

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: P474239

Luminaire Tested: **24CZ2-75VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474239
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-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: 5017.7 lumens
Efficiency: N/A
Efficacy: 97.6 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

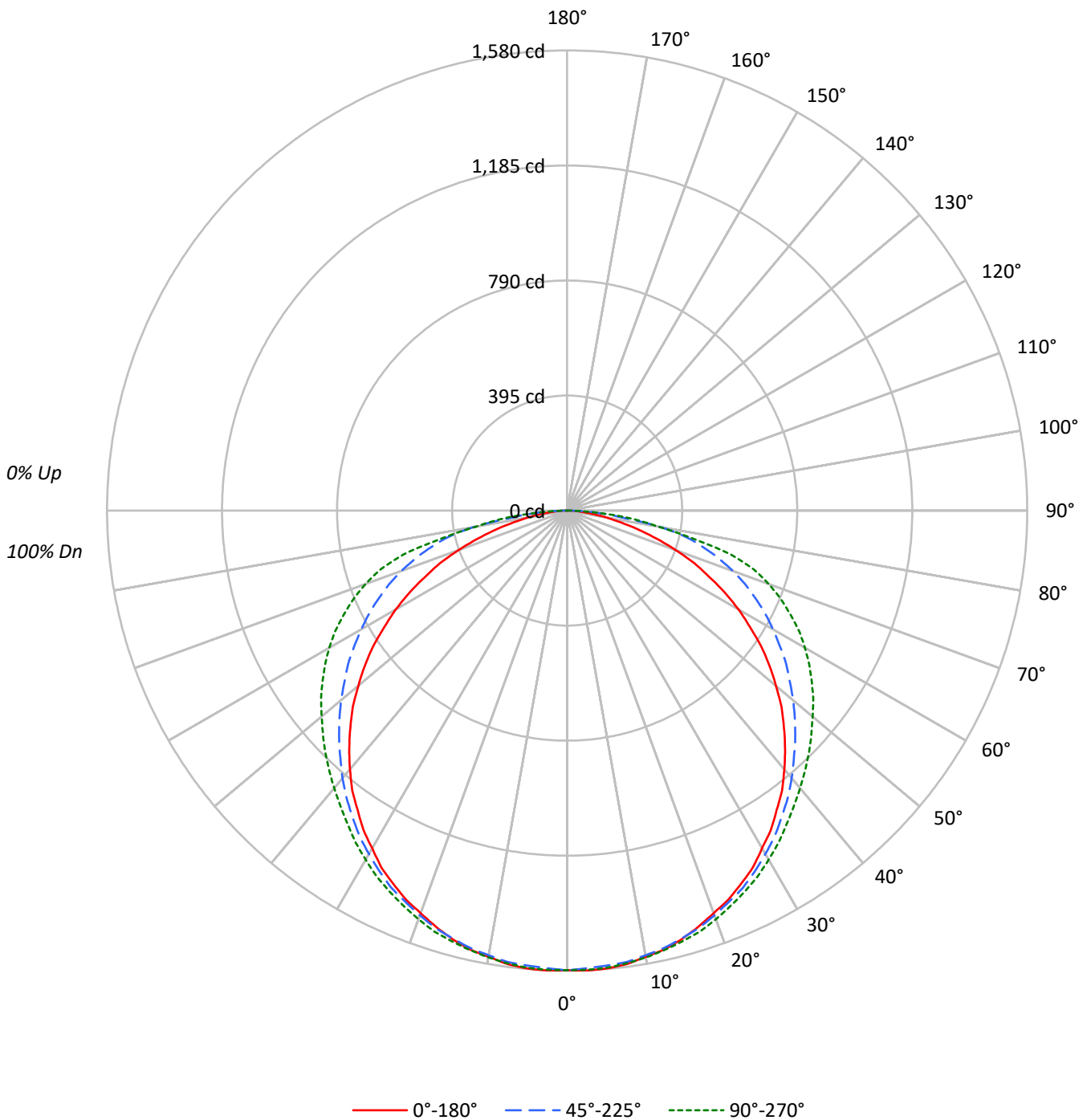
Input Watts (W): 51.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474239

