

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: P308671

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-CP125-W2A-U-6500K**

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: P308671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
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-CP125-W2A-U-6500K
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 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: 2242.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

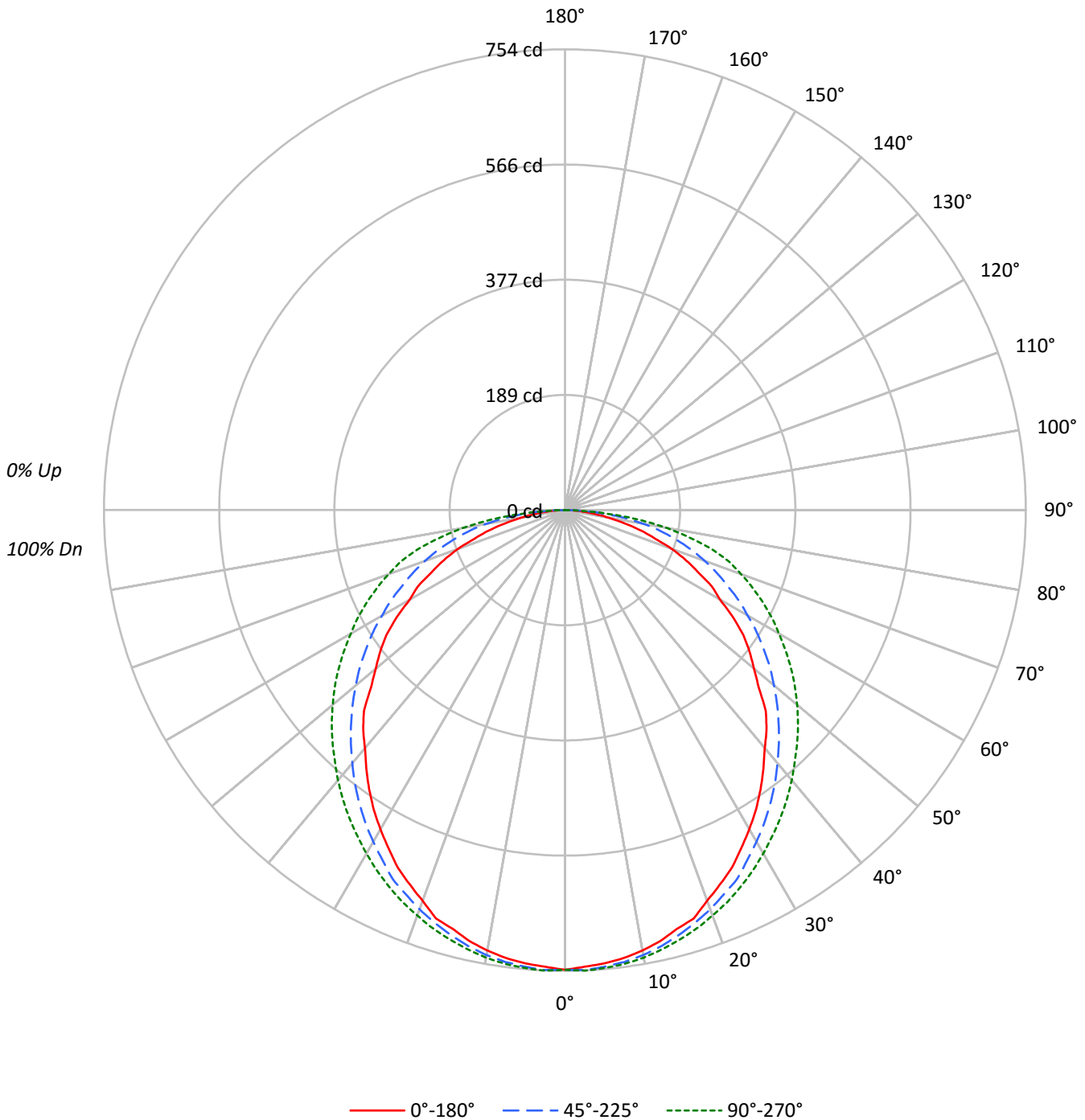
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2024	2024	2024
5°	2012	2026	2032
10°	2000	2020	2032
15°	1976	2006	2027
20°	1948	1991	2022
25°	1918	1979	2020
30°	1874	1947	2017
35°	1833	1925	2020
40°	1787	1900	2028
45°	1768	1883	2046
50°	1689	1869	2076
55°	1672	1863	2120
60°	1576	1859	2177
65°	1531	1872	2275
70°	1469	1917	2415
75°	1339	1974	2599
80°	1147	2046	2627
85°	926	1954	2254



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	3.2
10°-20°	203.0	9.1
20°-30°	305.6	13.6
30°-40°	366.8	16.4
40°-50°	383.4	17.1
50°-60°	357.3	15.9
60°-70°	293.0	13.1
70°-80°	197.4	8.8
80°-90°	64.3	2.9
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°	579.8	25.9
0°-40°	946.6	42.2
0°-60°	1687.2	75.3
0°-90°	2242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	745	747	750	751	752	71
15°	709	714	720	726	728	200
25°	646	650	666	676	680	297
35°	558	566	586	606	615	349
45°	465	468	495	525	538	355
55°	356	363	397	435	452	316
65°	240	251	294	337	357	239
75°	129	143	190	233	250	135
85°	30	43	63	74	73	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.2	752.2	752.2	752.2	752.2
2.5°	747.9	750.1	753.3	754.4	754.4
5°	744.7	746.8	750.1	751.1	752.2
7.5°	739.3	741.5	745.8	747.9	749.0
10°	731.8	734.0	739.3	742.6	743.6
12.5°	722.2	724.3	730.7	735.0	736.1
15°	709.3	713.6	720.0	726.5	727.5
17.5°	700.7	699.6	708.2	715.7	717.9
20°	680.3	685.7	695.3	703.9	706.1
22.5°	663.1	667.4	680.3	690.0	694.3
25°	646.0	650.3	666.4	676.0	680.3
27.5°	624.5	631.0	646.0	659.9	665.3
30°	603.1	609.5	626.7	642.8	649.2
32.5°	581.6	589.1	607.3	624.5	632.0
35°	558.0	565.5	585.9	606.3	614.9
37.5°	533.3	543.0	564.4	587.0	596.6
40°	508.6	518.3	540.8	566.6	577.3
42.5°	488.2	492.5	518.3	546.2	556.9
45°	464.6	467.9	494.7	524.7	537.6
47.5°	430.3	442.1	471.1	504.3	517.2
50°	403.5	416.3	446.4	481.8	495.8
52.5°	380.9	389.5	422.8	458.2	474.3
55°	356.3	362.7	397.0	434.6	451.8
57.5°	326.2	338.0	372.3	411.0	428.1
60°	292.9	308.0	345.5	387.4	404.5
62.5°	271.5	280.1	320.8	362.7	382.0
65°	240.4	251.1	294.0	336.9	357.3
67.5°	214.6	225.3	269.3	312.3	332.6
70°	186.7	197.4	243.6	286.5	306.9
72.5°	154.5	169.5	217.8	260.8	282.2
75°	128.8	142.7	189.9	232.9	250.0
77.5°	99.8	118.0	162.0	197.4	210.3
80°	74.0	92.3	132.0	157.7	169.5
82.5°	50.4	68.7	98.7	118.0	124.5
85°	30.0	42.9	63.3	74.0	73.0
87.5°	13.9	18.2	25.8	25.8	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)