

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: P474910

Luminaire Tested: **22CZ2-44-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474910
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-S-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

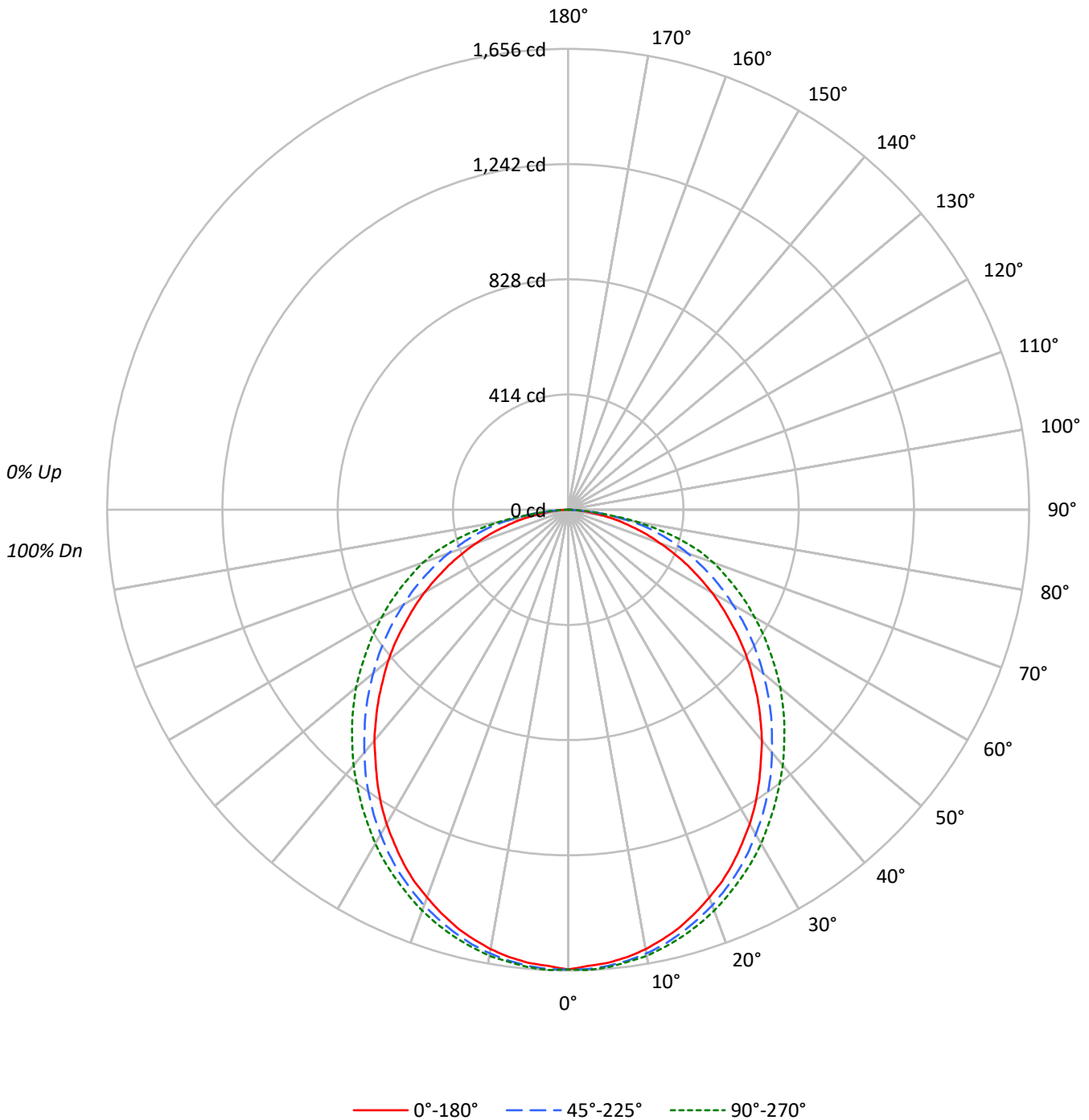
Lumens per Lamp: N/A
Luminaire Lumens: 4551.5 lumens
Efficiency: N/A
Efficacy: 137.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.2
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	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°	4446	4446	4446
5°	4415	4445	4457
10°	4382	4424	4448
15°	4327	4385	4422
20°	4246	4334	4391
25°	4160	4268	4346
30°	4052	4186	4305
35°	3926	4100	4252
40°	3803	4001	4214
45°	3664	3915	4179
50°	3532	3827	4164
55°	3364	3752	4145
60°	3213	3675	4161
65°	3016	3633	4222
70°	2756	3588	4359
75°	2473	3562	4364
80°	2083	3363	3874
85°	1565	2279	2109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	3.4
10°-20°	443.2	9.7
20°-30°	660.8	14.5
30°-40°	779.7	17.1
40°-50°	794.4	17.5
50°-60°	716.4	15.7
60°-70°	562.6	12.4
70°-80°	351.7	7.7
80°-90°	86.7	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°	1260.0	27.7
0°-40°	2039.7	44.8
0°-60°	3550.4	78.0
0°-90°	4551.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4551.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1635	1638	1646	1649	1650	155
15°	1553	1559	1574	1585	1587	437
25°	1401	1409	1437	1458	1464	645
35°	1195	1212	1248	1282	1294	747
45°	963	979	1029	1078	1098	743
55°	717	740	800	861	883	643
