

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: P474998

Luminaire Tested: **22CZ2-20HE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474998
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, 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: 1312.5 lumens
Efficiency: N/A
Efficacy: 87.5 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

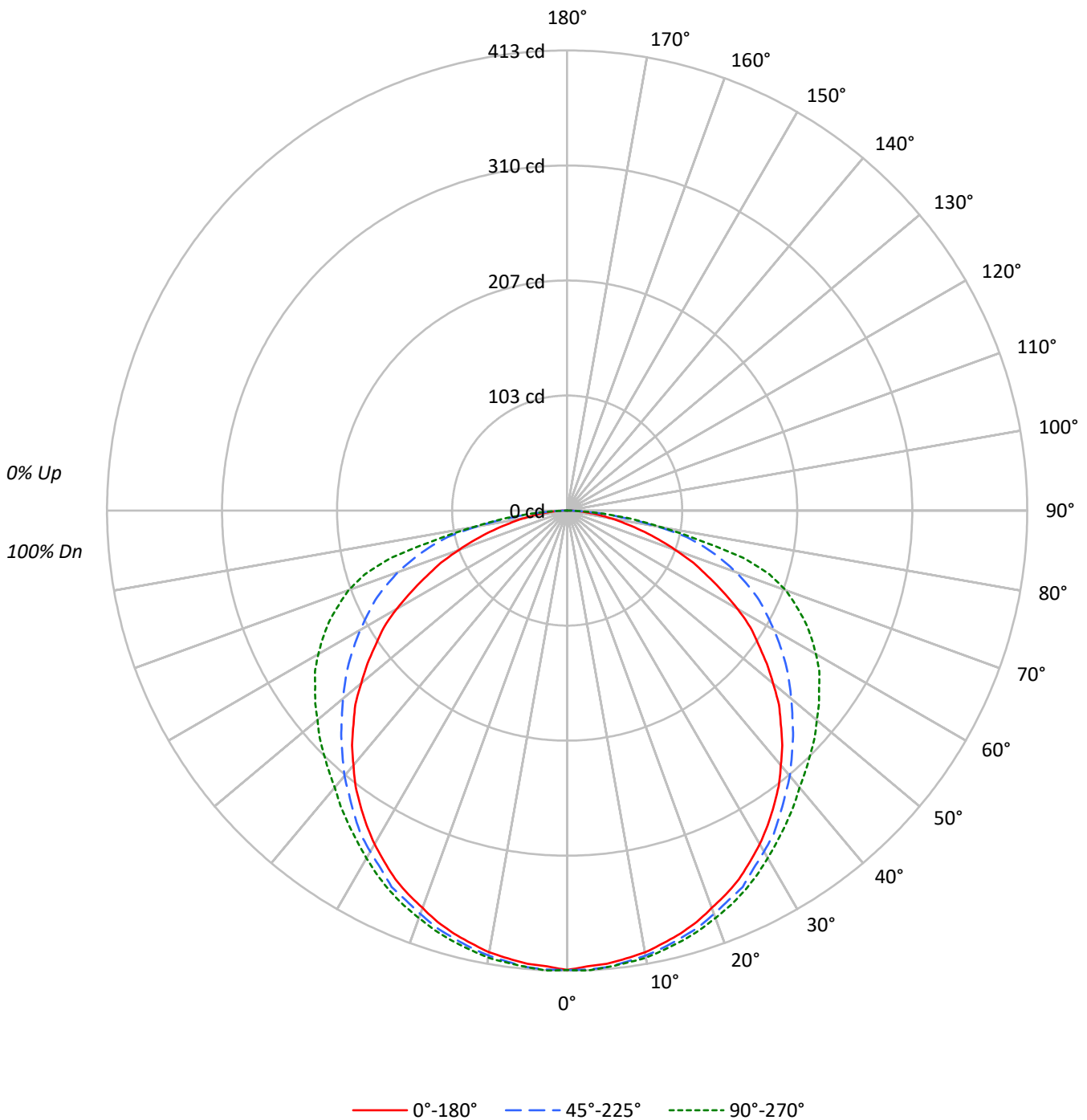
Input Watts (W): 15
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1109	1109	1109
5°	1103	1111	1111
10°	1100	1108	1113
15°	1095	1105	1114
20°	1087	1103	1114
25°	1084	1107	1118
30°	1074	1098	1119
35°	1062	1094	1126
40°	1048	1092	1140
45°	1032	1091	1176
50°	1011	1099	1225
55°	983	1124	1295
60°	951	1153	1387
65°	885	1212	1500
70°	813	1269	1641
75°	713	1335	1697
80°	614	1271	1333
85°	537	923	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	3.0
10°-20°	112.0	8.5
20°-30°	170.8	13.0
30°-40°	208.6	15.9
40°-50°	223.0	17.0
50°-60°	215.3	16.4
60°-70°	185.3	14.1
70°-80°	125.4	9.6
80°-90°	33.1	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°	321.8	24.5
0°-40°	530.4	40.4
0°-60°	968.7	73.8
0°-90°	1312.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1312.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	412	412	412	412	412	
5°	408	409	411	411	411	39
15°	393	394	397	399	400	111
25°	365	367	373	375	377	168
35°	323	326	333	340	343	202
45°	271	276	287	301	309	209
55°	210	216	240	264	276	188
65°	139	152	190	220	236	138
75°	69	91	128	154	163	74
85°	17	24	30	31	33	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	412.3	412.3	412.3	412.3	412.3
2.5°	409.4	410.3	412.3	412.3	413.2
5°	408.4	409.4	411.3	411.3	411.3
7.5°	405.5	406.5	408.4	409.4	409.4
10°	402.6	403.6	405.5	406.5	407.5
12.5°	397.8	398.7	401.6	403.6	403.6
15°	393.0	393.9	396.8	398.7	399.7
17.5°	387.1	389.1	392.0	393.9	394.9
20°	379.5	381.4	385.2	388.2	389.1
22.5°	372.7	374.7	378.5	381.4	383.3
25°	365.0	366.9	372.7	374.7	376.6
27.5°	355.3	357.3	362.1	365.9	368.8
30°	345.7	347.6	353.4	358.3	360.2
32.5°	335.0	337.9	344.7	348.6	351.4
35°	323.4	326.3	333.1	339.8	342.8
37.5°	311.9	314.8	321.5	330.2	334.1
40°	298.4	302.2	310.9	322.5	324.4
42.5°	285.8	290.6	298.4	311.9	316.7
45°	271.3	276.1	286.8	301.3	308.9
47.5°	257.8	262.6	274.2	291.6	301.3
50°	241.4	248.1	262.6	282.9	292.5
52.5°	225.9	231.7	251.1	273.2	284.9
55°	209.5	216.3	239.5	263.6	276.1
57.5°	195.1	200.8	226.9	254.0	268.4
60°	176.7	184.4	214.3	243.3	257.8
62.5°	157.3	169.0	201.8	231.7	247.1
65°	139.0	152.5	190.3	220.1	235.6
67.5°	122.6	137.1	175.8	207.6	222.1
70°	103.3	121.7	161.3	192.2	208.6
72.5°	86.0	106.2	144.9	175.8	190.3
75°	68.6	90.8	128.4	154.5	163.2
77.5°	53.1	74.4	110.0	117.8	118.8
80°	39.6	58.9	82.0	83.0	86.0
82.5°	27.1	41.5	53.1	57.9	58.9
85°	17.4	24.2	29.9	30.9	32.8
87.5°	7.8	8.7	10.6	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)