

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: P474895

Luminaire Tested: **22CZ2-60VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474895
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5946.5 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

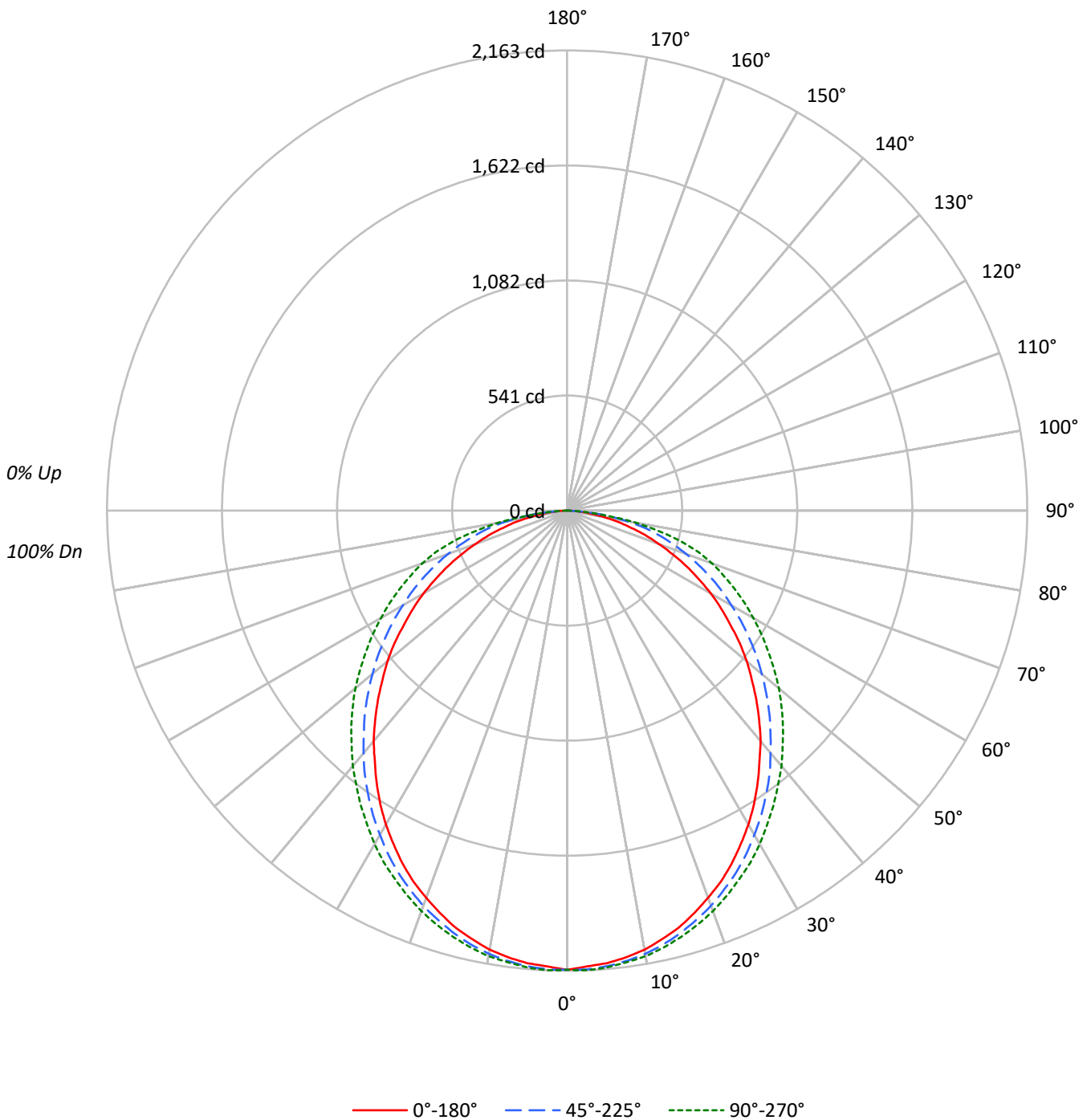
Input Watts (W): 42.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5809	5809	5809
5°	5769	5807	5823
10°	5725	5780	5812
15°	5653	5729	5777
20°	5547	5662	5737
25°	5435	5576	5679
30°	5294	5469	5625
35°	5129	5356	5555
40°	4969	5227	5505
45°	4786	5115	5460
50°	4615	5000	5440
55°	4395	4902	5415
60°	4198	4802	5437
65°	3940	4746	5516
70°	3600	4688	5695
75°	3231	4653	5701
80°	2721	4393	5063
85°	2044	2976	2754



