
55°	413.8	427.1	472.9	520.5	545.3
57.5°	385.2	396.6	448.1	501.5	530.1
60°	348.9	364.2	423.3	480.5	509.1
62.5°	310.8	333.7	398.5	457.6	488.1
65°	274.6	301.3	375.6	434.7	465.3
67.5°	242.2	270.8	347.0	410.0	438.6
70°	204.0	240.3	318.4	379.4	411.9
72.5°	169.7	209.7	286.0	347.0	375.6
75°	135.4	179.2	253.6	305.1	322.2
77.5°	104.9	146.8	217.4	232.6	234.5
80°	78.2	116.3	162.1	164.0	169.7
82.5°	53.4	82.0	104.9	114.4	116.3
85°	34.3	47.7	59.1	61.0	64.8
87.5°	15.3	17.2	21.0	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)