

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: P475040

Luminaire Tested: **22CZ2-60VHE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475040  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-60VHE-RDP-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4047.6 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

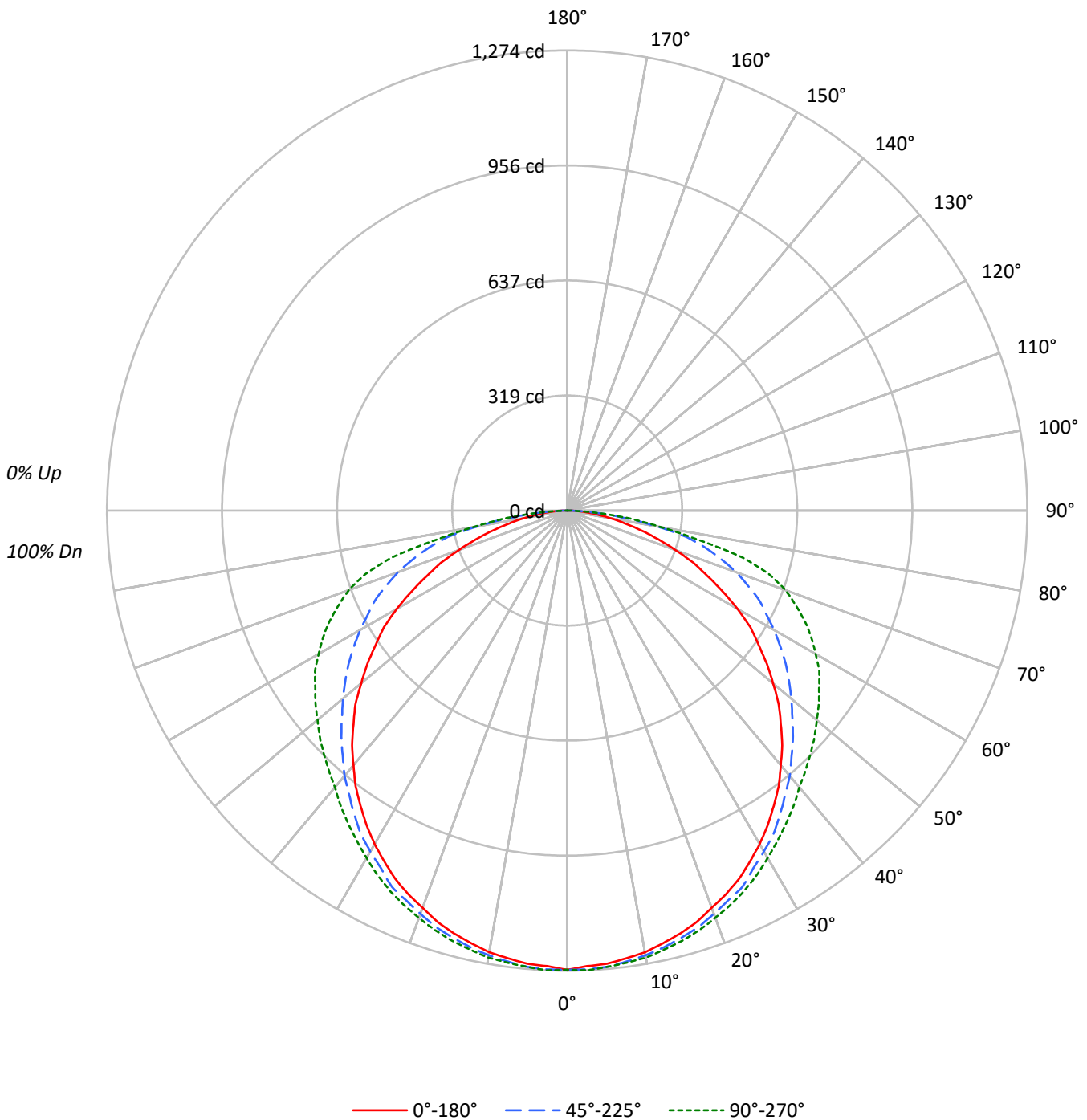
Input Watts (W): 42.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3421	3421	3421
5°	3402	3426	3426
10°	3392	3417	3434
15°	3376	3409	3434
20°	3351	3402	3436
25°	3342	3413	3448
30°	3312	3386	3451
35°	3277	3375	3473
40°	3232	3367	3514
45°	3184	3365	3626
50°	3116	3390	3777
55°	3032	3465	3995
60°	2933	3557	4279
65°	2730	3736	4627
70°	2507	3913	5061
75°	2199	4116	5233
80°	1894	3921	4108
85°	1655	2850	3125



