

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: P308585

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-CP187-W2A-U-4000K**

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: P308585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-RDP-CP187-W2A-U-4000K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.187" 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: 2488.0 lumens
Efficiency: N/A
Efficacy: 66.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

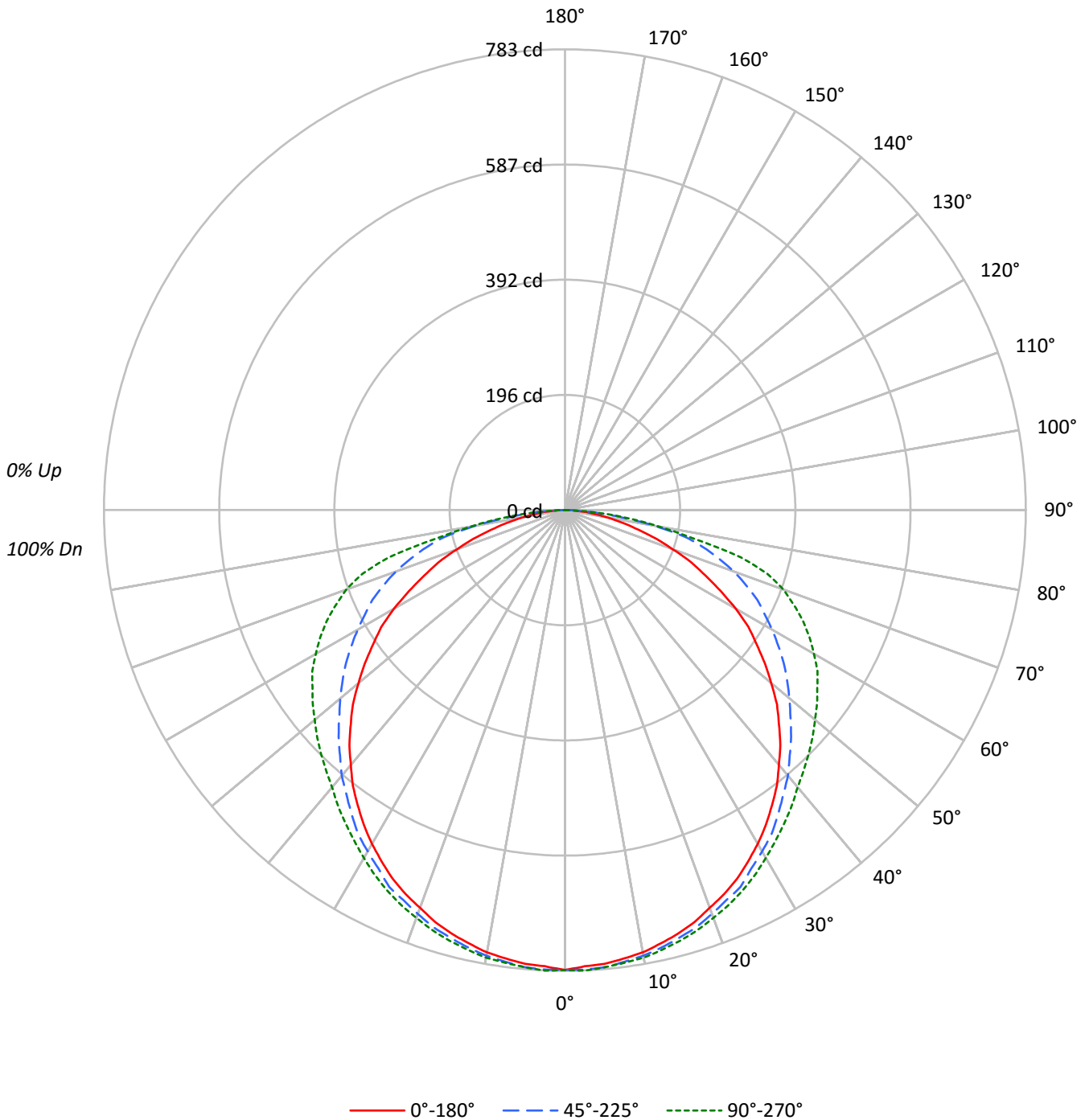
Input Watts (W): 37.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2103	2103	2103
5°	2091	2106	2106
10°	2085	2100	2111
15°	2075	2096	2111
20°	2060	2091	2112
25°	2054	2098	2119
30°	2036	2082	2121
35°	2014	2074	2134
40°	1987	2070	2160
45°	1957	2069	2229
50°	1916	2084	2322
55°	1863	2130	2456
60°	1802	2187	2630
65°	1678	2296	2844
70°	1541	2405	3110
75°	1351	2531	3216
80°	1162	2411	2524
85°	1016	1751	1920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	3.0
10°-20°	212.3	8.5
20°-30°	323.8	13.0
30°-40°	395.4	15.9
40°-50°	422.8	17.0
50°-60°	408.1	16.4
60°-70°	351.3	14.1
70°-80°	237.7	9.6
80°-90°	62.7	2.5
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°	610.0	24.5
0°-40°	1005.4	40.4
0°-60°	1836.3	73.8
0°-90°	2488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	774	776	780	780	780	74
15°	745	747	752	756	758	210
25°	692	696	706	710	714	318
35°	613	619	631	644	650	384
45°	514	524	544	571	586	397
55°	397	410	454	500	524	356
65°	264	289	361	417	447	262
75°	130	172	243	293	309	139
85°	33	46	57	59	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.5	781.5	781.5	781.5	781.5
2.5°	776.0	777.9	781.5	781.5	783.4
5°	774.2	776.0	779.7	779.7	779.7
7.5°	768.7	770.5	774.2	776.0	776.0
10°	763.2	765.1	768.7	770.5	772.4
12.5°	754.1	755.9	761.4	765.1	765.1
15°	744.9	746.7	752.2	755.9	757.7
17.5°	733.9	737.6	743.1	746.7	748.6
20°	719.3	723.0	730.3	735.8	737.6
22.5°	706.5	710.1	717.5	723.0	726.6
25°	691.8	695.5	706.5	710.1	713.8
27.5°	673.5	677.2	686.4	693.7	699.2
30°	655.2	658.9	669.9	679.0	682.7
32.5°	635.1	640.6	653.4	660.7	666.2
35°	613.1	618.6	631.4	644.3	649.7
37.5°	591.2	596.7	609.5	626.0	633.3
40°	565.6	572.9	589.3	611.3	615.0
42.5°	541.8	550.9	565.6	591.2	600.3
45°	514.3	523.5	543.6	571.0	585.7
47.5°	488.7	497.8	519.8	552.7	571.0
50°	457.6	470.4	497.8	536.3	554.6
52.5°	428.3	439.3	475.9	518.0	539.9
55°	397.2	410.0	453.9	499.7	523.5
57.5°	369.7	380.7	430.1	481.4	508.8
60°	334.9	349.6	406.3	461.2	488.7
62.5°	298.3	320.3	382.5	439.3	468.5
65°	263.6	289.2	360.6	417.3	446.6
67.5°	232.4	259.9	333.1	393.5	421.0
70°	195.8	230.6	305.7	364.2	395.3
72.5°	162.9	201.3	274.5	333.1	360.6
75°	129.9	172.0	243.4	292.8	309.3
77.5°	100.7	140.9	208.7	223.3	225.1
80°	75.0	111.6	155.6	157.4	162.9
82.5°	51.2	78.7	100.7	109.8	111.6
85°	32.9	45.8	56.7	58.6	62.2
87.5°	14.6	16.5	20.1	18.3	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)