

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: P474586

Luminaire Tested: **24CZ2-55VHE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474586
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5046.1 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

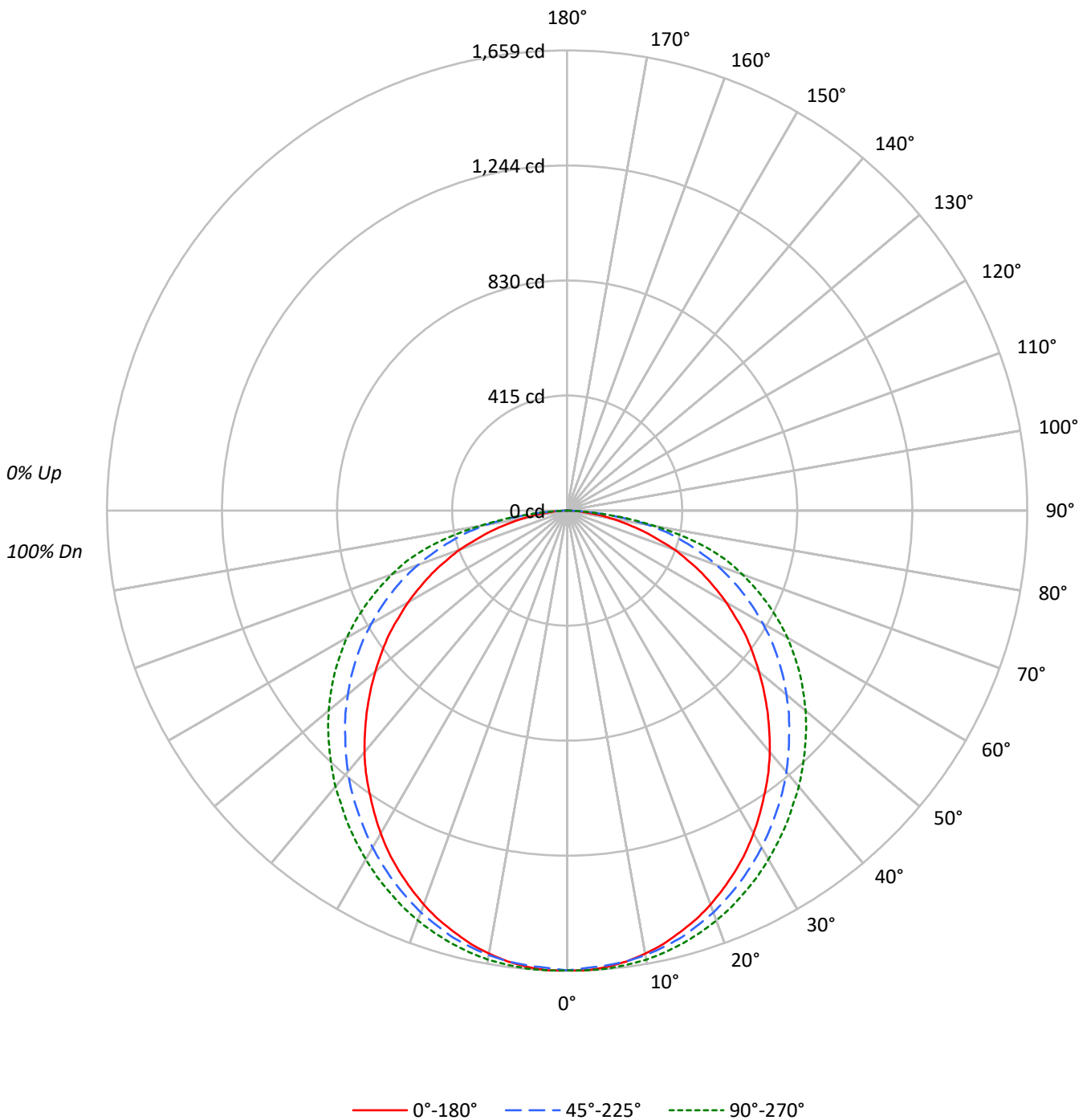
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4460	4460	4460
5°	4460	4447	4477
10°	4432	4447	4492
15°	4384	4438	4499
20°	4329	4416	4504
25°	4258	4385	4505
30°	4176	4359	4511
35°	4081	4333	4528
40°	3993	4319	4565
45°	3884	4308	4614
50°	3780	4320	4698
55°	3691	4350	4803
60°	3567	4382	4937
65°	3424	4435	5087
70°	3248	4497	5290
75°	2908	4560	5465
80°	2448	4573	4959
85°	1819	3461	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.1	3.1
10°-20°	450.2	8.9
20°-30°	681.4	13.5
30°-40°	824.3	16.3
40°-50°	870.2	17.2
50°-60°	820.6	16.3
60°-70°	676.5	13.4
70°-80°	443.8	8.8
80°-90°	122.0	2.4
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°	1288.7	25.5
0°-40°	2113.0	41.9
0°-60°	3803.7	75.4
0°-90°	5046.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5046.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1651	1651	1646	1658	1658	157
15°	1574	1582	1593	1612	1615	444
25°	1434	1452	1477	1508	1517	660
35°	1242	1274	1319	1364	1378	778
45°	1021	1067	1132	1192	1212	788
55°	787	842	927	996	1024	701
65°	538	602	696	771	799	531
75°	280	352	439	508	526	296
