

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: P292169

Luminaire Tested: **22GR-LD5-24-A-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292169  
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-LD5-24-A-UNV-L82765-W2A1-U-2700K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2232.0 lumens  
Efficiency: N/A  
Efficacy: 123.1 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

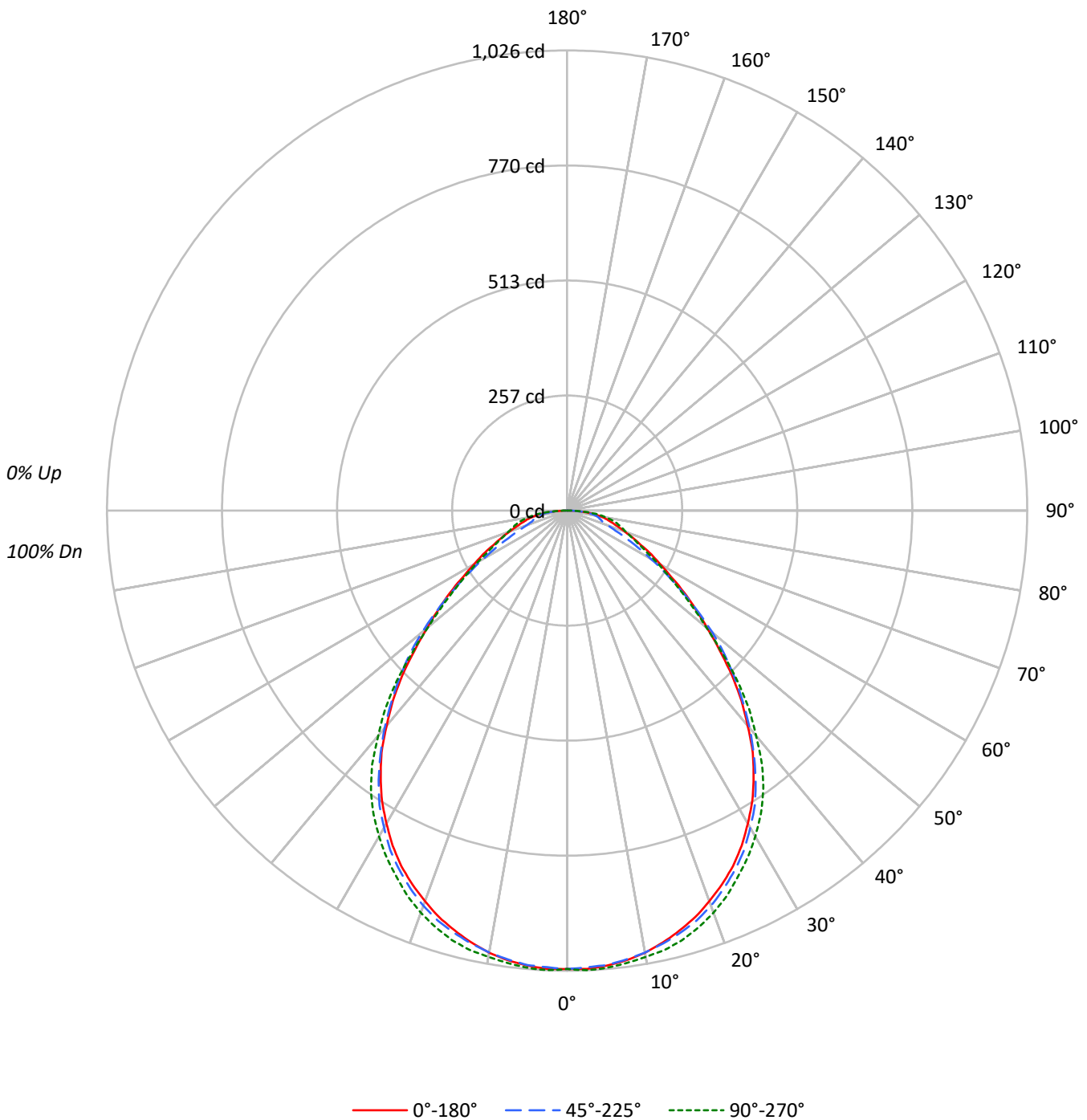
Input Watts (W): 18.135  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

