

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: P474294

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474294
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6832.8 lumens
Efficiency: N/A
Efficacy: 96.1 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

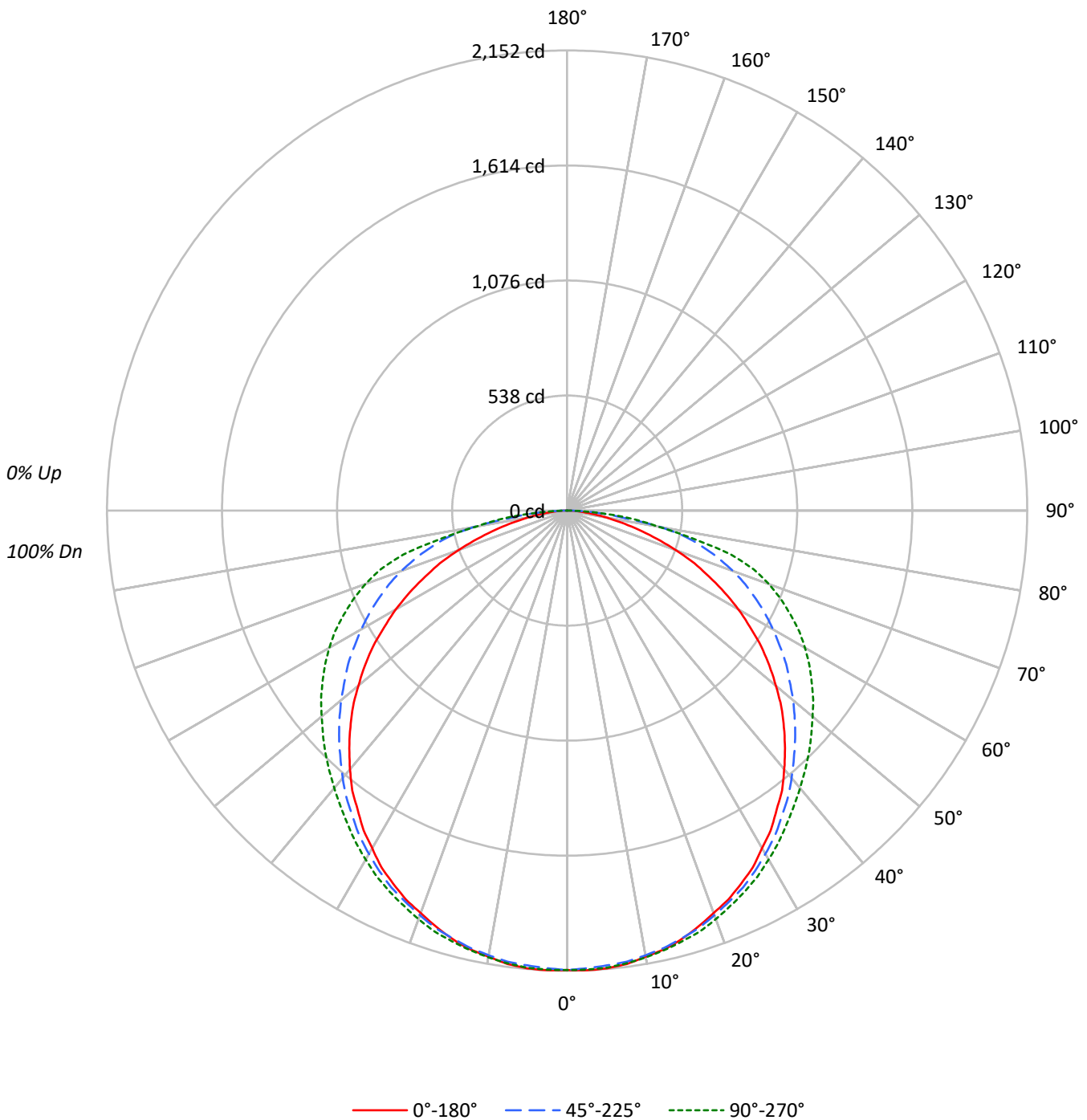
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474294

CATALOG NUMBER: 24CZ2-100VHE-RDP-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474294

