

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: P474994

Luminaire Tested: **22CZ2-24-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474994
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24-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

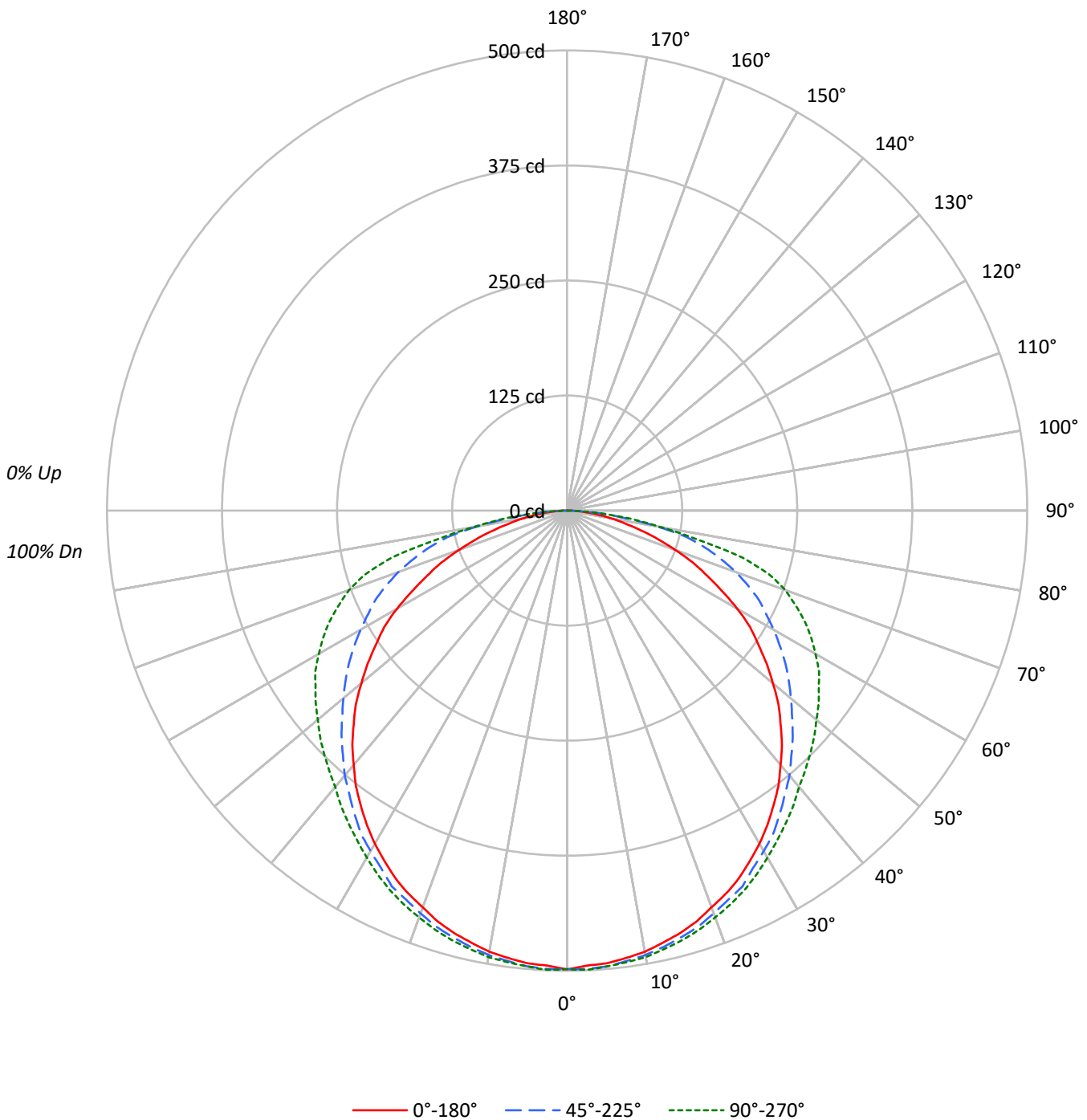
Lumens per Lamp: N/A
Luminaire Lumens: 1586.7 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
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°	1341	1341	1341
5°	1334	1343	1343
10°	1330	1340	1346
15°	1324	1336	1346
20°	1314	1334	1347
25°	1310	1338	1352
30°	1299	1327	1353
35°	1284	1323	1361
40°	1267	1320	1377
45°	1248	1319	1421
50°	1222	1329	1480
55°	1188	1358	1566
60°	1150	1394	1677
65°	1070	1465	1814
70°	983	1534	1983
75°	862	1614	2051
80°	742	1537	1610
85°	648	1118	1226



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	3.0
10°-20°	135.4	8.5
20°-30°	206.5	13.0
30°-40°	252.2	15.9
40°-50°	269.6	17.0
50°-60°	260.2	16.4
60°-70°	224.0	14.1
70°-80°	151.6	9.6
80°-90°	40.0	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°	389.0	24.5
0°-40°	641.2	40.4
0°-60°	1171.1	73.8
0°-90°	1586.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1586.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	494	495	497	497	497	47
15°	475	476	480	482	483	134
25°	441	444	451	453	455	203
35°	391	394	403	411	414	245
45°	328	334	347	364	374	253
55°	253	261	290	319	334	227
65°	168	184	230	266	285	167
75°	83	110	155	187	197	89
85°	21	29	36	37	40	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	498.4	498.4	498.4	498.4	498.4
2.5°	494.9	496.1	498.4	498.4	499.5
5°	493.7	494.9	497.2	497.2	497.2
7.5°	490.3	491.4	493.7	494.9	494.9
10°	486.7	487.9	490.3	491.4	492.6
12.5°	480.9	482.0	485.5	487.9	487.9
15°	475.1	476.2	479.7	482.0	483.2
17.5°	468.0	470.4	473.9	476.2	477.4
20°	458.7	461.0	465.7	469.3	470.4
22.5°	450.6	452.9	457.5	461.0	463.3
25°	441.2	443.5	450.6	452.9	455.2
27.5°	429.5	431.9	437.7	442.4	445.8
30°	417.9	420.2	427.2	433.1	435.4
32.5°	405.0	408.5	416.7	421.4	424.8
35°	391.0	394.5	402.7	410.8	414.4
37.5°	377.1	380.5	388.7	399.2	403.8
40°	360.7	365.3	375.8	389.8	392.1
42.5°	345.5	351.3	360.7	377.1	382.9
45°	328.0	333.8	346.7	364.2	373.5
47.5°	311.6	317.4	331.5	352.5	364.2
50°	291.8	299.9	317.4	342.0	353.6
52.5°	273.1	280.1	303.5	330.3	344.4
55°	253.3	261.4	289.5	318.6	333.8
57.5°	235.8	242.8	274.3	307.0	324.5
60°	213.6	222.9	259.1	294.1	311.6
62.5°	190.2	204.2	243.9	280.1	298.8
65°	168.1	184.4	230.0	266.1	284.9
67.5°	148.2	165.7	212.5	251.0	268.5
70°	124.9	147.1	195.0	232.3	252.1
72.5°	103.9	128.4	175.1	212.5	230.0
75°	82.9	109.7	155.2	186.7	197.3
77.5°	64.1	89.9	133.0	142.4	143.6
80°	47.9	71.2	99.2	100.3	103.9
82.5°	32.7	50.2	64.1	70.1	71.2
85°	21.0	29.2	36.2	37.3	39.7
87.5°	9.4	10.6	12.9	11.7	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)