

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: P475074

Luminaire Tested: **22CZ2-85VHE-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475074
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-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: 5849.1 lumens
Efficiency: N/A
Efficacy: 92.7 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

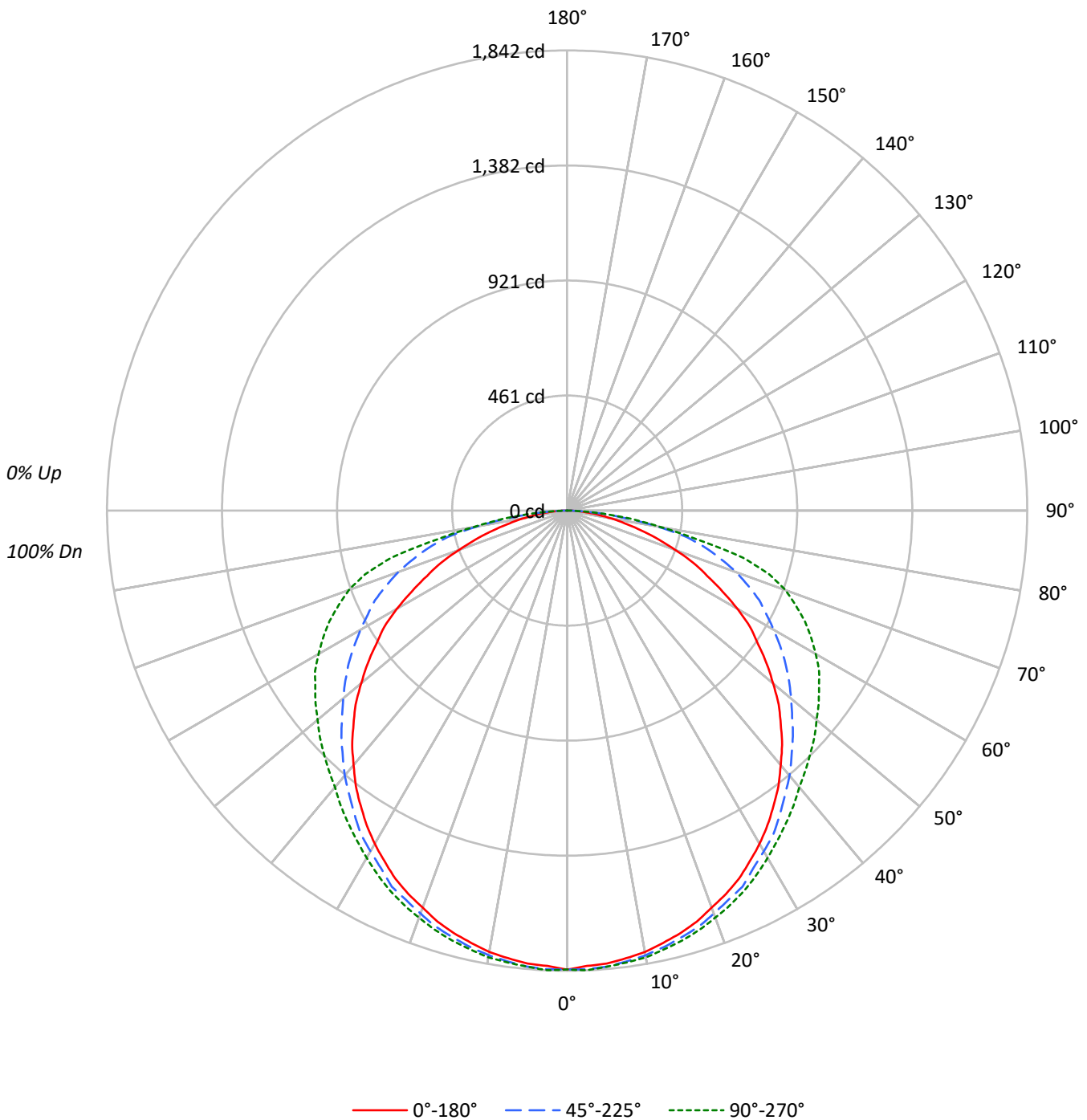
Input Watts (W): 63.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4944	4944	4944
5°	4917	4951	4951
10°	4902	4938	4962
15°	4879	4927	4962
20°	4842	4916	4966
25°	4829	4932	4983
30°	4787	4893	4987
35°	4735	4877	5019
40°	4671	4866	5078
45°	4601	4864	5239
50°	4503	4899	5457
55°	4381	5007	5773
60°	4239	5141	6183
65°	3945	5398	6686
70°	3623	5655	7313
75°	3178	5948	7562
80°	2737	5666	5937
85°	2390	4119	4514



