

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: P292161

Luminaire Tested: **22GR-LD5-20-A-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292161  
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-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1957.0 lumens  
Efficiency: N/A  
Efficacy: 127.5 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

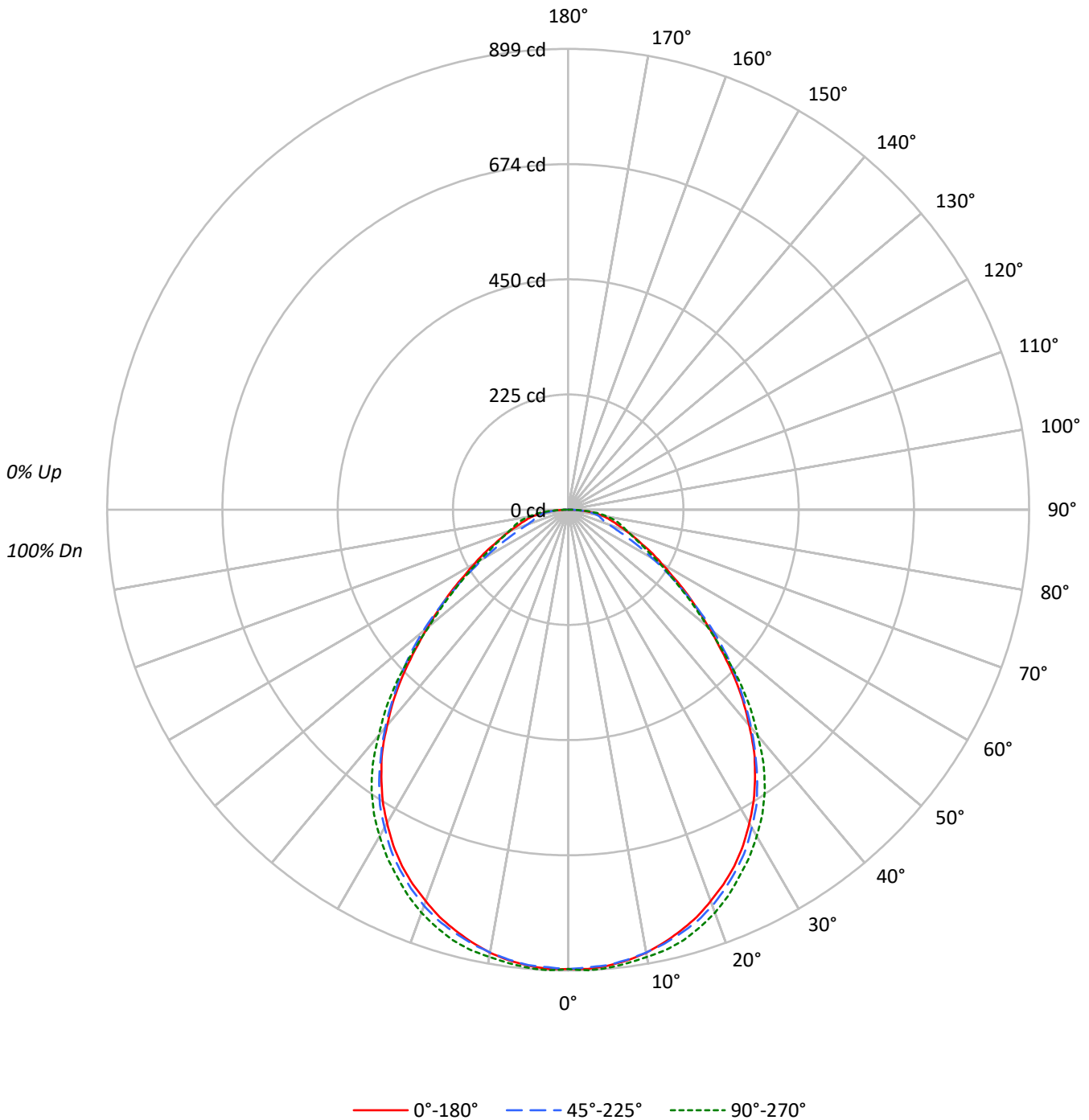
Input Watts (W): 15.345  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2412	2412	2412
5°	2412	2409	2423
10°	2398	2397	2420
15°	2367	2380	2422
20°	2326	2354	2396
25°	2277	2303	2345
30°	2195	2224	2285
35°	2087	2111	2196
40°	1929	1950	2019
45°	1733	1764	1792
50°	1498	1552	1483
55°	1308	1273	1256
60°	1132	1019	1088
65°	1012	800	977
70°	939	662	964
75°	938	701	1070
80°	1037	882	1207
85°	1084	957	1365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.8	4.3
10°-20°	241.6	12.3
20°-30°	357.3	18.3
30°-40°	403.1	20.6
40°-50°	355.4	18.2
50°-60°	243.8	12.5
60°-70°	143.8	7.4
70°-80°	89.8	4.6
80°-90°	37.4	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°	683.6	34.9
0°-40°	1086.8	55.5
0°-60°	1685.9	86.2
0°-90°	1957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1957.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	893	891	892	895	897	85
15°	850	851	854	865	869	240
25°	767	770	776	786	790	352
35°	635	641	643	658	668	396
45°	455	458	464	466	471	350
55°	279	272	271	262	268	250
65°	159	140	126	145	154	160
75°	90	81	67	94	103	97
85°	35	33	31	40	44	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	896.2	896.2	896.2	896.2	896.2
2.5°	896.7	894.4	893.5	897.1	899.4
5°	893.0	891.2	891.7	894.9	897.1
7.5°	886.7	885.3	885.3	889.9	892.1
10°	877.6	877.1	877.1	882.6	885.8
12.5°	864.8	865.3	867.1	874.4	879.8
15°	849.8	850.7	854.3	864.8	869.4
17.5°	833.4	833.4	840.7	848.9	854.3
20°	812.4	813.8	822.0	831.1	836.6
22.5°	791.0	793.3	800.1	810.6	815.6
25°	766.9	769.6	775.6	785.6	789.7
27.5°	738.7	742.3	748.7	756.0	764.6
30°	706.3	711.8	715.9	725.9	735.5
32.5°	673.5	678.6	683.1	693.6	704.5
35°	635.3	640.8	642.6	658.1	668.5
37.5°	596.1	598.4	599.3	614.8	626.2
40°	549.2	553.8	555.1	567.4	574.7
42.5°	504.1	506.0	508.7	517.8	526.4
45°	455.4	457.7	463.6	466.3	470.9
47.5°	404.4	411.2	418.1	409.4	409.9
50°	357.9	363.4	370.7	354.3	354.3
52.5°	316.5	319.2	319.7	306.0	308.8
55°	278.7	271.9	271.4	262.3	267.8
57.5°	240.9	231.8	228.6	225.9	232.3
60°	210.4	194.0	189.4	193.5	202.2
62.5°	185.3	164.4	155.7	166.2	174.0
65°	158.9	139.8	125.7	145.3	153.5
67.5°	138.4	120.2	102.0	129.8	135.7
70°	119.3	105.2	84.2	117.9	122.5
72.5°	103.8	92.9	72.9	106.6	112.0
75°	90.2	81.1	67.4	94.3	102.9
77.5°	79.2	69.2	62.8	81.5	92.0
80°	66.9	56.9	56.9	68.3	77.9
82.5°	52.8	44.6	46.0	55.6	62.4
85°	35.1	32.8	31.0	40.5	44.2
87.5°	17.8	18.2	16.4	20.9	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)