85°	59	102	112	109	106	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.5	1657.5	1657.5	1657.5	1657.5
2.5°	1659.1	1657.5	1650.2	1659.9	1659.1
5°	1651.0	1651.0	1646.2	1657.5	1657.5
7.5°	1639.7	1640.5	1638.9	1651.8	1651.8
10°	1622.0	1625.2	1627.6	1642.2	1643.8
12.5°	1601.0	1606.7	1611.5	1629.3	1630.9
15°	1573.6	1582.5	1593.0	1611.5	1614.8
17.5°	1545.4	1555.9	1567.2	1591.4	1595.4
20°	1511.6	1523.7	1542.2	1566.4	1572.8
22.5°	1473.7	1490.6	1509.9	1539.0	1547.0
25°	1434.2	1451.9	1476.9	1507.5	1517.2
27.5°	1391.4	1412.4	1440.6	1476.1	1486.6
30°	1343.9	1368.1	1402.7	1440.6	1451.9
32.5°	1293.9	1322.1	1360.8	1402.7	1415.6
35°	1242.3	1274.5	1318.9	1364.0	1378.5
37.5°	1191.5	1223.8	1276.2	1323.7	1337.4
40°	1136.7	1172.2	1229.4	1280.2	1299.5
42.5°	1078.6	1120.6	1181.0	1237.5	1256.0
45°	1020.6	1066.6	1131.9	1192.3	1212.5
47.5°	961.8	1012.5	1084.3	1145.6	1168.9
50°	902.9	956.9	1031.9	1098.0	1122.2
52.5°	843.2	899.7	981.1	1051.2	1073.0
55°	786.8	842.4	927.1	996.4	1023.8
57.5°	721.5	784.4	873.9	944.0	970.6
60°	662.7	723.9	814.2	888.4	917.4
62.5°	599.0	661.9	757.0	831.2	859.4
65°	537.7	602.2	696.5	770.7	798.9
67.5°	471.6	539.3	636.1	707.8	735.2
70°	412.8	476.4	571.6	644.9	672.3
72.5°	341.0	413.6	504.7	577.2	607.0
75°	279.7	351.5	438.6	507.9	525.6
77.5°	215.2	287.0	373.3	418.4	430.5
80°	158.0	225.7	295.1	319.2	320.0
82.5°	106.4	166.1	205.6	217.7	216.1
85°	58.9	101.6	112.1	108.8	105.6
87.5°	24.2	33.9	27.4	19.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)