

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: P475028

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475028  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-RDP-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, 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: 1657.6 lumens  
Efficiency: N/A  
Efficacy: 91.6 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

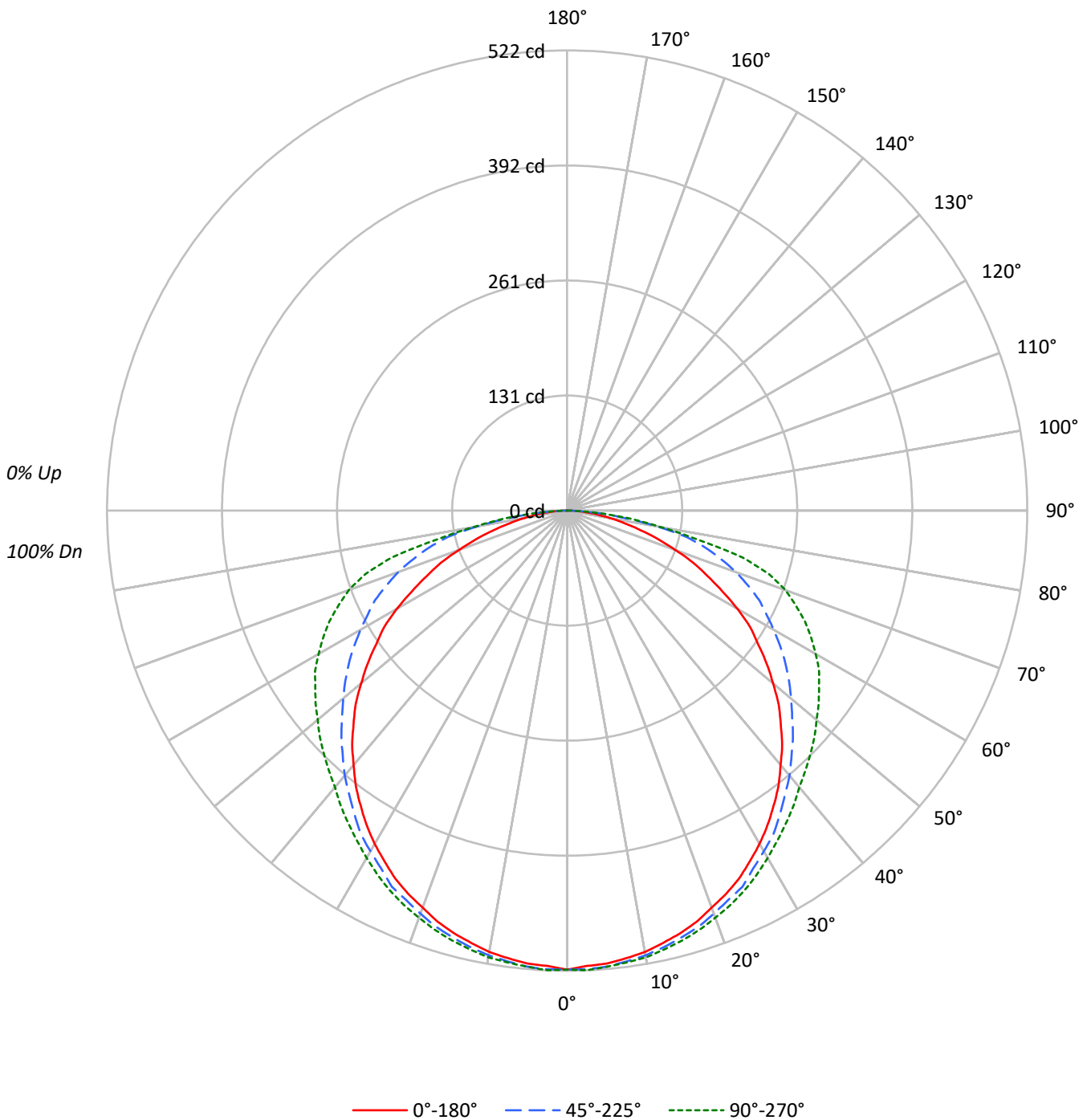
Input Watts (W): 18.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1401	1401	1401
5°	1393	1403	1403
10°	1389	1400	1406
15°	1383	1396	1406
20°	1372	1393	1407
25°	1368	1398	1412
30°	1357	1387	1413
35°	1342	1382	1422
40°	1324	1379	1439
45°	1304	1378	1485
50°	1276	1388	1546
55°	1241	1419	1636
60°	1201	1457	1752
65°	1118	1530	1895
70°	1027	1603	2072
75°	900	1685	2143
80°	775	1605	1683
85°	676	1167	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.3	3.0
10°-20°	141.4	8.5
20°-30°	215.8	13.0
30°-40°	263.4	15.9
40°-50°	281.7	17.0
50°-60°	271.9	16.4
60°-70°	234.0	14.1
70°-80°	158.4	9.6
80°-90°	41.8	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°	406.4	24.5
0°-40°	669.9	40.4
0°-60°	1223.4	73.8
0°-90°	1657.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1657.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	516	517	519	519	519	49
15°	496	498	501	504	505	140
25°	461	463	471	473	476	212
35°	408	412	421	429	433	256
45°	343	349	362	380	390	265
55°	265	273	302	333	349	237
65°	176	193	240	278	298	175
75°	87	115	162	195	206	93
85°	22	30	38	39	41	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	520.7	520.7	520.7	520.7	520.7
2.5°	517.0	518.2	520.7	520.7	521.9
5°	515.8	517.0	519.4	519.4	519.4
7.5°	512.2	513.4	515.8	517.0	517.0
10°	508.4	509.8	512.2	513.4	514.6
12.5°	502.4	503.6	507.2	509.8	509.8
15°	496.3	497.5	501.2	503.6	504.8
17.5°	488.9	491.5	495.1	497.5	498.7
20°	479.2	481.6	486.5	490.2	491.5
22.5°	470.7	473.2	478.0	481.6	484.1
25°	460.9	463.3	470.7	473.2	475.6
27.5°	448.7	451.2	457.3	462.1	465.8
30°	436.6	439.0	446.3	452.4	454.9
32.5°	423.1	426.8	435.4	440.2	443.8
35°	408.5	412.1	420.7	429.2	432.9
37.5°	393.9	397.6	406.0	417.1	421.9
40°	376.8	381.7	392.6	407.2	409.7
42.5°	361.0	367.0	376.8	393.9	400.0
45°	342.7	348.7	362.2	380.5	390.2
47.5°	325.6	331.6	346.3	368.2	380.5
50°	304.9	313.3	331.6	357.3	369.4
52.5°	285.4	292.6	317.1	345.1	359.7
55°	264.6	273.1	302.4	332.8	348.7
57.5°	246.3	253.6	286.6	320.7	339.0
60°	223.2	232.9	270.7	307.3	325.6
62.5°	198.7	213.4	254.8	292.6	312.1
65°	175.6	192.7	240.3	278.0	297.6
67.5°	154.9	173.1	222.0	262.2	280.5
70°	130.5	153.6	203.7	242.7	263.4
72.5°	108.6	134.1	183.0	222.0	240.3
75°	86.6	114.6	162.1	195.1	206.1
77.5°	67.0	93.9	139.0	148.8	150.0
80°	50.0	74.4	103.6	104.8	108.6
82.5°	34.2	52.5	67.0	73.2	74.4
85°	21.9	30.5	37.8	39.0	41.4
87.5°	9.8	11.0	13.4	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)