

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: P474336

Luminaire Tested: **24CZ2-55VHE-RDP-UNV-L850-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474336  
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-L850-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3757.8 lumens  
Efficiency: N/A  
Efficacy: 101.3 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

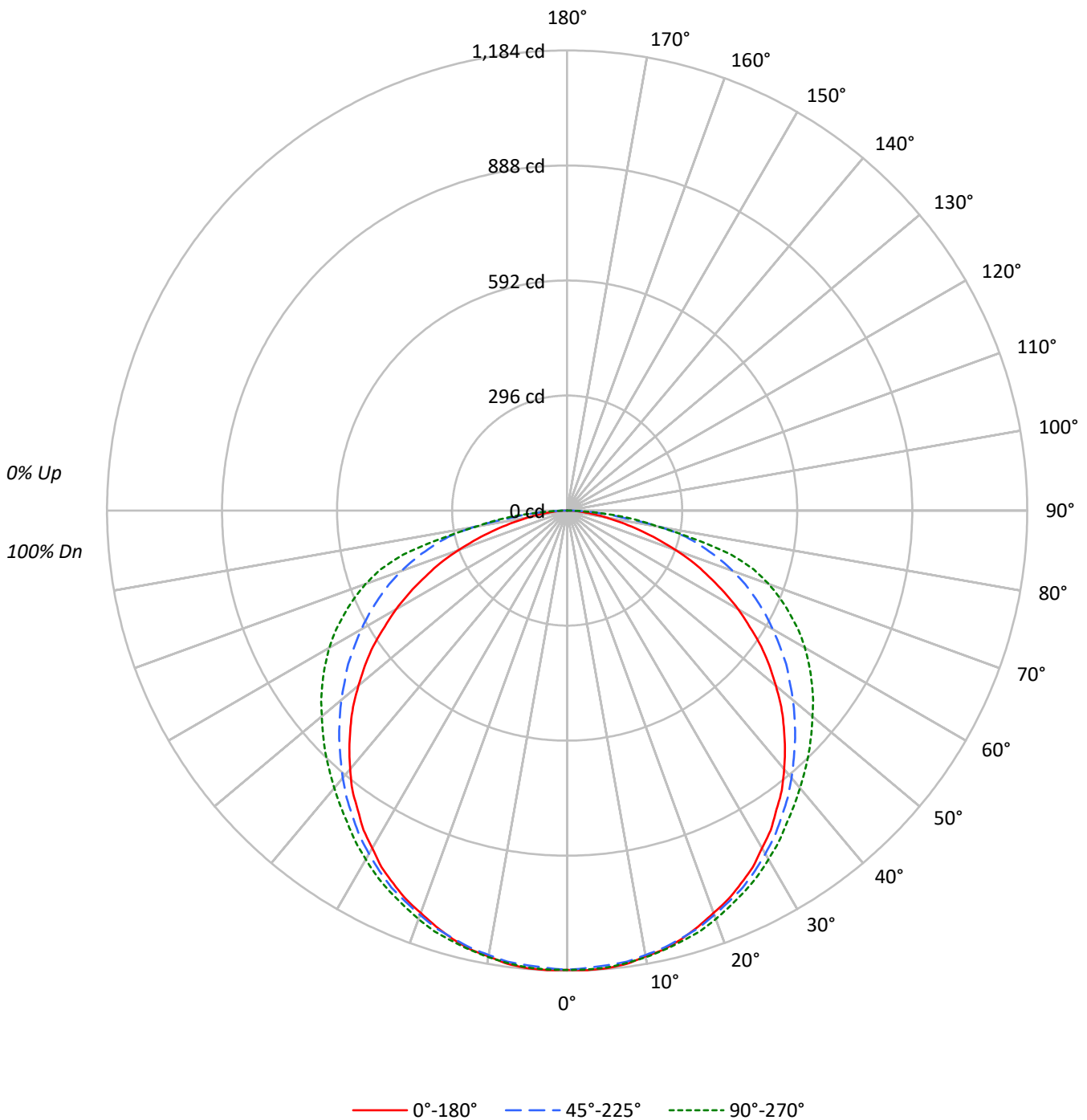
Input Watts (W): 37.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P474336

