

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: P475073

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475073  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-80VHE-RDP-UNV-L840-CD1-U  
Description: 2'X2' 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: 5473.6 lumens  
Efficiency: N/A  
Efficacy: 93.2 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

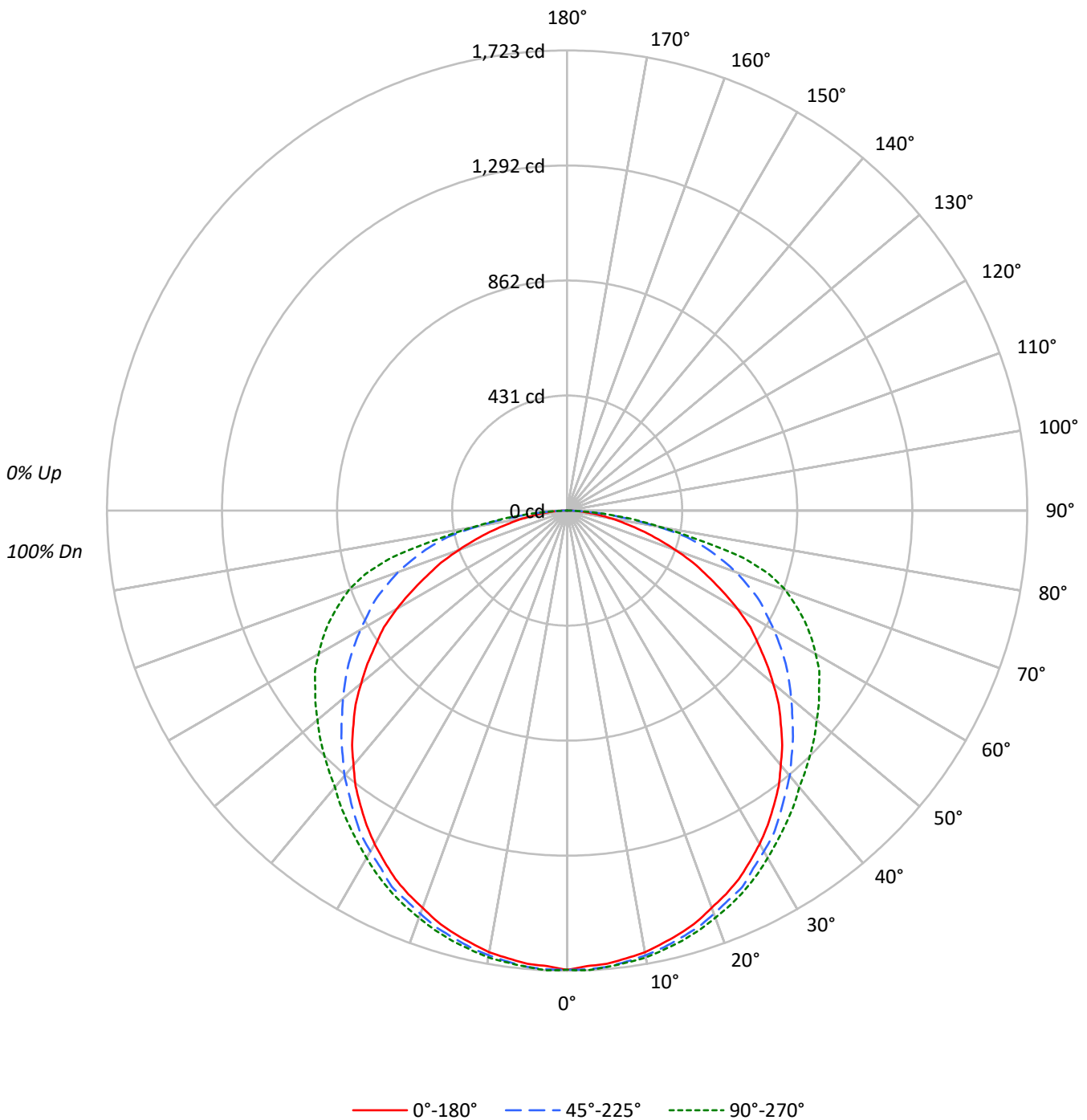
Input Watts (W): 58.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4627	4627	4627
5°	4601	4633	4633
10°	4587	4621	4643
15°	4566	4610	4644
20°	4531	4600	4647
25°	4519	4615	4663
30°	4479	4579	4667
35°	4431	4564	4696
40°	4371	4554	4752
45°	4306	4551	4903
50°	4214	4585	5107
55°	4100	4685	5402
60°	3967	4810	5786
65°	3692	5052	6257
70°	3390	5292	6843
75°	2975	5566	7076
80°	2560	5301	5556
85°	2235	3853	4224