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

	0°	45°	90°
0°	2751	2751	2751
5°	2751	2747	2764
10°	2735	2734	2760
15°	2700	2715	2762
20°	2653	2685	2732
25°	2597	2626	2674
30°	2503	2537	2606
35°	2380	2408	2505
40°	2200	2224	2303
45°	1977	2012	2044
50°	1709	1770	1692
55°	1491	1453	1433
60°	1292	1163	1241
65°	1154	913	1114
70°	1071	756	1099
75°	1069	800	1221
80°	1184	1006	1376
85°	1235	1090	1556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	4.3
10°-20°	275.5	12.3
20°-30°	407.5	18.3
30°-40°	459.8	20.6
40°-50°	405.3	18.2
50°-60°	278.1	12.5
60°-70°	164.1	7.4
70°-80°	102.4	4.6
80°-90°	42.7	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°	779.7	34.9
0°-40°	1239.5	55.5
0°-60°	1922.9	86.1
0°-90°	2232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2232.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1018	1016	1017	1021	1023	97
15°	969	970	974	986	992	273
25°	875	878	884	896	901	402
35°	725	731	733	750	762	451
45°	519	522	529	532	537	399
55°	318	310	310	299	305	285
65°	181	160	143	166	175	183
75°	103	92	77	108	117	110
85°	40	37	35	46	50	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022.2	1022.2	1022.2	1022.2	1022.2
2.5°	1022.7	1020.1	1019.1	1023.2	1025.8
5°	1018.5	1016.5	1017.0	1020.6	1023.2
7.5°	1011.3	1009.7	1009.7	1014.9	1017.5
10°	1000.9	1000.4	1000.4	1006.6	1010.2
12.5°	986.3	986.9	988.9	997.2	1003.5
15°	969.2	970.2	974.4	986.3	991.5
17.5°	950.5	950.5	958.8	968.2	974.4
20°	926.6	928.2	937.5	947.9	954.1
22.5°	902.2	904.8	912.6	924.5	930.2
25°	874.7	877.8	884.5	896.0	900.6
27.5°	842.5	846.6	853.9	862.2	872.1
30°	805.6	811.8	816.5	827.9	838.8
32.5°	768.2	773.9	779.1	791.0	803.5
35°	724.6	730.8	732.9	750.5	762.5
37.5°	679.9	682.5	683.5	701.2	714.2
40°	626.4	631.6	633.1	647.2	655.5
42.5°	575.0	577.1	580.2	590.6	600.4
45°	519.4	522.0	528.7	531.9	537.1
47.5°	461.2	469.0	476.8	466.9	467.5
50°	408.2	414.5	422.8	404.1	404.1
52.5°	361.0	364.1	364.6	349.0	352.2
55°	317.9	310.1	309.6	299.2	305.4
57.5°	274.8	264.4	260.7	257.6	264.9
60°	240.0	221.3	216.1	220.7	230.6
62.5°	211.4	187.5	177.6	189.6	198.4
65°	181.3	159.5	143.4	165.7	175.0
67.5°	157.9	137.1	116.3	148.0	154.8
70°	136.1	120.0	96.1	134.5	139.7
72.5°	118.4	106.0	83.1	121.5	127.8
75°	102.8	92.5	76.9	107.5	117.4
77.5°	90.4	78.9	71.7	93.0	104.9
80°	76.4	64.9	64.9	77.9	88.8
82.5°	60.3	50.9	52.5	63.4	71.2
85°	40.0	37.4	35.3	46.2	50.4
87.5°	20.3	20.8	18.7	23.9	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)