65°	474	499	571	634	663	468
75°	238	271	343	401	420	254
85°	51	65	74	73	68	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1652.2	1652.2	1652.2	1652.2	1652.2
2.5°	1641.2	1644.5	1652.2	1655.5	1655.5
5°	1634.6	1637.9	1645.6	1648.9	1650.0
7.5°	1621.4	1625.8	1634.6	1639.0	1639.0
10°	1603.7	1609.2	1619.1	1625.8	1628.0
12.5°	1579.5	1586.1	1599.3	1607.0	1609.2
15°	1553.1	1558.6	1574.0	1585.0	1587.2
17.5°	1518.9	1527.7	1544.2	1558.6	1561.9
20°	1482.6	1492.5	1513.4	1529.9	1533.2
22.5°	1445.1	1452.8	1476.0	1495.8	1500.2
25°	1401.1	1408.8	1437.4	1458.3	1463.8
27.5°	1352.6	1365.8	1394.5	1418.7	1427.5
30°	1304.1	1317.3	1347.1	1375.7	1385.6
32.5°	1251.3	1265.6	1299.7	1329.5	1339.4
35°	1195.1	1211.6	1248.0	1282.1	1294.2
37.5°	1136.7	1155.4	1196.2	1232.5	1245.8
40°	1082.7	1096.0	1138.9	1180.8	1199.5
42.5°	1022.2	1039.8	1082.7	1130.1	1147.7
45°	962.7	979.2	1028.8	1078.3	1098.2
47.5°	901.0	921.9	971.5	1026.6	1046.4
50°	843.7	861.3	914.2	972.6	994.6
52.5°	782.0	800.8	858.0	918.6	938.4
55°	717.1	740.2	799.7	861.3	883.4
57.5°	657.6	679.6	742.4	806.3	829.4
60°	597.0	619.0	682.9	747.9	773.2
62.5°	533.1	558.4	627.8	690.6	719.3
65°	473.6	499.0	570.6	634.4	663.1
67.5°	410.8	440.6	512.2	579.4	608.0
70°	350.3	385.5	456.0	522.1	554.0
72.5°	296.3	324.9	398.7	468.1	494.6
75°	237.9	271.0	342.6	400.9	419.7
77.5°	188.3	217.0	285.3	323.8	335.9
80°	134.4	166.3	217.0	240.1	250.0
82.5°	89.2	115.7	147.6	152.0	149.8
85°	50.7	65.0	73.8	72.7	68.3
87.5°	19.8	22.0	16.5	9.9	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)