

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: P225777

Luminaire Tested: **22GR-LD5-28-A-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P225777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-A-UNV-L935-CD1-U  
Description: METALUX GR 2X2 LED TROFFER WITH A LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2455.6 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

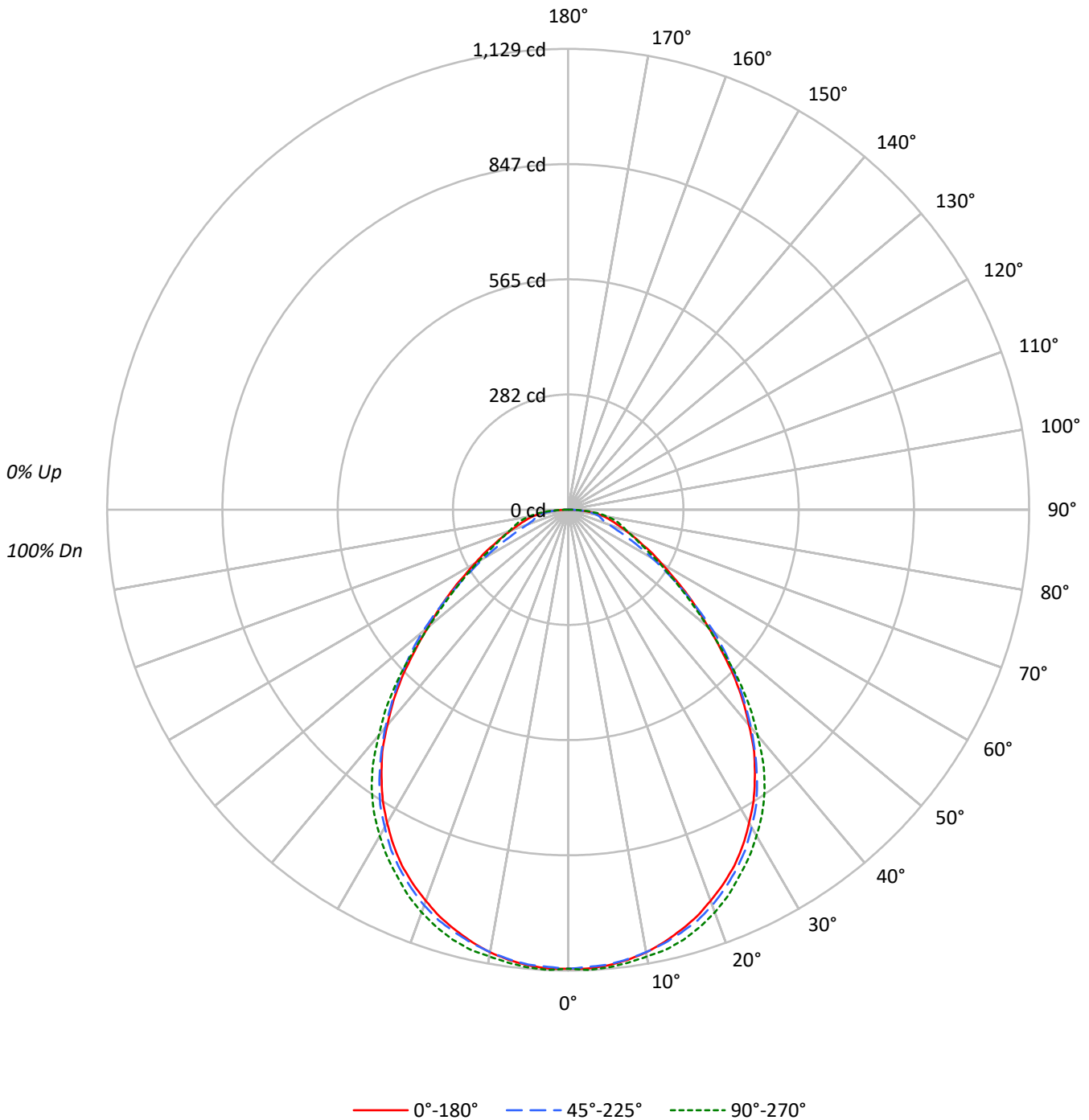
Input Watts (W): 22.986  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3602	3602	3602
5°	3602	3597	3619
10°	3581	3579	3614
15°	3535	3554	3617
20°	3474	3515	3578
25°	3400	3439	3501
30°	3277	3322	3412
35°	3116	3152	3280
40°	2881	2912	3015
45°	2588	2635	2676
50°	2238	2317	2215
55°	1953	1902	1876
60°	1691	1522	1625
65°	1511	1196	1459
70°	1402	990	1439
75°	1399	1047	1597
80°	1549	1317	1804
85°	1617	1426	2036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.4	4.3
10°-20°	303.1	12.3
20°-30°	448.3	18.3
30°-40°	505.9	20.6
40°-50°	445.9	18.2
50°-60°	305.9	12.5
60°-70°	180.5	7.4
70°-80°	112.6	4.6
80°-90°	47.0	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°	857.8	34.9
0°-40°	1363.7	55.5
0°-60°	2115.5	86.1
0°-90°	2455.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2455.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1125	1125	1125	1125	1125	
5°	1121	1118	1119	1123	1126	106
15°	1066	1067	1072	1085	1091	301
25°	962	966	973	986	991	442
35°	797	804	806	826	839	497
45°	572	574	582	585	591	439
