

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: P292130

Luminaire Tested: **22GR-LD5-24-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292130  
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-L83050-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: 2299.0 lumens  
Efficiency: N/A  
Efficacy: 126.8 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

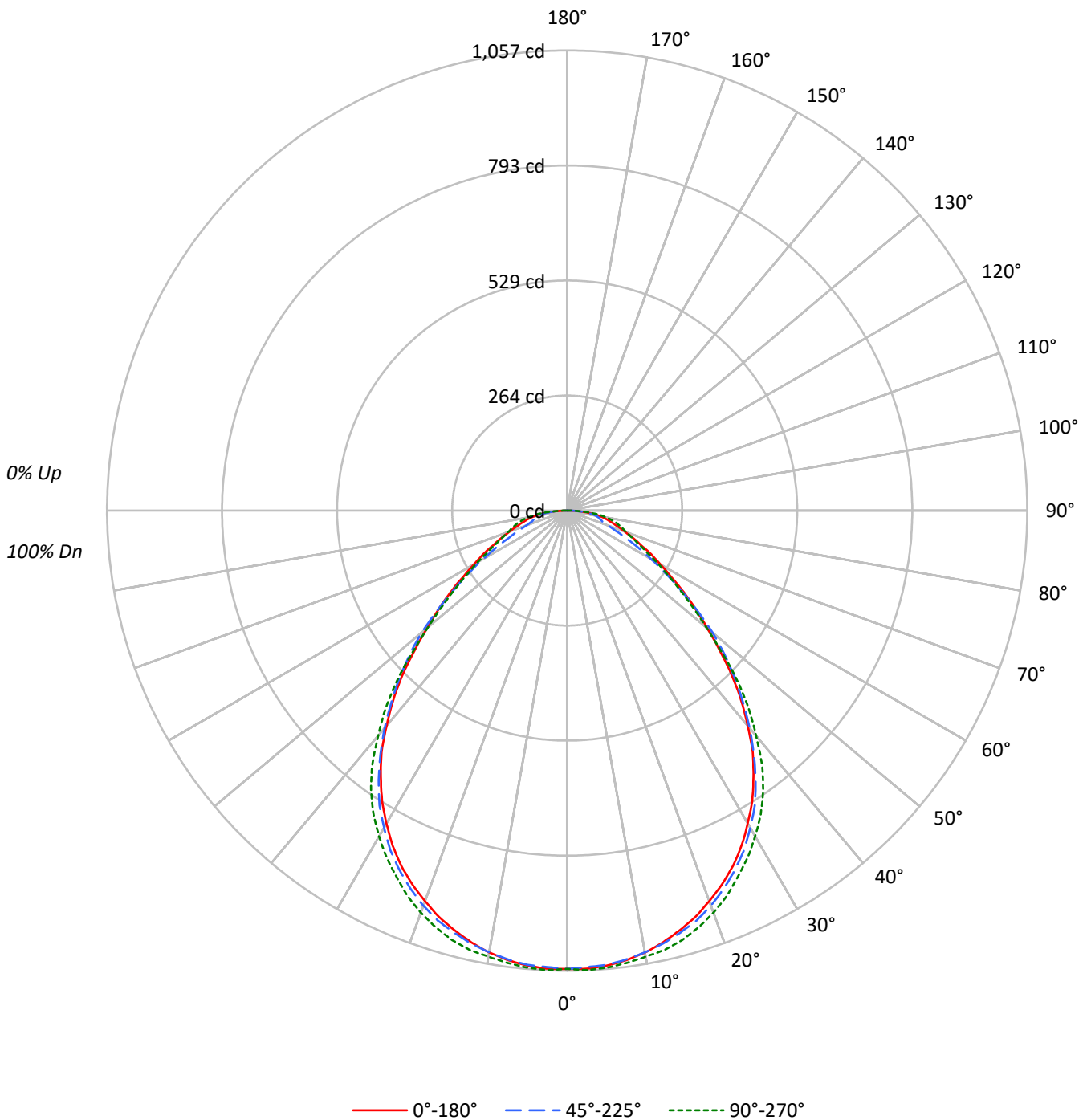
Input Watts (W): 18.135  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2833	2833	2833
5°	2834	2830	2847
10°	2817	2816	2843
15°	2781	2796	2845
20°	2733	2765	2814
25°	2675	2705	2754
30°	2578	2613	2685
35°	2452	2480	2580
40°	2266	2291	2372
45°	2036	2073	2105
50°	1760	1823	1742
55°	1536	1496	1476
60°	1330	1198	1278
65°	1189	940	1148
70°	1103	779	1132
75°	1101	823	1257
80°	1218	1037	1418
85°	1272	1124	1602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.6	4.3
10°-20°	283.8	12.3
20°-30°	419.7	18.3
30°-40°	473.6	20.6
40°-50°	417.5	18.2
50°-60°	286.4	12.5
60°-70°	169.0	7.4
70°-80°	105.5	4.6
80°-90°	44.0	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°	803.1	34.9
0°-40°	1276.7	55.5
0°-60°	1980.6	86.1
0°-90°	2299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2299.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1049	1047	1048	1051	1054	100
15°	998	999	1004	1016	1021	281
25°	901	904	911	923	928	414
35°	746	753	755	773	785	465
45°	535	538	545	548	553	411
55°	327	319	319	308	315	294
65°	187	164	148	171	180	188
75°	106	95	79	111	121	114
85°	41	38	36	48	52	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1052.9	1052.9	1052.9	1052.9	1052.9
2.5°	1053.4	1050.7	1049.6	1053.9	1056.6
5°	1049.1	1047.0	1047.5	1051.3	1053.9
7.5°	1041.6	1040.0	1040.0	1045.4	1048.0
10°	1030.9	1030.4	1030.4	1036.8	1040.6
12.5°	1015.9	1016.5	1018.6	1027.2	1033.6
15°	998.3	999.4	1003.6	1015.9	1021.3
17.5°	979.0	979.0	987.6	997.2	1003.6
20°	954.4	956.0	965.7	976.4	982.8
22.5°	929.3	932.0	940.0	952.3	958.2
25°	900.9	904.1	911.1	922.9	927.7
27.5°	867.8	872.0	879.5	888.1	898.2
30°	829.8	836.2	841.0	852.8	864.0
32.5°	791.2	797.1	802.5	814.8	827.6
35°	746.3	752.7	754.9	773.1	785.4
37.5°	700.3	703.0	704.0	722.2	735.6
40°	645.2	650.5	652.2	666.6	675.2
42.5°	592.2	594.4	597.6	608.3	618.4
45°	535.0	537.7	544.6	547.8	553.2
47.5°	475.1	483.1	491.1	481.0	481.5
50°	420.5	426.9	435.5	416.2	416.2
52.5°	371.8	375.0	375.6	359.5	362.7
55°	327.4	319.4	318.9	308.2	314.6
57.5°	283.0	272.3	268.6	265.4	272.8
60°	247.2	227.9	222.6	227.4	237.5
62.5°	217.7	193.1	183.0	195.3	204.4
65°	186.7	164.2	147.7	170.7	180.3
67.5°	162.6	141.2	119.8	152.5	159.4
70°	140.2	123.6	99.0	138.6	143.9
72.5°	122.0	109.1	85.6	125.2	131.6
75°	105.9	95.2	79.2	110.7	120.9
77.5°	93.1	81.3	73.8	95.8	108.1
80°	78.6	66.9	66.9	80.2	91.5
82.5°	62.1	52.4	54.0	65.3	73.3
85°	41.2	38.5	36.4	47.6	51.9
87.5°	20.9	21.4	19.3	24.6	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)