

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: P475034

Luminaire Tested: **22CZ2-24VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475034  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24VHE-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: 1620.1 lumens  
Efficiency: N/A  
Efficacy: 98.2 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

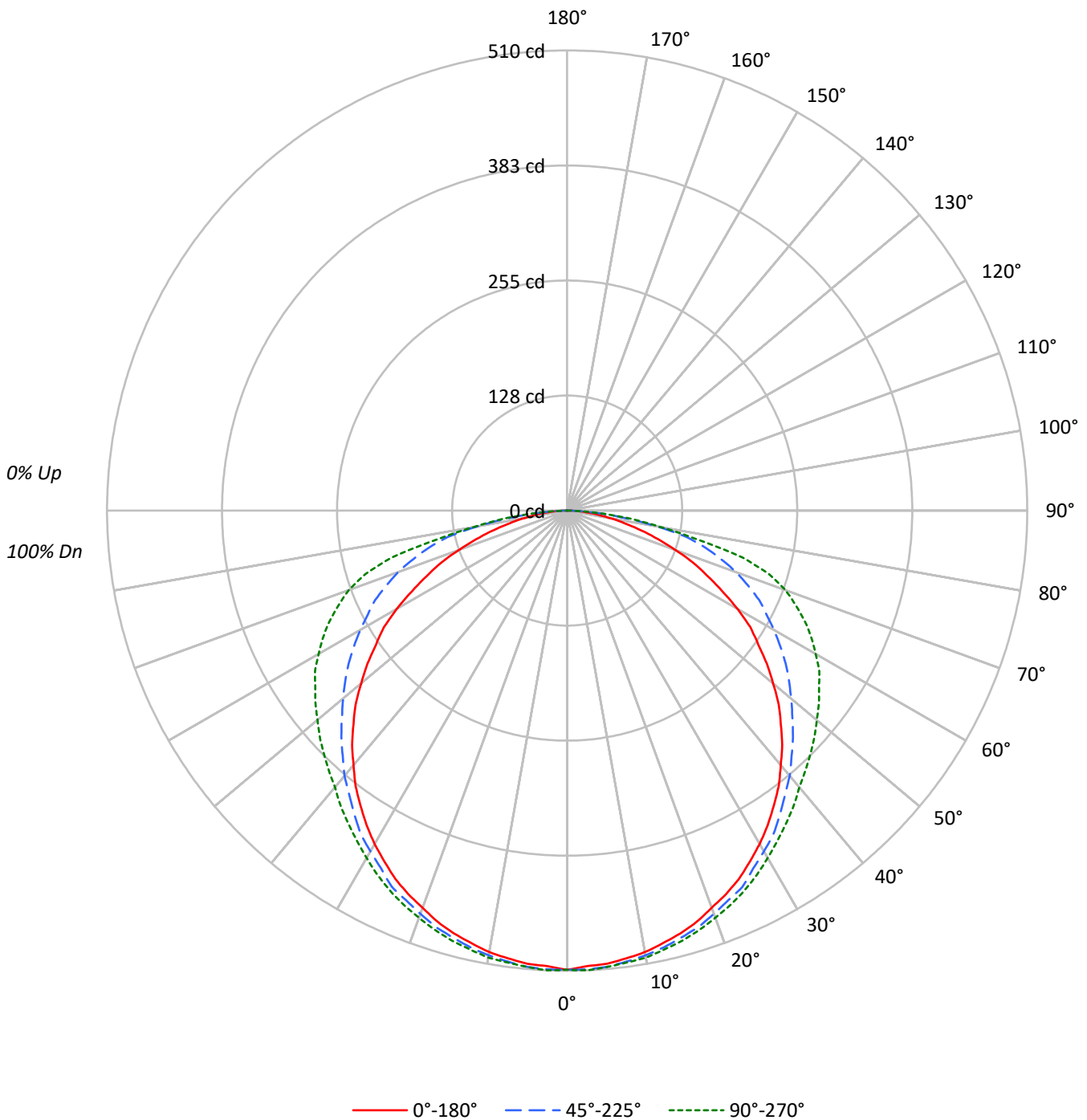
Input Watts (W): 16.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1369	1369	1369
5°	1362	1371	1371
10°	1358	1368	1374
15°	1351	1365	1375
20°	1341	1362	1375
25°	1338	1366	1380
30°	1326	1355	1381
35°	1311	1351	1390
40°	1294	1348	1407
45°	1275	1347	1451
50°	1248	1357	1512
55°	1213	1387	1599
60°	1174	1424	1713
65°	1093	1495	1852
70°	1003	1566	2026
75°	881	1648	2094
80°	758	1570	1644
85°	661	1139	1250



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.1	3.0
10°-20°	138.2	8.5
20°-30°	210.9	13.0
30°-40°	257.5	15.9
40°-50°	275.3	17.0
50°-60°	265.7	16.4
60°-70°	228.7	14.1
70°-80°	154.8	9.6
80°-90°	40.8	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°	397.2	24.5
0°-40°	654.7	40.4
0°-60°	1195.7	73.8
0°-90°	1620.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1620.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	504	505	508	508	508	48
15°	485	486	490	492	493	137
25°	450	453	460	462	465	207
35°	399	403	411	420	423	250
45°	335	341	354	372	381	259
55°	259	267	296	325	341	232
65°	172	188	235	272	291	171
75°	85	112	158	191	201	91
85°	21	30	37	38	40	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	508.9	508.9	508.9	508.9	508.9
2.5°	505.3	506.5	508.9	508.9	510.1
5°	504.1	505.3	507.7	507.7	507.7
7.5°	500.6	501.8	504.1	505.3	505.3
10°	496.9	498.2	500.6	501.8	503.0
12.5°	491.0	492.2	495.7	498.2	498.2
15°	485.1	486.3	489.8	492.2	493.4
17.5°	477.8	480.3	483.9	486.3	487.4
20°	468.4	470.7	475.5	479.1	480.3
22.5°	460.1	462.5	467.2	470.7	473.1
25°	450.5	452.9	460.1	462.5	464.8
27.5°	438.5	441.0	446.9	451.7	455.2
30°	426.7	429.1	436.2	442.2	444.6
32.5°	413.5	417.1	425.5	430.2	433.8
35°	399.2	402.8	411.2	419.5	423.1
37.5°	385.0	388.6	396.8	407.6	412.4
40°	368.3	373.0	383.7	398.0	400.4
42.5°	352.8	358.7	368.3	385.0	390.9
45°	334.9	340.8	354.0	371.9	381.3
47.5°	318.2	324.1	338.5	359.9	371.9
50°	298.0	306.2	324.1	349.2	361.1
52.5°	278.9	286.0	309.9	337.3	351.6
55°	258.6	266.9	295.6	325.3	340.8
57.5°	240.8	247.9	280.1	313.5	331.4
60°	218.1	227.6	264.6	300.3	318.2
62.5°	194.2	208.5	249.0	286.0	305.1
65°	171.6	188.3	234.8	271.7	290.9
67.5°	151.3	169.2	217.0	256.3	274.2
70°	127.5	150.2	199.1	237.2	257.5
72.5°	106.1	131.1	178.8	217.0	234.8
75°	84.7	112.0	158.5	190.7	201.4
77.5°	65.5	91.8	135.8	145.4	146.6
80°	48.9	72.7	101.3	102.4	106.1
82.5°	33.4	51.3	65.5	71.5	72.7
85°	21.4	29.8	36.9	38.1	40.5
87.5°	9.6	10.8	13.1	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)