

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: P307092

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-4500K**

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: P307092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 2110.0 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

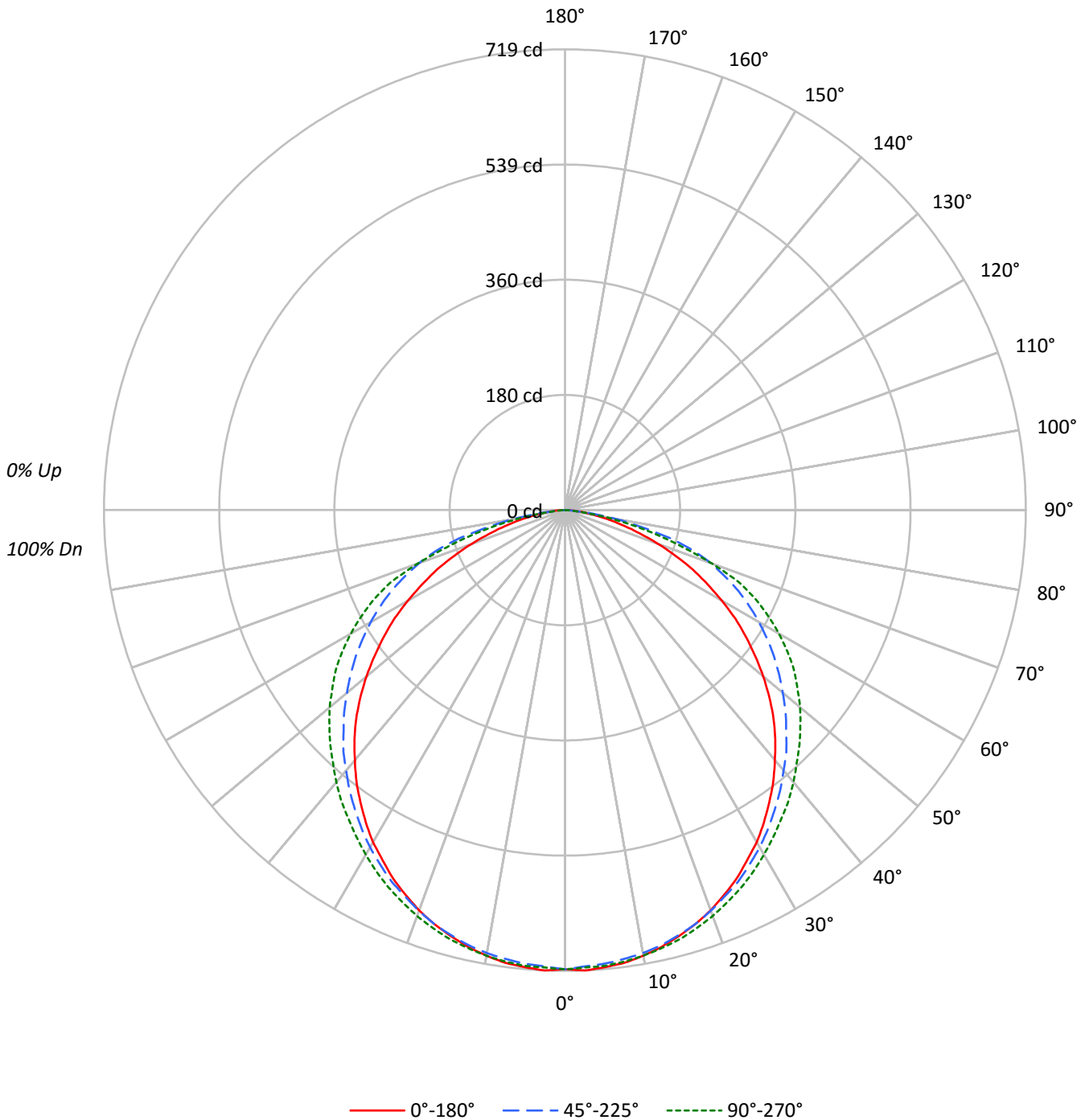
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307092

