

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: P474845

Luminaire Tested: **22CZ2-100VHE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474845
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10211.0 lumens
Efficiency: N/A
Efficacy: 134.7 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

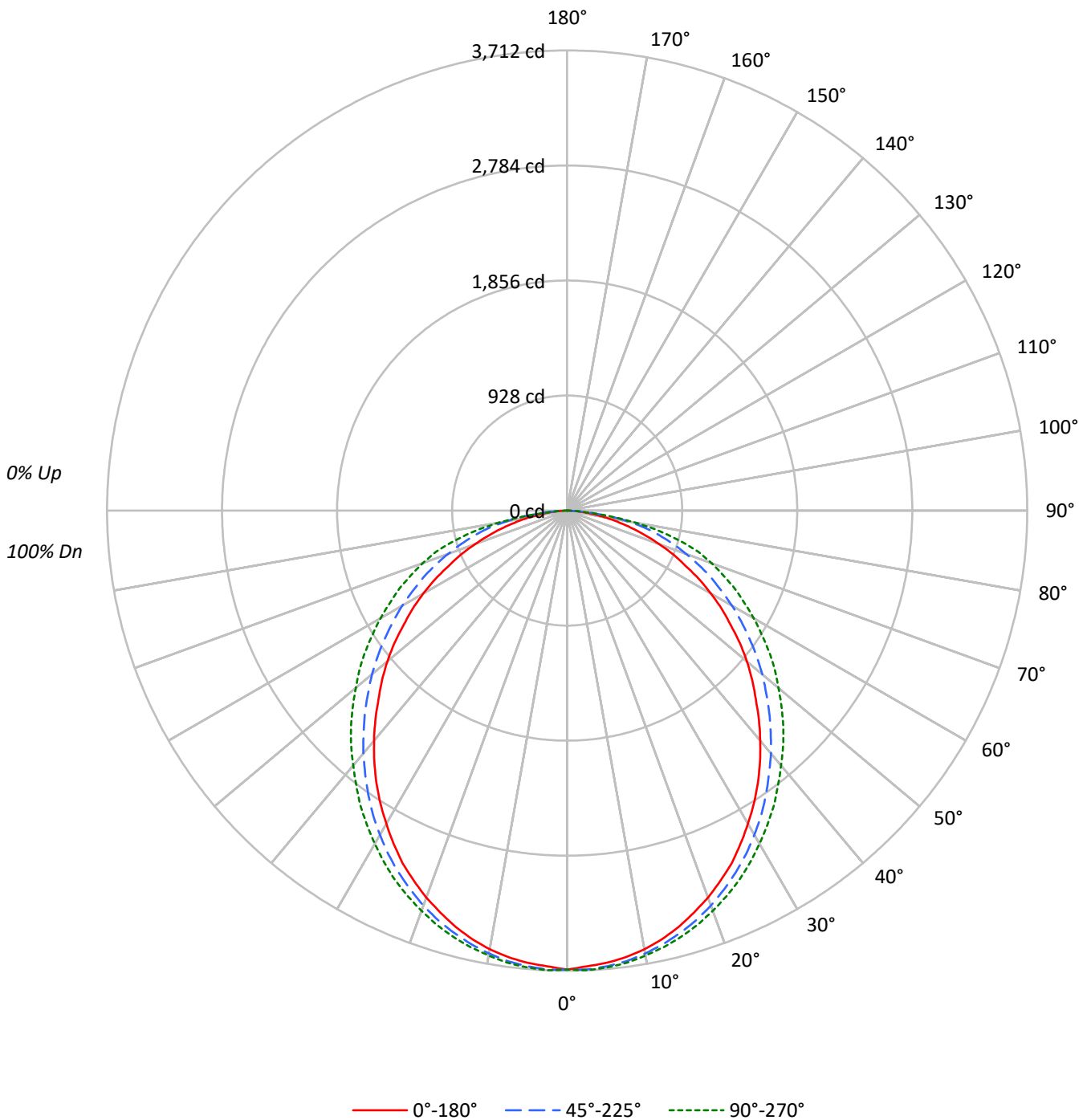
Input Watts (W): 75.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	87	85	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	73	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	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9965	9965	9965
5°	9892	9968	9991
10°	9818	9912	9959
15°	9685	9823	9914
20°	9511	9708	9838
25°	9323	9560	9758
30°	9065	9387	9642
35°	8812	9187	9549
40°	8513	8983	9430
45°	8188	8779	9387
50°	7923	8601	9314
55°	7553	8413	9334
60°	7212	8269	9361
65°	6706	8162	9508
70°	6198	8048	9746
75°	5542	8010	9805
80°	4649	7592	8560
85°	3597	5196	4863



