

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: P475015

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475015
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY 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: 5183.5 lumens
Efficiency: N/A
Efficacy: 88.3 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

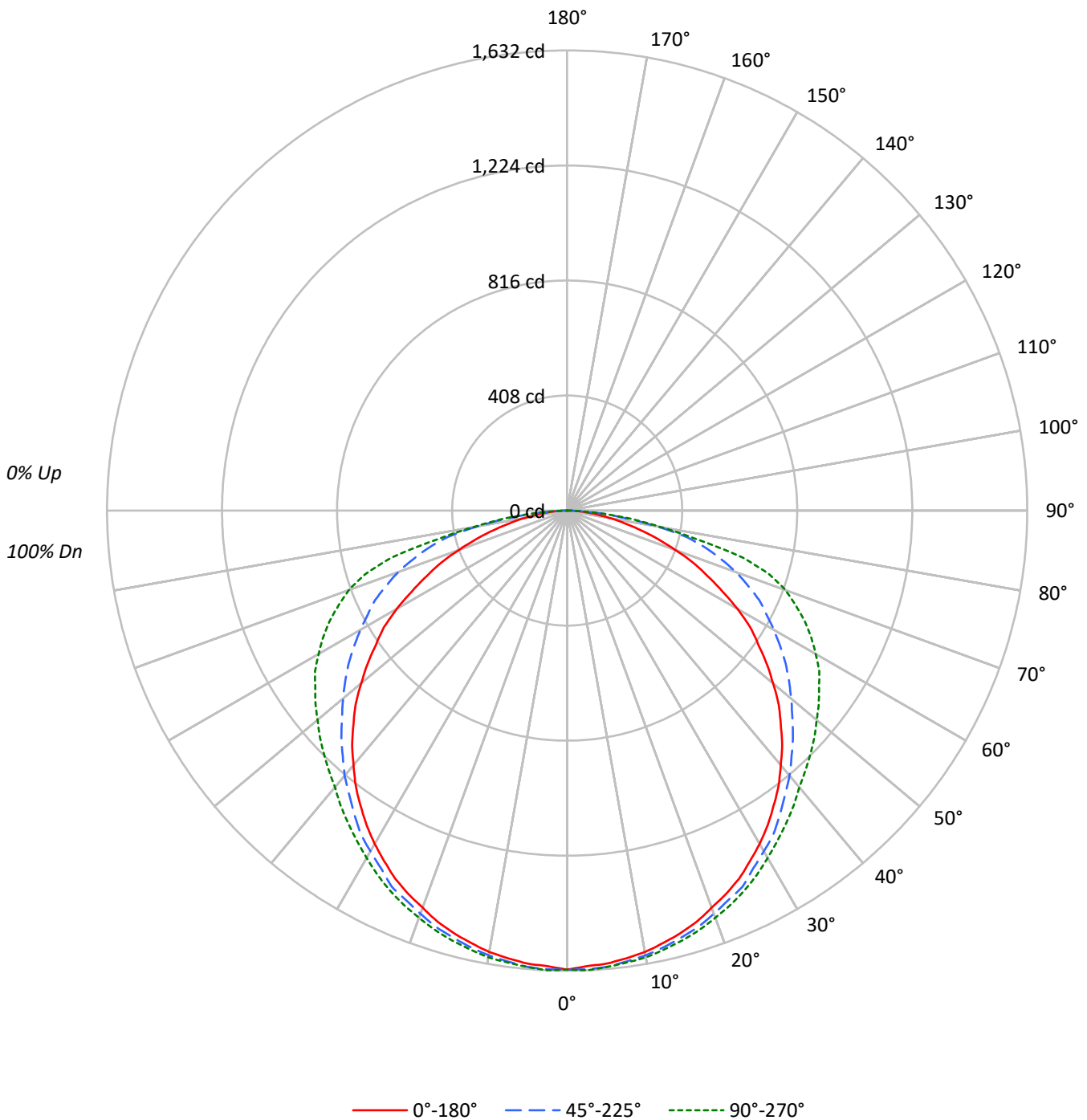
Input Watts (W): 58.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4381	4381	4381
5°	4357	4388	4388
10°	4344	4376	4397
15°	4324	4366	4398
20°	4292	4357	4401
25°	4279	4371	4416
30°	4242	4336	4420
35°	4196	4322	4447
40°	4140	4312	4500
45°	4078	4310	4643
50°	3991	4342	4837
55°	3882	4437	5116
60°	3756	4556	5479
65°	3496	4784	5926
70°	3211	5011	6481
75°	2817	5271	6701
80°	2425	5021	5261
85°	2118	3649	4001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.0	3.0
10°-20°	442.2	8.5
20°-30°	674.7	13.0
30°-40°	823.8	15.9
40°-50°	880.8	17.0
50°-60°	850.2	16.4
60°-70°	731.9	14.1
70°-80°	495.2	9.6
80°-90°	130.7	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°	1270.9	24.5
0°-40°	2094.7	40.4
0°-60°	3825.7	73.8
0°-90°	5183.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5183.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1613	1617	1624	1624	1624	153
15°	1552	1556	1567	1575	1578	438
25°	1441	1449	1472	1480	1487	663
35°	1277	1289	1316	1342	1354	799
45°	1072	1090	1132	1190	1220	827
55°	828	854	946	1041	1090	742
65°	549	602	751	869	931	546
75°	271	358	507	610	644	291
