

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: P475020

Luminaire Tested: **22CZ2-105VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475020
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-105VHE-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6809.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

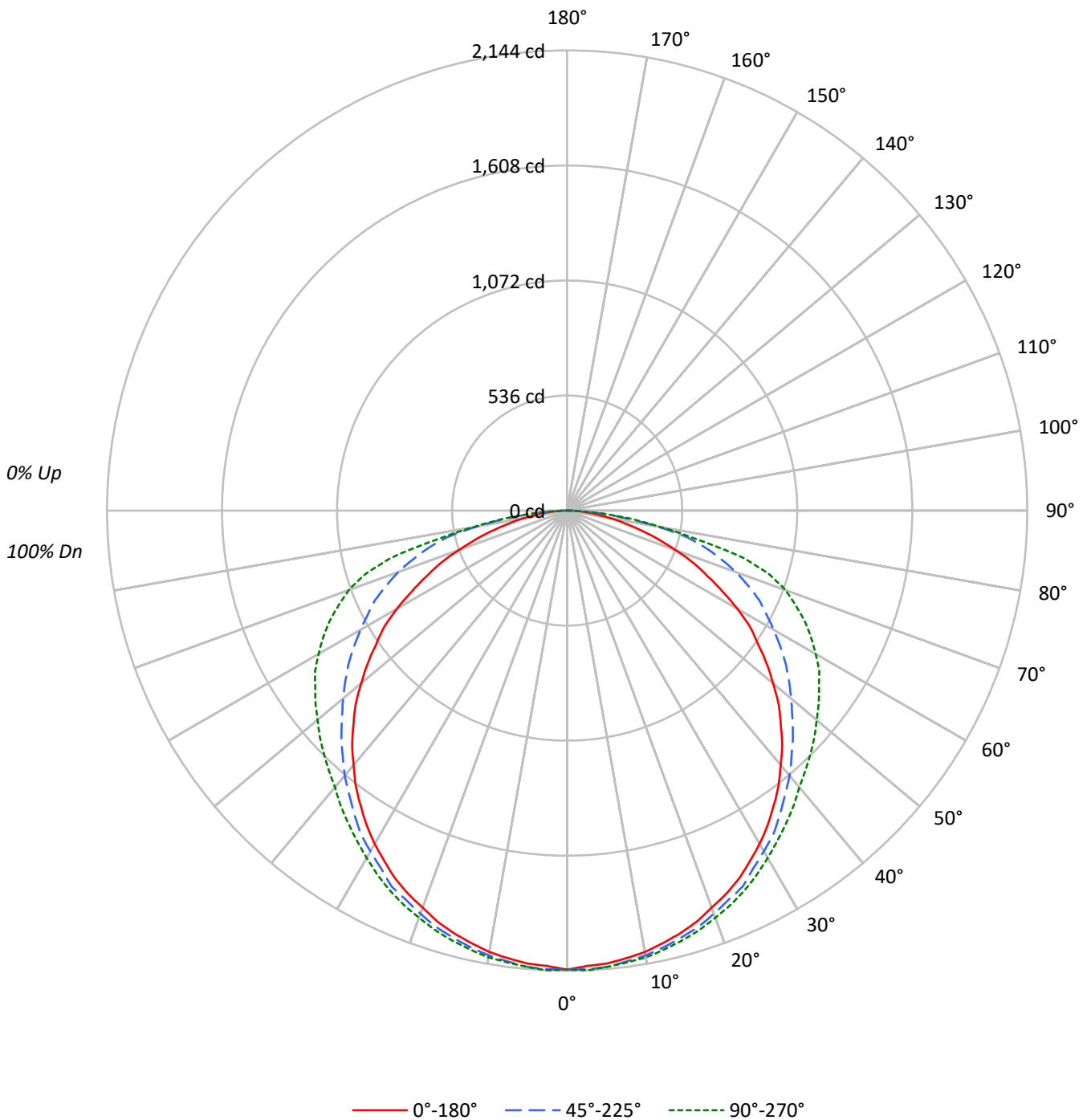
Input Watts (W): 79.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	5755	5755	5755
5°	5723	5764	5764
10°	5707	5749	5776
15°	5680	5735	5777
20°	5637	5722	5781
25°	5622	5741	5801
30°	5572	5696	5806
35°	5512	5677	5842
40°	5437	5665	5911
45°	5357	5662	6099
50°	5243	5703	6353
55°	5100	5828	6720
60°	4934	5984	7198
65°	4592	6285	7784
70°	4217	6583	8513
75°	3700	6924	8802
80°	3186	6595	6912
85°	2782	4795	5255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.3	3.0
10°-20°	580.9	8.5
20°-30°	886.3	13.0
30°-40°	1082.1	15.9
40°-50°	1157.0	17.0
50°-60°	1116.8	16.4
60°-70°	961.4	14.1
70°-80°	650.5	9.6
80°-90°	171.7	2.5
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°	1669.5	24.5
0°-40°	2751.6	40.4
0°-60°	5025.4	73.8
0°-90°	6809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2139	2139	2139	2139	2139	
5°	2119	2124	2134	2134	2134	201
15°	2039	2044	2059	2068	2074	575
25°	1893	1903	1934	1944	1954	871
35°	1678	1693	1728	1763	1778	1050
45°	1408	1432	1488	1563	1603	1087
55°	1087	1122	1242	1367	1432	974
65°	721	791	987	1142	1222	717
75°	356	471	666	801	847	382
