

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: P292655

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292655  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1892.0 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

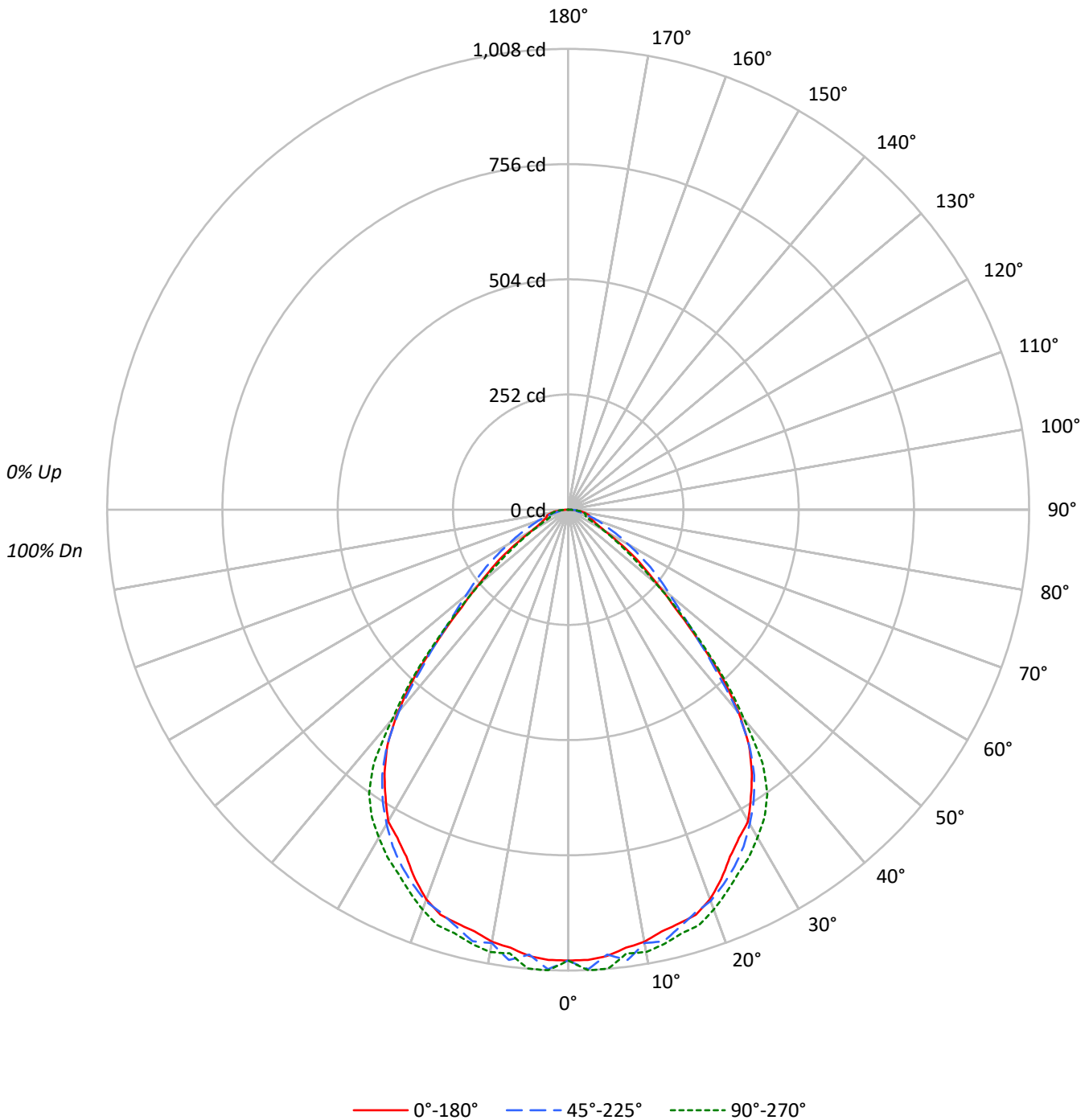
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2654	2654	2654
5°	2647	2638	2722
10°	2623	2630	2685
15°	2610	2630	2673
20°	2596	2609	2666
25°	2486	2556	2609
30°	2445	2467	2572
35°	2299	2328	2494
40°	2037	2023	2103
45°	1522	1525	1568
50°	1071	1219	1038
55°	791	1029	709
60°	494	813	463
65°	403	644	323
70°	400	537	319
75°	496	394	413
80°	553	311	504
85°	550	577	565



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.9	5.0
10°-20°	267.4	14.1
20°-30°	396.0	20.9
30°-40°	443.6	23.4
40°-50°	325.9	17.2
50°-60°	182.2	9.6
60°-70°	101.5	5.4
70°-80°	59.6	3.2
80°-90°	21.9	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°	757.2	40.0
0°-40°	1200.8	63.5
0°-60°	1708.9	90.3
0°-90°	1892.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1892.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	986	986	986	986	986	
5°	980	998	977	997	1008	93
15°	937	943	944	958	959	265
25°	837	844	861	873	879	388
35°	700	700	709	741	759	434
45°	400	432	401	429	412	312
55°	168	205	219	219	151	150
65°	63	112	101	130	51	65
75°	48	67	38	76	40	48
85°	18	26	19	24	18	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	986.1	986.1	986.1	986.1	986.1
2.5°	985.6	994.5	1006.1	1007.5	1008.3
5°	979.8	998.1	976.7	996.8	1007.5
7.5°	966.4	977.6	993.2	973.1	978.9
10°	959.8	962.4	962.4	987.4	982.5
12.5°	944.6	962.4	966.9	962.0	972.7
15°	937.0	942.8	944.2	958.4	959.3
17.5°	928.6	927.2	924.1	934.3	952.6
20°	906.7	901.8	911.2	923.6	930.8
22.5°	874.6	876.0	887.1	897.3	905.4
25°	837.2	843.9	860.8	872.8	878.6
27.5°	809.1	818.9	830.5	844.7	856.3
30°	786.8	785.9	793.9	814.4	827.8
32.5°	743.6	746.7	755.1	779.7	798.4
35°	699.9	700.3	708.8	740.9	759.2
37.5°	649.5	645.9	650.8	685.6	697.6
40°	580.0	580.8	575.9	600.5	598.7
42.5°	498.8	506.0	480.5	512.6	510.4
45°	399.9	432.4	400.8	429.3	411.9
47.5°	315.6	363.8	337.5	358.4	325.9
50°	255.9	305.4	291.1	300.5	247.9
52.5°	210.0	250.1	254.5	256.8	193.5
55°	168.5	205.1	219.3	218.9	151.1
57.5°	124.4	166.7	183.2	189.9	114.6
60°	91.8	138.6	151.1	165.8	86.0
62.5°	74.0	121.7	124.8	145.3	65.5
65°	63.3	112.3	101.2	129.7	50.8
67.5°	56.2	104.8	82.5	115.9	43.2
70°	50.8	93.2	68.2	103.9	40.6
72.5°	49.5	79.3	52.6	92.7	40.1
75°	47.7	67.3	37.9	76.2	39.7
77.5°	41.0	57.5	27.2	58.8	37.0
80°	35.7	45.9	20.1	44.1	32.5
82.5°	27.6	34.8	17.8	33.4	26.3
85°	17.8	26.3	18.7	24.1	18.3
87.5°	8.5	14.7	13.4	12.9	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)