85°	69	96	118	122	130	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1616.8	1620.6	1628.1	1628.1	1631.9
5°	1613.0	1616.8	1624.4	1624.4	1624.4
7.5°	1601.6	1605.4	1613.0	1616.8	1616.8
10°	1589.9	1594.0	1601.6	1605.4	1609.2
12.5°	1570.9	1574.7	1586.1	1594.0	1594.0
15°	1552.0	1555.8	1567.1	1574.7	1578.5
17.5°	1528.9	1536.8	1548.2	1555.8	1559.6
20°	1498.6	1506.1	1521.3	1533.0	1536.8
22.5°	1472.0	1479.6	1494.8	1506.1	1513.7
25°	1441.3	1448.9	1472.0	1479.6	1487.2
27.5°	1403.1	1411.0	1430.0	1445.1	1456.5
30°	1365.2	1372.8	1395.5	1414.8	1422.4
32.5°	1323.1	1334.5	1361.4	1376.6	1387.9
35°	1277.3	1288.6	1315.6	1342.1	1353.8
37.5°	1231.8	1243.2	1269.7	1304.2	1319.3
40°	1178.4	1193.5	1227.6	1273.5	1281.1
42.5°	1128.8	1147.7	1178.4	1231.8	1250.8
45°	1071.5	1090.5	1132.5	1189.8	1220.1
47.5°	1018.1	1037.1	1082.9	1151.5	1189.8
50°	953.3	979.8	1037.1	1117.4	1155.3
52.5°	892.3	915.1	991.6	1079.1	1125.0
55°	827.5	854.0	945.7	1040.8	1090.5
57.5°	770.3	793.0	896.1	1003.0	1060.2
60°	697.9	728.3	846.5	960.9	1018.1
62.5°	621.4	667.2	796.8	915.1	976.1
65°	549.0	602.5	751.4	869.2	930.6
67.5°	484.2	541.5	694.2	819.9	877.2
70°	408.1	480.4	636.9	758.9	823.7
72.5°	339.5	419.4	572.1	694.2	751.4
75°	270.9	358.4	507.0	610.0	644.5
77.5°	209.5	293.6	434.6	465.3	469.1
80°	156.5	232.6	324.0	327.8	339.5
82.5°	106.9	164.1	209.5	228.9	232.6
85°	68.6	95.5	118.2	122.0	129.6
87.5°	30.7	34.5	42.1	38.3	38.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)