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474239

CATALOG NUMBER: 24CZ2-75VHE-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°	2123	2123	2123
5°	2131	2118	2128
10°	2125	2119	2129
15°	2122	2118	2132
20°	2106	2117	2138
25°	2099	2121	2143
30°	2080	2115	2150
35°	2060	2109	2158
40°	2037	2107	2186
45°	2003	2108	2235
50°	1959	2120	2303
55°	1909	2154	2405
60°	1829	2197	2538
65°	1712	2274	2694
70°	1557	2380	2898
75°	1319	2510	3028
80°	1042	2526	2448
85°	769	1922	2152



TEST NUMBER: P474239

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	3.0
10°-20°	430.8	8.6
20°-30°	658.7	13.1
30°-40°	805.3	16.0
40°-50°	858.3	17.1
50°-60°	820.6	16.4
60°-70°	695.2	13.9
70°-80°	467.2	9.3
80°-90°	131.8	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°	1239.2	24.7
0°-40°	2044.5	40.7
0°-60°	3723.5	74.2
0°-90°	5017.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5017.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1578	1576	1568	1576	1576	150
15°	1523	1523	1521	1533	1531	429
25°	1414	1419	1429	1441	1444	652
35°	1254	1264	1284	1309	1314	786
45°	1053	1070	1108	1155	1175	812
55°	814	844	918	991	1025	725
65°	538	592	714	809	846	534
75°	254	346	483	565	582	272
85°	50	102	124	134	139	62
90°	0	0	0	0	0	



TEST NUMBER: P474239

CATALOG NUMBER: 24CZ2-75VHE-RDP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1578.0	1578.0	1578.0	1578.0	1578.0
2.5°	1580.5	1580.5	1573.0	1578.0	1578.0
5°	1578.0	1575.5	1568.0	1575.5	1575.5
7.5°	1570.5	1568.0	1563.1	1570.5	1568.0
10°	1555.6	1555.6	1550.6	1558.1	1558.1
12.5°	1543.1	1540.6	1538.2	1548.1	1545.6
15°	1523.2	1523.2	1520.7	1533.2	1530.7
17.5°	1498.3	1500.8	1503.3	1513.3	1515.7
20°	1470.9	1475.9	1478.4	1493.3	1493.3
22.5°	1446.0	1448.5	1453.5	1468.4	1468.4
25°	1413.7	1418.6	1428.6	1441.0	1443.5
27.5°	1381.3	1383.8	1396.2	1413.7	1416.1
30°	1338.9	1346.4	1361.4	1381.3	1383.8
32.5°	1301.6	1309.1	1326.5	1346.4	1351.4
35°	1254.3	1264.2	1284.2	1309.1	1314.0
37.5°	1212.0	1219.4	1244.3	1271.7	1279.2
40°	1159.9	1174.6	1199.5	1231.9	1244.3
42.5°	1107.6	1122.6	1152.4	1194.5	1209.5
45°	1052.8	1070.3	1107.6	1154.9	1174.6
47.5°	998.0	1018.0	1060.3	1115.1	1137.5
50°	935.8	960.7	1013.0	1075.2	1100.1
52.5°	876.0	905.9	963.2	1032.9	1065.3
55°	813.8	843.7	918.4	990.6	1025.4
57.5°	744.1	783.9	866.1	948.2	985.6
60°	679.6	716.7	816.3	905.9	943.3
62.5°	609.8	659.6	766.5	861.1	898.4
65°	537.6	592.4	714.2	808.8	846.1
67.5°	472.9	532.6	662.1	756.5	793.9
70°	395.7	470.4	604.9	699.2	736.6
72.5°	323.5	405.6	545.1	637.2	672.1
75°	253.7	345.9	482.8	565.0	582.4
77.5°	189.3	286.1	418.1	453.0	440.5
80°	134.5	229.1	326.0	308.5	316.0
82.5°	87.2	174.3	201.7	229.1	236.3
85°	49.8	102.1	124.5	134.5	139.4
87.5°	22.4	37.4	49.8	49.8	47.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)