

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: P308734

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-CP250-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: P308734
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: 22FCZ2-29HE-UNV-L82765-CP250-W2A-U-6500K
Description: 2'X2' TROFFER LED MODULE, RIBBED 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: 2490.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

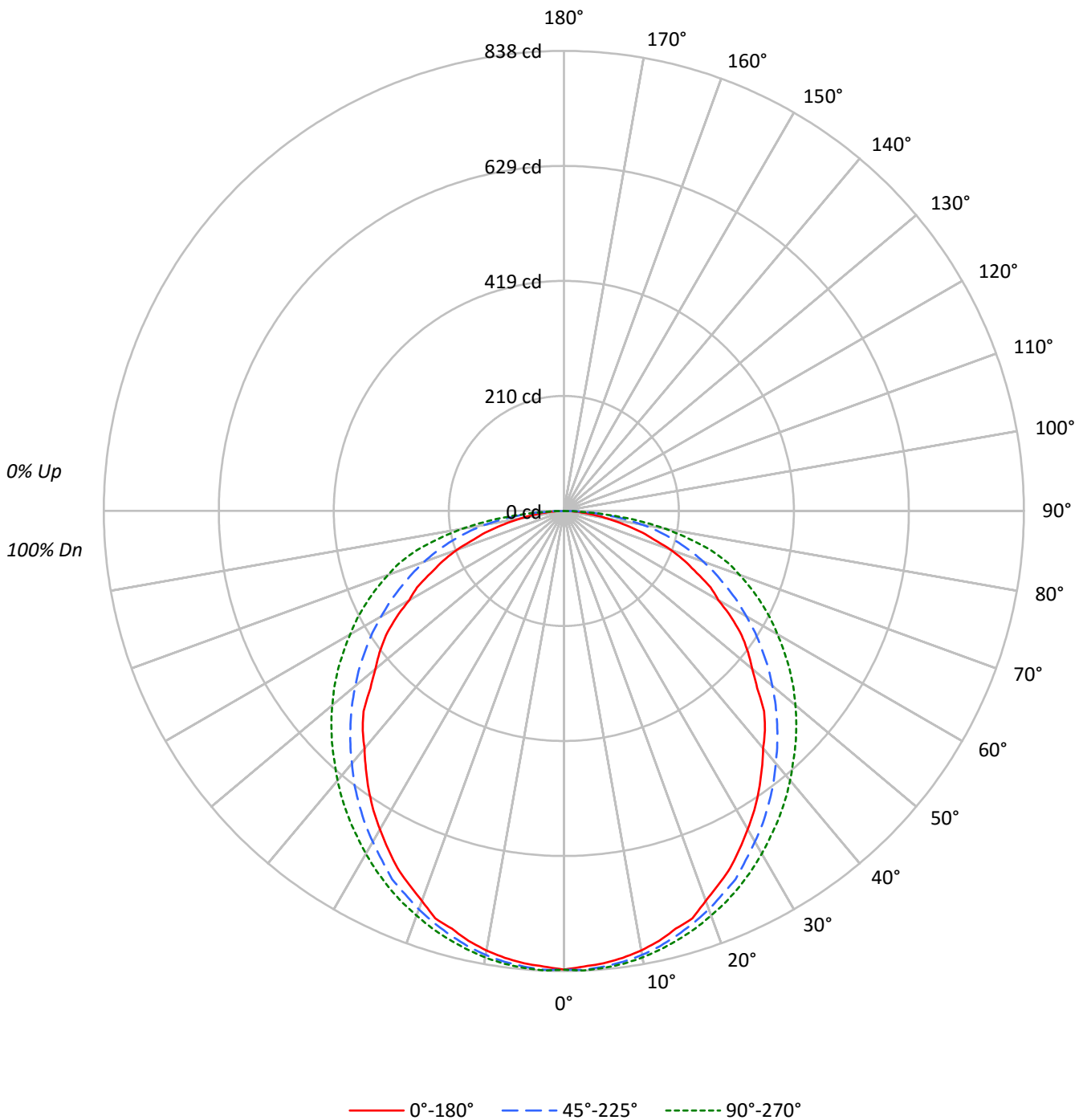
Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2248	2248	2248
5°	2234	2250	2257
10°	2221	2244	2257
15°	2194	2228	2251
20°	2164	2212	2246
25°	2130	2197	2244
30°	2081	2163	2240
35°	2036	2138	2243
40°	1984	2110	2252
45°	1964	2091	2272
50°	1876	2076	2305
55°	1856	2069	2354
60°	1751	2065	2418
65°	1700	2079	2527
70°	1632	2128	2681
75°	1487	2193	2887
80°	1274	2272	2918
85°	1031	2171	2501



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	3.2
10°-20°	225.5	9.1
20°-30°	339.4	13.6
30°-40°	407.4	16.4
40°-50°	425.8	17.1
50°-60°	396.8	15.9
60°-70°	325.4	13.1
70°-80°	219.3	8.8
80°-90°	71.4	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°	644.0	25.9
0°-40°	1051.3	42.2
0°-60°	1873.9	75.3
0°-90°	2490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2490.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	827	830	833	834	835	79
15°	788	792	800	807	808	223
25°	717	722	740	751	756	330
35°	620	628	651	673	683	387
45°	516	520	549	583	597	394
55°	396	403	441	483	502	351
65°	267	279	326	374	397	266
75°	143	158	211	259	278	150
85°	33	48	70	82	81	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.4	835.4	835.4	835.4	835.4
2.5°	830.6	833.0	836.6	837.8	837.8
5°	827.1	829.5	833.0	834.2	835.4
7.5°	821.1	823.5	828.3	830.6	831.8
10°	812.8	815.2	821.1	824.7	825.9
12.5°	802.0	804.4	811.6	816.3	817.5
15°	787.7	792.5	799.7	806.8	808.0
17.5°	778.2	777.0	786.6	794.9	797.3
20°	755.6	761.5	772.3	781.8	784.2
22.5°	736.5	741.3	755.6	766.3	771.1
25°	717.4	722.2	740.1	750.8	755.6
27.5°	693.6	700.7	717.4	732.9	738.9
30°	669.8	676.9	696.0	713.9	721.0
32.5°	645.9	654.3	674.5	693.6	701.9
35°	619.7	628.1	650.7	673.3	682.9
37.5°	592.3	603.0	626.9	651.9	662.6
40°	564.9	575.6	600.6	629.2	641.2
42.5°	542.2	547.0	575.6	606.6	618.5
45°	516.0	519.6	549.4	582.8	597.1
47.5°	477.9	491.0	523.2	560.1	574.4
50°	448.1	462.4	495.8	535.1	550.6
52.5°	423.1	432.6	469.5	508.9	526.8
55°	395.7	402.8	440.9	482.7	501.7
57.5°	362.3	375.4	413.5	456.4	475.5
60°	325.3	342.0	383.7	430.2	449.3
62.5°	301.5	311.0	356.3	402.8	424.3
65°	267.0	278.9	326.5	374.2	396.9
67.5°	238.3	250.3	299.1	346.8	369.4
70°	207.4	219.3	270.5	318.2	340.8
72.5°	171.6	188.3	241.9	289.6	313.4
75°	143.0	158.5	210.9	258.6	277.7
77.5°	110.8	131.1	180.0	219.3	233.6
80°	82.2	102.5	146.6	175.2	188.3
82.5°	56.0	76.3	109.6	131.1	138.2
85°	33.4	47.7	70.3	82.2	81.0
87.5°	15.5	20.3	28.6	28.6	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)