

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: P234156

Luminaire Tested: **22GR-LD5-85-A19/156-UNV-L950-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-85-A19/156-UNV-L950-CD1-U  
Description: METALUX 2X2 GRLED TROFFER  
WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8431.4 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

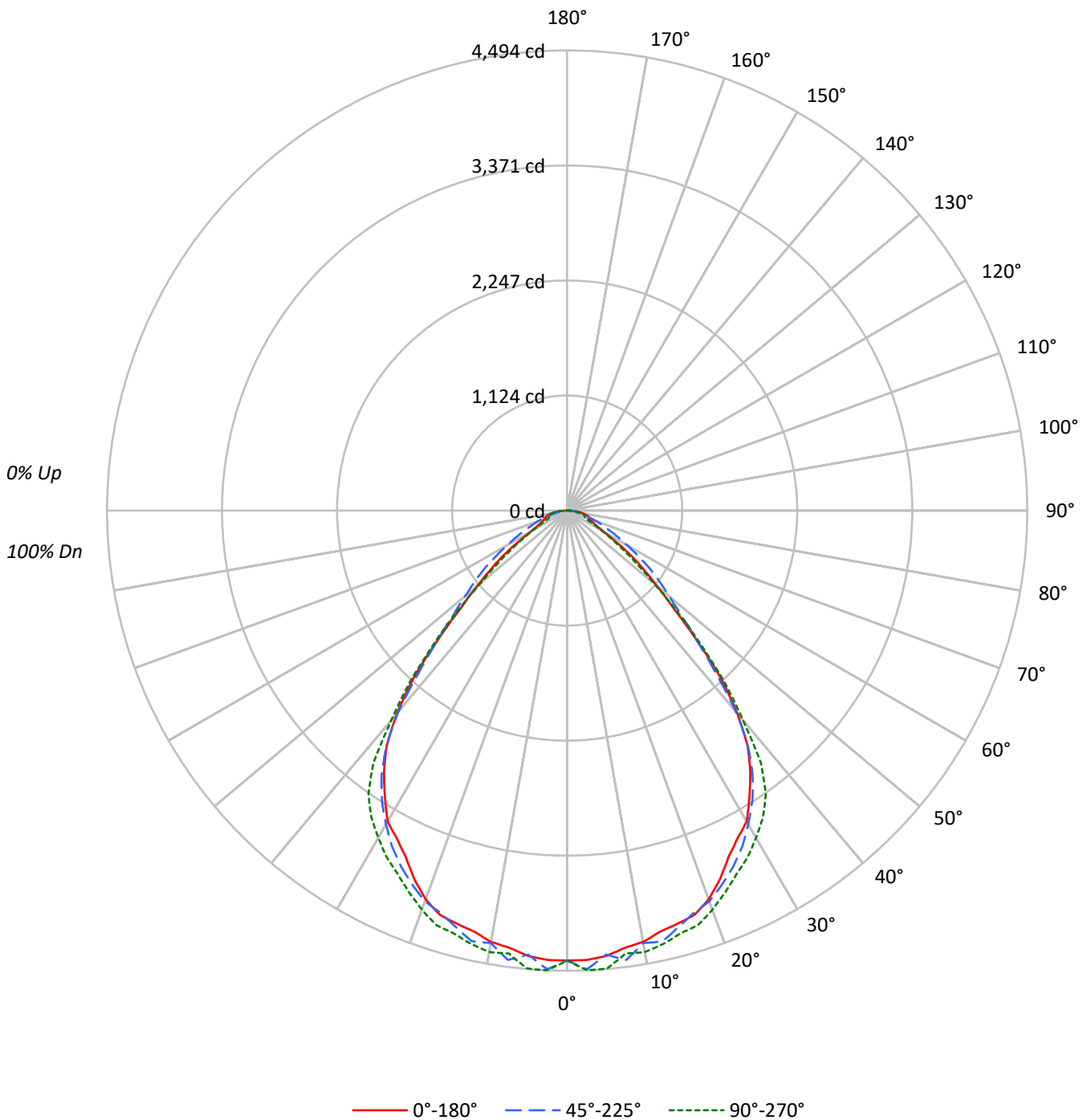
Input Watts (W): 81.06  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

