

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: P292561

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292561  
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-L82765-W2A1-U-2700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2205.0 lumens  
Efficiency: N/A  
Efficacy: 121.6 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

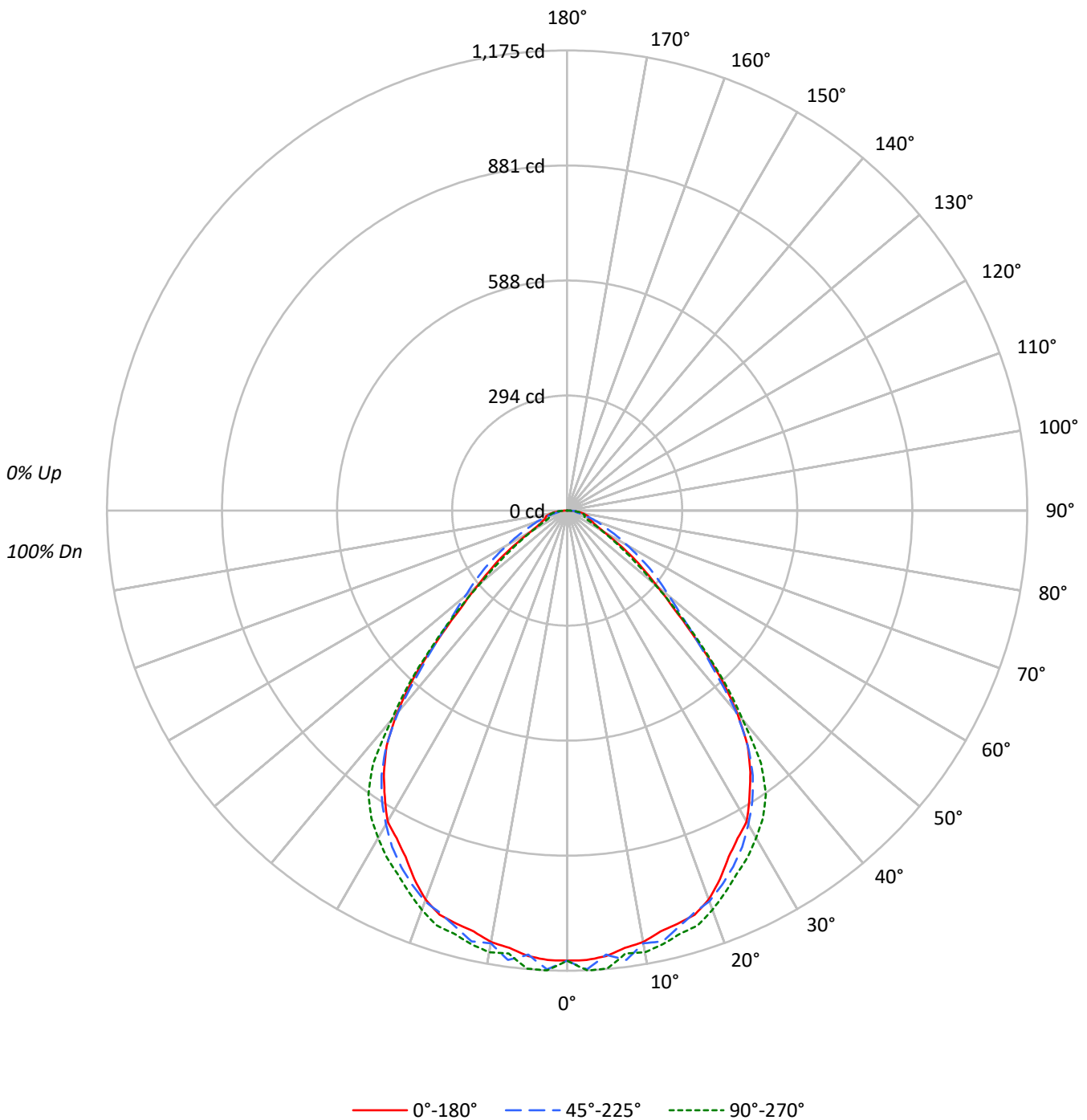
Input Watts (W): 18.135  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3092	3092	3092
5°	3085	3075	3172
10°	3056	3065	3129
15°	3042	3065	3115
20°	3026	3041	3107
25°	2897	2979	3040
30°	2849	2875	2998
35°	2680	2713	2906
40°	2374	2358	2451
45°	1773	1778	1827
50°	1248	1420	1209
55°	921	1199	826
60°	576	948	540
65°	470	751	377
70°	466	625	372
75°	578	460	480
80°	645	363	587
85°	642	673	658



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.4	5.0
10°-20°	311.6	14.1
20°-30°	461.5	20.9
30°-40°	516.9	23.4
40°-50°	379.8	17.2
50°-60°	212.3	9.6
60°-70°	118.3	5.4
70°-80°	69.5	3.2
80°-90°	25.6	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°	882.5	40.0
0°-40°	1399.4	63.5
0°-60°	1991.6	90.3
0°-90°	2205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1142	1163	1138	1162	1174	108
15°	1092	1099	1100	1117	1118	308
25°	976	984	1003	1017	1024	452
35°	816	816	826	863	885	505
45°	466	504	467	500	480	364
55°	196	239	256	255	176	175
65°	74	131	118	151	59	76
75°	56	78	44	89	46	56
85°	21	31	22	28	21	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1149.2	1149.2	1149.2	1149.2	1149.2
2.5°	1148.7	1159.1	1172.6	1174.1	1175.2
5°	1141.9	1163.2	1138.3	1161.7	1174.1
7.5°	1126.3	1139.3	1157.5	1134.1	1140.9
10°	1118.5	1121.7	1121.7	1150.7	1145.0
12.5°	1100.9	1121.7	1126.8	1121.1	1133.6
15°	1092.0	1098.8	1100.3	1117.0	1118.0
17.5°	1082.2	1080.6	1077.0	1088.9	1110.2
20°	1056.7	1051.0	1061.9	1076.5	1084.8
22.5°	1019.3	1020.9	1033.9	1045.8	1055.2
25°	975.7	983.5	1003.2	1017.2	1024.0
27.5°	942.9	954.4	967.9	984.5	998.0
30°	917.0	915.9	925.3	949.2	964.8
32.5°	866.6	870.2	880.1	908.6	930.5
35°	815.7	816.2	826.0	863.4	884.7
37.5°	756.9	752.8	758.5	799.0	813.1
40°	675.9	676.9	671.2	699.8	697.7
42.5°	581.3	589.7	560.0	597.5	594.9
45°	466.0	503.9	467.1	500.3	480.0
47.5°	367.8	423.9	393.3	417.7	379.8
50°	298.2	355.9	339.2	350.2	288.9
52.5°	244.7	291.5	296.6	299.2	225.5
55°	196.4	239.0	255.6	255.1	176.1
57.5°	144.9	194.3	213.5	221.3	133.5
60°	107.0	161.6	176.1	193.3	100.3
62.5°	86.2	141.8	145.5	169.4	76.4
65°	73.8	130.9	117.9	151.2	59.2
67.5°	65.5	122.1	96.1	135.1	50.4
70°	59.2	108.6	79.5	121.0	47.3
72.5°	57.7	92.5	61.3	108.1	46.8
75°	55.6	78.4	44.2	88.8	46.2
77.5°	47.8	67.0	31.7	68.6	43.1
80°	41.6	53.5	23.4	51.4	37.9
82.5°	32.2	40.5	20.8	39.0	30.7
85°	20.8	30.7	21.8	28.1	21.3
87.5°	9.9	17.1	15.6	15.1	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)