

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: P475049

Luminaire Tested: **22CZ2-105VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475049
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-L835-CD1-U
Description: 2'X2' 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: 7056.0 lumens
Efficiency: N/A
Efficacy: 88.8 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

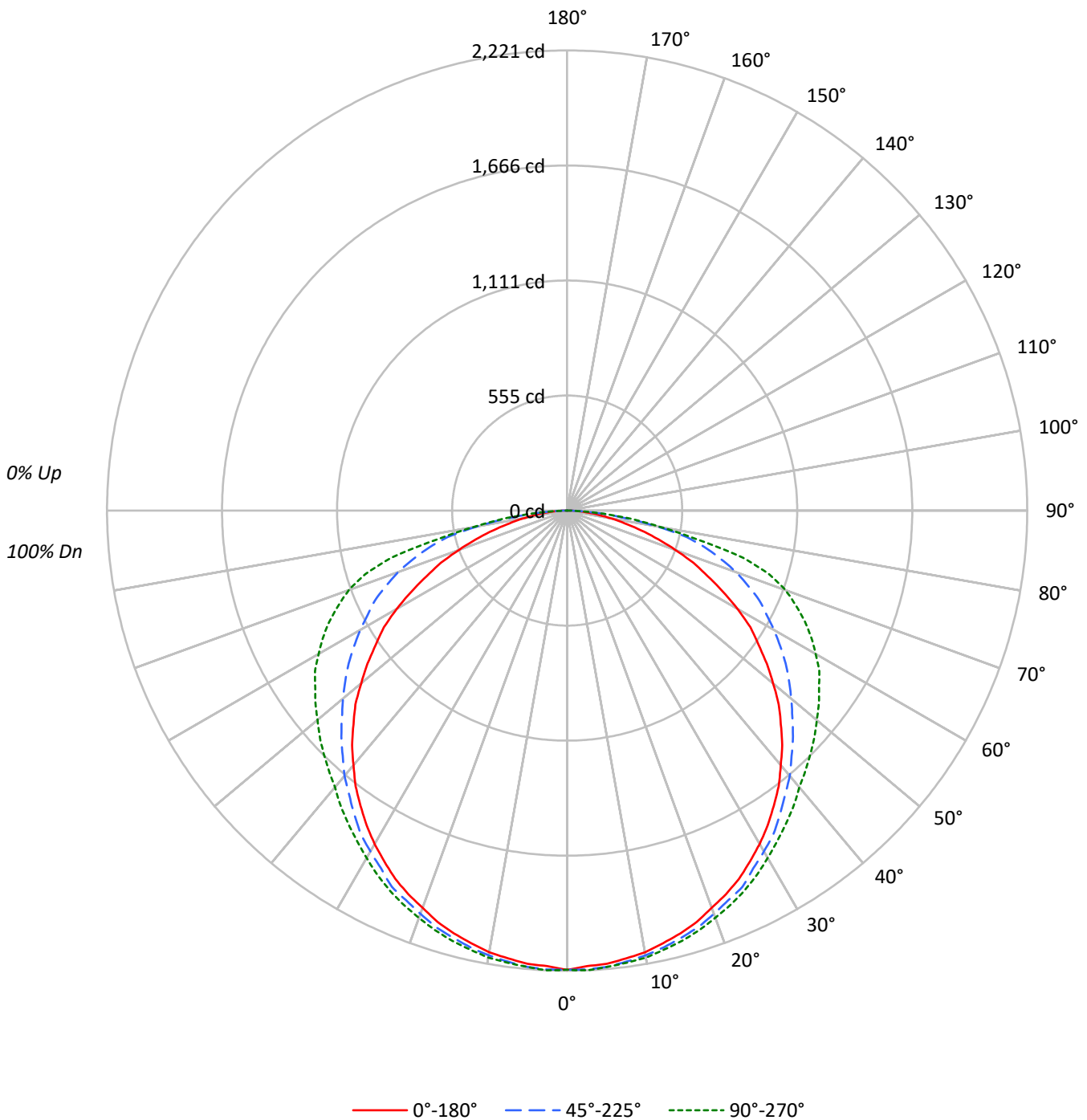
Input Watts (W): 79.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5964	5964	5964
5°	5931	5973	5973
10°	5914	5957	5986
15°	5886	5943	5986
20°	5842	5930	5991
25°	5826	5950	6011
30°	5774	5903	6016
35°	5712	5883	6054
40°	5635	5870	6126
45°	5551	5867	6320
50°	5433	5910	6584
55°	5285	6040	6964
60°	5113	6201	7459
65°	4759	6513	8066
70°	4371	6821	8822
75°	3834	7175	9121
80°	3301	6834	7161
85°	2884	4968	5446



