

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: P474236

Luminaire Tested: **24CZ2-55VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474236
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3687.7 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

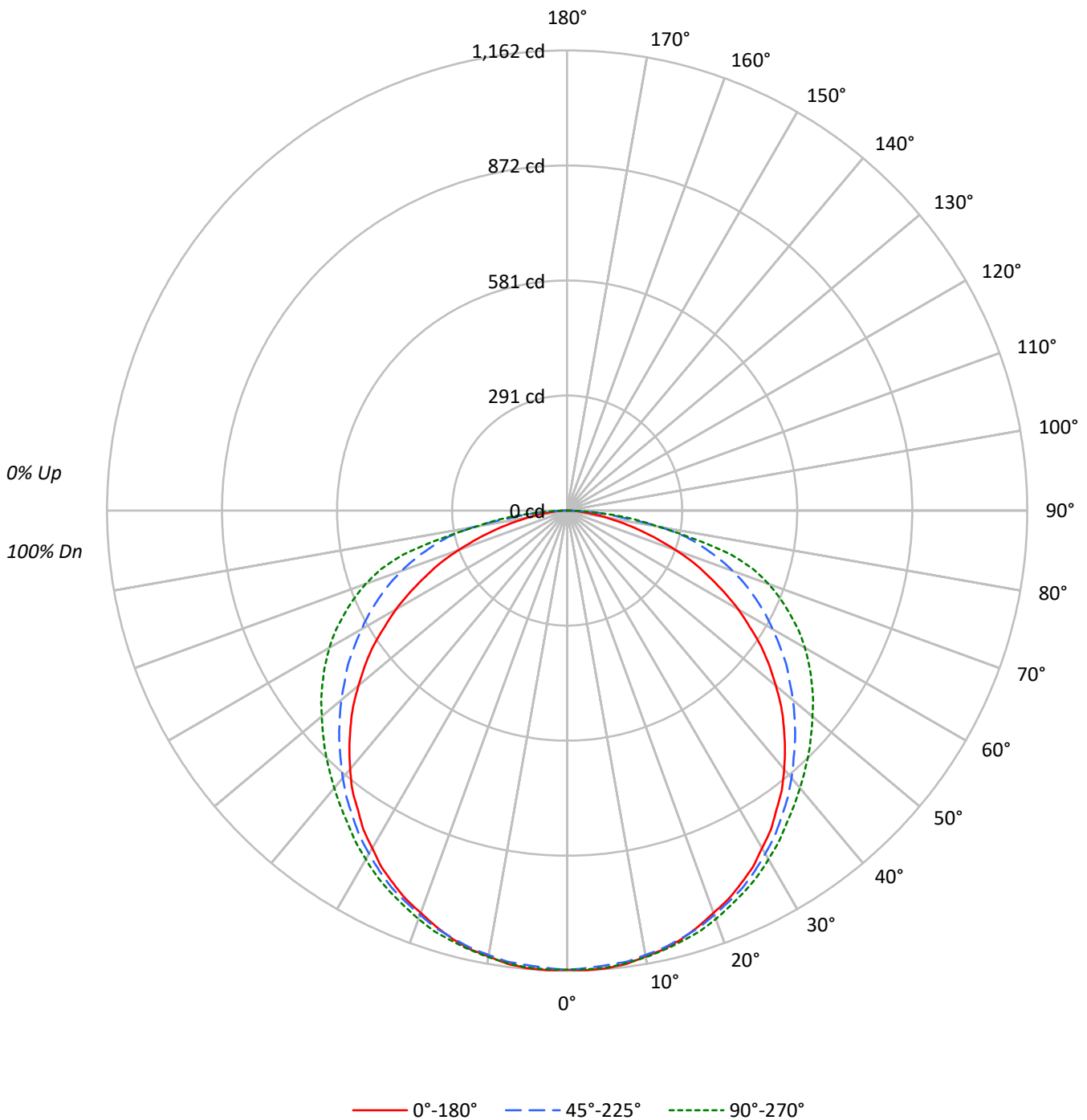
Input Watts (W): 37.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474236

