

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: P474993

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474993
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

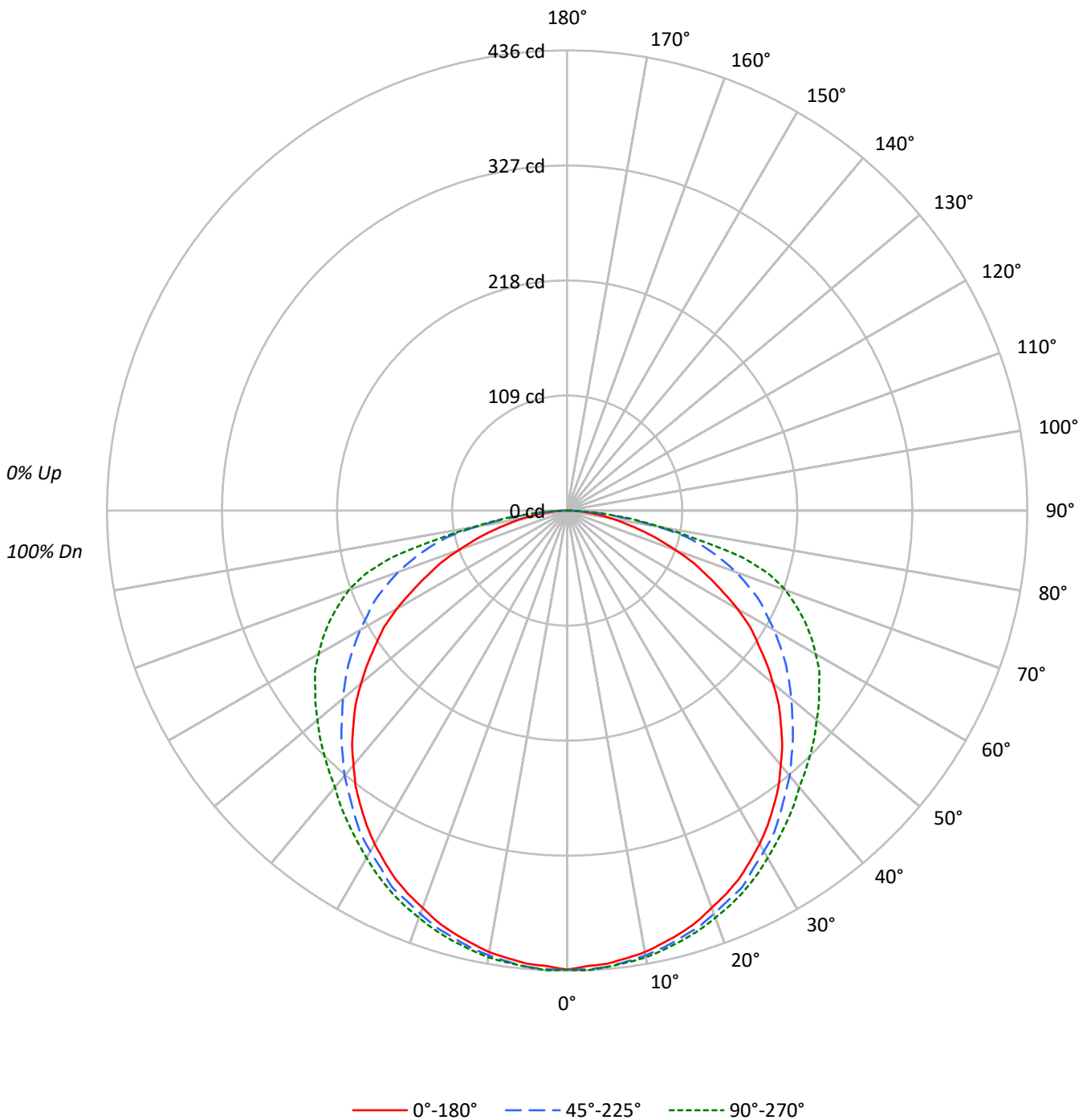
Lumens per Lamp: N/A
Luminaire Lumens: 1385.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
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°	1171	1171	1171
5°	1164	1172	1172
10°	1161	1169	1175
15°	1155	1166	1175
20°	1147	1164	1176
25°	1143	1168	1180
30°	1134	1159	1181
35°	1121	1155	1188
40°	1106	1152	1202
45°	1090	1152	1241
50°	1066	1160	1292
55°	1037	1186	1367
60°	1004	1217	1464
65°	934	1279	1583
70°	858	1339	1732
75°	753	1409	1790
80°	648	1342	1406
85°	565	976	1068



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.2	3.0
10°-20°	118.2	8.5
20°-30°	180.3	13.0
30°-40°	220.1	15.9
40°-50°	235.3	17.0
50°-60°	227.2	16.4
60°-70°	195.6	14.1
70°-80°	132.3	9.6
80°-90°	34.9	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°	339.6	24.5
0°-40°	559.7	40.4
0°-60°	1022.2	73.8
0°-90°	1385.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1385.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	435	435	435	435	435	
5°	431	432	434	434	434	41
15°	415	416	419	421	422	117
25°	385	387	393	395	397	177
35°	341	344	352	359	362	214
45°	286	291	303	318	326	221
55°	221	228	253	278	291	198
65°	147	161	201	232	249	146
75°	72	96	136	163	172	78
85°	18	26	32	33	35	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	435.0	435.0	435.0	435.0	435.0
2.5°	432.0	433.0	435.0	435.0	436.0
5°	431.0	432.0	434.0	434.0	434.0
7.5°	427.9	428.9	431.0	432.0	432.0
10°	424.8	425.9	427.9	428.9	429.9
12.5°	419.7	420.7	423.8	425.9	425.9
15°	414.7	415.7	418.7	420.7	421.7
17.5°	408.5	410.6	413.7	415.7	416.7
20°	400.4	402.4	406.5	409.6	410.6
22.5°	393.3	395.3	399.4	402.4	404.4
25°	385.1	387.1	393.3	395.3	397.4
27.5°	374.9	377.0	382.1	386.1	389.2
30°	364.8	366.8	372.9	378.0	380.0
32.5°	353.5	356.6	363.7	367.8	370.8
35°	341.3	344.3	351.5	358.6	361.7
37.5°	329.1	332.2	339.2	348.5	352.5
40°	314.8	318.9	328.0	340.3	342.3
42.5°	301.6	306.6	314.8	329.1	334.2
45°	286.3	291.4	302.6	317.9	326.0
47.5°	272.0	277.1	289.3	307.7	317.9
50°	254.7	261.8	277.1	298.5	308.7
52.5°	238.4	244.5	264.9	288.3	300.6
55°	221.1	228.2	252.7	278.1	291.4
57.5°	205.8	211.9	239.4	268.0	283.3
60°	186.5	194.6	226.2	256.7	272.0
62.5°	166.0	178.3	212.9	244.5	260.8
65°	146.7	161.0	200.8	232.2	248.6
67.5°	129.4	144.7	185.5	219.1	234.4
70°	109.0	128.4	170.2	202.8	220.1
72.5°	90.7	112.1	152.9	185.5	200.8
75°	72.4	95.8	135.5	163.0	172.2
77.5°	56.0	78.5	116.1	124.3	125.3
80°	41.8	62.2	86.6	87.6	90.7
82.5°	28.5	43.8	56.0	61.1	62.2
85°	18.3	25.5	31.6	32.6	34.6
87.5°	8.2	9.2	11.2	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)