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.8	3.0
10°-20°	499.0	8.5
20°-30°	761.3	13.0
30°-40°	929.6	15.9
40°-50°	993.9	17.0
50°-60°	959.4	16.4
60°-70°	825.8	14.1
70°-80°	558.8	9.6
80°-90°	147.5	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°	1434.1	24.5
0°-40°	2363.7	40.4
0°-60°	4317.0	73.8
0°-90°	5849.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5849.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1837	1837	1837	1837	1837	
5°	1820	1824	1833	1833	1833	173
15°	1751	1756	1768	1777	1781	494
25°	1626	1635	1661	1670	1678	749
35°	1441	1454	1484	1514	1528	902
45°	1209	1230	1278	1342	1377	933
55°	934	964	1067	1174	1230	837
65°	620	680	848	981	1050	616
75°	306	404	572	688	727	328
85°	77	108	133	138	146	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1837.2	1837.2	1837.2	1837.2	1837.2
2.5°	1824.4	1828.7	1837.2	1837.2	1841.5
5°	1820.1	1824.4	1832.9	1832.9	1832.9
7.5°	1807.3	1811.5	1820.1	1824.4	1824.4
10°	1794.0	1798.7	1807.3	1811.5	1815.8
12.5°	1772.6	1776.9	1789.7	1798.7	1798.7
15°	1751.3	1755.5	1768.4	1776.9	1781.2
17.5°	1725.2	1734.2	1747.0	1755.5	1759.8
20°	1691.0	1699.5	1716.6	1729.9	1734.2
22.5°	1661.0	1669.6	1686.7	1699.5	1708.1
25°	1626.4	1635.0	1661.0	1669.6	1678.2
27.5°	1583.2	1592.2	1613.6	1630.7	1643.5
30°	1540.5	1549.0	1574.7	1596.5	1605.0
32.5°	1493.0	1505.8	1536.2	1553.3	1566.1
35°	1441.3	1454.1	1484.5	1514.4	1527.7
37.5°	1390.0	1402.8	1432.7	1471.6	1488.7
40°	1329.7	1346.8	1385.3	1437.0	1445.6
42.5°	1273.7	1295.1	1329.7	1390.0	1411.4
45°	1209.1	1230.5	1278.0	1342.5	1376.7
47.5°	1148.8	1170.2	1222.0	1299.3	1342.5
50°	1075.7	1105.7	1170.2	1260.9	1303.6
52.5°	1006.9	1032.5	1118.9	1217.7	1269.4
55°	933.8	963.7	1067.2	1174.5	1230.5
57.5°	869.2	894.9	1011.2	1131.7	1196.3
60°	787.6	821.8	955.2	1084.3	1148.8
62.5°	701.2	752.9	899.1	1032.5	1101.4
65°	619.5	679.8	847.8	980.8	1050.1
67.5°	546.4	611.0	783.3	925.2	989.8
70°	460.5	542.1	718.7	856.4	929.5
72.5°	383.1	473.3	645.6	783.3	847.8
75°	305.7	404.5	572.1	688.4	727.3
77.5°	236.4	331.4	490.4	525.0	529.3
80°	176.6	262.5	365.6	369.8	383.1
82.5°	120.6	185.1	236.4	258.2	262.5
85°	77.4	107.7	133.4	137.7	146.2
87.5°	34.6	38.9	47.5	43.2	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)