

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: P292664

Luminaire Tested: **22GR-LD5-24-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292664  
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-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: 2221.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

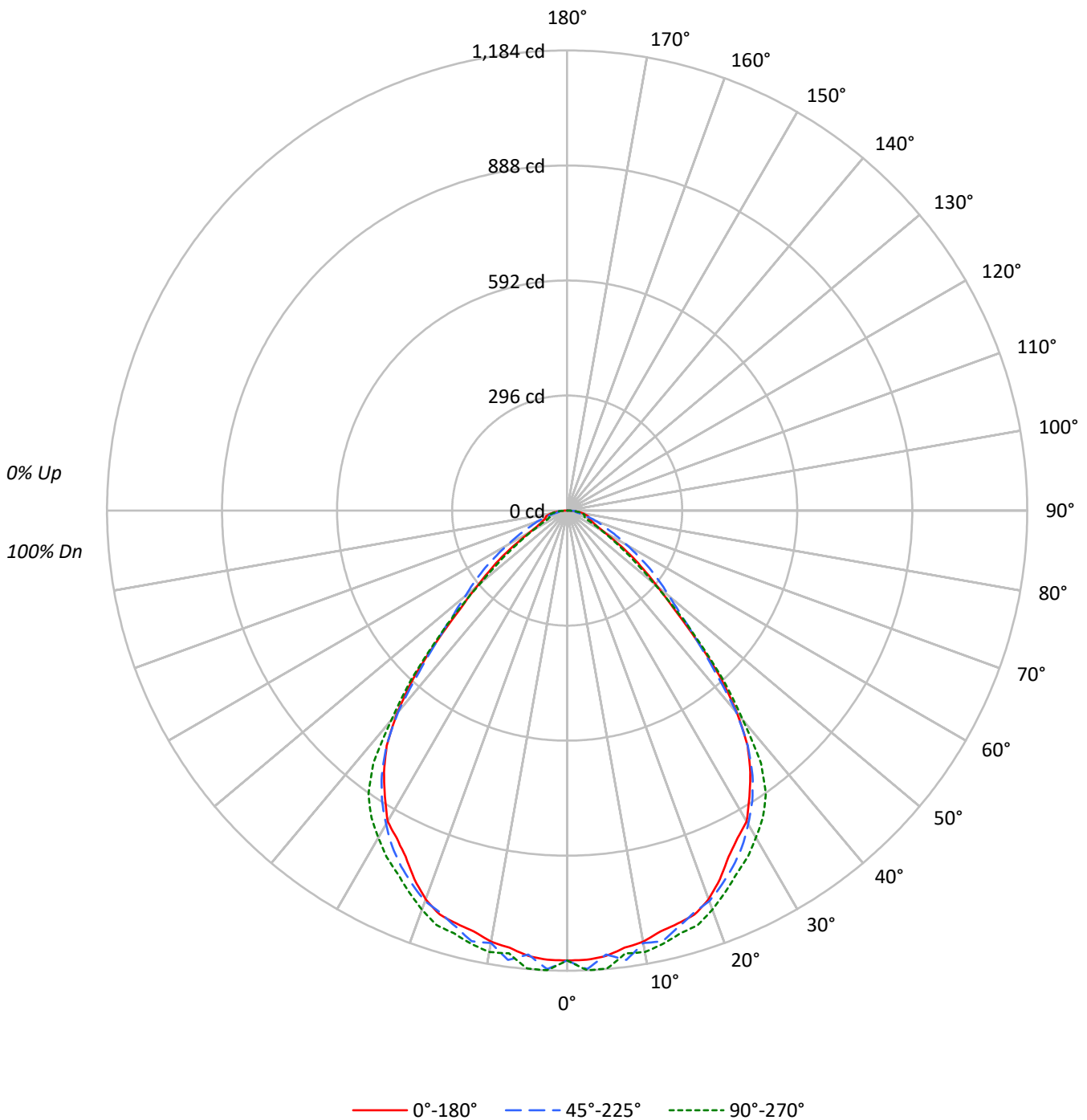
Input Watts (W): 18.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3115	3115	3115
5°	3107	3097	3195
10°	3078	3087	3151
15°	3064	3088	3137
20°	3048	3063	3129
25°	2918	3000	3062
30°	2870	2896	3020
35°	2699	2733	2928
40°	2392	2375	2469
45°	1786	1790	1840
50°	1258	1430	1218
55°	928	1208	832
60°	580	955	544
65°	473	756	380
70°	470	630	375
75°	582	463	485
80°	649	364	592
85°	645	679	664



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	5.0
10°-20°	313.9	14.1
20°-30°	464.9	20.9
30°-40°	520.7	23.4
40°-50°	382.6	17.2
50°-60°	213.9	9.6
60°-70°	119.2	5.4
70°-80°	70.0	3.2
80°-90°	25.7	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°	888.9	40.0
0°-40°	1409.6	63.5
0°-60°	2006.0	90.3
0°-90°	2221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2221.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1150	1172	1146	1170	1183	109
15°	1100	1107	1108	1125	1126	311
25°	983	991	1010	1025	1031	455
35°	822	822	832	870	891	509
45°	469	508	470	504	484	367
55°	198	241	258	257	177	176
65°	74	132	119	152	60	77
75°	56	79	44	90	47	56
85°	21	31	22	28	22	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.5	1157.5	1157.5	1157.5	1157.5
2.5°	1157.0	1167.5	1181.1	1182.6	1183.7
5°	1150.2	1171.7	1146.5	1170.1	1182.6
7.5°	1134.5	1147.6	1165.9	1142.3	1149.2
10°	1126.6	1129.8	1129.8	1159.1	1153.3
12.5°	1108.9	1129.8	1135.0	1129.3	1141.8
15°	1100.0	1106.8	1108.3	1125.1	1126.1
17.5°	1090.0	1088.4	1084.8	1096.8	1118.3
20°	1064.4	1058.6	1069.6	1084.3	1092.6
22.5°	1026.7	1028.3	1041.4	1053.4	1062.8
25°	982.7	990.6	1010.5	1024.6	1031.4
27.5°	949.8	961.3	974.9	991.6	1005.2
30°	923.6	922.6	932.0	956.1	971.8
32.5°	872.9	876.5	886.5	915.2	937.2
35°	821.6	822.1	832.0	869.7	891.2
37.5°	762.4	758.3	764.0	804.8	819.0
40°	680.8	681.9	676.1	704.9	702.8
42.5°	585.6	593.9	564.1	601.8	599.2
45°	469.4	507.6	470.4	503.9	483.5
47.5°	370.5	427.0	396.1	420.7	382.5
50°	300.4	358.5	341.7	352.7	291.0
52.5°	246.5	293.6	298.8	301.4	227.1
55°	197.8	240.7	257.5	256.9	177.4
57.5°	146.0	195.7	215.1	222.9	134.5
60°	107.8	162.7	177.4	194.7	101.0
62.5°	86.9	142.9	146.5	170.6	76.9
65°	74.3	131.9	118.8	152.3	59.7
67.5°	65.9	123.0	96.8	136.1	50.8
70°	59.7	109.4	80.1	121.9	47.6
72.5°	58.1	93.1	61.7	108.8	47.1
75°	56.0	79.0	44.5	89.5	46.6
77.5°	48.1	67.5	31.9	69.1	43.4
80°	41.9	53.9	23.5	51.8	38.2
82.5°	32.4	40.8	20.9	39.2	30.9
85°	20.9	30.9	22.0	28.3	21.5
87.5°	9.9	17.3	15.7	15.2	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)