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.6	3.0
10°-20°	467.0	8.5
20°-30°	712.4	13.0
30°-40°	869.9	15.9
40°-50°	930.1	17.0
50°-60°	897.8	16.4
60°-70°	772.8	14.1
70°-80°	522.9	9.6
80°-90°	138.0	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°	1342.0	24.5
0°-40°	2211.9	40.4
0°-60°	4039.8	73.8
0°-90°	5473.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5473.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1719	1719	1719	1719	1719	
5°	1703	1707	1715	1715	1715	162
15°	1639	1643	1655	1663	1667	462
25°	1522	1530	1554	1562	1570	700
35°	1349	1361	1389	1417	1430	844
45°	1132	1152	1196	1256	1288	873
55°	874	902	999	1099	1152	783
65°	580	636	793	918	983	577
75°	286	378	535	644	681	307
85°	72	101	125	129	137	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1719.3	1719.3	1719.3	1719.3	1719.3
2.5°	1707.3	1711.3	1719.3	1719.3	1723.3
5°	1703.3	1707.3	1715.3	1715.3	1715.3
7.5°	1691.2	1695.2	1703.3	1707.3	1707.3
10°	1678.8	1683.2	1691.2	1695.2	1699.2
12.5°	1658.8	1662.8	1674.8	1683.2	1683.2
15°	1638.8	1642.8	1654.8	1662.8	1666.8
17.5°	1614.4	1622.8	1634.8	1642.8	1646.8
20°	1582.4	1590.4	1606.4	1618.8	1622.8
22.5°	1554.4	1562.4	1578.4	1590.4	1598.4
25°	1522.0	1530.0	1554.4	1562.4	1570.4
27.5°	1481.6	1490.0	1510.0	1526.0	1538.0
30°	1441.6	1449.6	1473.6	1494.0	1502.0
32.5°	1397.2	1409.2	1437.6	1453.6	1465.6
35°	1348.8	1360.8	1389.2	1417.2	1429.6
37.5°	1300.7	1312.7	1340.8	1377.2	1393.2
40°	1244.3	1260.3	1296.3	1344.8	1352.8
42.5°	1191.9	1211.9	1244.3	1300.7	1320.7
45°	1131.5	1151.5	1195.9	1256.3	1288.3
47.5°	1075.1	1095.1	1143.5	1215.9	1256.3
50°	1006.7	1034.7	1095.1	1179.9	1219.9
52.5°	942.2	966.3	1047.1	1139.5	1187.9
55°	873.8	901.8	998.7	1099.1	1151.5
57.5°	813.4	837.4	946.3	1059.1	1119.5
60°	737.0	769.0	893.8	1014.7	1075.1
62.5°	656.2	704.6	841.4	966.3	1030.7
65°	579.8	636.2	793.4	917.8	982.7
67.5°	511.3	571.8	733.0	865.8	926.2
70°	430.9	507.3	672.6	801.4	869.8
72.5°	358.5	442.9	604.2	733.0	793.4
75°	286.1	378.5	535.3	644.2	680.6
77.5°	221.3	310.1	458.9	491.3	495.3
80°	165.2	245.7	342.1	346.1	358.5
82.5°	112.8	173.2	221.3	241.7	245.7
85°	72.4	100.8	124.8	128.8	136.8
87.5°	32.4	36.4	44.4	40.4	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)