

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: P307812

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-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: P307812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-S-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH 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: 2014.0 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

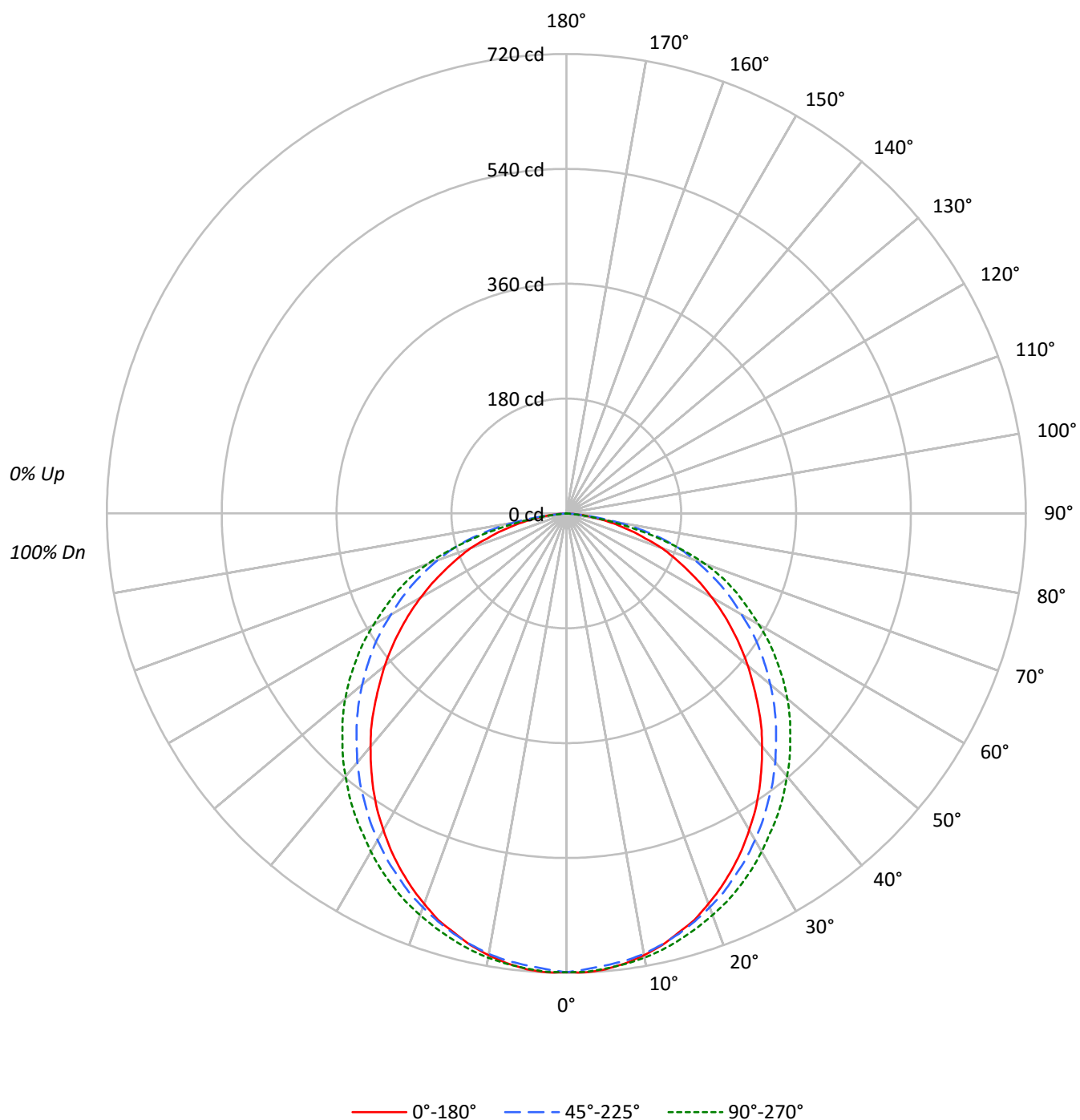
Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1935	1935	1935
5°	1937	1921	1934
10°	1921	1915	1932
15°	1894	1900	1925
20°	1865	1882	1919
25°	1826	1859	1912
30°	1781	1837	1902
35°	1732	1811	1896
40°	1677	1789	1891
45°	1615	1767	1889
50°	1555	1747	1894
55°	1490	1734	1888
60°	1419	1709	1876
65°	1335	1704	1876
70°	1257	1689	1823
75°	1090	1651	1557
80°	882	1331	1037
85°	587	463	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	3.4
10°-20°	193.2	9.6
20°-30°	289.8	14.4
30°-40°	345.7	17.2
40°-50°	357.4	17.7
50°-60°	326.3	16.2
60°-70°	256.8	12.7
70°-80°	149.5	7.4
80°-90°	27.5	1.4
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°	550.9	27.4
0°-40°	896.6	44.5
0°-60°	1580.2	78.5
0°-90°	2014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	717	715	711	717	716	68
15°	680	681	682	691	691	192
25°	615	618	626	641	644	283
35°	527	534	551	572	577	330
45°	424	438	464	490	496	328
55°	318	334	370	396	402	284
65°	210	232	268	289	295	208
75°	105	130	159	156	150	111
85°	19	27	15	12	10	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.0	719.0	719.0	719.0	719.0
2.5°	720.0	718.0	715.0	720.0	719.0
5°	717.0	715.0	711.0	717.0	716.0
7.5°	711.0	709.0	707.0	713.0	712.0
10°	703.0	702.0	701.0	708.0	707.0
12.5°	693.0	693.0	692.0	700.0	700.0
15°	680.0	681.0	682.0	691.0	691.0
17.5°	668.0	667.0	670.0	680.0	681.0
20°	651.1	653.1	657.1	669.0	670.0
22.5°	634.1	636.1	643.1	655.1	658.1
25°	615.1	618.1	626.1	641.1	644.1
27.5°	595.1	599.1	610.1	626.1	629.1
30°	573.2	579.2	591.1	609.1	612.1
32.5°	551.2	557.2	572.2	590.2	594.1
35°	527.2	534.2	551.2	572.2	577.2
37.5°	502.3	511.3	531.2	552.2	558.2
40°	477.3	487.3	509.3	531.2	538.2
42.5°	452.3	462.3	486.3	511.3	518.3
45°	424.4	438.4	464.3	490.3	496.3
47.5°	397.4	412.4	441.4	467.3	475.3
50°	371.5	386.4	417.4	444.4	452.3
52.5°	344.5	360.5	393.4	421.4	428.4
55°	317.5	334.5	369.5	396.4	402.4
57.5°	290.6	308.6	344.5	370.5	377.5
60°	263.6	282.6	317.5	343.5	348.5
62.5°	236.7	256.6	292.6	315.5	320.5
65°	209.7	231.7	267.6	288.6	294.6
67.5°	183.7	205.7	240.7	260.6	265.6
70°	159.8	179.7	214.7	229.7	231.7
72.5°	129.8	154.8	188.7	196.7	191.7
75°	104.8	129.8	158.8	155.8	149.8
77.5°	79.9	104.8	123.8	113.8	105.8
80°	56.9	81.9	85.9	70.9	66.9
82.5°	36.9	56.9	47.9	36.9	30.0
85°	19.0	27.0	15.0	12.0	10.0
87.5°	6.0	4.0	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)