

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: P475035

Luminaire Tested: **22CZ2-29VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475035  
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-L835-CD1-U  
Description: 2'X2' 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: 1959.1 lumens  
Efficiency: N/A  
Efficacy: 98.4 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

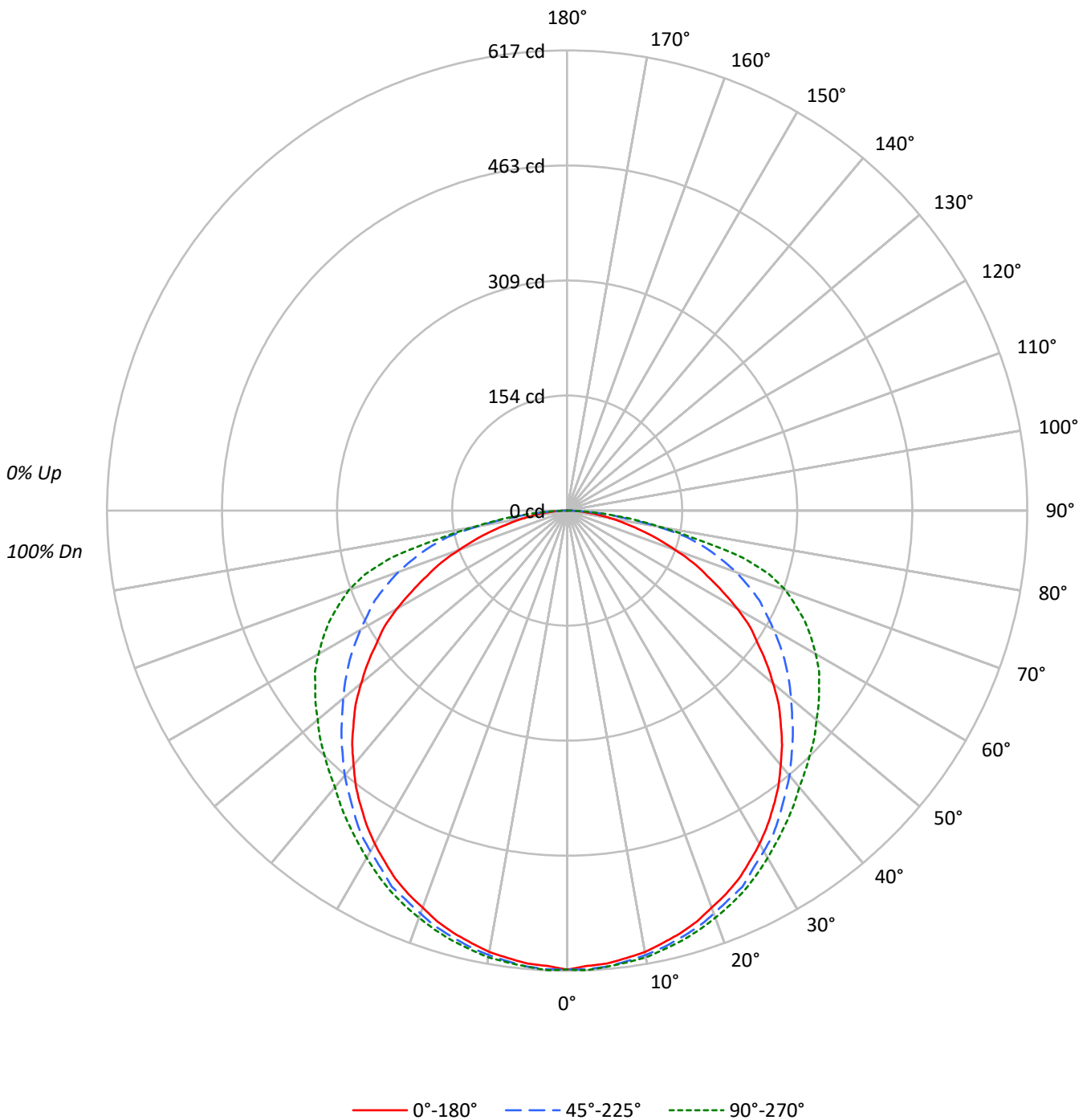
Input Watts (W): 19.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1656	1656	1656
5°	1647	1658	1658
10°	1642	1654	1662
15°	1634	1650	1662
20°	1622	1647	1664
25°	1618	1652	1669
30°	1603	1639	1670
35°	1586	1633	1681
40°	1565	1630	1701
45°	1541	1629	1755
50°	1508	1641	1828
55°	1468	1677	1934
60°	1420	1722	2071
65°	1321	1808	2239
70°	1213	1894	2449
75°	1065	1992	2533
80°	916	1897	1988
85°	800	1380	1513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.2	3.0
10°-20°	167.1	8.5
20°-30°	255.0	13.0
30°-40°	311.4	15.9
40°-50°	332.9	17.0
50°-60°	321.3	16.4
60°-70°	276.6	14.1
70°-80°	187.2	9.6
80°-90°	49.4	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°	480.4	24.5
0°-40°	791.7	40.4
0°-60°	1446.0	73.8
0°-90°	1959.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1959.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	610	611	614	614	614	58
15°	587	588	592	595	597	165
25°	545	548	556	559	562	251
35°	483	487	497	507	512	302
45°	405	412	428	450	461	313
55°	313	323	357	393	412	280
65°	208	228	284	328	352	206
75°	102	136	192	231	244	110
85°	26	36	45	46	49	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	615.4	615.4	615.4	615.4	615.4
2.5°	611.1	612.5	615.4	615.4	616.8
5°	609.6	611.1	613.9	613.9	613.9
7.5°	605.3	606.8	609.6	611.1	611.1
10°	600.9	602.5	605.3	606.8	608.2
12.5°	593.7	595.2	599.5	602.5	602.5
15°	586.6	588.0	592.3	595.2	596.6
17.5°	577.8	580.9	585.1	588.0	589.4
20°	566.4	569.3	575.0	579.4	580.9
22.5°	556.4	559.2	565.0	569.3	572.1
25°	544.8	547.6	556.4	559.2	562.1
27.5°	530.3	533.3	540.5	546.2	550.5
30°	516.0	518.8	527.4	534.7	537.6
32.5°	500.1	504.4	514.5	520.3	524.6
35°	482.8	487.0	497.2	507.2	511.7
37.5°	465.6	469.9	479.9	492.9	498.6
40°	445.4	451.1	464.0	481.3	484.2
42.5°	426.6	433.8	445.4	465.6	472.7
45°	405.0	412.2	428.0	449.7	461.1
47.5°	384.8	392.0	409.3	435.2	449.7
50°	360.3	370.3	392.0	422.3	436.6
52.5°	337.3	345.8	374.8	407.9	425.2
55°	312.8	322.8	357.4	393.4	412.2
57.5°	291.1	299.7	338.7	379.1	400.7
60°	263.8	275.2	319.9	363.2	384.8
62.5°	234.9	252.2	301.2	345.8	368.9
65°	207.5	227.7	284.0	328.5	351.7
67.5°	183.0	204.6	262.4	309.9	331.5
70°	154.2	181.6	240.7	286.8	311.3
72.5°	128.3	158.5	216.2	262.4	284.0
75°	102.4	135.5	191.6	230.6	243.6
77.5°	79.2	111.0	164.3	175.9	177.3
80°	59.1	87.9	122.4	123.9	128.3
82.5°	40.4	62.0	79.2	86.5	87.9
85°	25.9	36.1	44.7	46.1	49.0
87.5°	11.6	13.0	15.9	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)