

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: P308528

Luminaire Tested: **22FCZ2-39HE-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: P308528
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: 22FCZ2-39HE-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: 2129.0 lumens
Efficiency: N/A
Efficacy: 65.7 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

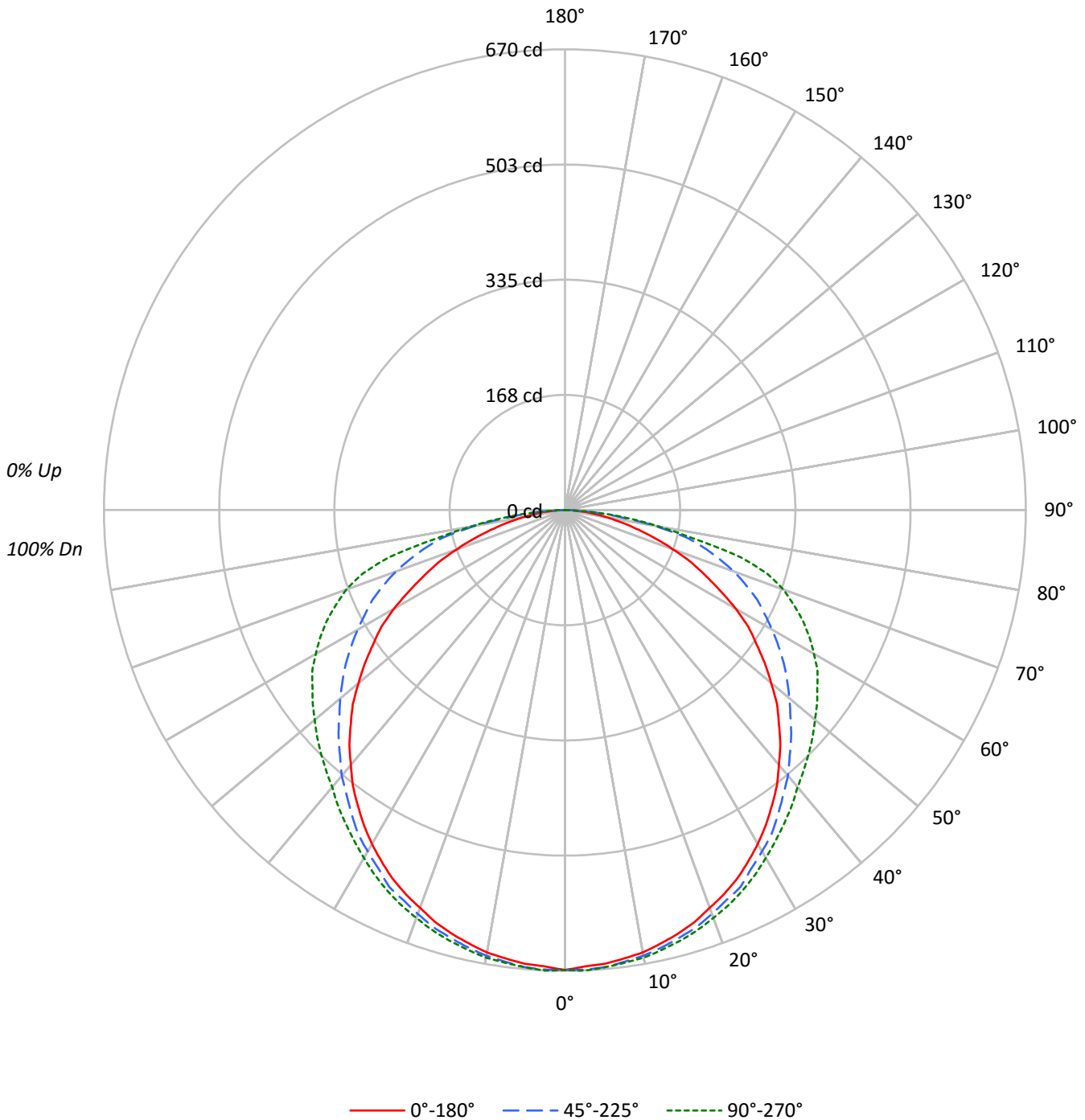
Input Watts (W): 32.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308528

