

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: P307868

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP187-W2A-U-5500K**

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: P307868
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: 14FCZ2-25-UNV-L82765-S-CP187-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB SHEET
Light Source: (168) 5500K 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: 2305.0 lumens
Efficiency: N/A
Efficacy: 114.1 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

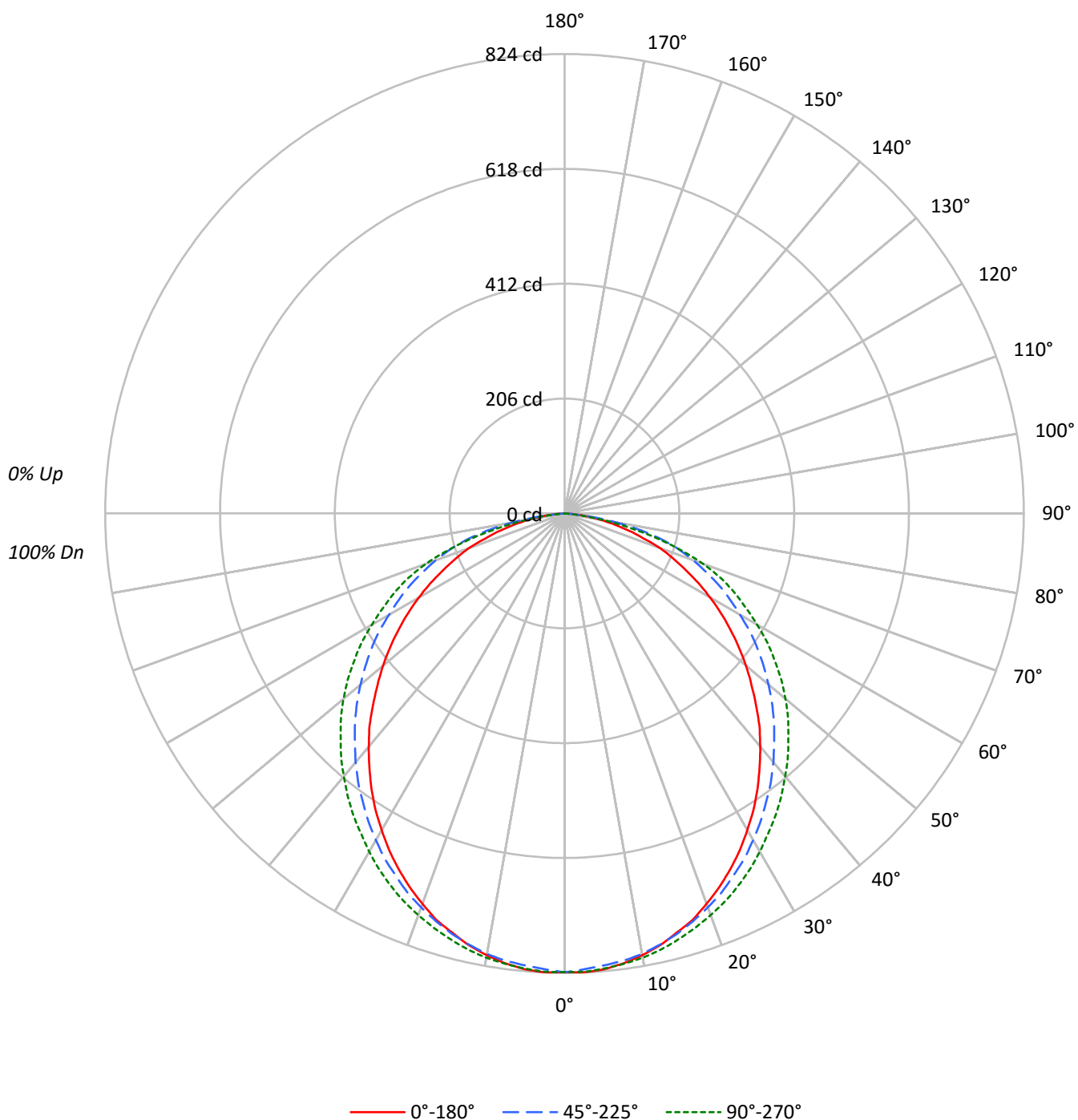
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2214	2214	2214
5°	2217	2198	2213
10°	2199	2192	2211
15°	2168	2175	2203
20°	2134	2153	2196
25°	2090	2128	2189
30°	2038	2102	2177
35°	1982	2072	2170
40°	1919	2047	2164
45°	1848	2022	2162
50°	1780	2000	2167
55°	1705	1984	2161
60°	1624	1956	2147
65°	1528	1950	2146
70°	1439	1933	2086
75°	1248	1889	1782
80°	1009	1523	1187
85°	670	528	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	3.4
10°-20°	221.1	9.6
20°-30°	331.7	14.4
30°-40°	395.6	17.2
40°-50°	409.0	17.7
50°-60°	373.4	16.2
60°-70°	293.9	12.7
70°-80°	171.1	7.4
80°-90°	31.5	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°	630.5	27.4
0°-40°	1026.1	44.5
0°-60°	1808.5	78.5
0°-90°	2305.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2305.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	821	818	814	821	819	78
15°	778	779	781	791	791	220
25°	704	707	717	734	737	324
35°	603	611	631	655	661	377
45°	486	502	531	561	568	375
55°	363	383	423	454	461	325
65°	240	265	306	330	337	238
75°	120	149	182	178	171	128
85°	22	31	17	14	11	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.8	822.8	822.8	822.8	822.8
2.5°	824.0	821.7	818.3	824.0	822.8
5°	820.6	818.3	813.7	820.6	819.4
7.5°	813.7	811.4	809.1	816.0	814.8
10°	804.6	803.4	802.3	810.3	809.1
12.5°	793.1	793.1	792.0	801.1	801.1
15°	778.3	779.4	780.6	790.8	790.8
17.5°	764.6	763.4	766.8	778.3	779.4
20°	745.1	747.4	752.0	765.7	766.8
22.5°	725.7	728.0	736.0	749.7	753.1
25°	704.0	707.4	716.6	733.7	737.1
27.5°	681.1	685.7	698.3	716.6	720.0
30°	656.0	662.8	676.6	697.1	700.6
32.5°	630.8	637.7	654.8	675.4	680.0
35°	603.4	611.4	630.8	654.8	660.6
37.5°	574.8	585.1	608.0	632.0	638.8
40°	546.3	557.7	582.8	608.0	616.0
42.5°	517.7	529.1	556.6	585.1	593.1
45°	485.7	501.7	531.4	561.1	568.0
47.5°	454.9	472.0	505.1	534.9	544.0
50°	425.1	442.3	477.7	508.6	517.7
52.5°	394.3	412.6	450.3	482.3	490.3
55°	363.4	382.9	422.9	453.7	460.6
57.5°	332.6	353.1	394.3	424.0	432.0
60°	301.7	323.4	363.4	393.1	398.9
62.5°	270.9	293.7	334.9	361.1	366.9
65°	240.0	265.1	306.3	330.3	337.1
67.5°	210.3	235.4	275.4	298.3	304.0
70°	182.9	205.7	245.7	262.9	265.1
72.5°	148.6	177.1	216.0	225.1	219.4
75°	120.0	148.6	181.7	178.3	171.4
77.5°	91.4	120.0	141.7	130.3	121.1
80°	65.1	93.7	98.3	81.1	76.6
82.5°	42.3	65.1	54.9	42.3	34.3
85°	21.7	30.9	17.1	13.7	11.4
87.5°	6.9	4.6	2.3	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)