

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: P474232

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474232
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2032.8 lumens
Efficiency: N/A
Efficacy: 99.2 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

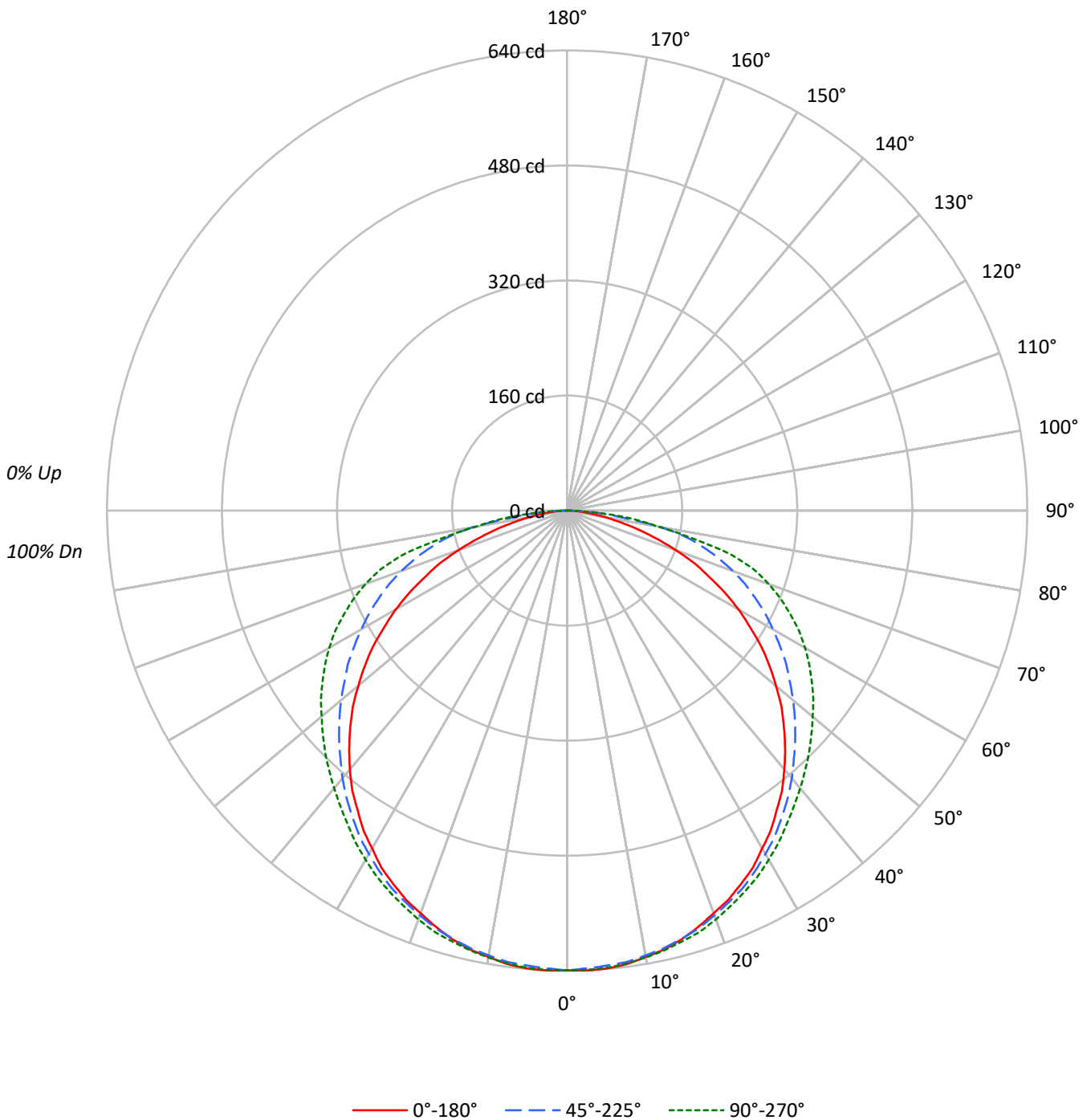
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	860	860	860
5°	863	858	862
10°	861	858	862
15°	860	858	864
20°	853	858	866
25°	850	859	868
30°	843	857	871
35°	835	855	874
40°	825	854	885
45°	812	854	906
50°	794	859	933
55°	773	873	974
60°	741	890	1028
65°	693	921	1091
70°	631	964	1174
75°	534	1017	1227
80°	422	1024	992
85°	312	778	872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	3.0
10°-20°	174.5	8.6
20°-30°	266.9	13.1
30°-40°	326.2	16.0
40°-50°	347.7	17.1
50°-60°	332.5	16.4
60°-70°	281.6	13.9
70°-80°	189.3	9.3
80°-90°	53.4	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°	502.0	24.7
0°-40°	828.3	40.7
0°-60°	1508.5	74.2
0°-90°	2032.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	639	638	635	638	638	61
15°	617	617	616	621	620	174
25°	573	575	579	584	585	264
35°	508	512	520	530	532	318
45°	426	434	449	468	476	329
55°	330	342	372	401	415	294
65°	218	240	289	328	343	216
75°	103	140	196	229	236	110
85°	20	41	50	54	56	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	639.3	639.3	639.3	639.3	639.3
2.5°	640.3	640.3	637.3	639.3	639.3
5°	639.3	638.3	635.3	638.3	638.3
7.5°	636.3	635.3	633.2	636.3	635.3
10°	630.2	630.2	628.2	631.2	631.2
12.5°	625.2	624.2	623.2	627.2	626.2
15°	617.1	617.1	616.1	621.1	620.1
17.5°	607.0	608.0	609.0	613.1	614.1
20°	595.9	597.9	598.9	605.0	605.0
22.5°	585.8	586.8	588.9	594.9	594.9
25°	572.7	574.7	578.8	583.8	584.8
27.5°	559.6	560.6	565.6	572.7	573.7
30°	542.4	545.5	551.5	559.6	560.6
32.5°	527.3	530.3	537.4	545.5	547.5
35°	508.1	512.2	520.3	530.3	532.4
37.5°	491.0	494.0	504.1	515.2	518.2
40°	469.9	475.9	486.0	499.1	504.1
42.5°	448.7	454.8	466.9	483.9	490.0
45°	426.5	433.6	448.7	467.9	475.9
47.5°	404.3	412.4	429.6	451.8	460.8
50°	379.1	389.2	410.4	435.6	445.7
52.5°	354.9	367.0	390.2	418.5	431.6
55°	329.7	341.8	372.1	401.3	415.4
57.5°	301.4	317.6	350.9	384.2	399.3
60°	275.3	290.3	330.7	367.0	382.1
62.5°	247.1	267.2	310.5	348.9	364.0
65°	217.8	240.0	289.3	327.7	342.8
67.5°	191.6	215.8	268.2	306.5	321.6
70°	160.3	190.6	245.0	283.3	298.4
72.5°	131.0	164.3	220.8	258.2	272.3
75°	102.8	140.1	195.6	228.9	236.0
77.5°	76.7	115.9	169.4	183.5	178.5
80°	54.5	92.8	132.1	125.0	128.0
82.5°	35.3	70.6	81.7	92.8	95.7
85°	20.2	41.4	50.4	54.5	56.5
87.5°	9.1	15.1	20.2	20.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)