

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: P474242

Luminaire Tested: **24CZ2-90VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474242
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-90VHE-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: 6083.0 lumens
Efficiency: N/A
Efficacy: 94.9 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

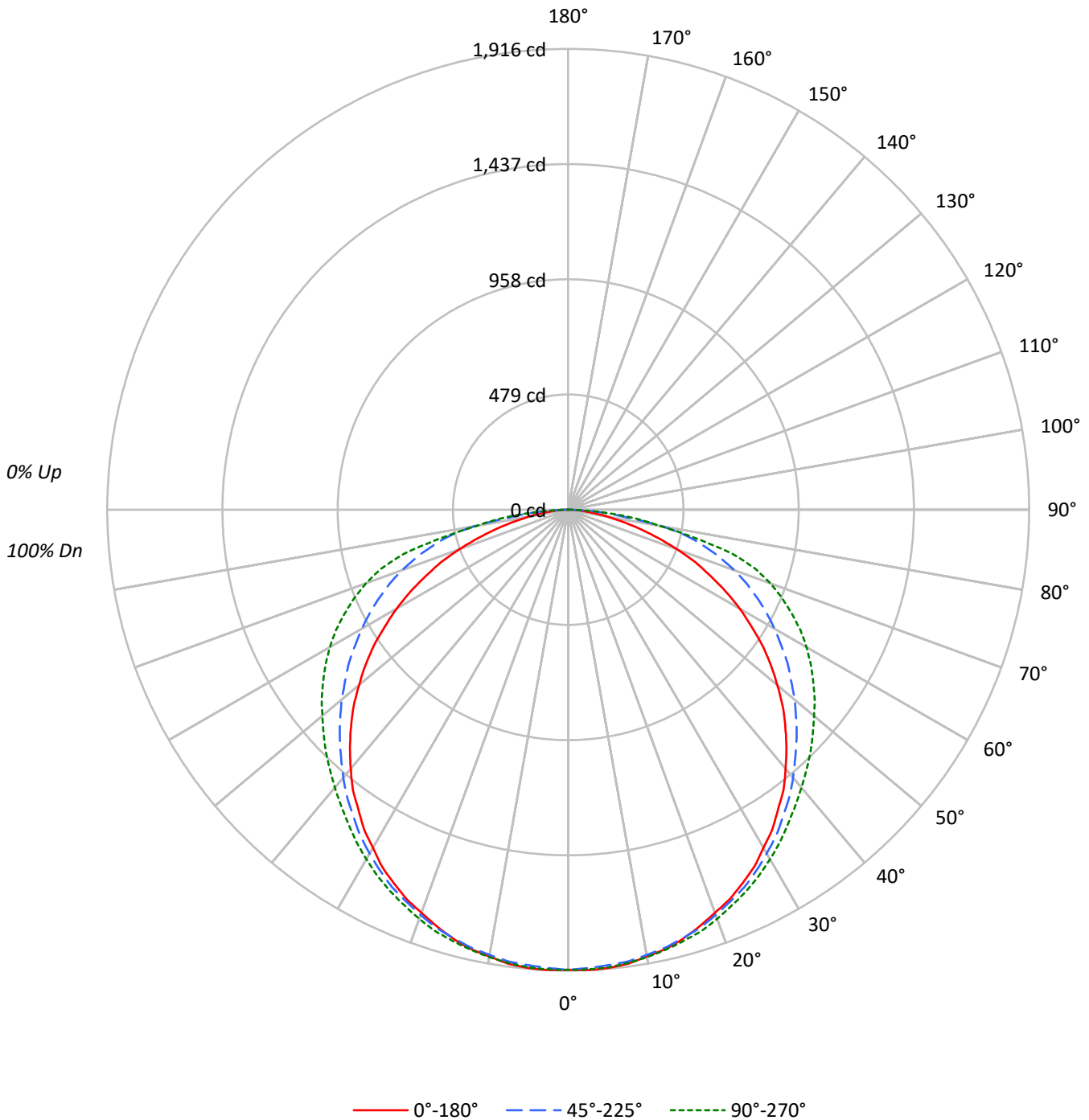
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2574	2574	2574
5°	2584	2568	2580
10°	2577	2568	2581
15°	2572	2568	2585
20°	2553	2566	2592
25°	2544	2571	2598
30°	2522	2564	2606
35°	2498	2557	2617
40°	2470	2554	2650
45°	2429	2555	2710
50°	2375	2571	2792
55°	2314	2612	2916
60°	2217	2663	3077
65°	2075	2756	3266
70°	1887	2885	3513
75°	1599	3043	3671
80°	1263	3062	2968
85°	932	2330	2611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	3.0
10°-20°	522.3	8.6
20°-30°	798.6	13.1
30°-40°	976.2	16.0
40°-50°	1040.6	17.1
50°-60°	994.9	16.4
60°-70°	842.8	13.9
70°-80°	566.4	9.3
80°-90°	159.8	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°	1502.3	24.7
0°-40°	2478.6	40.7
0°-60°	4514.0	74.2
0°-90°	6083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1913	1913	1913	1913	1913	
5°	1913	1910	1901	1910	1910	182
15°	1847	1847	1844	1859	1856	521
25°	1714	1720	1732	1747	1750	790
35°	1521	1533	1557	1587	1593	953
45°	1276	1298	1343	1400	1424	984
55°	987	1023	1113	1201	1243	879
65°	652	718	866	980	1026	647
75°	308	419	585	685	706	329
