

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: P475016

Luminaire Tested: **22CZ2-85VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475016
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-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: 5539.1 lumens
Efficiency: N/A
Efficacy: 87.8 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

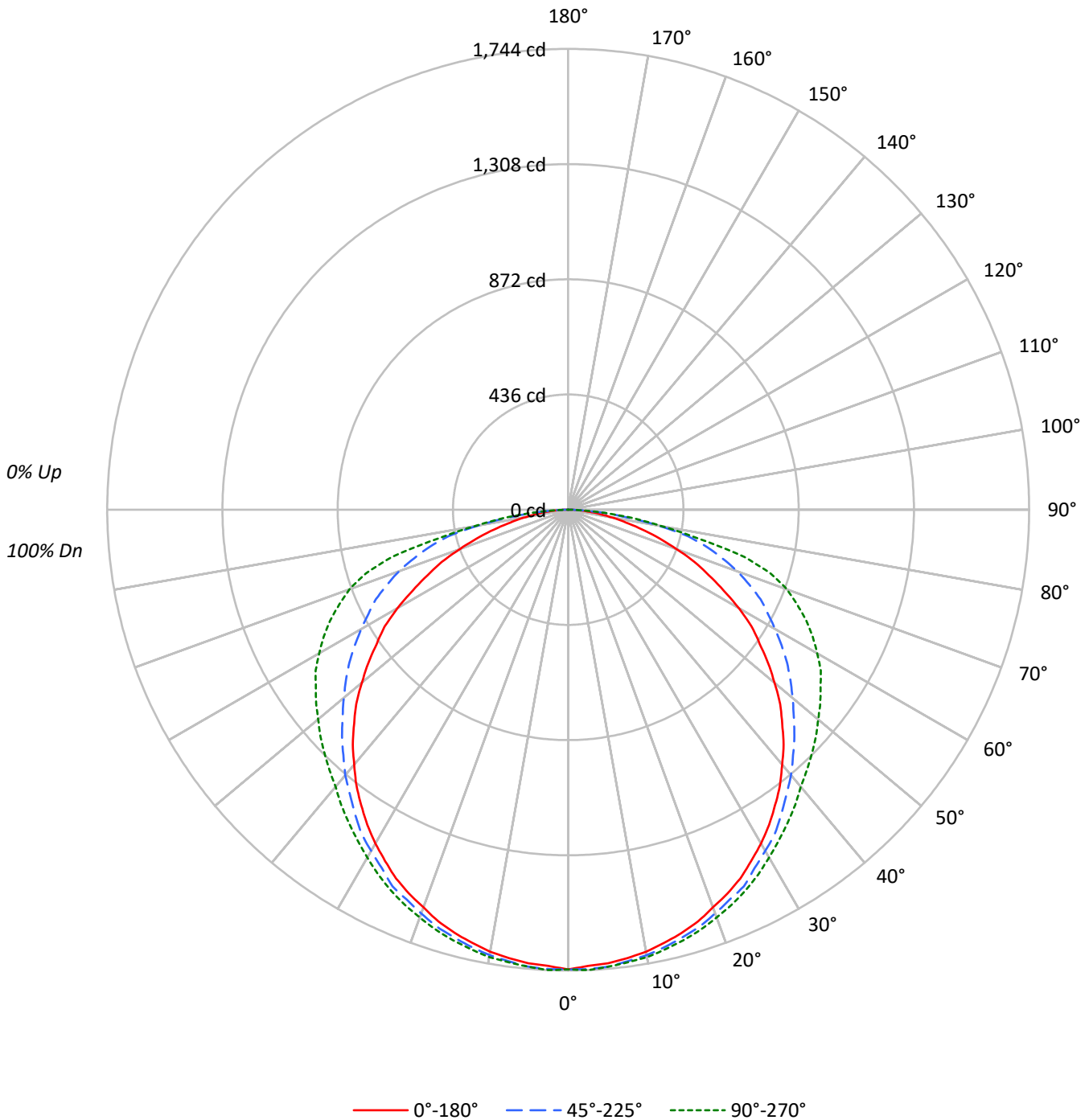
Input Watts (W): 63.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4682	4682	4682
5°	4656	4689	4689
10°	4642	4677	4699
15°	4620	4666	4699
20°	4586	4655	4703
25°	4573	4670	4719
30°	4533	4634	4723
35°	4484	4618	4753
40°	4423	4608	4809
45°	4357	4606	4962
50°	4265	4639	5168
55°	4149	4741	5467
60°	4014	4868	5856
65°	3736	5112	6332
70°	3431	5355	6925
75°	3010	5633	7161
80°	2591	5365	5622
85°	2263	3900	4276



