

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: P291866

Luminaire Tested: **22GR-LD5-20-F1-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-F1-UNV-L92765-W2A1-U-2700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1629.0 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

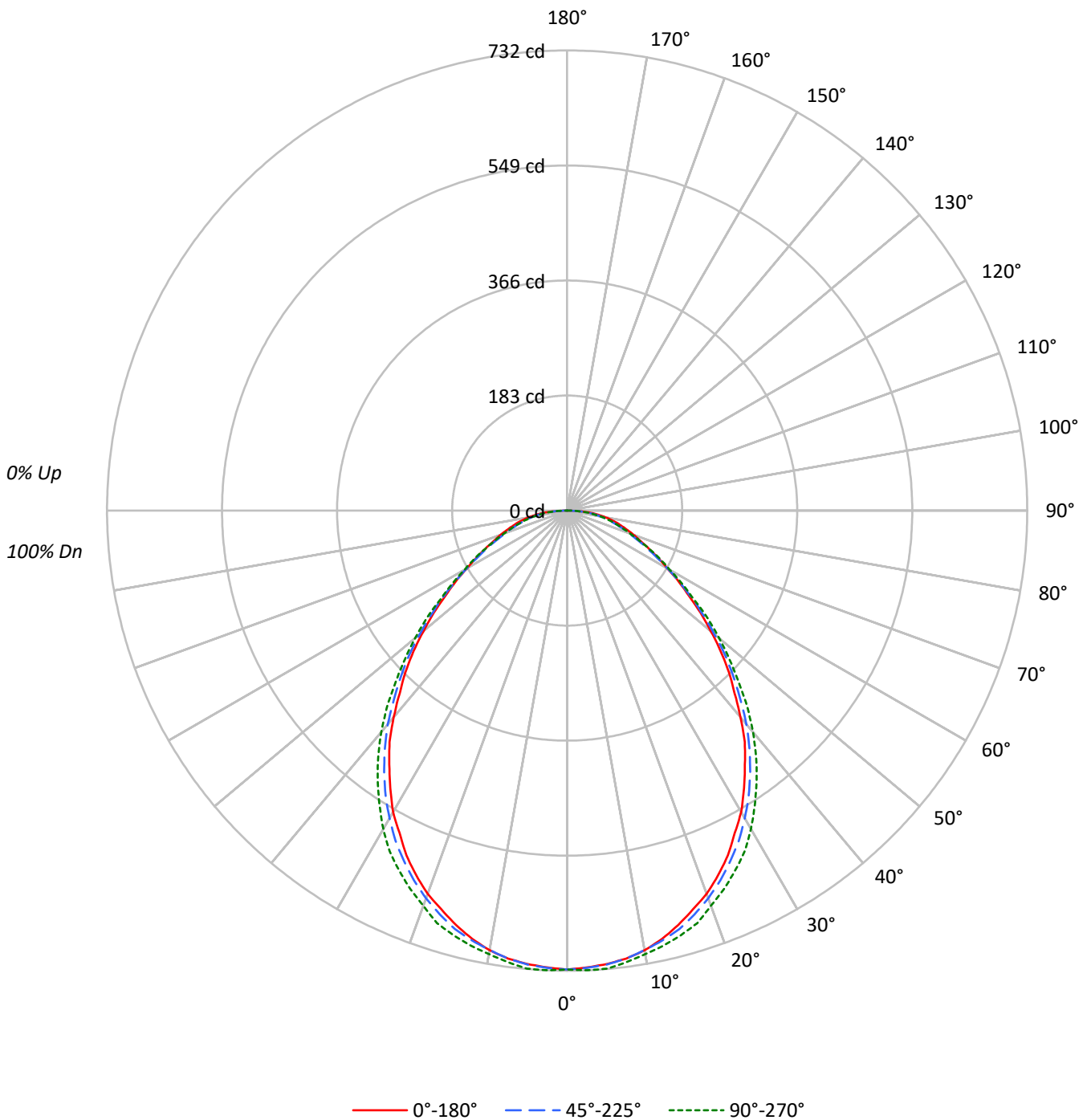
Input Watts (W): 15.438  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

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

	0°	45°	90°
0°	1964	1964	1964
5°	1956	1958	1976
10°	1941	1940	1958
15°	1901	1920	1948
20°	1858	1879	1916
25°	1796	1825	1877
30°	1721	1756	1817
35°	1620	1667	1726
40°	1508	1559	1615
45°	1384	1424	1468
50°	1248	1280	1320
55°	1108	1134	1153
60°	993	995	1015
65°	915	884	915
70°	883	818	842
75°	898	802	817
80°	969	841	841
85°	1074	889	877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.9	4.2
10°-20°	194.2	11.9
20°-30°	283.5	17.4
30°-40°	317.4	19.5
40°-50°	288.8	17.7
50°-60°	217.4	13.3
60°-70°	141.9	8.7
70°-80°	85.1	5.2
80°-90°	31.9	2.0
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°	546.6	33.6
0°-40°	863.9	53.0
0°-60°	1370.2	84.1
0°-90°	1629.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1629.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	724	723	725	727	732	69
15°	682	683	689	695	699	192
25°	605	607	615	626	632	278
35°	493	498	507	519	525	308
45°	364	367	374	382	386	280
55°	236	240	242	245	246	213
65°	144	142	139	141	144	144
75°	86	83	77	78	79	92
85°	35	34	29	27	28	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	730.0	730.0	730.0	730.0	730.0
2.5°	727.4	727.0	728.1	730.0	731.9
5°	724.0	722.9	724.8	727.4	731.5
7.5°	718.8	718.8	718.8	723.6	724.4
10°	710.2	710.9	709.8	714.6	716.5
12.5°	697.8	698.2	700.4	705.3	708.7
15°	682.5	683.2	689.2	694.8	699.3
17.5°	665.3	667.9	673.5	682.5	688.1
20°	648.8	651.8	656.3	666.0	669.0
22.5°	627.8	631.2	636.8	645.4	651.8
25°	605.0	606.9	614.7	626.0	632.0
27.5°	577.7	581.8	591.6	603.1	611.4
30°	553.8	556.0	565.0	578.5	584.8
32.5°	523.5	530.2	537.7	549.6	555.6
35°	493.1	497.6	507.4	519.3	525.3
37.5°	464.0	466.6	476.3	486.4	493.9
40°	429.2	434.0	443.8	454.6	459.8
42.5°	394.4	401.5	407.8	418.7	424.3
45°	363.7	367.4	374.2	382.0	385.8
47.5°	331.5	333.4	341.2	346.1	350.2
50°	298.2	300.5	305.7	310.6	315.4
52.5°	267.5	269.4	272.8	277.3	282.1
55°	236.1	239.5	241.7	245.1	245.8
57.5°	210.7	210.3	211.8	214.4	217.0
60°	184.5	185.2	184.8	187.5	188.6
62.5°	162.8	162.4	160.1	163.9	166.9
65°	143.7	142.2	138.8	141.1	143.7
67.5°	126.1	125.3	119.7	121.6	123.8
70°	112.2	109.6	104.0	105.1	107.0
72.5°	98.8	95.8	90.2	90.5	91.7
75°	86.4	83.4	77.1	77.5	78.6
77.5°	74.8	71.1	65.5	64.7	65.5
80°	62.5	59.1	54.3	52.0	54.3
82.5°	49.8	47.9	42.3	40.0	40.8
85°	34.8	33.7	28.8	27.3	28.4
87.5°	16.1	17.2	14.6	13.5	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)