55°	350	341	341	329	336	314
65°	199	175	158	182	193	201
75°	113	102	85	118	129	121
85°	44	41	39	51	55	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1124.6	1124.6	1124.6	1124.6	1124.6
2.5°	1125.1	1122.3	1121.1	1125.7	1128.6
5°	1120.6	1118.3	1118.9	1122.8	1125.7
7.5°	1112.6	1110.9	1110.9	1116.6	1119.4
10°	1101.2	1100.6	1100.6	1107.5	1111.5
12.5°	1085.2	1085.7	1088.0	1097.2	1104.1
15°	1066.3	1067.4	1072.0	1085.2	1090.9
17.5°	1045.8	1045.8	1054.8	1065.1	1072.0
20°	1019.5	1021.2	1031.5	1042.9	1049.8
22.5°	992.6	995.4	1004.0	1017.2	1023.5
25°	962.3	965.8	973.2	985.7	990.8
27.5°	926.8	931.4	939.4	948.6	959.5
30°	886.3	893.2	898.3	910.9	922.8
32.5°	845.2	851.4	857.1	870.3	884.0
35°	797.1	804.0	806.3	825.8	838.9
37.5°	748.0	750.9	752.0	771.5	785.7
40°	689.2	694.9	696.6	712.0	721.1
42.5°	632.6	634.9	638.3	649.7	660.6
45°	571.5	574.3	581.7	585.1	590.8
47.5°	507.4	516.0	524.6	513.7	514.3
50°	449.1	456.0	465.1	444.6	444.6
52.5°	397.1	400.6	401.1	384.0	387.4
55°	349.7	341.2	340.6	329.1	336.0
57.5°	302.3	290.9	286.9	283.5	291.5
60°	264.0	243.4	237.7	242.8	253.7
62.5°	232.6	206.3	195.4	208.6	218.3
65°	199.4	175.4	157.8	182.3	192.6
67.5°	173.7	150.9	128.0	162.9	170.3
70°	149.7	132.0	105.7	148.0	153.7
72.5°	130.3	116.5	91.5	133.7	140.6
75°	113.1	101.7	84.6	118.3	129.1
77.5°	99.4	86.9	78.9	102.3	115.4
80°	84.0	71.4	71.4	85.7	97.8
82.5°	66.3	56.0	57.7	69.7	78.3
85°	44.0	41.1	38.8	50.8	55.4
87.5°	22.3	22.9	20.6	26.3	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)