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.7	3.0
10°-20°	602.0	8.5
20°-30°	918.4	13.0
30°-40°	1121.4	15.9
40°-50°	1199.0	17.0
50°-60°	1157.3	16.4
60°-70°	996.3	14.1
70°-80°	674.1	9.6
80°-90°	177.9	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°	1730.0	24.5
0°-40°	2851.4	40.4
0°-60°	5207.7	73.8
0°-90°	7056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2216	2216	2216	2216	2216	
5°	2196	2201	2211	2211	2211	209
15°	2113	2118	2133	2144	2149	596
25°	1962	1972	2004	2014	2024	903
35°	1739	1754	1791	1827	1843	1088
45°	1459	1484	1542	1620	1661	1126
55°	1126	1163	1287	1417	1484	1009
65°	747	820	1023	1183	1267	743
75°	369	488	690	830	877	395
85°	93	130	161	166	176	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2216.3	2216.3	2216.3	2216.3	2216.3
2.5°	2200.8	2206.0	2216.3	2216.3	2221.4
5°	2195.6	2200.8	2211.1	2211.1	2211.1
7.5°	2180.2	2185.3	2195.6	2200.8	2200.8
10°	2164.2	2169.9	2180.2	2185.3	2190.5
12.5°	2138.4	2143.6	2159.0	2169.9	2169.9
15°	2112.6	2117.8	2133.2	2143.6	2148.7
17.5°	2081.1	2092.0	2107.4	2117.8	2122.9
20°	2039.9	2050.2	2070.8	2086.8	2092.0
22.5°	2003.8	2014.1	2034.7	2050.2	2060.5
25°	1962.0	1972.3	2003.8	2014.1	2024.4
27.5°	1909.9	1920.7	1946.5	1967.2	1982.6
30°	1858.3	1868.6	1899.6	1925.9	1936.2
32.5°	1801.1	1816.6	1853.2	1873.8	1889.3
35°	1738.7	1754.1	1790.8	1826.9	1842.9
37.5°	1676.8	1692.3	1728.4	1775.3	1795.9
40°	1604.1	1624.7	1671.1	1733.5	1743.8
42.5°	1536.5	1562.3	1604.1	1676.8	1702.6
45°	1458.6	1484.4	1541.6	1619.5	1660.8
47.5°	1385.9	1411.7	1474.1	1567.4	1619.5
50°	1297.7	1333.8	1411.7	1521.0	1572.6
52.5°	1214.6	1245.6	1349.8	1468.9	1531.3
55°	1126.4	1162.6	1287.4	1416.8	1484.4
57.5°	1048.6	1079.5	1219.8	1365.3	1443.1
60°	950.1	991.3	1152.2	1308.0	1385.9
62.5°	845.9	908.3	1084.7	1245.6	1328.6
65°	747.4	820.1	1022.8	1183.2	1266.7
67.5°	659.2	737.0	944.9	1116.1	1194.0
70°	555.5	654.0	867.0	1033.1	1121.3
72.5°	462.1	571.0	778.8	944.9	1022.8
75°	368.8	487.9	690.1	830.4	877.3
77.5°	285.2	399.7	591.6	633.4	638.5
80°	213.0	316.7	441.0	446.1	462.1
82.5°	145.4	223.3	285.2	311.5	316.7
85°	93.4	130.0	160.9	166.1	176.4
87.5°	41.8	46.9	57.3	52.1	52.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)