

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: P292659

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292659  
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-LD5-24-A19/156-UNV-L92765-W2A1-U-2700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1883.0 lumens  
Efficiency: N/A  
Efficacy: 103.8 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

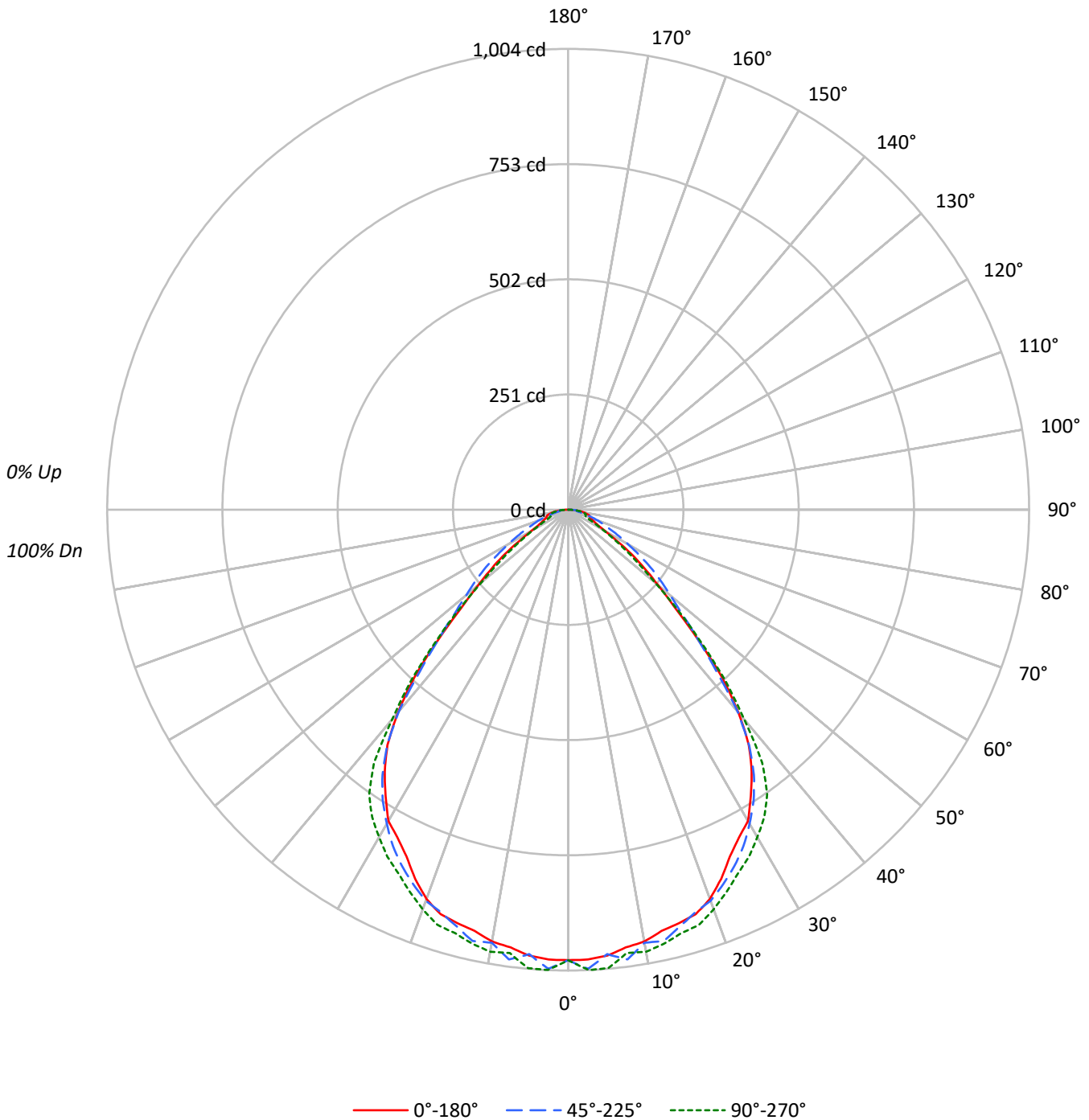
Input Watts (W): 18.135  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2641	2641	2641
5°	2634	2626	2709
10°	2610	2617	2672
15°	2598	2618	2660
20°	2584	2597	2653
25°	2474	2544	2596
30°	2433	2455	2560
35°	2288	2317	2482
40°	2028	2014	2093
45°	1515	1518	1560
50°	1066	1213	1033
55°	787	1024	706
60°	492	809	461
65°	401	641	322
70°	398	534	318
75°	494	392	411
80°	550	310	502
85°	546	574	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.4	5.0
10°-20°	266.1	14.1
20°-30°	394.1	20.9
30°-40°	441.5	23.4
40°-50°	324.4	17.2
50°-60°	181.3	9.6
60°-70°	101.1	5.4
70°-80°	59.4	3.2
80°-90°	21.8	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°	753.6	40.0
0°-40°	1195.1	63.5
0°-60°	1700.7	90.3
0°-90°	1883.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1883.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	975	993	972	992	1003	92
15°	933	938	940	954	955	263
25°	833	840	857	869	874	386
35°	696	697	705	737	756	432
45°	398	430	399	427	410	311
55°	168	204	218	218	150	150
65°	63	112	101	129	51	65
75°	48	67	38	76	40	48
85°	18	26	19	24	18	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.4	981.4	981.4	981.4	981.4
2.5°	980.9	989.8	1001.3	1002.7	1003.6
5°	975.2	993.3	972.1	992.0	1002.7
7.5°	961.8	972.9	988.5	968.5	974.3
10°	955.2	957.9	957.9	982.7	977.8
12.5°	940.1	957.9	962.3	957.4	968.1
15°	932.6	938.3	939.7	953.9	954.7
17.5°	924.1	922.8	919.7	929.9	948.1
20°	902.4	897.5	906.8	919.3	926.4
22.5°	870.5	871.8	882.9	893.1	901.1
25°	833.2	839.8	856.7	868.7	874.4
27.5°	805.2	815.0	826.5	840.7	852.3
30°	783.1	782.2	790.2	810.6	823.9
32.5°	740.0	743.1	751.6	776.0	794.6
35°	696.5	697.0	705.4	737.4	755.5
37.5°	646.4	642.9	647.7	682.3	694.3
40°	577.2	578.1	573.2	597.6	595.8
42.5°	496.5	503.5	478.3	510.2	508.0
45°	398.0	430.3	398.8	427.2	409.9
47.5°	314.1	362.0	335.8	356.7	324.3
50°	254.7	303.9	289.7	299.0	246.7
52.5°	209.0	248.9	253.3	255.5	192.5
55°	167.7	204.1	218.3	217.8	150.4
57.5°	123.8	165.9	182.3	189.0	114.0
60°	91.4	138.0	150.4	165.0	85.6
62.5°	73.6	121.1	124.2	144.6	65.2
65°	63.0	111.8	100.7	129.1	50.6
67.5°	55.9	104.3	82.1	115.4	43.0
70°	50.6	92.7	67.9	103.4	40.4
72.5°	49.2	79.0	52.4	92.3	39.9
75°	47.5	67.0	37.7	75.9	39.5
77.5°	40.8	57.2	27.1	58.6	36.8
80°	35.5	45.7	20.0	43.9	32.4
82.5°	27.5	34.6	17.7	33.3	26.2
85°	17.7	26.2	18.6	24.0	18.2
87.5°	8.4	14.6	13.3	12.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)