

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: P309242

Luminaire Tested: **24FCZ2-35HE-UNV-L82765-HRP-CA125-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: P309242
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: 24FCZ2-35HE-UNV-L82765-HRP-CA125-W2A-U-4000K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (336) 4000K 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: 2428.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

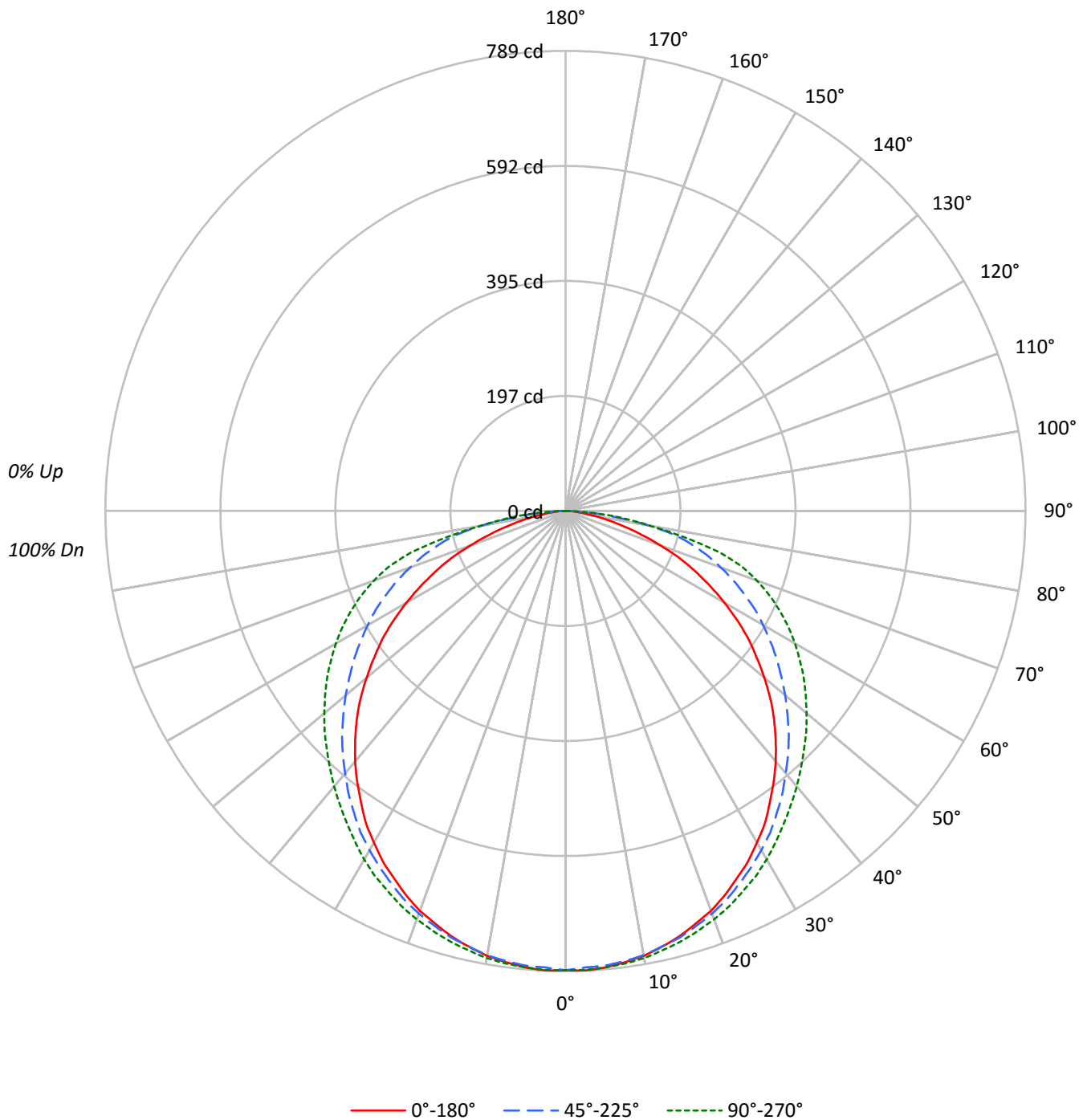
Input Watts (W): 26.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P309242

