

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: P474183

Luminaire Tested: **24CZ2-35VHE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474183
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2290.1 lumens
Efficiency: N/A
Efficacy: 95.8 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

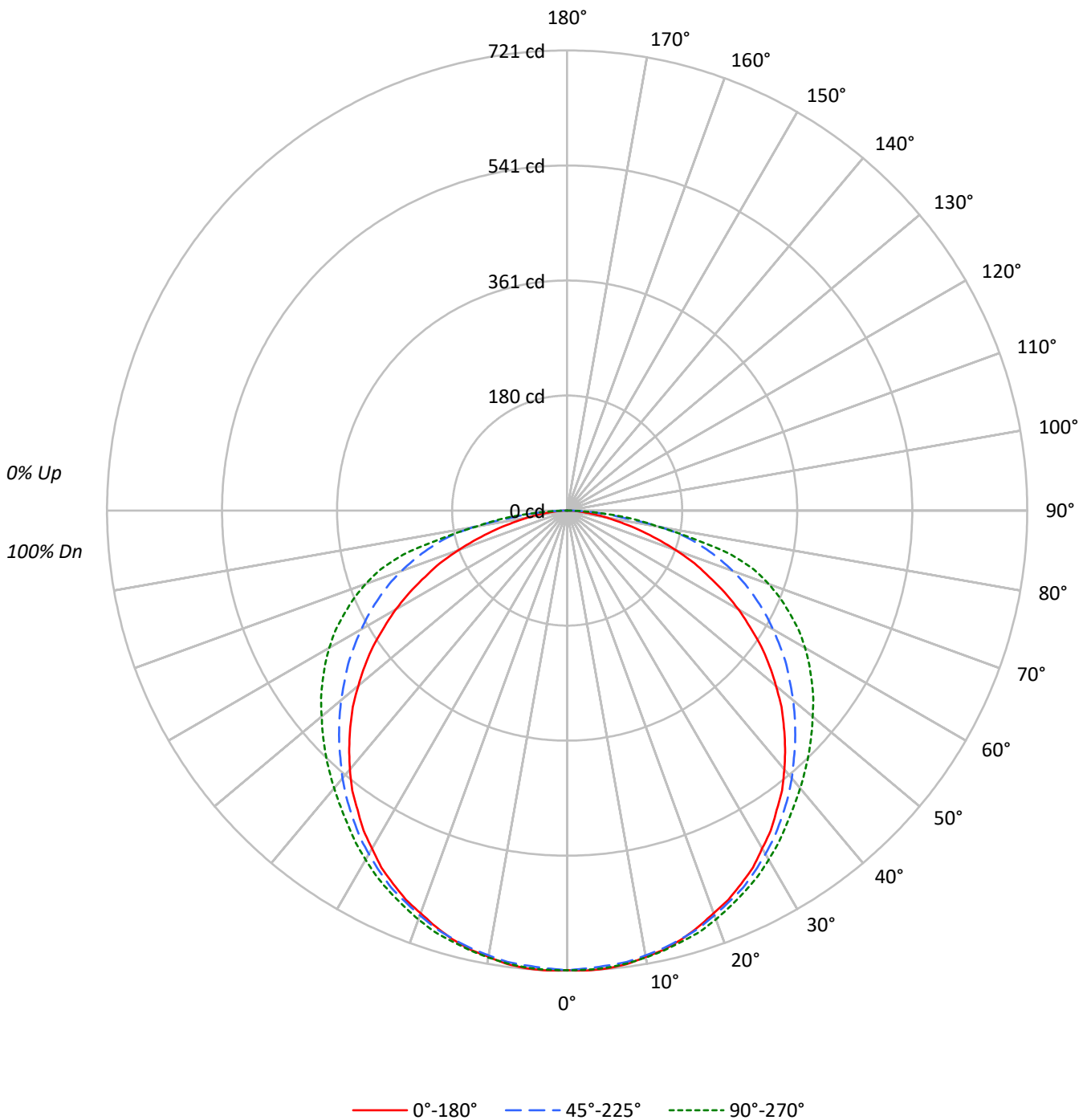
Input Watts (W): 23.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	67	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°	969	969	969
5°	973	967	971
10°	970	967	972
15°	968	967	973
20°	961	966	976
25°	958	968	978
30°	949	965	981
35°	940	963	985
40°	930	962	997
45°	914	962	1020
50°	894	968	1051
55°	871	983	1098
60°	835	1003	1158
65°	781	1038	1230
70°	710	1086	1323
75°	602	1146	1382
80°	476	1153	1117
85°	350	877	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	3.0
10°-20°	196.6	8.6
20°-30°	300.7	13.1
30°-40°	367.5	16.0
40°-50°	391.7	17.1
50°-60°	374.5	16.4
60°-70°	317.3	13.9
70°-80°	213.2	9.3
80°-90°	60.2	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°	565.6	24.7
0°-40°	933.1	40.7
0°-60°	1699.4	74.2
0°-90°	2290.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2290.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	720	719	716	719	719	68
15°	695	695	694	700	699	196
25°	645	648	652	658	659	297
35°	572	577	586	598	600	359
45°	480	488	506	527	536	371
55°	371	385	419	452	468	331
65°	245	270	326	369	386	244
75°	116	158	220	258	266	124
85°	23	47	57	61	64	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.2	720.2	720.2	720.2	720.2
2.5°	721.3	721.3	717.9	720.2	720.2
5°	720.2	719.1	715.7	719.1	719.1
7.5°	716.8	715.7	713.4	716.8	715.7
10°	710.0	710.0	707.7	711.1	711.1
12.5°	704.3	703.2	702.0	706.6	705.4
15°	695.2	695.2	694.1	699.8	698.6
17.5°	683.8	685.0	686.1	690.7	691.8
20°	671.3	673.6	674.7	681.6	681.6
22.5°	660.0	661.1	663.4	670.2	670.2
25°	645.2	647.5	652.0	657.7	658.8
27.5°	630.4	631.6	637.2	645.2	646.3
30°	611.1	614.5	621.3	630.4	631.6
32.5°	594.1	597.5	605.4	614.5	616.8
35°	572.5	577.0	586.1	597.5	599.7
37.5°	553.1	556.6	567.9	580.4	583.8
40°	529.4	536.1	547.5	562.2	567.9
42.5°	505.5	512.3	526.0	545.2	552.0
45°	480.5	488.5	505.5	527.1	536.1
47.5°	455.5	464.6	483.9	508.9	519.2
50°	427.1	438.5	462.3	490.7	502.1
52.5°	399.8	413.5	439.6	471.4	486.2
55°	371.4	385.1	419.1	452.1	468.0
57.5°	339.6	357.8	395.3	432.8	449.8
60°	310.2	327.1	372.6	413.5	430.5
62.5°	278.3	301.1	349.8	393.0	410.1
65°	245.4	270.4	326.0	369.1	386.2
67.5°	215.8	243.1	302.2	345.3	362.3
70°	180.6	214.7	276.1	319.1	336.2
72.5°	147.6	185.1	248.8	290.8	306.7
75°	115.8	157.9	220.4	257.9	265.8
77.5°	86.4	130.6	190.8	206.7	201.0
80°	61.4	104.6	148.8	140.8	144.2
82.5°	39.8	79.6	92.1	104.6	107.9
85°	22.7	46.6	56.8	61.4	63.6
87.5°	10.2	17.0	22.7	22.7	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)