85°	90	125	155	160	170	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2138.7	2138.7	2138.7	2138.7	2138.7
2.5°	2123.8	2128.8	2138.7	2138.7	2143.7
5°	2118.8	2123.8	2133.7	2133.7	2133.7
7.5°	2103.9	2108.8	2118.8	2123.8	2123.8
10°	2088.4	2093.9	2103.9	2108.8	2113.8
12.5°	2063.5	2068.5	2083.5	2093.9	2093.9
15°	2038.7	2043.6	2058.6	2068.5	2073.5
17.5°	2008.3	2018.8	2033.7	2043.6	2048.6
20°	1968.5	1978.4	1998.3	2013.8	2018.8
22.5°	1933.6	1943.6	1963.5	1978.4	1988.4
25°	1893.3	1903.3	1933.6	1943.6	1953.6
27.5°	1843.1	1853.5	1878.4	1898.3	1913.2
30°	1793.3	1803.2	1833.1	1858.5	1868.4
32.5°	1738.0	1753.0	1788.3	1808.2	1823.2
35°	1677.8	1692.7	1728.1	1762.9	1778.4
37.5°	1618.1	1633.0	1667.9	1713.2	1733.1
40°	1547.9	1567.8	1612.6	1672.8	1682.8
42.5°	1482.7	1507.6	1547.9	1618.1	1643.0
45°	1407.6	1432.4	1487.7	1562.8	1602.7
47.5°	1337.4	1362.3	1422.5	1512.6	1562.8
50°	1252.3	1287.1	1362.3	1467.8	1517.6
52.5°	1172.1	1202.0	1302.5	1417.5	1477.7
55°	1087.0	1121.9	1242.3	1367.2	1432.4
57.5°	1011.9	1041.7	1177.1	1317.5	1392.6
60°	916.8	956.6	1111.9	1262.2	1337.4
62.5°	816.3	876.5	1046.7	1202.0	1282.1
65°	721.2	791.4	987.0	1141.8	1222.4
67.5°	636.1	711.2	911.8	1077.1	1152.2
70°	536.0	631.1	836.7	996.9	1082.0
72.5°	446.0	551.0	751.6	911.8	987.0
75°	355.9	470.8	666.0	801.3	846.6
77.5°	275.2	385.7	570.9	611.2	616.2
80°	205.6	305.6	425.6	430.5	446.0
82.5°	140.4	215.5	275.2	300.6	305.6
85°	90.1	125.4	155.3	160.3	170.2
87.5°	40.3	45.3	55.2	50.3	50.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)