

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: P475006

Luminaire Tested: **22CZ2-29VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475006
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-RDP-UNV-L830-CD1-U
Description: 2'X2' 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: 1890.6 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

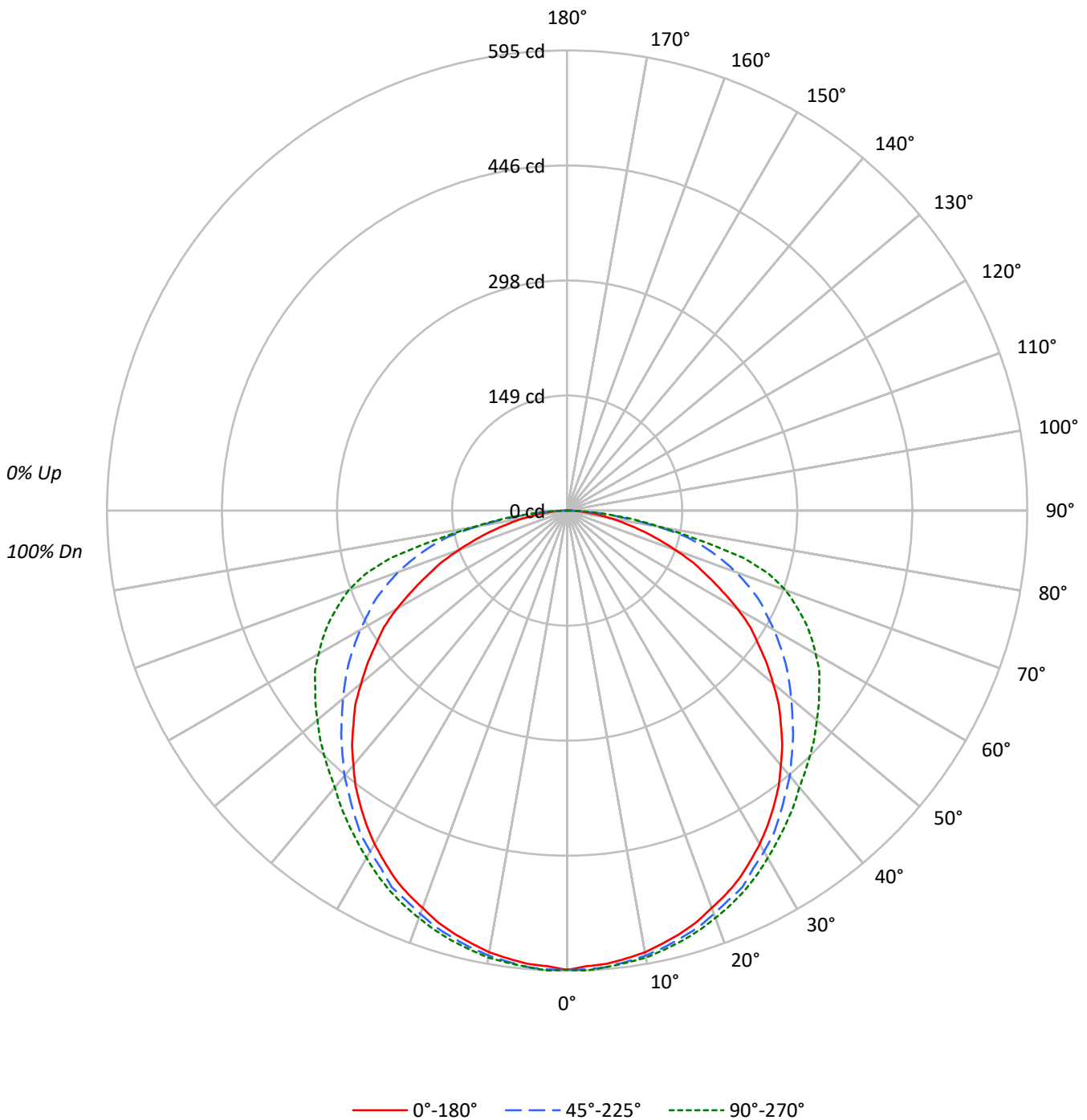
Input Watts (W): 19.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	1598	1598	1598
5°	1589	1600	1600
10°	1585	1596	1604
15°	1577	1592	1604
20°	1565	1589	1605
25°	1561	1594	1610
30°	1547	1582	1612
35°	1531	1576	1622
40°	1510	1573	1641
45°	1487	1572	1694
50°	1456	1583	1764
55°	1416	1618	1866
60°	1370	1661	1998
65°	1275	1745	2161
70°	1171	1828	2364
75°	1027	1922	2444
80°	885	1832	1918
85°	772	1331	1460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.0
10°-20°	161.3	8.5
20°-30°	246.1	13.0
30°-40°	300.5	15.9
40°-50°	321.3	17.0
50°-60°	310.1	16.4
60°-70°	266.9	14.1
70°-80°	180.6	9.6
80°-90°	47.7	2.5
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°	463.5	24.5
0°-40°	764.0	40.4
0°-60°	1395.3	73.8
0°-90°	1890.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1890.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	588	590	592	592	592	56
15°	566	567	572	574	576	160
25°	526	528	537	540	542	242
35°	466	470	480	490	494	292
45°	391	398	413	434	445	302
55°	302	312	345	380	398	270
65°	200	220	274	317	339	199
75°	99	131	185	222	235	106
85°	25	35	43	44	47	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	593.8	593.8	593.8	593.8	593.8
2.5°	589.7	591.1	593.8	593.8	595.2
5°	588.3	589.7	592.4	592.4	592.4
7.5°	584.2	585.5	588.3	589.7	589.7
10°	579.9	581.4	584.2	585.5	586.9
12.5°	573.0	574.3	578.5	581.4	581.4
15°	566.0	567.4	571.6	574.3	575.7
17.5°	557.6	560.5	564.7	567.4	568.8
20°	546.6	549.3	554.9	559.1	560.5
22.5°	536.9	539.7	545.2	549.3	552.1
25°	525.7	528.5	536.9	539.7	542.4
27.5°	511.7	514.6	521.5	527.1	531.2
30°	497.9	500.7	509.0	516.0	518.8
32.5°	482.6	486.7	496.5	502.1	506.2
35°	465.9	470.0	479.8	489.5	493.8
37.5°	449.3	453.4	463.1	475.7	481.2
40°	429.8	435.3	447.8	464.5	467.2
42.5°	411.7	418.6	429.8	449.3	456.2
45°	390.8	397.7	413.1	433.9	445.0
47.5°	371.3	378.2	395.0	420.0	433.9
50°	347.7	357.4	378.2	407.5	421.4
52.5°	325.5	333.7	361.7	393.6	410.3
55°	301.8	311.5	344.9	379.6	397.7
57.5°	281.0	289.2	326.8	365.8	386.7
60°	254.6	265.6	308.7	350.5	371.3
62.5°	226.6	243.4	290.6	333.7	356.0
65°	200.2	219.7	274.0	317.0	339.4
67.5°	176.6	197.5	253.2	299.1	319.9
70°	148.8	175.2	232.3	276.8	300.4
72.5°	123.8	153.0	208.7	253.2	274.0
75°	98.8	130.7	184.9	222.5	235.1
77.5°	76.4	107.1	158.5	169.7	171.1
80°	57.1	84.9	118.2	119.5	123.8
82.5°	39.0	59.8	76.4	83.5	84.9
85°	25.0	34.8	43.1	44.5	47.3
87.5°	11.2	12.6	15.3	14.0	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)