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307092

CATALOG NUMBER: 14FC22-29-UNV-L82765-HRP-CP125-W2A-U-4500K

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1928	1928	1928
5°	1934	1920	1928
10°	1929	1918	1929
15°	1917	1913	1931
20°	1904	1906	1930
25°	1883	1899	1931
30°	1860	1889	1930
35°	1827	1874	1933
40°	1790	1865	1949
45°	1752	1858	1969
50°	1692	1858	2005
55°	1619	1868	2048
60°	1521	1882	2075
65°	1403	1901	2087
70°	1222	1906	1921
75°	1007	1773	1552
80°	792	1275	1038
85°	614	491	247



TEST NUMBER: P307092

CATALOG NUMBER: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.2
10°-20°	194.7	9.2
20°-30°	295.6	14.0
30°-40°	358.2	17.0
40°-50°	377.4	17.9
50°-60°	352.4	16.7
60°-70°	281.6	13.3
70°-80°	155.0	7.3
80°-90°	27.4	1.3
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°	558.1	26.5
0°-40°	916.3	43.4
0°-60°	1646.1	78.0
0°-90°	2110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	716	714	711	715	714	68
15°	688	688	687	693	693	194
25°	634	636	640	649	650	292
35°	556	561	571	585	588	348
45°	460	469	488	510	518	354
55°	345	362	398	426	437	308
65°	220	248	299	323	328	217
75°	97	139	170	153	149	104
85°	20	25	16	10	8	24
90°	0	0	0	0	0	



TEST NUMBER: P307092

CATALOG NUMBER: 14FC22-29-UNV-L82765-HRP-CP125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.6	716.6	716.6	716.6	716.6
2.5°	719.2	717.2	712.6	716.6	714.6
5°	715.9	713.9	710.6	715.2	713.9
7.5°	712.6	709.9	706.6	711.9	710.6
10°	706.0	704.0	702.0	706.6	706.0
12.5°	698.0	697.3	695.3	700.6	700.0
15°	688.0	688.0	686.7	693.3	693.3
17.5°	677.4	676.8	677.4	684.7	684.1
20°	664.8	664.8	665.5	674.1	674.1
22.5°	649.6	650.2	652.2	662.8	662.2
25°	634.3	635.6	639.6	648.9	650.2
27.5°	615.7	619.0	623.7	635.0	636.3
30°	598.5	600.5	607.8	618.4	621.0
32.5°	577.9	581.9	589.8	601.8	605.1
35°	556.0	561.3	570.6	585.2	588.5
37.5°	534.1	538.8	551.4	566.6	572.6
40°	509.6	517.5	530.8	548.0	554.7
42.5°	485.7	493.6	511.5	529.5	535.4
45°	460.5	469.1	488.3	510.2	517.5
47.5°	432.6	442.5	467.1	490.3	498.3
50°	404.1	416.7	443.9	469.7	479.0
52.5°	374.2	390.1	421.3	448.5	457.1
55°	345.0	362.3	398.1	426.0	436.6
57.5°	315.2	333.7	374.2	406.1	412.0
60°	282.6	305.2	349.7	377.5	385.5
62.5°	250.8	276.7	324.4	351.0	357.6
65°	220.3	248.1	298.6	323.1	327.8
67.5°	187.1	220.3	270.0	292.6	293.9
70°	155.3	193.7	242.2	252.8	244.2
72.5°	124.1	165.2	209.7	201.0	193.7
75°	96.9	138.7	170.5	153.3	149.3
77.5°	71.7	113.5	122.1	112.8	105.5
80°	51.1	89.6	82.3	70.3	67.0
82.5°	35.2	56.4	45.1	35.2	30.5
85°	19.9	25.2	15.9	10.0	8.0
87.5°	8.6	6.0	3.3	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)