

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: P292129

Luminaire Tested: **22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292129  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2197.0 lumens  
Efficiency: N/A  
Efficacy: 135.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

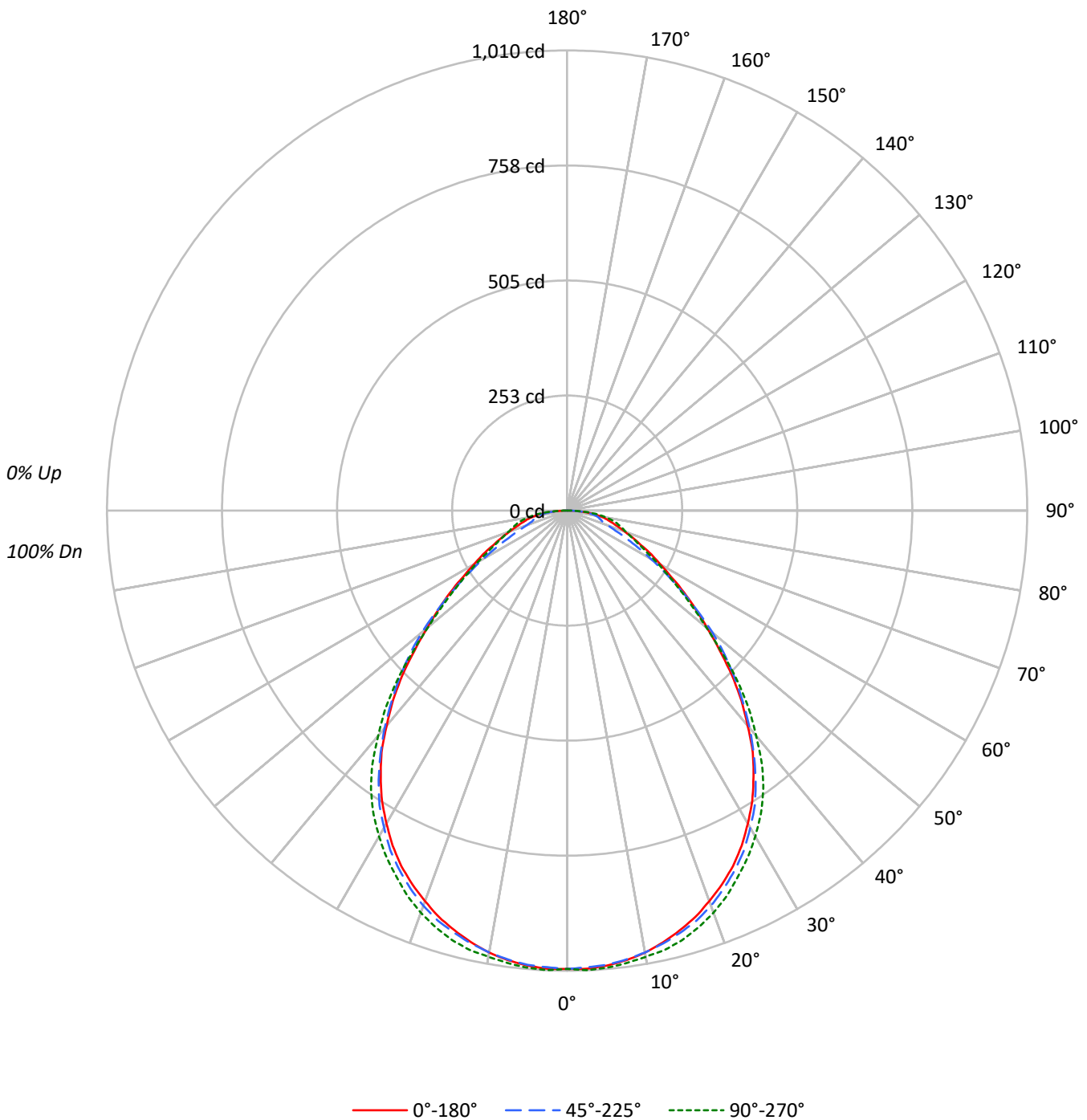
Input Watts (W): 16.182  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292129