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.6	3.0
10°-20°	472.6	8.5
20°-30°	721.0	13.0
30°-40°	880.3	15.9
40°-50°	941.3	17.0
50°-60°	908.5	16.4
60°-70°	782.1	14.1
70°-80°	529.2	9.6
80°-90°	139.7	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°	1358.1	24.5
0°-40°	2238.4	40.4
0°-60°	4088.2	73.8
0°-90°	5539.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5539.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1724	1728	1736	1736	1736	164
15°	1658	1662	1675	1683	1687	468
25°	1540	1548	1573	1581	1589	709
35°	1365	1377	1406	1434	1447	854
45°	1145	1165	1210	1271	1304	884
55°	884	913	1011	1112	1165	792
65°	587	644	803	929	994	584
75°	290	383	542	652	689	310
85°	73	102	126	130	138	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.8	1739.8	1739.8	1739.8	1739.8
2.5°	1727.7	1731.7	1739.8	1739.8	1743.9
5°	1723.6	1727.7	1735.8	1735.8	1735.8
7.5°	1711.5	1715.5	1723.6	1727.7	1727.7
10°	1698.9	1703.4	1711.5	1715.5	1719.6
12.5°	1678.7	1682.8	1694.9	1703.4	1703.4
15°	1658.5	1662.5	1674.7	1682.8	1686.8
17.5°	1633.8	1642.3	1654.4	1662.5	1666.6
20°	1601.4	1609.5	1625.7	1638.2	1642.3
22.5°	1573.0	1581.1	1597.3	1609.5	1617.6
25°	1540.2	1548.3	1573.0	1581.1	1589.2
27.5°	1499.3	1507.8	1528.1	1544.3	1556.4
30°	1458.8	1466.9	1491.2	1511.9	1520.0
32.5°	1413.9	1426.0	1454.8	1471.0	1483.1
35°	1364.9	1377.1	1405.8	1434.1	1446.7
37.5°	1316.3	1328.5	1356.8	1393.7	1409.9
40°	1259.2	1275.4	1311.9	1360.9	1369.0
42.5°	1206.2	1226.4	1259.2	1316.3	1336.6
45°	1145.0	1165.3	1210.2	1271.4	1303.8
47.5°	1088.0	1108.2	1157.2	1230.5	1271.4
50°	1018.7	1047.1	1108.2	1194.0	1234.5
52.5°	953.5	977.8	1059.6	1153.1	1202.1
55°	884.3	912.6	1010.6	1112.3	1165.3
57.5°	823.2	847.4	957.6	1071.8	1132.9
60°	745.8	778.2	904.5	1026.8	1088.0
62.5°	664.0	713.0	851.5	977.8	1043.0
65°	586.7	643.8	802.9	928.8	994.4
67.5°	517.5	578.6	741.8	876.2	937.3
70°	436.1	513.4	680.6	811.0	880.2
72.5°	362.8	448.2	611.4	741.8	802.9
75°	289.5	383.0	541.8	651.9	688.7
77.5°	223.9	313.8	464.4	497.2	501.3
80°	167.2	248.6	346.2	350.2	362.8
82.5°	114.2	175.3	223.9	244.6	248.6
85°	73.3	102.0	126.3	130.4	138.5
87.5°	32.8	36.8	44.9	40.9	40.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)