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P474336

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L850-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°	1590	1590	1590
5°	1596	1586	1594
10°	1592	1587	1594
15°	1589	1586	1597
20°	1577	1585	1601
25°	1572	1588	1605
30°	1558	1584	1610
35°	1543	1580	1616
40°	1526	1578	1637
45°	1500	1578	1674
50°	1467	1588	1725
55°	1430	1613	1802
60°	1369	1645	1901
65°	1282	1703	2018
70°	1166	1782	2170
75°	988	1880	2268
80°	780	1891	1834
85°	576	1439	1612



TEST NUMBER: P474336

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L850-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	3.0
10°-20°	322.6	8.6
20°-30°	493.3	13.1
30°-40°	603.1	16.0
40°-50°	642.8	17.1
50°-60°	614.6	16.4
60°-70°	520.6	13.9
70°-80°	349.9	9.3
80°-90°	98.7	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°	928.1	24.7
0°-40°	1531.1	40.7
0°-60°	2788.5	74.2
0°-90°	3757.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3757.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1182	1180	1174	1180	1180	112
15°	1141	1141	1139	1148	1146	322
25°	1059	1062	1070	1079	1081	488
35°	939	947	962	980	984	588
45°	788	802	830	865	880	608
55°	609	632	688	742	768	543
65°	403	444	535	606	634	400
75°	190	259	362	423	436	204
85°	37	76	93	101	104	46
90°	0	0	0	0	0	



TEST NUMBER: P474336

CATALOG NUMBER: 24CZ2-55VHE-RDP-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1181.8	1181.8	1181.8	1181.8	1181.8
2.5°	1183.6	1183.6	1178.0	1181.8	1181.8
5°	1181.8	1179.9	1174.3	1179.9	1179.9
7.5°	1176.2	1174.3	1170.6	1176.2	1174.3
10°	1165.0	1165.0	1161.3	1166.9	1166.9
12.5°	1155.7	1153.8	1151.9	1159.4	1157.5
15°	1140.8	1140.8	1138.9	1148.2	1146.3
17.5°	1122.1	1124.0	1125.8	1133.3	1135.2
20°	1101.6	1105.3	1107.2	1118.4	1118.4
22.5°	1082.9	1084.8	1088.5	1099.7	1099.7
25°	1058.7	1062.4	1069.9	1079.2	1081.1
27.5°	1034.5	1036.3	1045.6	1058.7	1060.6
30°	1002.7	1008.3	1019.5	1034.5	1036.3
32.5°	974.8	980.4	993.4	1008.3	1012.1
35°	939.3	946.8	961.7	980.4	984.1
37.5°	907.6	913.2	931.9	952.4	958.0
40°	868.7	879.7	898.3	922.6	931.9
42.5°	829.5	840.7	863.1	894.6	905.8
45°	788.5	801.5	829.5	864.9	879.7
47.5°	747.4	762.4	794.1	835.1	851.9
50°	700.8	719.5	758.6	805.3	823.9
52.5°	656.1	678.4	721.3	773.6	797.8
55°	609.4	631.8	687.8	741.9	768.0
57.5°	557.2	587.1	648.6	710.1	738.1
60°	508.9	536.7	611.3	678.4	706.4
62.5°	456.7	494.0	574.0	644.9	672.9
65°	402.6	443.7	534.8	605.7	633.7
67.5°	354.1	398.9	495.9	566.6	594.5
70°	296.3	352.3	453.0	523.7	551.6
72.5°	242.2	303.8	408.2	477.2	503.3
75°	190.0	259.0	361.6	423.1	436.2
77.5°	141.7	214.3	313.1	339.2	329.9
80°	100.7	171.6	244.1	231.1	236.7
82.5°	65.3	130.5	151.1	171.6	177.0
85°	37.3	76.5	93.2	100.7	104.4
87.5°	16.8	28.0	37.3	37.3	35.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)