

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: P308173

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-HRP-CP125-W2A-U-5000K**

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: P308173  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-29HE-UNV-L82765-HRP-CP125-W2A-U-5000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 2007.0 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

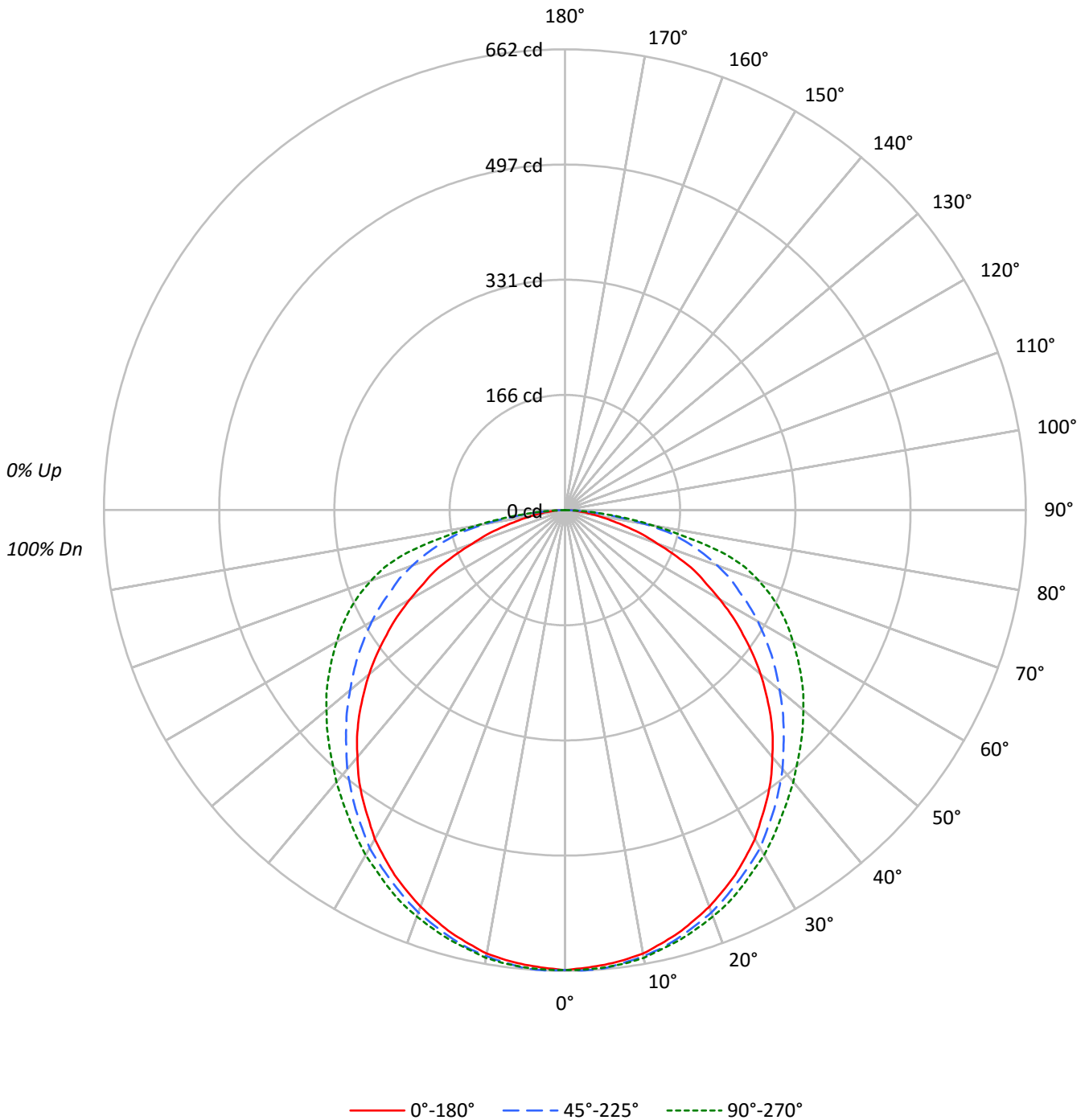
Input Watts (W): 22.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1778	1778	1778
5°	1771	1785	1782
10°	1768	1778	1785
15°	1753	1771	1781
20°	1737	1762	1780
25°	1718	1748	1778
30°	1696	1743	1778
35°	1664	1722	1776
40°	1628	1708	1792
45°	1590	1691	1821
50°	1537	1685	1871
55°	1467	1699	1942
60°	1383	1724	2038
65°	1306	1757	2176
70°	1116	1833	2331
75°	935	1909	2423
80°	766	1844	2021
85°	664	1368	1485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.6	3.1
10°-20°	179.2	8.9
20°-30°	271.5	13.5
30°-40°	327.9	16.3
40°-50°	344.5	17.2
50°-60°	324.2	16.2
60°-70°	270.3	13.5
70°-80°	179.1	8.9
80°-90°	47.7	2.4
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°	513.3	25.6
0°-40°	841.2	41.9
0°-60°	1509.9	75.2
0°-90°	2007.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2007.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	656	657	661	661	660	62
15°	629	632	636	638	639	177
25°	579	582	589	596	599	266
35°	506	512	524	536	541	317
45°	418	424	444	467	479	322
55°	313	327	362	399	414	280
65°	205	223	276	322	342	200
75°	90	125	184	222	233	98
85°	22	33	44	48	48	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.9	660.9	660.9	660.9	660.9
2.5°	658.4	659.6	662.1	662.1	660.9
5°	655.8	657.1	660.9	660.9	659.6
7.5°	652.0	653.3	655.8	658.4	657.1
10°	647.0	648.2	650.8	653.3	653.3
12.5°	638.1	639.4	644.4	645.7	645.7
15°	629.2	631.8	635.6	638.1	639.4
17.5°	617.8	620.4	625.4	630.5	630.5
20°	606.4	609.0	615.3	620.4	621.6
22.5°	592.5	596.3	602.6	609.0	611.5
25°	578.6	582.4	588.7	596.3	598.8
27.5°	562.1	565.9	574.8	583.7	584.9
30°	545.7	549.5	560.9	568.5	572.3
32.5°	525.4	530.5	541.9	553.3	557.1
35°	506.4	511.5	524.1	535.5	540.6
37.5°	486.2	491.2	505.2	519.1	525.4
40°	463.4	469.7	486.2	501.4	510.2
42.5°	441.9	448.2	464.6	484.9	493.8
45°	417.8	424.1	444.4	467.2	478.6
47.5°	392.5	400.1	424.1	452.0	463.4
50°	367.2	376.0	402.6	434.3	446.9
52.5°	340.6	352.0	382.3	416.5	431.7
55°	312.7	326.6	362.1	398.8	414.0
57.5°	286.1	298.8	340.6	379.8	396.3
60°	257.0	273.5	320.3	360.8	378.6
62.5°	229.2	246.9	298.8	341.8	360.8
65°	205.1	222.8	276.0	321.6	341.8
67.5°	173.5	197.5	257.0	300.1	320.3
70°	141.8	174.7	233.0	277.3	296.3
72.5°	117.7	149.4	208.9	253.2	270.9
75°	89.9	125.3	183.6	221.6	233.0
77.5°	67.1	103.8	157.0	176.0	177.2
80°	49.4	79.8	119.0	125.3	130.4
82.5°	34.2	55.7	77.2	84.8	87.4
85°	21.5	32.9	44.3	48.1	48.1
87.5°	11.4	12.7	15.2	15.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)