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	3.4
10°-20°	579.0	9.7
20°-30°	863.3	14.5
30°-40°	1018.7	17.1
40°-50°	1037.8	17.5
50°-60°	936.0	15.7
60°-70°	735.1	12.4
70°-80°	459.5	7.7
80°-90°	113.3	1.9
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°	1646.2	27.7
0°-40°	2664.8	44.8
0°-60°	4638.6	78.0
0°-90°	5946.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5946.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2159	2159	2159	2159	2159	
5°	2136	2140	2150	2154	2156	203
15°	2029	2036	2056	2071	2074	571
25°	1830	1840	1878	1905	1912	842
35°	1561	1583	1630	1675	1691	976
45°	1258	1279	1344	1409	1435	970
55°	937	967	1045	1125	1154	840
65°	619	652	745	829	866	611
75°	311	354	448	524	548	332
85°	66	85	96	95	89	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2158.6	2158.6	2158.6	2158.6	2158.6
2.5°	2144.2	2148.5	2158.6	2162.9	2162.9
5°	2135.6	2139.9	2149.9	2154.3	2155.7
7.5°	2118.3	2124.0	2135.6	2141.3	2141.3
10°	2095.3	2102.5	2115.4	2124.0	2126.9
12.5°	2063.6	2072.2	2089.5	2099.6	2102.5
15°	2029.1	2036.3	2056.4	2070.8	2073.7
17.5°	1984.5	1996.0	2017.5	2036.3	2040.6
20°	1937.0	1949.9	1977.3	1998.8	2003.2
22.5°	1888.0	1898.1	1928.3	1954.2	1960.0
25°	1830.5	1840.5	1878.0	1905.3	1912.5
27.5°	1767.2	1784.4	1821.8	1853.5	1865.0
30°	1703.8	1721.1	1760.0	1797.4	1810.3
32.5°	1634.8	1653.5	1698.1	1736.9	1749.9
35°	1561.4	1583.0	1630.4	1675.1	1690.9
37.5°	1485.1	1509.6	1562.8	1610.3	1627.6
40°	1414.6	1431.9	1488.0	1542.7	1567.1
42.5°	1335.4	1358.5	1414.6	1476.5	1499.5
45°	1257.7	1279.3	1344.1	1408.8	1434.7
47.5°	1177.1	1204.5	1269.2	1341.2	1367.1
50°	1102.3	1125.3	1194.4	1270.7	1299.5
52.5°	1021.7	1046.2	1121.0	1200.2	1226.1
55°	936.8	967.0	1044.8	1125.3	1154.1
57.5°	859.1	887.9	969.9	1053.4	1083.6
60°	780.0	808.7	892.2	977.1	1010.2
62.5°	696.5	729.6	820.3	902.3	939.7
65°	618.8	651.9	745.4	828.9	866.3
67.5°	536.8	575.6	669.2	756.9	794.4
70°	457.6	503.7	595.8	682.1	723.8
72.5°	387.1	424.5	520.9	611.6	646.1
75°	310.8	354.0	447.5	523.8	548.3
77.5°	246.1	283.5	372.7	423.1	438.9
80°	175.6	217.3	283.5	313.7	326.7
82.5°	116.6	151.1	192.8	198.6	195.7
85°	66.2	84.9	96.4	95.0	89.2
87.5°	25.9	28.8	21.6	13.0	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)