

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: P474240

Luminaire Tested: **24CZ2-80VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474240
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-80VHE-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: 5372.8 lumens
Efficiency: N/A
Efficacy: 95.6 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

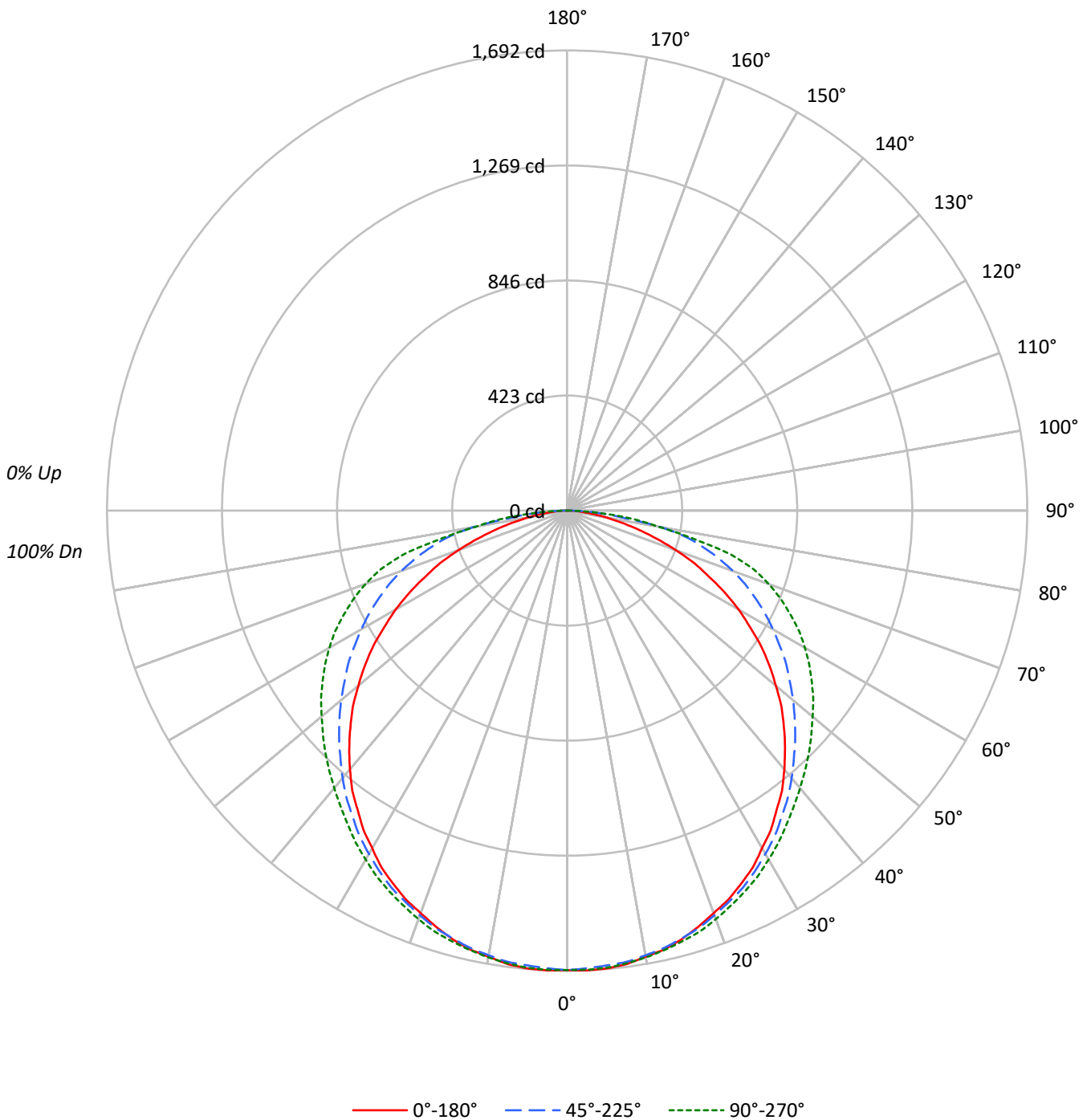
Input Watts (W): 56.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2273	2273	2273
5°	2282	2268	2279
10°	2276	2268	2279
15°	2272	2268	2283
20°	2255	2267	2290
25°	2247	2271	2295
30°	2227	2265	2302
35°	2206	2258	2311
40°	2181	2256	2340
45°	2145	2257	2393
50°	2097	2271	2466
55°	2044	2307	2576
60°	1958	2352	2718
65°	1833	2435	2884
70°	1667	2548	3103
75°	1412	2688	3242
80°	1116	2704	2622
85°	823	2058	2305