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474236

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L835-CD1-U

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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	1560	1560	1560
5°	1566	1556	1564
10°	1562	1557	1564
15°	1559	1557	1567
20°	1548	1556	1571
25°	1542	1559	1575
30°	1529	1554	1580
35°	1514	1550	1586
40°	1497	1548	1606
45°	1472	1549	1643
50°	1440	1558	1692
55°	1403	1583	1768
60°	1344	1614	1865
65°	1258	1671	1980
70°	1144	1749	2129
75°	970	1845	2226
80°	766	1857	1799
85°	565	1413	1582



TEST NUMBER: P474236

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.0
10°-20°	316.6	8.6
20°-30°	484.1	13.1
30°-40°	591.8	16.0
40°-50°	630.8	17.1
50°-60°	603.1	16.4
60°-70°	510.9	13.9
70°-80°	343.4	9.3
80°-90°	96.9	2.6
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°	910.8	24.7
0°-40°	1502.6	40.7
0°-60°	2736.5	74.2
0°-90°	3687.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3687.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1160	1158	1152	1158	1158	110
15°	1120	1120	1118	1127	1125	316
25°	1039	1043	1050	1059	1061	479
35°	922	929	944	962	966	577
45°	774	787	814	849	863	597
55°	598	620	675	728	754	533
65°	395	435	525	594	622	392
75°	186	254	355	415	428	200
85°	37	75	92	99	102	45
90°	0	0	0	0	0	



TEST NUMBER: P474236

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1159.7	1159.7	1159.7	1159.7	1159.7
2.5°	1161.6	1161.6	1156.1	1159.7	1159.7
5°	1159.7	1157.9	1152.4	1157.9	1157.9
7.5°	1154.3	1152.4	1148.8	1154.3	1152.4
10°	1143.3	1143.3	1139.6	1145.1	1145.1
12.5°	1134.1	1132.3	1130.5	1137.8	1136.0
15°	1119.5	1119.5	1117.7	1126.8	1125.0
17.5°	1101.2	1103.0	1104.8	1112.2	1114.0
20°	1081.0	1084.7	1086.5	1097.5	1097.5
22.5°	1062.7	1064.6	1068.2	1079.2	1079.2
25°	1039.0	1042.6	1049.9	1059.1	1060.9
27.5°	1015.2	1017.0	1026.1	1039.0	1040.8
30°	984.1	989.5	1000.5	1015.2	1017.0
32.5°	956.6	962.1	974.9	989.5	993.2
35°	921.8	929.1	943.8	962.1	965.8
37.5°	890.7	896.2	914.5	934.6	940.1
40°	852.5	863.3	881.6	905.4	914.5
42.5°	814.0	825.0	847.0	877.9	888.9
45°	773.8	786.6	814.0	848.8	863.3
47.5°	733.5	748.2	779.3	819.5	836.0
50°	687.8	706.1	744.5	790.2	808.5
52.5°	643.8	665.8	707.9	759.1	782.9
55°	598.1	620.0	674.9	728.0	753.6
57.5°	546.8	576.1	636.5	696.9	724.4
60°	499.4	526.7	599.9	665.8	693.2
62.5°	448.2	484.8	563.3	632.9	660.3
65°	395.1	435.4	524.9	594.4	621.9
67.5°	347.5	391.5	486.6	556.0	583.4
70°	290.8	345.7	444.5	513.9	541.3
72.5°	237.7	298.1	400.6	468.3	493.9
75°	186.5	254.2	354.9	415.3	428.1
77.5°	139.1	210.3	307.3	332.9	323.7
80°	98.8	168.4	239.6	226.8	232.2
82.5°	64.1	128.1	148.2	168.4	173.7
85°	36.6	75.0	91.5	98.8	102.5
87.5°	16.5	27.5	36.6	36.6	34.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)