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.8	3.4
10°-20°	993.2	9.7
20°-30°	1480.8	14.5
30°-40°	1748.1	17.1
40°-50°	1781.7	17.4
50°-60°	1606.7	15.7
60°-70°	1262.9	12.4
70°-80°	790.7	7.7
80°-90°	197.1	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°	2823.8	27.7
0°-40°	4571.9	44.8
0°-60°	7960.3	78.0
0°-90°	10211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10211.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3703	3703	3703	3703	3703	
5°	3662	3671	3690	3699	3699	347
15°	3476	3492	3526	3552	3558	979
25°	3140	3164	3220	3269	3287	1443
35°	2682	2717	2797	2874	2907	1676
45°	2152	2199	2307	2419	2466	1664
55°	1610	1660	1793	1931	1990	1445
65°	1053	1118	1282	1424	1493	1050
75°	533	613	770	908	943	566
85°	116	149	168	168	158	141
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3703.0	3703.0	3703.0	3703.0	3703.0
2.5°	3679.3	3687.9	3705.2	3711.7	3711.7
5°	3662.0	3670.7	3690.1	3698.7	3698.7
7.5°	3634.0	3642.6	3666.3	3677.1	3679.3
10°	3593.0	3603.8	3627.5	3644.8	3644.8
12.5°	3541.2	3552.0	3582.2	3603.8	3605.9
15°	3476.5	3491.6	3526.1	3552.0	3558.5
17.5°	3400.9	3424.7	3463.5	3495.9	3502.3
20°	3321.1	3344.8	3390.1	3426.8	3435.4
22.5°	3232.6	3254.2	3308.1	3353.4	3364.2
25°	3139.8	3163.5	3219.7	3269.3	3286.6
27.5°	3029.8	3057.8	3124.7	3180.8	3198.1
30°	2917.5	2952.1	3021.1	3083.7	3103.1
32.5°	2803.2	2835.5	2913.2	2980.1	3006.0
35°	2682.3	2716.9	2796.7	2874.4	2906.8
37.5°	2555.0	2589.5	2675.9	2764.3	2794.5
40°	2423.4	2464.4	2557.2	2652.1	2684.5
42.5°	2289.6	2332.7	2429.8	2535.6	2578.7
45°	2151.5	2198.9	2306.8	2419.1	2466.5
47.5°	2026.3	2065.2	2177.4	2300.4	2345.7
50°	1892.5	1929.2	2054.4	2177.4	2224.8
52.5°	1756.6	1791.1	1924.9	2054.4	2112.6
55°	1609.8	1659.5	1793.3	1931.4	1989.6
57.5°	1480.4	1525.7	1663.8	1804.0	1860.1
60°	1340.1	1387.6	1536.5	1678.9	1739.3
62.5°	1199.8	1251.6	1402.7	1555.9	1612.0
65°	1053.1	1117.8	1281.8	1424.2	1493.3
67.5°	927.9	990.5	1152.3	1301.2	1361.7
70°	787.7	861.0	1022.9	1173.9	1238.7
72.5°	656.0	729.4	895.5	1046.6	1111.3
75°	533.0	612.9	770.4	908.5	943.0
77.5°	414.3	489.9	647.4	727.2	763.9
80°	300.0	373.3	489.9	543.8	552.4
82.5°	202.8	265.4	332.3	347.4	338.8
85°	116.5	148.9	168.3	168.3	157.5
87.5°	47.5	47.5	41.0	25.9	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)