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	3.0
10°-20°	461.3	8.6
20°-30°	705.4	13.1
30°-40°	862.3	16.0
40°-50°	919.1	17.1
50°-60°	878.7	16.4
60°-70°	744.4	13.9
70°-80°	500.3	9.3
80°-90°	141.2	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°	1326.9	24.7
0°-40°	2189.2	40.7
0°-60°	3987.0	74.2
0°-90°	5372.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5372.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1690	1687	1679	1687	1687	161
15°	1631	1631	1628	1642	1639	460
25°	1514	1519	1530	1543	1546	698
35°	1343	1354	1375	1402	1407	841
45°	1127	1146	1186	1237	1258	870
55°	871	903	983	1061	1098	776
65°	576	634	765	866	906	572
75°	272	370	517	605	624	291
85°	53	109	133	144	149	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689.7	1689.7	1689.7	1689.7	1689.7
2.5°	1692.3	1692.3	1684.3	1689.7	1689.7
5°	1689.7	1687.0	1679.0	1687.0	1687.0
7.5°	1681.7	1679.0	1673.7	1681.7	1679.0
10°	1665.7	1665.7	1660.3	1668.3	1668.3
12.5°	1652.3	1649.7	1647.0	1657.7	1655.0
15°	1631.0	1631.0	1628.4	1641.7	1639.0
17.5°	1604.4	1607.0	1609.7	1620.4	1623.0
20°	1575.0	1580.4	1583.0	1599.0	1599.0
22.5°	1548.4	1551.0	1556.4	1572.4	1572.4
25°	1513.7	1519.0	1529.7	1543.0	1545.7
27.5°	1479.0	1481.7	1495.0	1513.7	1516.4
30°	1433.7	1441.7	1457.7	1479.0	1481.7
32.5°	1393.7	1401.7	1420.4	1441.7	1447.0
35°	1343.0	1353.7	1375.0	1401.7	1407.0
37.5°	1297.7	1305.7	1332.4	1361.7	1369.7
40°	1242.0	1257.7	1284.4	1319.1	1332.4
42.5°	1186.0	1202.0	1234.0	1279.1	1295.1
45°	1127.3	1146.0	1186.0	1236.7	1257.7
47.5°	1068.7	1090.0	1135.3	1194.0	1218.0
50°	1002.0	1028.7	1084.7	1151.3	1178.0
52.5°	938.0	970.0	1031.4	1106.0	1140.7
55°	871.4	903.4	983.4	1060.7	1098.0
57.5°	796.7	839.4	927.4	1015.4	1055.3
60°	727.7	767.4	874.0	970.0	1010.0
62.5°	653.0	706.3	820.7	922.0	962.0
65°	575.7	634.3	764.7	866.0	906.0
67.5°	506.3	570.3	709.0	810.0	850.0
70°	423.7	503.7	647.7	748.7	788.7
72.5°	346.4	434.4	583.7	682.3	719.7
75°	271.7	370.4	517.0	605.0	623.7
77.5°	202.6	306.4	447.7	485.0	471.7
80°	144.0	245.3	349.0	330.4	338.4
82.5°	93.3	186.6	216.0	245.3	253.0
85°	53.3	109.3	133.3	144.0	149.3
87.5°	24.0	40.0	53.3	53.3	50.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)