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

	0°	45°	90°
0°	14072	14072	14072
5°	14037	13992	14433
10°	13908	13947	14238
15°	13844	13950	14174
20°	13770	13838	14136
25°	13183	13555	13836
30°	12966	13083	13642
35°	12193	12349	13226
40°	10805	10730	11153
45°	8071	8088	8313
50°	5681	6463	5503
55°	4193	5457	3760
60°	2621	4313	2456
65°	2138	3417	1716
70°	2121	2846	1693
75°	2631	2090	2188
80°	2930	1649	2676
85°	2918	3064	2991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.3	5.0
10°-20°	1191.5	14.1
20°-30°	1764.7	20.9
30°-40°	1976.7	23.4
40°-50°	1452.4	17.2
50°-60°	811.8	9.6
60°-70°	452.5	5.4
70°-80°	265.8	3.2
80°-90°	97.7	1.2
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°	3374.4	40.0
0°-40°	5351.1	63.5
0°-60°	7615.4	90.3
0°-90°	8431.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8431.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4394	4394	4394	4394	4394	
5°	4366	4448	4352	4442	4490	413
15°	4176	4202	4208	4271	4275	1179
25°	3731	3760	3836	3890	3916	1729
35°	3119	3121	3159	3302	3383	1932
45°	1782	1927	1786	1913	1836	1392
55°	751	914	977	975	673	670
65°	282	501	451	578	226	292
75°	213	300	169	340	177	214
85°	79	117	83	107	81	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4394.2	4394.2	4394.2	4394.2	4394.2
2.5°	4392.2	4432.0	4483.7	4489.6	4493.6
5°	4366.5	4447.9	4352.5	4441.9	4489.6
7.5°	4306.8	4356.4	4426.0	4336.6	4362.4
10°	4277.0	4288.9	4288.9	4400.2	4378.4
12.5°	4209.5	4288.9	4308.8	4286.9	4334.6
15°	4175.7	4201.6	4207.5	4271.1	4275.0
17.5°	4138.0	4132.0	4118.1	4163.8	4245.2
20°	4040.6	4018.7	4060.5	4116.1	4147.9
22.5°	3897.6	3903.5	3953.2	3998.9	4034.7
25°	3730.7	3760.5	3836.0	3889.6	3915.5
27.5°	3605.6	3649.3	3700.9	3764.5	3816.2
30°	3506.2	3502.2	3538.0	3629.4	3689.0
32.5°	3313.6	3327.4	3365.2	3474.5	3557.9
35°	3118.8	3120.8	3158.6	3301.7	3383.1
37.5°	2894.3	2878.5	2900.4	3055.3	3108.9
40°	2584.5	2588.5	2566.6	2675.9	2667.9
42.5°	2222.9	2254.7	2141.5	2284.6	2274.5
45°	1782.0	1926.9	1785.9	1913.0	1835.6
47.5°	1406.5	1621.0	1503.8	1597.1	1452.2
50°	1140.2	1360.8	1297.2	1338.9	1104.6
52.5°	935.7	1114.5	1134.3	1144.2	862.1
55°	750.9	913.8	977.3	975.4	673.4
57.5°	554.3	742.9	816.5	846.3	510.5
60°	409.2	617.8	673.4	739.0	383.4
62.5°	329.8	542.4	556.2	647.6	292.0
65°	282.1	500.6	450.9	578.1	226.5
67.5°	250.3	466.8	367.5	516.5	192.7
70°	226.5	415.1	303.9	462.8	180.8
72.5°	220.5	353.6	234.4	413.2	178.8
75°	212.6	299.9	168.9	339.7	176.8
77.5°	182.7	256.3	121.2	262.3	164.9
80°	158.9	204.6	89.4	196.7	145.1
82.5°	123.1	155.0	79.4	149.0	117.2
85°	79.4	117.2	83.4	107.3	81.4
87.5°	37.8	65.5	59.6	57.6	41.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)