

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: P308577

Luminaire Tested: **22FCZ2-44HE-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: P308577
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-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: 2644.0 lumens
Efficiency: N/A
Efficacy: 69.8 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

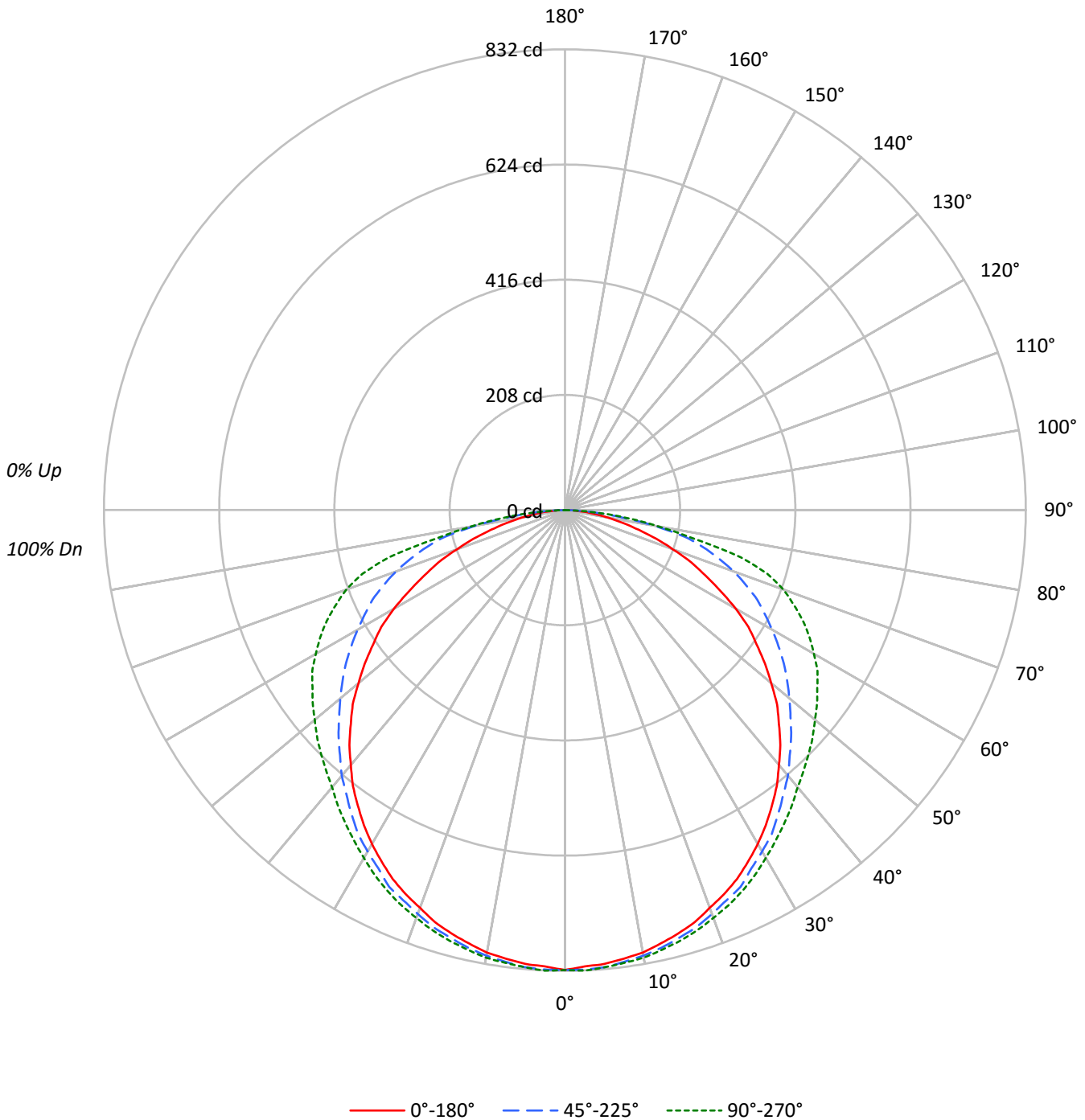
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82				82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67				67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55				55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47				47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40				40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35				35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31				31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27				27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24				24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2235	2235	2235
5°	2222	2238	2238
10°	2216	2232	2243
15°	2205	2227	2243
20°	2189	2223	2245
25°	2183	2229	2252
30°	2164	2212	2254
35°	2141	2204	2268
40°	2111	2200	2296
45°	2080	2199	2369
50°	2036	2215	2467
55°	1980	2263	2610
60°	1915	2324	2795
65°	1784	2440	3022
70°	1637	2555	3305
75°	1436	2690	3418
80°	1235	2562	2682
85°	1081	1862	2041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	3.0
10°-20°	225.6	8.5
20°-30°	344.2	13.0
30°-40°	420.2	15.9
40°-50°	449.3	17.0
50°-60°	433.7	16.4
60°-70°	373.3	14.1
70°-80°	252.6	9.6
80°-90°	66.6	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°	648.3	24.5
0°-40°	1068.5	40.4
0°-60°	1951.5	73.8
0°-90°	2644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2644.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	823	825	829	829	829	78
15°	792	794	799	803	805	223
25°	735	739	751	755	759	338
35°	652	657	671	685	690	408
45°	547	556	578	607	622	422
55°	422	436	482	531	556	378
65°	280	307	383	444	475	279
75°	138	183	259	311	329	148
85°	35	49	60	62	66	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	830.5	830.5	830.5	830.5	830.5
2.5°	824.7	826.6	830.5	830.5	832.5
5°	822.7	824.7	828.6	828.6	828.6
7.5°	816.9	818.9	822.7	824.7	824.7
10°	811.1	813.0	816.9	818.9	820.8
12.5°	801.4	803.3	809.1	813.0	813.0
15°	791.6	793.6	799.4	803.3	805.2
17.5°	780.0	783.8	789.7	793.6	795.5
20°	764.4	768.3	776.1	781.9	783.8
22.5°	750.8	754.7	762.5	768.3	772.2
25°	735.2	739.1	750.8	754.7	758.6
27.5°	715.8	719.7	729.4	737.2	743.0
30°	696.3	700.2	711.9	721.6	725.5
32.5°	674.9	680.8	694.4	702.2	708.0
35°	651.6	657.4	671.0	684.6	690.5
37.5°	628.2	634.1	647.7	665.2	673.0
40°	601.0	608.8	626.3	649.6	653.5
42.5°	575.7	585.5	601.0	628.2	638.0
45°	546.6	556.3	577.7	606.8	622.4
47.5°	519.3	529.0	552.4	587.4	606.8
50°	486.3	499.9	529.0	569.9	589.3
52.5°	455.1	466.8	505.7	550.4	573.8
55°	422.1	435.7	482.4	531.0	556.3
57.5°	392.9	404.6	457.1	511.5	540.7
60°	355.9	371.5	431.8	490.1	519.3
62.5°	317.0	340.4	406.5	466.8	497.9
65°	280.1	307.3	383.2	443.5	474.6
67.5°	247.0	276.2	354.0	418.2	447.4
70°	208.1	245.1	324.8	387.1	420.1
72.5°	173.1	214.0	291.8	354.0	383.2
75°	138.1	182.8	258.7	311.2	328.7
77.5°	107.0	149.8	221.7	237.3	239.2
80°	79.7	118.6	165.3	167.3	173.1
82.5°	54.5	83.6	107.0	116.7	118.6
85°	35.0	48.6	60.3	62.2	66.1
87.5°	15.6	17.5	21.4	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)