

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: P308213

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-HRP-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: P308213  
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: 22FCZ2-34HE-UNV-L82765-HRP-CP125-W2A-U-2700K  
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**

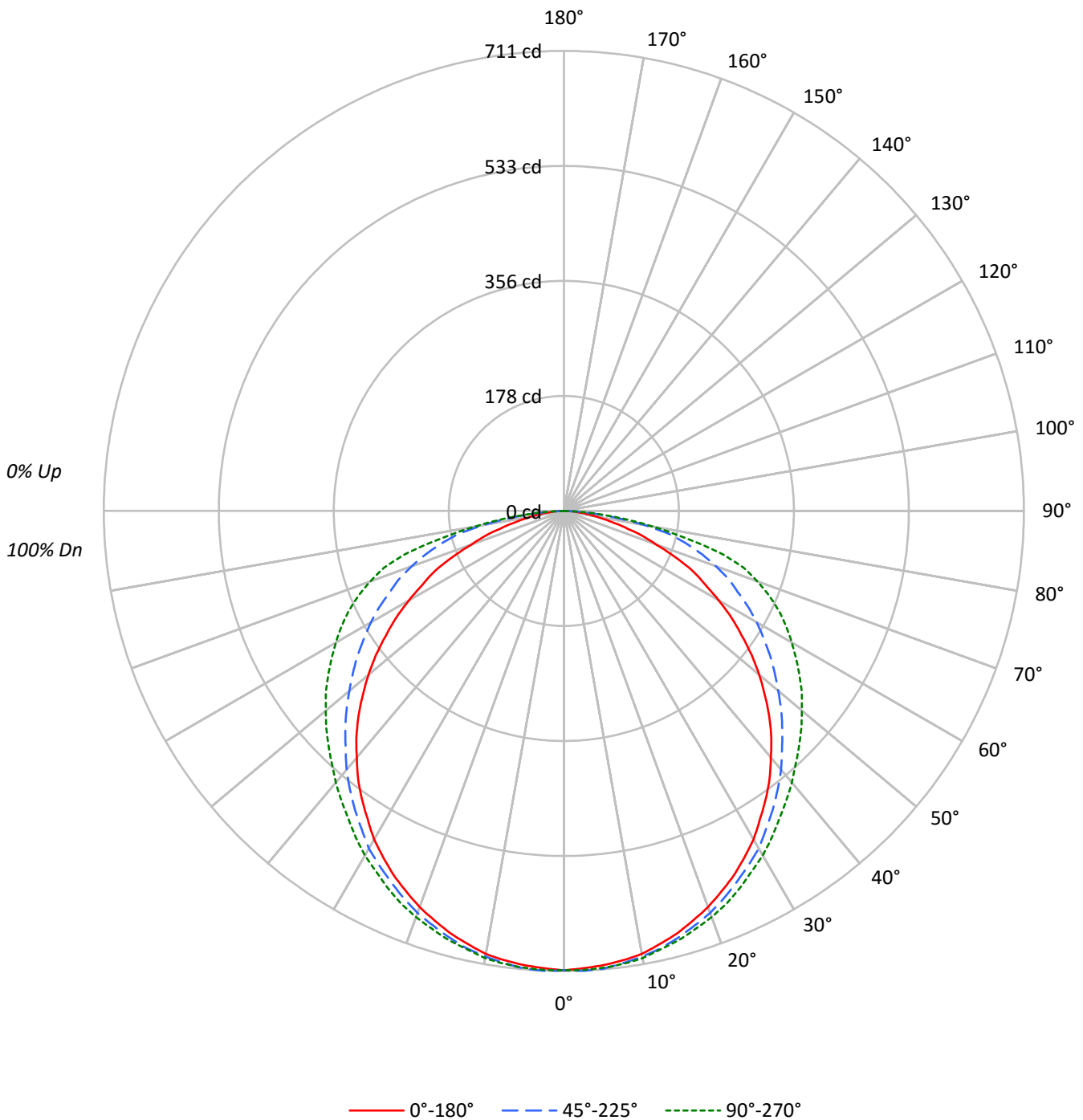
Lumens per Lamp: N/A  
Luminaire Lumens: 2156.0 lumens  
Efficiency: N/A  
Efficacy: 78.1 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	1910	1910	1910
5°	1903	1918	1914
10°	1899	1910	1918
15°	1883	1902	1913
20°	1866	1893	1912
25°	1845	1878	1910
30°	1821	1872	1910
35°	1787	1850	1908
40°	1749	1835	1925
45°	1708	1817	1956
50°	1651	1811	2010
55°	1576	1825	2086
60°	1486	1852	2189
65°	1403	1888	2338
70°	1198	1969	2504
75°	1004	2050	2601
80°	821	1980	2171
85°	713	1470	1596



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	3.1
10°-20°	192.5	8.9
20°-30°	291.7	13.5
30°-40°	352.2	16.3
40°-50°	370.1	17.2
50°-60°	348.2	16.2
60°-70°	290.4	13.5
70°-80°	192.4	8.9
80°-90°	51.3	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°	551.4	25.6
0°-40°	903.7	41.9
0°-60°	1622.0	75.2
0°-90°	2156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2156.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	704	706	710	710	709	67
15°	676	679	683	686	687	191
25°	622	626	632	641	643	286
35°	544	550	563	575	581	340
45°	449	456	477	502	514	346
55°	336	351	389	428	445	301
65°	220	239	296	346	367	214
75°	97	135	197	238	250	105
85°	23	35	48	52	52	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	709.9	709.9	709.9	709.9	709.9
2.5°	707.2	708.6	711.3	711.3	709.9
5°	704.5	705.9	709.9	709.9	708.6
7.5°	700.4	701.8	704.5	707.2	705.9
10°	695.0	696.3	699.1	701.8	701.8
12.5°	685.5	686.8	692.3	693.6	693.6
15°	675.9	678.7	682.7	685.5	686.8
17.5°	663.7	666.4	671.9	677.3	677.3
20°	651.5	654.2	661.0	666.4	667.8
22.5°	636.5	640.6	647.4	654.2	656.9
25°	621.5	625.6	632.4	640.6	643.3
27.5°	603.9	607.9	617.5	627.0	628.3
30°	586.2	590.3	602.5	610.7	614.7
32.5°	564.4	569.9	582.1	594.3	598.4
35°	544.0	549.5	563.1	575.3	580.7
37.5°	522.3	527.7	542.7	557.6	564.4
40°	497.8	504.6	522.3	538.6	548.1
42.5°	474.7	481.5	499.1	520.9	530.4
45°	448.8	455.6	477.4	501.9	514.1
47.5°	421.6	429.8	455.6	485.5	497.8
50°	394.4	403.9	432.5	466.5	480.1
52.5°	365.9	378.1	410.7	447.5	463.8
55°	335.9	350.9	389.0	428.4	444.7
57.5°	307.4	321.0	365.9	408.0	425.7
60°	276.1	293.8	344.1	387.6	406.7
62.5°	246.2	265.2	321.0	367.2	387.6
65°	220.3	239.4	296.5	345.5	367.2
67.5°	186.3	212.2	276.1	322.3	344.1
70°	152.3	187.7	250.2	297.9	318.3
72.5°	126.5	160.5	224.4	272.0	291.1
75°	96.6	134.6	197.2	238.0	250.2
77.5°	72.1	111.5	168.6	189.0	190.4
80°	53.0	85.7	127.8	134.6	140.1
82.5°	36.7	59.8	83.0	91.1	93.8
85°	23.1	35.4	47.6	51.7	51.7
87.5°	12.2	13.6	16.3	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)