

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: P309157

Luminaire Tested: **24FCZ2-30HE-UNV-L82765-HRP-CA125-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: P309157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-30HE-UNV-L82765-HRP-CA125-W2A-U-6500K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
ACRYLIC SHEET
Light Source: (336) 6500K 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: 2218.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

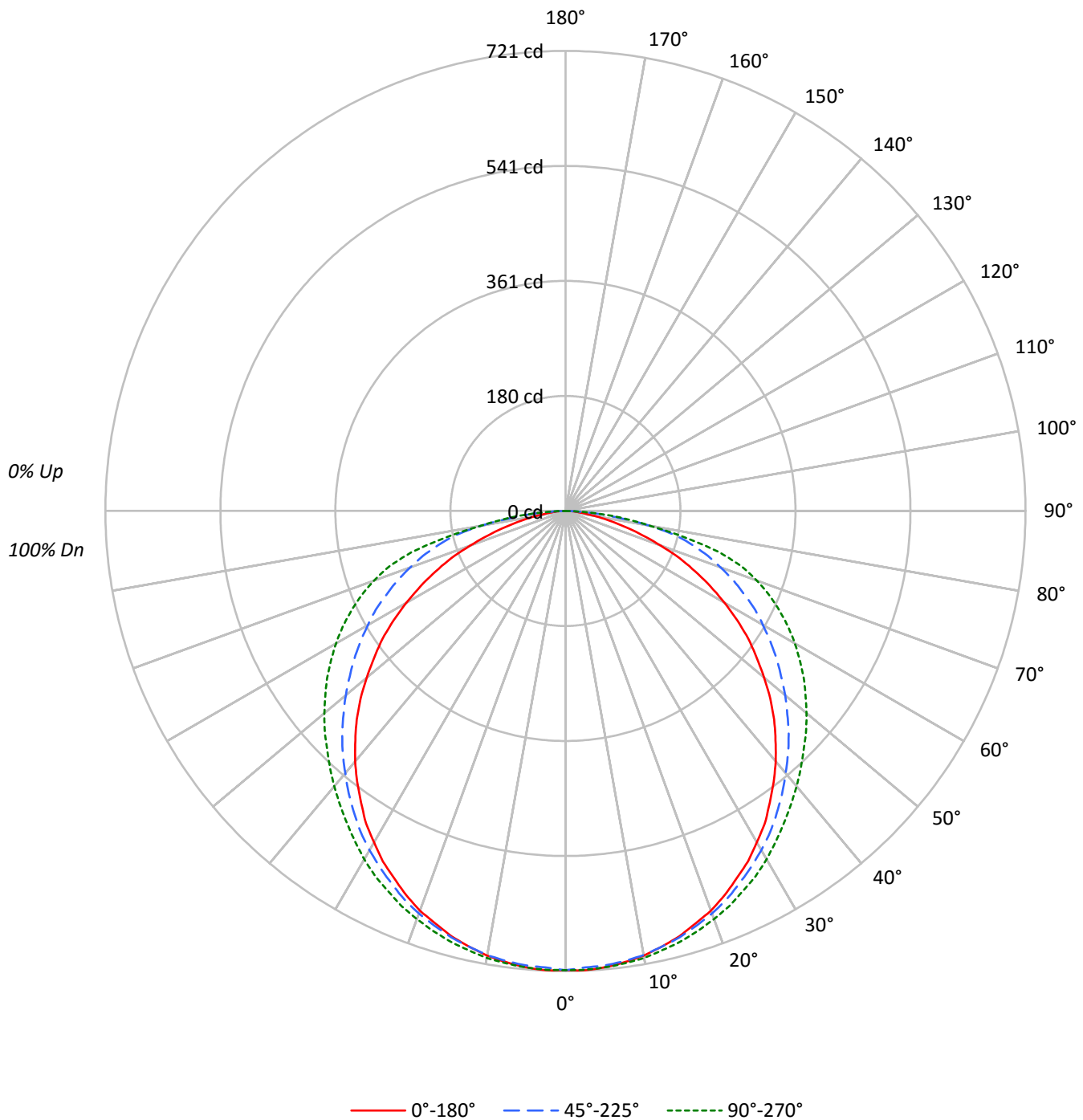
Input Watts (W): 22
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	108	103	98	94	105	101	96	93	96	93	90		92	90	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	968	968	968
5°	969	966	969
10°	967	965	972
15°	961	964	973
20°	955	961	975
25°	943	957	976
30°	932	954	980
35°	917	949	981
40°	900	943	990
45°	880	942	1005
50°	851	941	1032
55°	821	947	1069
60°	775	962	1117
65°	715	984	1180
70°	625	1019	1257
75°	507	1071	1299
80°	374	1051	1051
85°	287	773	874



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	3.1
10°-20°	195.8	8.8
20°-30°	298.0	13.4
30°-40°	361.9	16.3
40°-50°	382.3	17.2
50°-60°	360.8	16.3
60°-70°	300.0	13.5
70°-80°	197.4	8.9
80°-90°	53.8	2.4
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°	562.0	25.3
0°-40°	923.8	41.7
0°-60°	1666.9	75.2
0°-90°	2218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	718	718	715	718	718	68
15°	690	691	692	698	698	195
25°	635	639	644	656	657	293
35°	558	565	578	592	597	349
45°	462	472	495	519	528	356
55°	350	365	404	442	456	312
65°	225	251	309	355	370	222
75°	98	142	206	244	250	105
85°	19	41	50	56	57	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.6	719.6	719.6	719.6	719.6
2.5°	720.6	719.6	715.9	719.6	719.6
5°	717.8	717.8	715.0	717.8	717.8
7.5°	713.1	713.1	711.3	715.0	715.0
10°	707.6	707.6	706.6	711.3	711.3
12.5°	699.2	700.1	699.2	704.8	704.8
15°	689.9	690.8	691.8	698.3	698.3
17.5°	677.8	679.7	681.6	689.0	689.9
20°	666.7	667.6	671.3	679.7	680.6
22.5°	651.8	654.6	659.3	667.6	670.4
25°	635.1	638.8	644.4	655.6	657.4
27.5°	619.3	622.1	629.6	641.6	645.3
30°	599.8	604.5	613.8	625.8	630.5
32.5°	581.3	585.9	597.1	610.1	613.8
35°	558.1	564.6	577.6	592.4	597.1
37.5°	535.8	542.3	558.1	574.8	580.3
40°	512.6	520.0	536.7	556.2	563.6
42.5°	487.5	497.7	516.3	537.6	546.0
45°	462.4	471.7	494.9	519.1	528.3
47.5°	435.5	446.6	471.7	500.5	511.6
50°	406.7	420.6	449.4	481.0	493.1
52.5°	377.9	393.7	426.2	461.5	474.5
55°	350.1	364.9	403.9	442.0	455.9
57.5°	319.4	338.0	380.7	421.6	435.5
60°	287.9	308.3	357.5	400.2	415.1
62.5°	256.3	279.5	335.2	377.9	393.7
65°	224.7	250.7	309.2	354.7	370.5
67.5°	194.1	222.9	285.1	330.6	346.4
70°	158.8	195.0	259.1	303.6	319.4
72.5°	126.3	168.1	234.0	275.8	289.7
75°	97.5	142.1	206.1	244.2	249.8
77.5°	71.5	116.1	177.4	190.4	191.3
80°	48.3	92.9	135.6	133.7	135.6
82.5°	31.6	69.6	85.4	95.6	96.6
85°	18.6	40.9	50.1	55.7	56.6
87.5°	9.3	13.9	17.6	18.6	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)