

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: P292164

Luminaire Tested: **22GR-LD5-20-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292164  
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-L82765-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2106.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 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

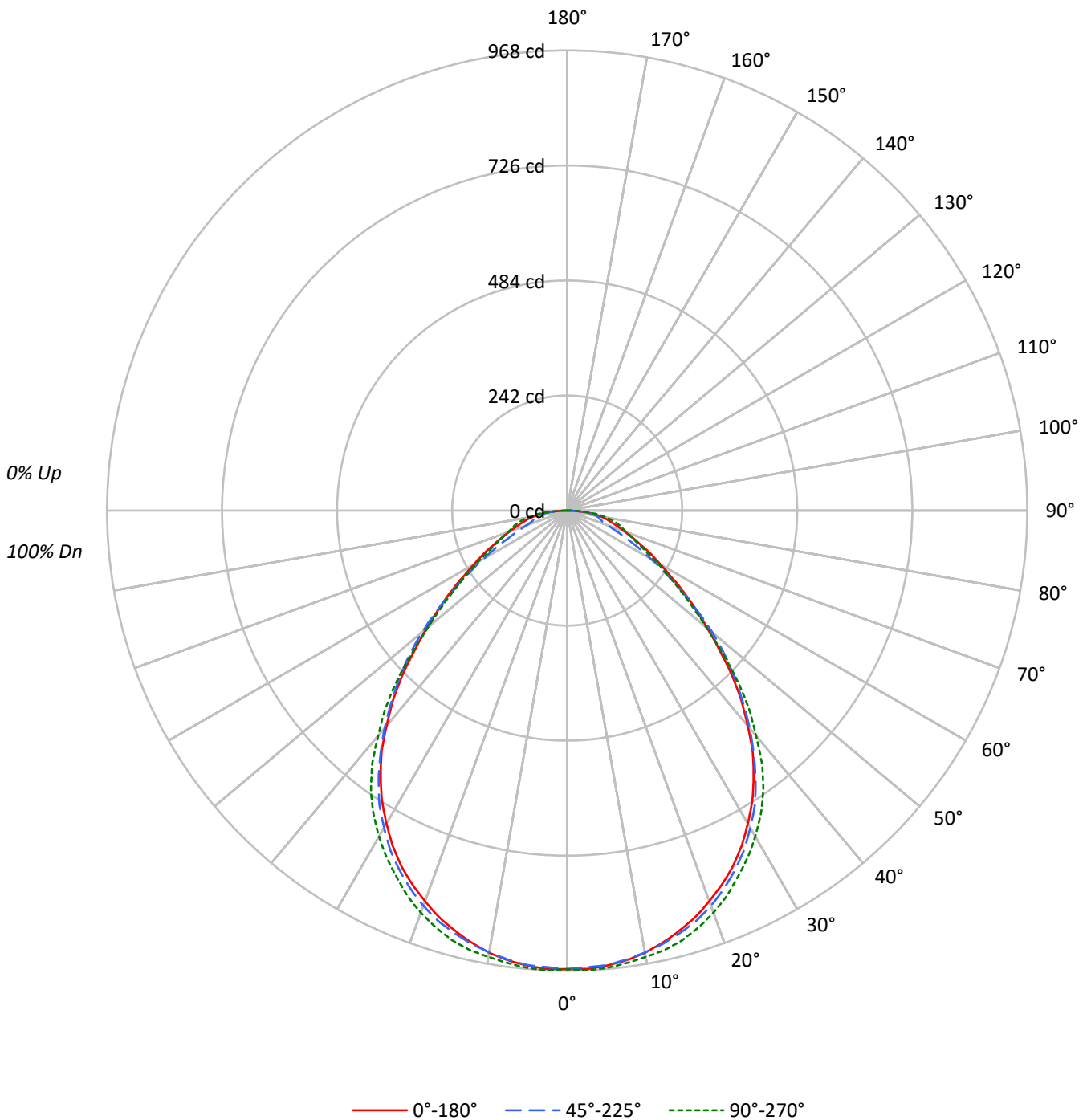
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2595	2595	2595
5°	2596	2592	2608
10°	2581	2579	2605
15°	2548	2561	2606
20°	2504	2533	2578
25°	2450	2478	2523
30°	2362	2394	2459
35°	2246	2272	2363
40°	2076	2099	2173
45°	1865	1899	1928
50°	1613	1670	1596
55°	1407	1370	1352
60°	1218	1097	1171
65°	1089	862	1052
70°	1010	714	1037
75°	1009	754	1152
80°	1116	950	1299
85°	1164	1028	1467



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.3	4.3
10°-20°	259.9	12.3
20°-30°	384.5	18.3
30°-40°	433.8	20.6
40°-50°	382.4	18.2
50°-60°	262.4	12.5
60°-70°	154.8	7.4
70°-80°	96.6	4.6
80°-90°	40.3	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°	735.7	34.9
0°-40°	1169.5	55.5
0°-60°	1814.3	86.1
0°-90°	2106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2106.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	961	959	960	963	966	91
15°	914	916	919	931	936	258
25°	825	828	835	845	850	379
35°	684	690	692	708	719	426
45°	490	492	499	502	507	376
55°	300	293	292	282	288	269
65°	171	150	135	156	165	172
75°	97	87	72	101	111	104
85°	38	35	33	44	48	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	964.5	964.5	964.5	964.5	964.5
2.5°	965.0	962.5	961.5	965.5	967.9
5°	961.0	959.1	959.6	963.0	965.5
7.5°	954.2	952.7	952.7	957.6	960.1
10°	944.4	943.9	943.9	949.8	953.2
12.5°	930.7	931.1	933.1	940.9	946.8
15°	914.5	915.5	919.4	930.7	935.6
17.5°	896.8	896.8	904.7	913.5	919.4
20°	874.3	875.8	884.6	894.4	900.3
22.5°	851.3	853.7	861.1	872.3	877.7
25°	825.3	828.2	834.6	845.4	849.8
27.5°	794.9	798.8	805.7	813.5	822.8
30°	760.1	766.0	770.4	781.2	791.5
32.5°	724.8	730.2	735.1	746.4	758.1
35°	683.7	689.5	691.5	708.2	719.4
37.5°	641.5	644.0	644.9	661.6	673.9
40°	591.0	595.9	597.4	610.6	618.5
42.5°	542.5	544.5	547.4	557.2	566.5
45°	490.1	492.5	498.9	501.8	506.7
47.5°	435.2	442.5	449.9	440.6	441.1
50°	385.2	391.1	398.9	381.3	381.3
52.5°	340.6	343.5	344.0	329.3	332.3
55°	299.9	292.6	292.1	282.3	288.2
57.5°	259.3	249.4	246.0	243.1	249.9
60°	226.4	208.8	203.9	208.3	217.6
62.5°	199.5	176.9	167.6	178.9	187.2
65°	171.0	150.5	135.3	156.3	165.2
67.5°	149.0	129.4	109.8	139.7	146.0
70°	128.4	113.2	90.7	126.9	131.8
72.5°	111.7	100.0	78.4	114.7	120.6
75°	97.0	87.2	72.5	101.4	110.8
77.5°	85.3	74.5	67.6	87.7	99.0
80°	72.0	61.3	61.3	73.5	83.8
82.5°	56.8	48.0	49.5	59.8	67.1
85°	37.7	35.3	33.3	43.6	47.5
87.5°	19.1	19.6	17.6	22.5	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)