85°	60	124	151	163	169	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1913.0	1913.0	1913.0	1913.0	1913.0
2.5°	1916.0	1916.0	1907.0	1913.0	1913.0
5°	1913.0	1910.0	1901.0	1910.0	1910.0
7.5°	1904.0	1901.0	1894.9	1904.0	1901.0
10°	1885.9	1885.9	1879.8	1888.9	1888.9
12.5°	1870.8	1867.7	1864.7	1876.8	1873.8
15°	1846.6	1846.6	1843.6	1858.7	1855.7
17.5°	1816.4	1819.4	1822.5	1834.5	1837.6
20°	1783.2	1789.3	1792.3	1810.4	1810.4
22.5°	1753.0	1756.0	1762.1	1780.2	1780.2
25°	1713.8	1719.8	1731.9	1747.0	1750.0
27.5°	1674.5	1677.6	1692.7	1713.8	1716.8
30°	1623.2	1632.3	1650.4	1674.5	1677.6
32.5°	1577.9	1587.0	1608.1	1632.3	1638.3
35°	1520.6	1532.7	1556.8	1587.0	1593.0
37.5°	1469.3	1478.3	1508.5	1541.7	1550.8
40°	1406.2	1424.0	1454.2	1493.4	1508.5
42.5°	1342.8	1360.9	1397.1	1448.1	1466.2
45°	1276.4	1297.5	1342.8	1400.1	1424.0
47.5°	1209.9	1234.1	1285.4	1351.8	1379.0
50°	1134.5	1164.7	1228.1	1303.5	1333.7
52.5°	1062.0	1098.2	1167.7	1252.2	1291.5
55°	986.6	1022.8	1113.3	1200.9	1243.2
57.5°	902.0	950.3	1049.9	1149.6	1194.9
60°	823.8	868.8	989.6	1098.2	1143.5
62.5°	739.3	799.7	929.2	1043.9	1089.2
65°	651.8	718.2	865.8	980.5	1025.8
67.5°	573.3	645.7	802.7	917.1	962.4
70°	479.7	570.3	733.3	847.7	893.0
72.5°	392.1	491.8	660.8	772.5	814.8
75°	307.6	419.3	585.3	685.0	706.1
77.5°	229.4	346.9	506.9	549.1	534.0
80°	163.0	277.7	395.2	374.0	383.1
82.5°	105.7	211.3	244.5	277.7	286.5
85°	60.4	123.8	150.9	163.0	169.1
87.5°	27.2	45.3	60.4	60.4	57.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)