

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: METALUX

Report Number: P274788

Luminaire Tested: **24CZ2-35-RDP-UNV-L935-CD1-U**

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: P274788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35-RDP-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2069.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

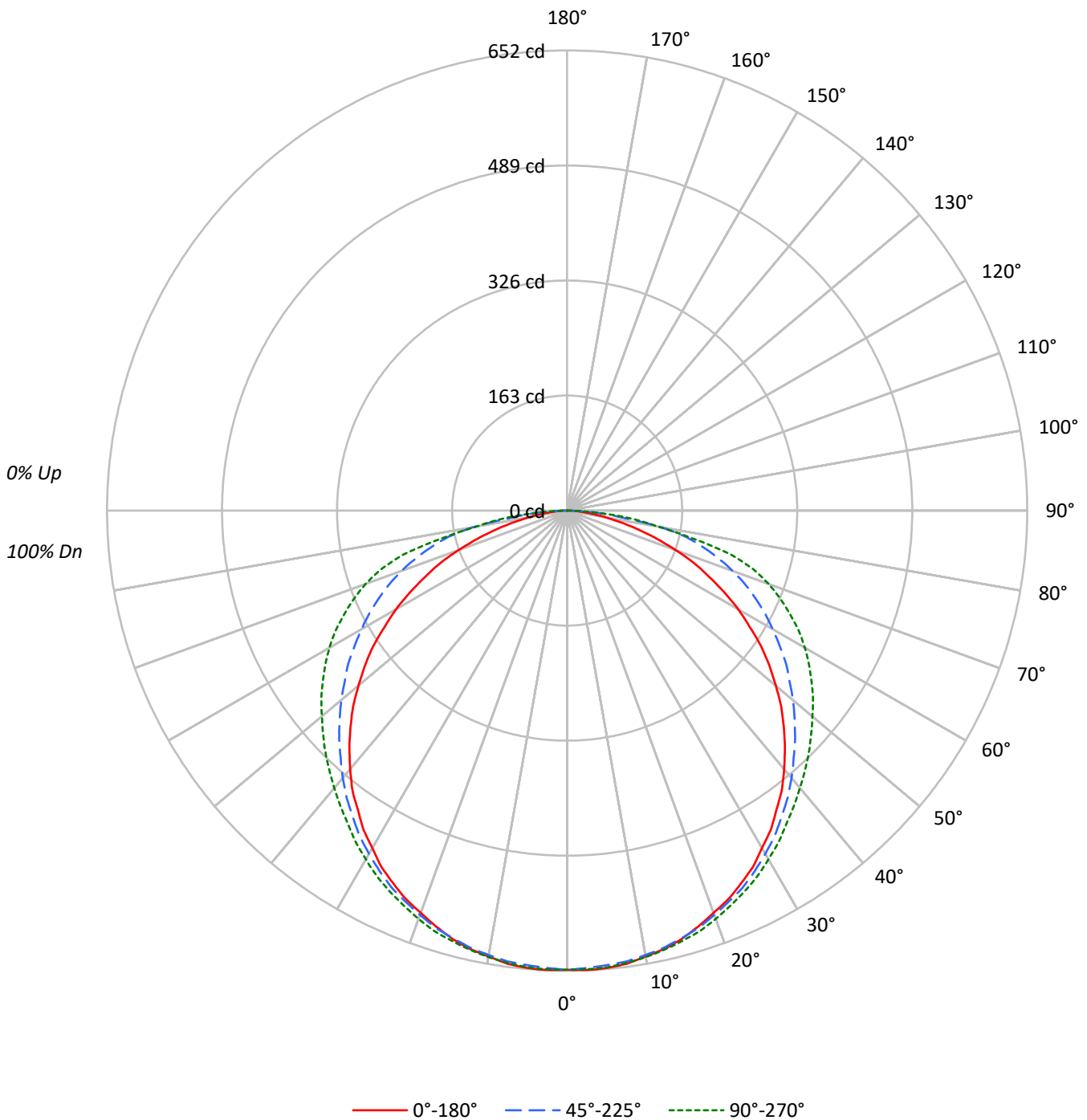
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	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
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	875	875	875
5°	879	873	877
10°	876	874	878
15°	875	873	879
20°	868	873	882
25°	865	875	884
30°	858	872	887
35°	850	870	890
40°	840	869	901
45°	826	869	922
50°	808	874	949
55°	787	888	992
60°	754	906	1047
65°	706	938	1111
70°	642	981	1195
75°	544	1035	1248
80°	429	1041	1010
85°	316	792	888



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	3.0
10°-20°	177.6	8.6
20°-30°	271.6	13.1
30°-40°	332.1	16.0
40°-50°	353.9	17.1
50°-60°	338.4	16.4
60°-70°	286.7	13.9
70°-80°	192.7	9.3
80°-90°	54.3	2.6
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°	511.0	24.7
0°-40°	843.0	40.7
0°-60°	1535.4	74.2
0°-90°	2069.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2069.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	651	650	646	650	650	62
15°	628	628	627	632	631	177
25°	583	585	589	594	595	269
35°	517	521	530	540	542	324
45°	434	441	457	476	484	335
55°	336	348	379	408	423	299
65°	222	244	294	334	349	220
75°	105	143	199	233	240	112
85°	20	42	51	55	58	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	650.6	650.6	650.6	650.6	650.6
2.5°	651.7	651.7	648.6	650.6	650.6
5°	650.6	649.6	646.5	649.6	649.6
7.5°	647.6	646.5	644.5	647.6	646.5
10°	641.4	641.4	639.4	642.4	642.4
12.5°	636.3	635.2	634.2	638.3	637.3
15°	628.1	628.1	627.0	632.2	631.1
17.5°	617.8	618.8	619.9	624.0	625.0
20°	606.5	608.6	609.6	615.7	615.7
22.5°	596.3	597.3	599.3	605.5	605.5
25°	582.9	585.0	589.1	594.2	595.2
27.5°	569.6	570.6	575.7	582.9	583.9
30°	552.1	555.2	561.4	569.6	570.6
32.5°	536.7	539.8	547.0	555.2	557.3
35°	517.2	521.3	529.5	539.8	541.9
37.5°	499.8	502.9	513.1	524.4	527.5
40°	478.2	484.4	494.7	508.0	513.1
42.5°	456.7	462.8	475.2	492.6	498.8
45°	434.1	441.3	456.7	476.2	484.4
47.5°	411.5	419.7	437.2	459.8	469.0
50°	385.9	396.1	417.7	443.3	453.6
52.5°	361.2	373.6	397.2	425.9	439.2
55°	335.6	347.9	378.7	408.4	422.8
57.5°	306.8	323.3	357.1	391.0	406.4
60°	280.2	295.6	336.6	373.6	388.9
62.5°	251.4	272.0	316.1	355.1	370.5
65°	221.7	244.2	294.5	333.5	348.9
67.5°	195.0	219.6	273.0	312.0	327.4
70°	163.2	194.0	249.4	288.4	303.8
72.5°	133.4	167.3	224.7	262.7	277.1
75°	104.7	142.6	199.1	233.0	240.1
77.5°	78.0	118.0	172.4	186.8	181.6
80°	55.4	94.4	134.4	127.3	130.3
82.5°	35.9	71.8	83.1	94.4	97.5
85°	20.5	42.1	51.3	55.4	57.5
87.5°	9.2	15.4	20.5	20.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)