CATALOG NUMBER: 24FCZ2-35HE-UNV-L82765-HRP-CA125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P309242

CATALOG NUMBER: 24FCZ2-35HE-UNV-L82765-HRP-CA125-W2A-U-4000K

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°	1060	1060	1060
5°	1061	1057	1061
10°	1058	1057	1064
15°	1052	1055	1065
20°	1045	1052	1067
25°	1032	1047	1068
30°	1020	1044	1072
35°	1003	1038	1074
40°	986	1032	1084
45°	963	1031	1101
50°	932	1030	1130
55°	899	1037	1171
60°	848	1053	1223
65°	783	1078	1291
70°	684	1116	1376
75°	555	1173	1421
80°	410	1150	1150
85°	313	848	957



TEST NUMBER: P309242

CATALOG NUMBER: 24FCZ2-35HE-UNV-L82765-HRP-CA125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	3.1
10°-20°	214.3	8.8
20°-30°	326.2	13.4
30°-40°	396.1	16.3
40°-50°	418.5	17.2
50°-60°	394.9	16.3
60°-70°	328.4	13.5
70°-80°	216.0	8.9
80°-90°	58.9	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°	615.2	25.3
0°-40°	1011.3	41.7
0°-60°	1824.7	75.2
0°-90°	2428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2428.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	786	786	783	786	786	75
15°	755	756	757	764	764	213
25°	695	699	705	718	720	321
35°	611	618	632	648	654	382
45°	506	516	542	568	578	390
55°	383	400	442	484	499	341
65°	246	274	338	388	406	243
75°	107	156	226	267	273	115
85°	20	45	55	61	62	25
90°	0	0	0	0	0	



TEST NUMBER: P309242

CATALOG NUMBER: 24FCZ2-35HE-UNV-L82765-HRP-CA125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	787.8	787.8	787.8	787.8	787.8
2.5°	788.8	787.8	783.7	787.8	787.8
5°	785.7	785.7	782.7	785.7	785.7
7.5°	780.7	780.7	778.6	782.7	782.7
10°	774.6	774.6	773.5	778.6	778.6
12.5°	765.4	766.4	765.4	771.5	771.5
15°	755.2	756.3	757.3	764.4	764.4
17.5°	742.0	744.1	746.1	754.2	755.2
20°	729.8	730.8	734.9	744.1	745.1
22.5°	713.6	716.6	721.7	730.8	733.9
25°	695.3	699.3	705.4	717.6	719.7
27.5°	678.0	681.0	689.2	702.4	706.4
30°	656.6	661.7	671.9	685.1	690.2
32.5°	636.3	641.4	653.6	667.8	671.9
35°	610.9	618.0	632.2	648.5	653.6
37.5°	586.5	593.6	610.9	629.2	635.3
40°	561.1	569.2	587.5	608.9	617.0
42.5°	533.6	544.8	565.2	588.5	597.7
45°	506.2	516.4	541.8	568.2	578.4
47.5°	476.7	488.9	516.4	547.9	560.1
50°	445.2	460.5	492.0	526.5	539.7
52.5°	413.7	431.0	466.6	505.2	519.4
55°	383.2	399.5	442.2	483.8	499.1
57.5°	349.7	370.0	416.8	461.5	476.7
60°	315.1	337.5	391.3	438.1	454.4
62.5°	280.5	306.0	366.9	413.7	431.0
65°	246.0	274.4	338.5	388.3	405.6
67.5°	212.4	244.0	312.1	361.9	379.1
70°	173.8	213.5	283.6	332.4	349.7
72.5°	138.2	184.0	256.2	301.9	317.1
75°	106.7	155.5	225.7	267.3	273.4
77.5°	78.3	127.1	194.1	208.4	209.4
80°	52.9	101.6	148.4	146.4	148.4
82.5°	34.6	76.2	93.5	104.7	105.7
85°	20.3	44.7	54.9	61.0	62.0
87.5°	10.2	15.2	19.3	20.3	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)