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P292129

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K

**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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

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

	0°	45°	90°
0°	2707	2707	2707
5°	2708	2704	2721
10°	2692	2691	2717
15°	2658	2672	2719
20°	2612	2643	2690
25°	2556	2585	2632
30°	2464	2497	2566
35°	2343	2370	2465
40°	2166	2189	2266
45°	1946	1981	2012
50°	1682	1742	1665
55°	1468	1430	1410
60°	1271	1145	1222
65°	1136	898	1097
70°	1054	744	1082
75°	1052	787	1201
80°	1165	990	1354
85°	1216	1074	1531



TEST NUMBER: P292129

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.2	4.3
10°-20°	271.2	12.3
20°-30°	401.1	18.3
30°-40°	452.6	20.6
40°-50°	399.0	18.2
50°-60°	273.7	12.5
60°-70°	161.5	7.4
70°-80°	100.8	4.6
80°-90°	42.0	1.9
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°	767.5	34.9
0°-40°	1220.0	55.5
0°-60°	1892.7	86.1
0°-90°	2197.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2197.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1003	1000	1001	1005	1007	95
15°	954	955	959	971	976	269
25°	861	864	871	882	886	395
35°	713	719	721	739	750	444
45°	511	514	520	524	529	393
55°	313	305	305	294	301	281
65°	178	157	141	163	172	180
75°	101	91	76	106	116	109
85°	39	37	35	46	50	43
90°	0	0	0	0	0	



TEST NUMBER: P292129

CATALOG NUMBER: 22GR-LD5-20-A-UNV-L83050-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1006.1	1006.1	1006.1	1006.1	1006.1
2.5°	1006.7	1004.1	1003.1	1007.2	1009.7
5°	1002.6	1000.5	1001.0	1004.6	1007.2
7.5°	995.4	993.9	993.9	999.0	1001.5
10°	985.2	984.7	984.7	990.8	994.4
12.5°	970.9	971.4	973.4	981.6	987.7
15°	954.0	955.0	959.1	970.9	976.0
17.5°	935.6	935.6	943.8	953.0	959.1
20°	912.1	913.6	922.8	933.0	939.2
22.5°	888.0	890.6	898.3	910.0	915.7
25°	861.0	864.0	870.7	881.9	886.5
27.5°	829.3	833.3	840.5	848.7	858.4
30°	793.0	799.1	803.7	814.9	825.7
32.5°	756.1	761.8	766.9	778.6	790.9
35°	713.2	719.3	721.4	738.8	750.5
37.5°	669.2	671.8	672.8	690.2	703.0
40°	616.6	621.7	623.2	637.0	645.2
42.5°	566.0	568.0	571.1	581.3	591.0
45°	511.3	513.8	520.5	523.5	528.6
47.5°	454.0	461.7	469.3	459.6	460.1
50°	401.8	408.0	416.2	397.8	397.8
52.5°	355.3	358.4	358.9	343.6	346.6
55°	312.9	305.2	304.7	294.5	300.6
57.5°	270.5	260.2	256.6	253.6	260.7
60°	236.2	217.8	212.7	217.3	227.0
62.5°	208.1	184.6	174.8	186.6	195.3
65°	178.4	157.0	141.1	163.1	172.3
67.5°	155.4	135.0	114.5	145.7	152.4
70°	133.9	118.1	94.6	132.4	137.5
72.5°	116.6	104.3	81.8	119.6	125.8
75°	101.2	91.0	75.7	105.8	115.5
77.5°	89.0	77.7	70.6	91.5	103.3
80°	75.2	63.9	63.9	76.7	87.4
82.5°	59.3	50.1	51.6	62.4	70.0
85°	39.4	36.8	34.8	45.5	49.6
87.5°	19.9	20.5	18.4	23.5	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)