

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: P308979

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-S-CP125-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: P308979  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
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-S-CP125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH 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: 2498.0 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

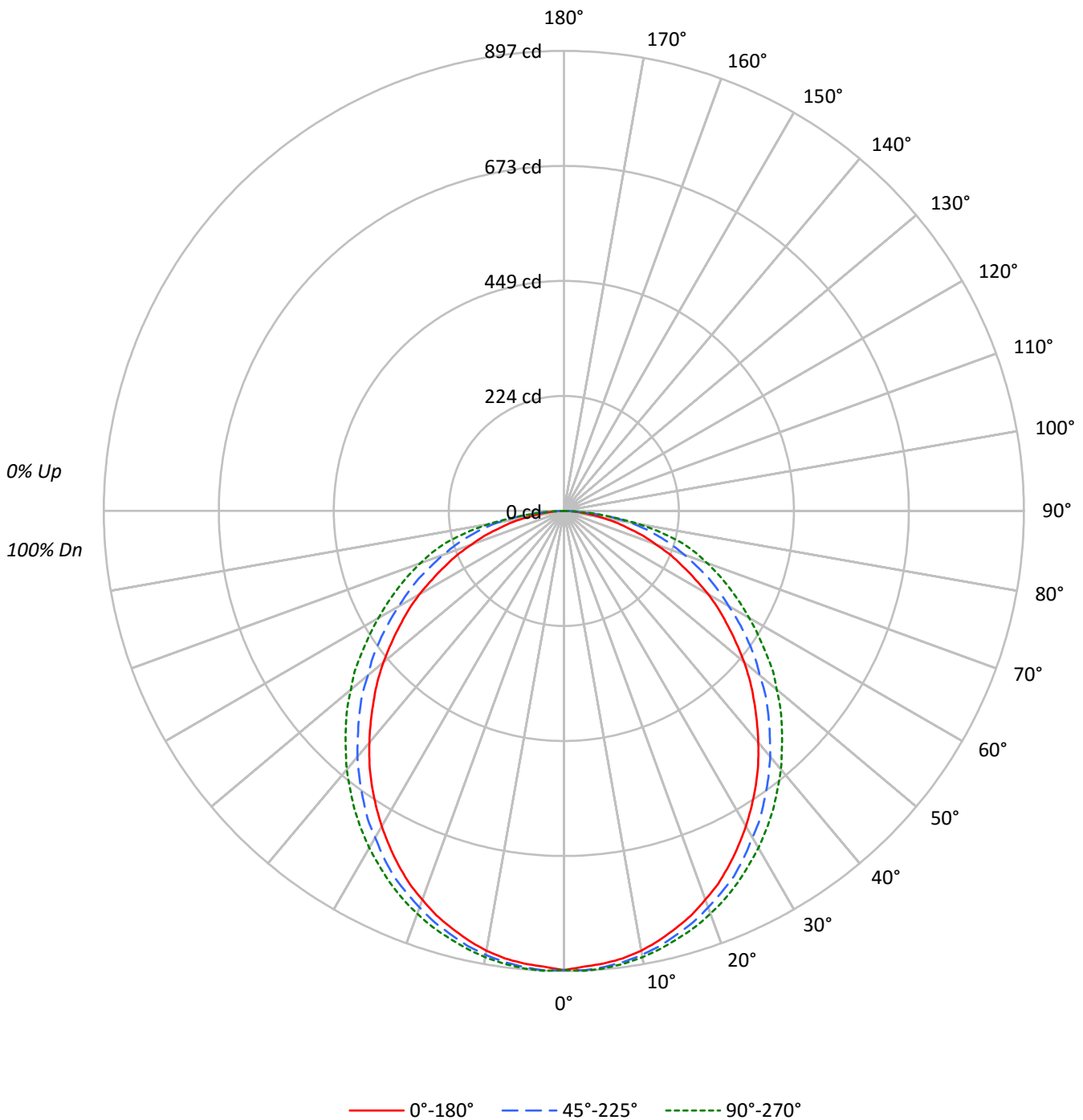
Input Watts (W): 22.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2409	2409	2409
5°	2393	2412	2418
10°	2379	2401	2414
15°	2348	2380	2403
20°	2310	2356	2393
25°	2263	2333	2377
30°	2206	2285	2357
35°	2144	2244	2336
40°	2072	2199	2313
45°	1996	2147	2289
50°	1922	2088	2269
55°	1832	2051	2253
60°	1750	2001	2246
65°	1633	1989	2271
70°	1504	1972	2338
75°	1357	1999	2460
80°	1175	2060	2312
85°	973	1726	1726



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	3.4
10°-20°	240.9	9.6
20°-30°	360.4	14.4
30°-40°	426.9	17.1
40°-50°	435.0	17.4
50°-60°	389.9	15.6
60°-70°	305.3	12.2
70°-80°	196.8	7.9
80°-90°	58.1	2.3
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°	686.0	27.5
0°-40°	1112.8	44.5
0°-60°	1937.8	77.6
0°-90°	2498.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2498.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	886	888	893	894	895	84
15°	843	847	854	861	862	238
25°	762	769	786	796	801	351
35°	653	661	683	704	711	408
45°	524	536	564	593	601	405
55°	390	403	437	467	480	350
65°	256	272	312	343	357	255
75°	130	150	192	225	237	140
85°	32	43	56	56	56	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	895.1	895.1	895.1	895.1	895.1
2.5°	889.3	891.6	896.3	897.4	897.4
5°	885.8	888.1	892.8	893.9	895.1
7.5°	880.0	881.1	887.0	889.3	890.4
10°	870.6	873.0	878.8	882.3	883.5
12.5°	857.8	861.3	868.3	873.0	874.1
15°	842.7	847.3	854.3	861.3	862.5
17.5°	826.3	831.0	840.3	848.5	850.8
20°	806.5	812.4	822.8	832.2	835.7
22.5°	786.7	791.4	804.2	815.9	819.4
25°	762.2	769.2	785.6	796.0	800.7
27.5°	736.6	744.8	761.1	775.1	779.7
30°	709.8	718.0	735.4	752.9	758.7
32.5°	681.8	691.1	712.1	729.6	735.4
35°	652.7	660.8	683.0	704.0	711.0
37.5°	622.4	629.4	655.0	677.2	684.2
40°	589.7	599.1	625.9	651.5	658.5
42.5°	557.1	567.6	594.4	622.4	629.4
45°	524.5	536.1	564.1	593.2	601.4
47.5°	493.0	502.3	533.8	561.8	573.4
50°	459.2	468.5	498.8	530.3	542.0
52.5°	424.2	437.1	469.7	500.0	514.0
55°	390.4	403.3	437.1	467.4	480.2
57.5°	359.0	369.5	404.4	435.9	448.7
60°	325.2	334.5	371.8	405.6	417.3
62.5°	289.0	303.0	341.5	373.0	386.9
65°	256.4	271.6	312.4	342.7	356.6
67.5°	226.1	240.1	279.7	312.4	327.5
70°	191.1	209.8	250.6	283.2	297.2
72.5°	163.2	179.5	221.4	254.1	269.2
75°	130.5	150.4	192.3	224.9	236.6
77.5°	103.7	123.5	163.2	188.8	194.6
80°	75.8	95.6	132.9	145.7	149.2
82.5°	51.3	69.9	95.6	99.1	100.2
85°	31.5	43.1	55.9	55.9	55.9
87.5°	15.2	17.5	19.8	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)