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.3	3.0
10°-20°	345.3	8.5
20°-30°	526.8	13.0
30°-40°	643.3	15.9
40°-50°	687.8	17.0
50°-60°	663.9	16.4
60°-70°	571.5	14.1
70°-80°	386.7	9.6
80°-90°	102.1	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°	992.4	24.5
0°-40°	1635.7	40.4
0°-60°	2987.3	73.8
0°-90°	4047.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4047.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1260	1262	1268	1268	1268	120
15°	1212	1215	1224	1230	1233	342
25°	1126	1131	1149	1155	1161	518
35°	997	1006	1027	1048	1057	624
45°	837	852	884	929	953	646
55°	646	667	738	813	852	579
65°	429	470	587	679	727	426
75°	212	280	396	476	503	227
85°	54	75	92	95	101	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1271.3	1271.3	1271.3	1271.3	1271.3
2.5°	1262.5	1265.4	1271.3	1271.3	1274.3
5°	1259.5	1262.5	1268.4	1268.4	1268.4
7.5°	1250.6	1253.6	1259.5	1262.5	1262.5
10°	1241.5	1244.7	1250.6	1253.6	1256.6
12.5°	1226.7	1229.6	1238.5	1244.7	1244.7
15°	1211.9	1214.8	1223.7	1229.6	1232.6
17.5°	1193.8	1200.0	1208.9	1214.8	1217.8
20°	1170.2	1176.1	1187.9	1197.1	1200.0
22.5°	1149.4	1155.4	1167.2	1176.1	1182.0
25°	1125.5	1131.4	1149.4	1155.4	1161.3
27.5°	1095.6	1101.8	1116.6	1128.4	1137.3
30°	1066.0	1071.9	1089.7	1104.8	1110.7
32.5°	1033.2	1042.0	1063.1	1074.9	1083.8
35°	997.4	1006.2	1027.3	1048.0	1057.1
37.5°	961.9	970.7	991.5	1018.4	1030.2
40°	920.1	932.0	958.6	994.4	1000.3
42.5°	881.4	896.2	920.1	961.9	976.7
45°	836.7	851.5	884.3	929.0	952.7
47.5°	795.0	809.8	845.6	899.1	929.0
50°	744.4	765.1	809.8	872.5	902.1
52.5°	696.8	714.5	774.3	842.6	878.4
55°	646.2	666.9	738.5	812.7	851.5
57.5°	601.5	619.3	699.7	783.2	827.8
60°	545.0	568.7	661.0	750.3	795.0
62.5°	485.2	521.0	622.2	714.5	762.2
65°	428.7	470.4	586.7	678.7	726.7
67.5°	378.1	422.8	542.0	640.3	684.9
70°	318.6	375.2	497.4	592.6	643.2
72.5°	265.1	327.5	446.8	542.0	586.7
75°	211.5	279.9	395.9	476.3	503.3
77.5°	163.6	229.3	339.4	363.3	366.3
80°	122.2	181.7	253.0	255.9	265.1
82.5°	83.4	128.1	163.6	178.7	181.7
85°	53.6	74.6	92.3	95.3	101.2
87.5°	24.0	26.9	32.8	29.9	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)