

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: P312726

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-RDP-CP125-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: P312726
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-L83050-RDP-CP125-W2A-U-3500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (168) 3500K 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: 2602.0 lumens
Efficiency: N/A
Efficacy: 69.9 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

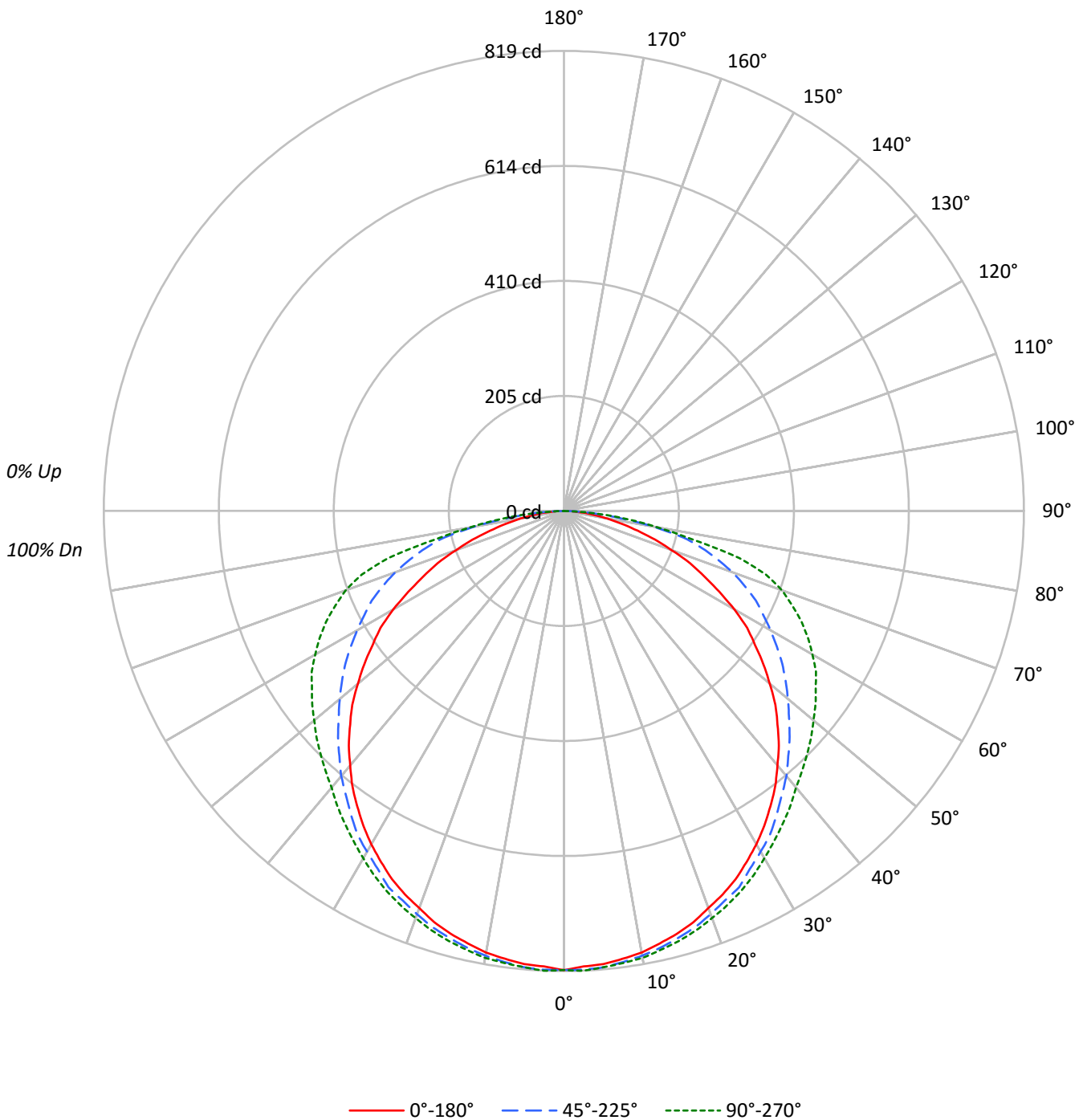
Input Watts (W): 37.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2199	2199	2199
5°	2187	2203	2203
10°	2181	2197	2207
15°	2170	2192	2208
20°	2154	2187	2209
25°	2148	2194	2216
30°	2129	2177	2219
35°	2106	2169	2232
40°	2078	2165	2259
45°	2047	2163	2331
50°	2003	2179	2428
55°	1949	2227	2568
60°	1885	2287	2751
65°	1755	2401	2974
70°	1611	2515	3253
75°	1413	2647	3363
80°	1216	2521	2641
85°	1065	1831	2010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	3.0
10°-20°	222.0	8.5
20°-30°	338.7	13.0
30°-40°	413.5	15.9
40°-50°	442.2	17.0
50°-60°	426.8	16.4
60°-70°	367.4	14.1
70°-80°	248.6	9.6
80°-90°	65.6	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°	638.0	24.5
0°-40°	1051.5	40.4
0°-60°	1920.5	73.8
0°-90°	2602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2602.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	817	817	817	817	817	
5°	810	812	815	815	815	77
15°	779	781	787	790	792	220
25°	724	727	739	743	746	333
35°	641	647	660	674	680	401
45°	538	547	568	597	612	415
55°	415	429	475	523	547	372
65°	276	302	377	436	467	274
75°	136	180	255	306	324	146
85°	34	48	59	61	65	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	817.3	817.3	817.3	817.3	817.3
2.5°	811.6	813.5	817.3	817.3	819.2
5°	809.7	811.6	815.4	815.4	815.4
7.5°	803.9	805.8	809.7	811.6	811.6
10°	798.2	800.1	803.9	805.8	807.8
12.5°	788.6	790.5	796.3	800.1	800.1
15°	779.1	781.0	786.7	790.5	792.4
17.5°	767.6	771.4	777.1	781.0	782.9
20°	752.3	756.1	763.7	769.5	771.4
22.5°	738.9	742.7	750.3	756.1	759.9
25°	723.5	727.4	738.9	742.7	746.5
27.5°	704.4	708.2	717.8	725.5	731.2
30°	685.3	689.1	700.6	710.1	714.0
32.5°	664.2	669.9	683.3	691.0	696.7
35°	641.2	647.0	660.4	673.8	679.5
37.5°	618.3	624.0	637.4	654.6	662.3
40°	591.5	599.1	616.3	639.3	643.1
42.5°	566.6	576.2	591.5	618.3	627.8
45°	537.9	547.4	568.5	597.2	612.5
47.5°	511.1	520.6	543.6	578.1	597.2
50°	478.5	491.9	520.6	560.8	580.0
52.5°	447.9	459.4	497.7	541.7	564.7
55°	415.4	428.8	474.7	522.6	547.4
57.5°	386.7	398.1	449.8	503.4	532.1
60°	350.3	365.6	424.9	482.4	511.1
62.5°	312.0	335.0	400.1	459.4	490.0
65°	275.6	302.4	377.1	436.4	467.0
67.5°	243.1	271.8	348.4	411.5	440.2
70°	204.8	241.2	319.7	380.9	413.5
72.5°	170.4	210.6	287.1	348.4	377.1
75°	135.9	179.9	254.6	306.3	323.5
77.5°	105.3	147.4	218.2	233.5	235.4
80°	78.5	116.8	162.7	164.6	170.4
82.5°	53.6	82.3	105.3	114.8	116.8
85°	34.5	47.9	59.3	61.3	65.1
87.5°	15.3	17.2	21.1	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)