CATALOG NUMBER: 24CZ2-100VHE-RDP-UNV-L840-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°	2891	2891	2891
5°	2902	2884	2898
10°	2894	2885	2899
15°	2889	2885	2903
20°	2868	2883	2912
25°	2858	2888	2918
30°	2833	2880	2928
35°	2805	2872	2939
40°	2774	2869	2976
45°	2728	2870	3044
50°	2667	2887	3136
55°	2600	2934	3276
60°	2490	2991	3457
65°	2331	3096	3668
70°	2120	3240	3946
75°	1796	3418	4123
80°	1419	3439	3334
85°	1047	2617	2932



TEST NUMBER: P474294

CATALOG NUMBER: 24CZ2-100VHE-RDP-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.8	3.0
10°-20°	586.6	8.6
20°-30°	897.1	13.1
30°-40°	1096.6	16.0
40°-50°	1168.8	17.1
50°-60°	1117.5	16.4
60°-70°	946.7	13.9
70°-80°	636.2	9.3
80°-90°	179.5	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°	1687.5	24.7
0°-40°	2784.1	40.7
0°-60°	5070.4	74.2
0°-90°	6832.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6832.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2149	2146	2135	2146	2146	204
15°	2074	2074	2071	2088	2084	585
25°	1925	1932	1945	1962	1966	887
35°	1708	1722	1749	1783	1789	1070
45°	1434	1457	1508	1573	1600	1106
55°	1108	1149	1251	1349	1396	987
65°	732	807	972	1101	1152	727
75°	346	471	658	769	793	370
85°	68	139	170	183	190	84
90°	0	0	0	0	0	



TEST NUMBER: P474294

CATALOG NUMBER: 24CZ2-100VHE-RDP-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2148.8	2148.8	2148.8	2148.8	2148.8
2.5°	2152.2	2152.2	2142.1	2148.8	2148.8
5°	2148.8	2145.5	2135.3	2145.5	2145.5
7.5°	2138.7	2135.3	2128.5	2138.7	2135.3
10°	2118.3	2118.3	2111.5	2121.7	2121.7
12.5°	2101.4	2098.0	2094.6	2108.2	2104.8
15°	2074.2	2074.2	2070.9	2087.8	2084.4
17.5°	2040.3	2043.7	2047.1	2060.7	2064.1
20°	2003.0	2009.8	2013.2	2033.6	2033.6
22.5°	1969.1	1972.5	1979.3	1999.6	1999.6
25°	1925.0	1931.8	1945.4	1962.3	1965.7
27.5°	1881.0	1884.4	1901.3	1925.0	1928.4
30°	1823.3	1833.5	1853.8	1881.0	1884.4
32.5°	1772.4	1782.6	1806.4	1833.5	1840.3
35°	1708.0	1721.6	1748.7	1782.6	1789.4
37.5°	1650.4	1660.5	1694.5	1731.8	1741.9
40°	1579.5	1599.5	1633.4	1677.5	1694.5
42.5°	1508.3	1528.6	1569.3	1626.6	1647.0
45°	1433.7	1457.4	1508.3	1572.7	1599.5
47.5°	1359.1	1386.2	1443.9	1518.5	1549.0
50°	1274.3	1308.2	1379.4	1464.2	1498.1
52.5°	1192.9	1233.6	1311.6	1406.6	1450.6
55°	1108.2	1148.9	1250.6	1348.9	1396.4
57.5°	1013.2	1067.5	1179.4	1291.3	1342.1
60°	925.4	975.9	1111.6	1233.6	1284.5
62.5°	830.4	898.3	1043.7	1172.6	1223.5
65°	732.1	806.7	972.5	1101.4	1152.2
67.5°	643.9	725.3	901.7	1030.2	1081.0
70°	538.8	640.6	823.7	952.2	1003.0
72.5°	440.5	552.4	742.3	867.7	915.2
75°	345.5	471.0	657.5	769.4	793.1
77.5°	257.7	389.6	569.3	616.8	599.9
80°	183.1	312.0	443.9	420.1	430.3
82.5°	118.7	237.4	274.7	312.0	321.8
85°	67.8	139.0	169.5	183.1	189.9
87.5°	30.5	50.9	67.8	67.8	64.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)