

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: P308277

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP250-W2A-U-3000K**

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: P308277  
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: 22FCZ2-39HE-UNV-L82765-HRP-CP250-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

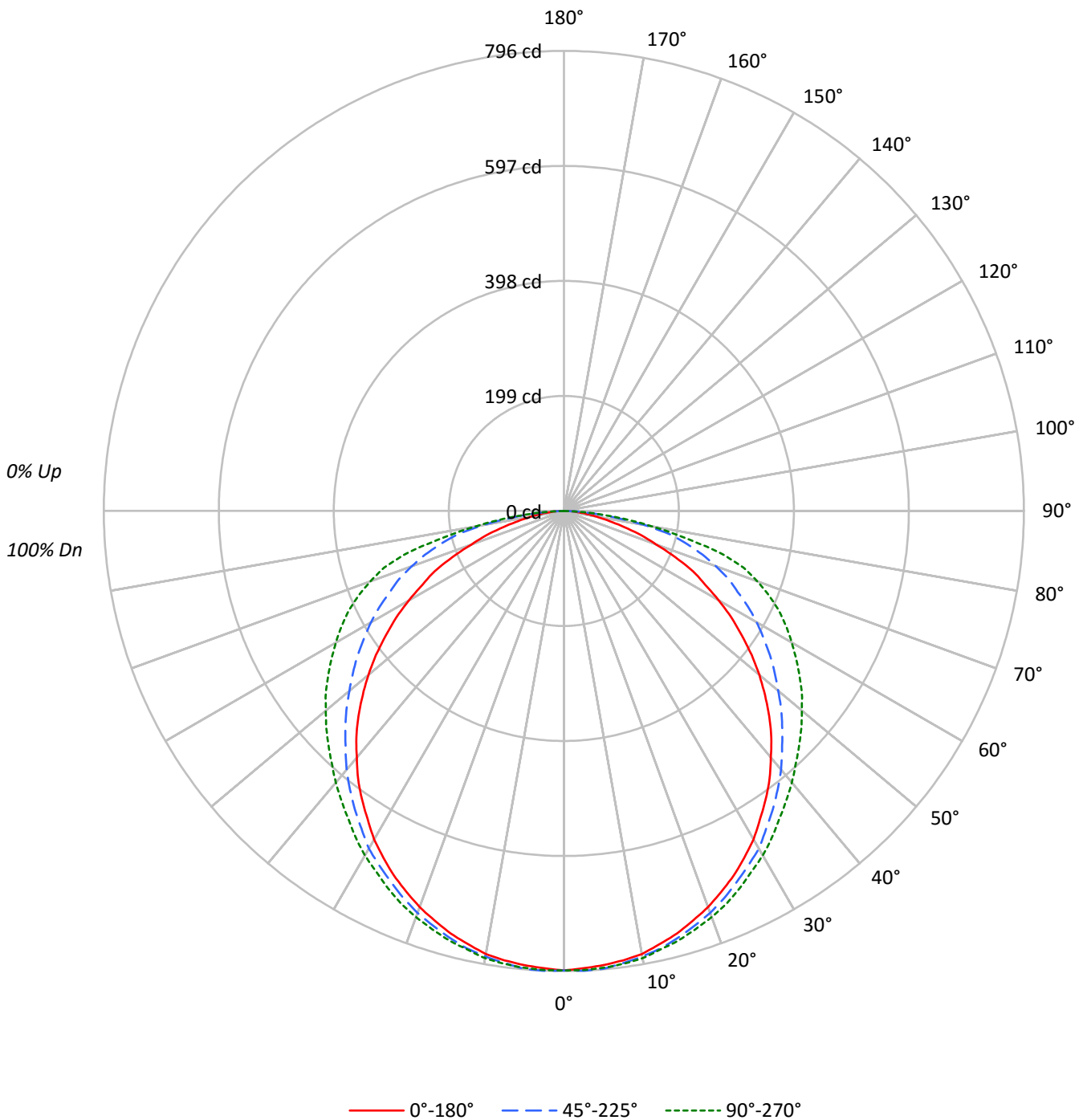
Lumens per Lamp: N/A  
Luminaire Lumens: 2414.0 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2139	2139	2139
5°	2131	2147	2143
10°	2126	2139	2147
15°	2108	2130	2142
20°	2089	2119	2141
25°	2066	2102	2139
30°	2039	2096	2139
35°	2001	2071	2136
40°	1958	2054	2156
45°	1912	2034	2191
50°	1849	2027	2250
55°	1765	2043	2336
60°	1664	2074	2450
65°	1571	2114	2618
70°	1342	2205	2803
75°	1124	2296	2913
80°	921	2218	2430
85°	800	1646	1788



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	3.1
10°-20°	215.5	8.9
20°-30°	326.6	13.5
30°-40°	394.4	16.3
40°-50°	414.4	17.2
50°-60°	389.9	16.2
60°-70°	325.1	13.5
70°-80°	215.4	8.9
80°-90°	57.4	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°	617.4	25.6
0°-40°	1011.8	41.9
0°-60°	1816.1	75.2
0°-90°	2414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2414.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	789	790	795	795	793	75
15°	757	760	764	768	769	213
25°	696	700	708	717	720	320
35°	609	615	630	644	650	381
45°	502	510	534	562	576	387
55°	376	393	436	480	498	336
65°	247	268	332	387	411	240
75°	108	151	221	266	280	117
85°	26	40	53	58	58	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	794.9	794.9	794.9	794.9	794.9
2.5°	791.9	793.4	796.4	796.4	794.9
5°	788.8	790.3	794.9	794.9	793.4
7.5°	784.2	785.8	788.8	791.9	790.3
10°	778.2	779.7	782.7	785.8	785.8
12.5°	767.5	769.0	775.1	776.6	776.6
15°	756.8	759.9	764.4	767.5	769.0
17.5°	743.1	746.2	752.3	758.4	758.4
20°	729.4	732.5	740.1	746.2	747.7
22.5°	712.7	717.2	724.9	732.5	735.5
25°	695.9	700.5	708.1	717.2	720.3
27.5°	676.1	680.7	691.4	702.0	703.5
30°	656.3	660.9	674.6	683.7	688.3
32.5°	632.0	638.1	651.8	665.5	670.0
35°	609.1	615.2	630.4	644.1	650.2
37.5°	584.8	590.8	607.6	624.3	632.0
40°	557.3	565.0	584.8	603.0	613.7
42.5°	531.5	539.1	558.9	583.2	593.9
45°	502.5	510.1	534.5	561.9	575.6
47.5°	472.1	481.2	510.1	543.6	557.3
50°	441.6	452.3	484.3	522.3	537.5
52.5°	409.6	423.3	459.9	501.0	519.3
55°	376.1	392.9	435.5	479.7	498.0
57.5°	344.2	359.4	409.6	456.8	476.6
60°	309.1	328.9	385.3	434.0	455.3
62.5°	275.6	296.9	359.4	411.2	434.0
65°	246.7	268.0	332.0	386.8	411.2
67.5°	208.6	237.6	309.1	360.9	385.3
70°	170.6	210.1	280.2	333.5	356.3
72.5°	141.6	179.7	251.3	304.6	325.9
75°	108.1	150.8	220.8	266.5	280.2
77.5°	80.7	124.9	188.8	211.7	213.2
80°	59.4	95.9	143.1	150.8	156.8
82.5°	41.1	67.0	92.9	102.0	105.1
85°	25.9	39.6	53.3	57.9	57.9
87.5°	13.7	15.2	18.3	18.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)