

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: P292557

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292557  
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-L82765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2108.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 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

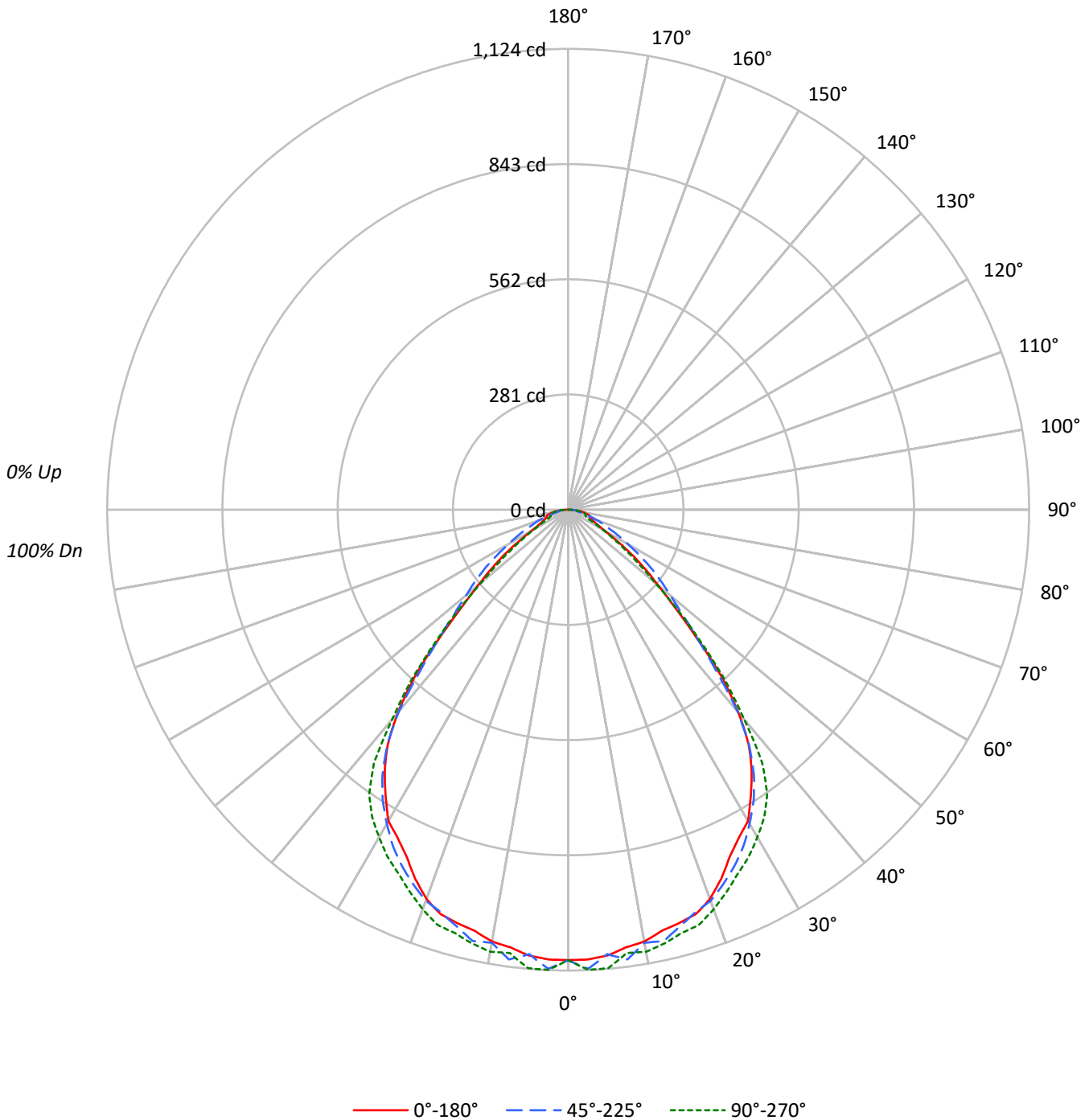
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2956	2956	2956
5°	2949	2940	3032
10°	2922	2930	2991
15°	2908	2930	2978
20°	2893	2907	2970
25°	2769	2848	2907
30°	2724	2749	2866
35°	2562	2594	2779
40°	2270	2254	2343
45°	1695	1699	1746
50°	1194	1358	1156
55°	881	1147	790
60°	551	906	516
65°	449	718	360
70°	445	598	356
75°	552	439	460
80°	615	347	563
85°	614	645	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.6	5.0
10°-20°	297.9	14.1
20°-30°	441.2	20.9
30°-40°	494.2	23.4
40°-50°	363.1	17.2
50°-60°	203.0	9.6
60°-70°	113.1	5.4
70°-80°	66.5	3.2
80°-90°	24.4	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°	843.7	40.0
0°-40°	1337.9	63.5
0°-60°	1904.0	90.3
0°-90°	2108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2108.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1099	1099	1099	1099	1099	
5°	1092	1112	1088	1111	1122	103
15°	1044	1050	1052	1068	1069	295
25°	933	940	959	972	979	432
35°	780	780	790	826	846	483
45°	446	482	446	478	459	348
55°	188	228	244	244	168	167
65°	70	125	113	144	57	73
75°	53	75	42	85	44	53
85°	20	29	21	27	20	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1098.6	1098.6	1098.6	1098.6	1098.6
2.5°	1098.1	1108.1	1121.0	1122.5	1123.5
5°	1091.7	1112.0	1088.2	1110.6	1122.5
7.5°	1076.8	1089.2	1106.6	1084.2	1090.7
10°	1069.3	1072.3	1072.3	1100.1	1094.7
12.5°	1052.4	1072.3	1077.3	1071.8	1083.7
15°	1044.0	1050.5	1051.9	1067.8	1068.8
17.5°	1034.6	1033.1	1029.6	1041.0	1061.4
20°	1010.2	1004.8	1015.2	1029.1	1037.0
22.5°	974.5	976.0	988.4	999.8	1008.7
25°	932.7	940.2	959.1	972.5	978.9
27.5°	901.5	912.4	925.3	941.2	954.1
30°	876.6	875.6	884.6	907.4	922.3
32.5°	828.4	831.9	841.4	868.7	889.5
35°	779.8	780.3	789.7	825.5	845.8
37.5°	723.6	719.7	725.1	763.9	777.3
40°	646.2	647.2	641.7	669.0	667.0
42.5°	555.8	563.7	535.4	571.2	568.7
45°	445.5	481.8	446.5	478.3	458.9
47.5°	351.6	405.3	376.0	399.3	363.1
50°	285.1	340.2	324.3	334.8	276.1
52.5°	233.9	278.6	283.6	286.1	215.6
55°	187.7	228.5	244.4	243.9	168.4
57.5°	138.6	185.8	204.1	211.6	127.6
60°	102.3	154.5	168.4	184.8	95.9
62.5°	82.4	135.6	139.1	161.9	73.0
65°	70.5	125.2	112.7	144.5	56.6
67.5°	62.6	116.7	91.9	129.1	48.2
70°	56.6	103.8	76.0	115.7	45.2
72.5°	55.1	88.4	58.6	103.3	44.7
75°	53.1	75.0	42.2	84.9	44.2
77.5°	45.7	64.1	30.3	65.6	41.2
80°	39.7	51.2	22.4	49.2	36.3
82.5°	30.8	38.7	19.9	37.3	29.3
85°	19.9	29.3	20.9	26.8	20.4
87.5°	9.4	16.4	14.9	14.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)