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP125-W2A-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P308528

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP125-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°	1800	1800	1800
5°	1790	1802	1802
10°	1785	1797	1806
15°	1776	1793	1806
20°	1763	1790	1808
25°	1758	1795	1814
30°	1742	1781	1815
35°	1724	1775	1827
40°	1700	1772	1848
45°	1675	1770	1907
50°	1639	1783	1987
55°	1595	1822	2101
60°	1542	1871	2251
65°	1436	1964	2433
70°	1319	2058	2662
75°	1156	2166	2752
80°	995	2063	2160
85°	871	1501	1643



TEST NUMBER: P308528

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP125-W2A-U-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	3.0
10°-20°	181.6	8.5
20°-30°	277.1	13.0
30°-40°	338.4	15.9
40°-50°	361.8	17.0
50°-60°	349.2	16.4
60°-70°	300.6	14.1
70°-80°	203.4	9.6
80°-90°	53.7	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°	522.0	24.5
0°-40°	860.4	40.4
0°-60°	1571.4	73.8
0°-90°	2129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	662	664	667	667	667	63
15°	637	639	644	647	648	180
25°	592	595	604	608	611	272
35°	525	529	540	551	556	328
45°	440	448	465	489	501	340
55°	340	351	388	428	448	305
65°	226	248	308	357	382	224
75°	111	147	208	251	265	119
85°	28	39	49	50	53	32
90°	0	0	0	0	0	



TEST NUMBER: P308528

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CP125-W2A-U-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.8	668.8	668.8	668.8	668.8
2.5°	664.1	665.6	668.8	668.8	670.3
5°	662.5	664.1	667.2	667.2	667.2
7.5°	657.8	659.4	662.5	664.1	664.1
10°	653.1	654.7	657.8	659.4	660.9
12.5°	645.3	646.8	651.5	654.7	654.7
15°	637.4	639.0	643.7	646.8	648.4
17.5°	628.0	631.2	635.9	639.0	640.6
20°	615.5	618.6	624.9	629.6	631.2
22.5°	604.5	607.7	613.9	618.6	621.8
25°	592.0	595.1	604.5	607.7	610.8
27.5°	576.4	579.5	587.3	593.6	598.3
30°	560.7	563.8	573.2	581.1	584.2
32.5°	543.5	548.2	559.1	565.4	570.1
35°	524.7	529.4	540.3	551.3	556.0
37.5°	505.9	510.6	521.5	535.6	541.9
40°	483.9	490.2	504.3	523.1	526.2
42.5°	463.6	471.4	483.9	505.9	513.7
45°	440.1	447.9	465.2	488.6	501.2
47.5°	418.2	426.0	444.8	473.0	488.6
50°	391.5	402.5	426.0	458.9	474.6
52.5°	366.5	375.9	407.2	443.2	462.0
55°	339.9	350.8	388.4	427.6	447.9
57.5°	316.4	325.8	368.1	411.9	435.4
60°	286.6	299.1	347.7	394.7	418.2
62.5°	255.3	274.1	327.3	375.9	400.9
65°	225.5	247.5	308.5	357.1	382.1
67.5°	198.9	222.4	285.0	336.7	360.2
70°	167.6	197.3	261.6	311.7	338.3
72.5°	139.4	172.3	234.9	285.0	308.5
75°	111.2	147.2	208.3	250.6	264.7
77.5°	86.1	120.6	178.5	191.1	192.6
80°	64.2	95.5	133.1	134.7	139.4
82.5°	43.9	67.3	86.1	94.0	95.5
85°	28.2	39.2	48.6	50.1	53.2
87.5°	12.5	14.1	17.2	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)