

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: P291777

Luminaire Tested: **22GR-LD5-24-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-F1-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2239.0 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

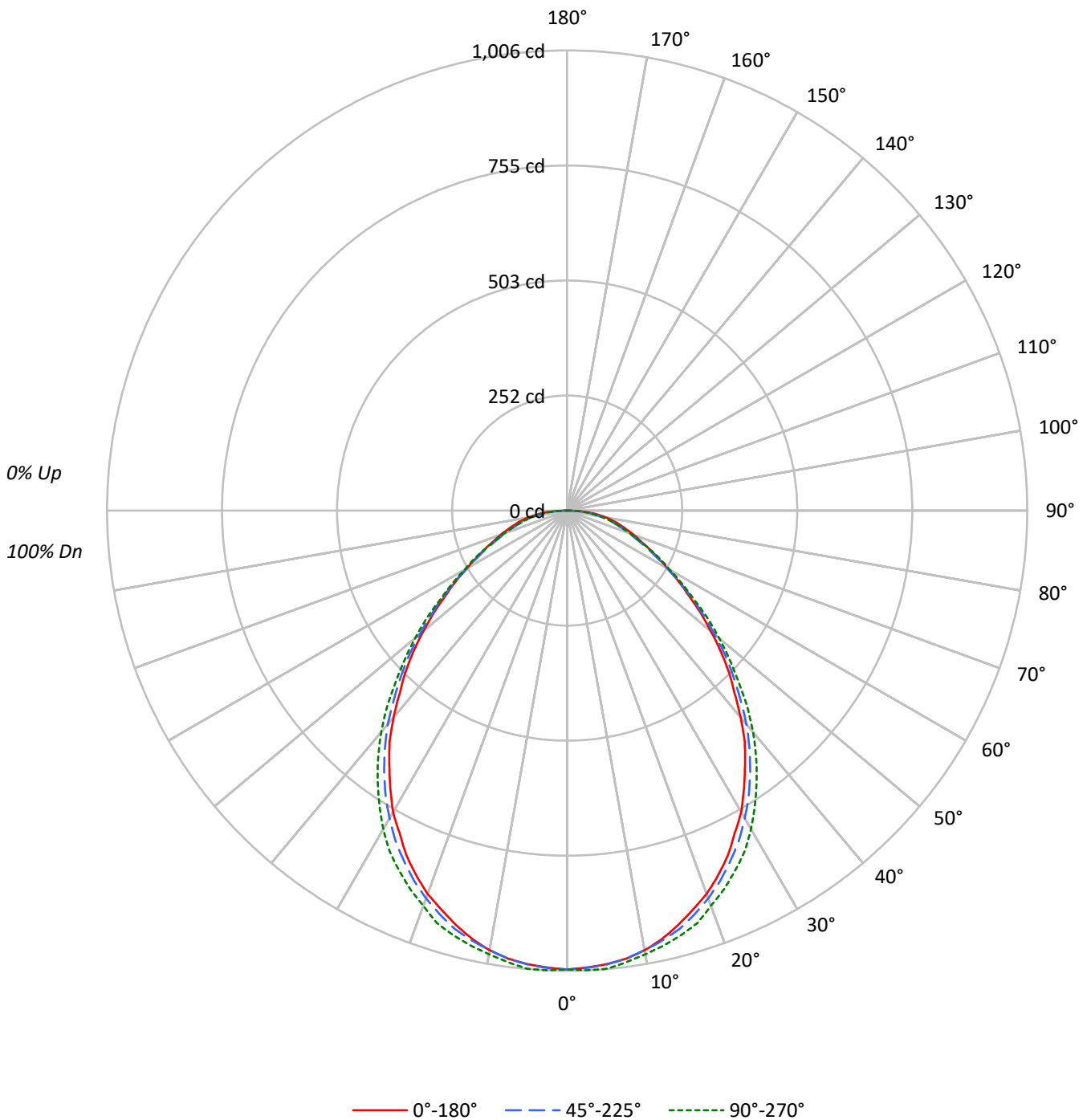
Input Watts (W): 18.135
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2700	2700	2700
5°	2688	2691	2716
10°	2667	2666	2691
15°	2613	2639	2678
20°	2554	2583	2633
25°	2469	2509	2579
30°	2365	2413	2498
35°	2227	2291	2372
40°	2072	2142	2220
45°	1902	1957	2018
50°	1716	1759	1815
55°	1522	1559	1585
60°	1364	1368	1395
65°	1258	1215	1258
70°	1214	1125	1157
75°	1235	1101	1123
80°	1331	1156	1156
85°	1476	1223	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	4.2
10°-20°	267.0	11.9
20°-30°	389.6	17.4
30°-40°	436.2	19.5
40°-50°	397.0	17.7
50°-60°	298.8	13.3
60°-70°	195.0	8.7
70°-80°	117.0	5.2
80°-90°	43.9	2.0
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°	751.2	33.6
0°-40°	1187.4	53.0
0°-60°	1883.2	84.1
0°-90°	2239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1003	1003	1003	1003	1003	
5°	995	994	996	1000	1005	94
15°	938	939	947	955	961	264
25°	832	834	845	860	869	382
35°	678	684	697	714	722	424
45°	500	505	514	525	530	385
55°	324	329	332	337	338	293
65°	198	195	191	194	198	197
75°	119	115	106	106	108	126
85°	48	46	40	38	39	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.3	1003.3	1003.3	1003.3	1003.3
2.5°	999.7	999.2	1000.8	1003.3	1005.9
5°	995.1	993.6	996.1	999.7	1005.4
7.5°	987.9	987.9	987.9	994.6	995.6
10°	976.1	977.1	975.6	982.3	984.8
12.5°	959.1	959.6	962.7	969.4	974.0
15°	938.0	939.1	947.3	955.0	961.2
17.5°	914.4	918.0	925.7	938.0	945.7
20°	891.7	895.9	902.0	915.4	919.5
22.5°	862.9	867.6	875.3	887.1	895.9
25°	831.6	834.1	844.9	860.4	868.6
27.5°	794.0	799.7	813.1	829.0	840.3
30°	761.1	764.2	776.6	795.1	803.8
32.5°	719.5	728.7	739.0	755.5	763.7
35°	677.8	684.0	697.4	713.8	722.0
37.5°	637.7	641.3	654.7	668.6	678.8
40°	589.9	596.6	609.9	624.8	632.0
42.5°	542.0	551.8	560.6	575.5	583.2
45°	499.9	505.0	514.3	525.1	530.2
47.5°	455.6	458.2	469.0	475.7	481.4
50°	409.9	413.0	420.2	426.8	433.5
52.5°	367.7	370.3	374.9	381.1	387.8
55°	324.5	329.1	332.2	336.8	337.9
57.5°	289.5	289.0	291.1	294.7	298.3
60°	253.5	254.6	254.1	257.7	259.2
62.5°	223.7	223.2	220.1	225.3	229.4
65°	197.5	195.4	190.8	193.9	197.5
67.5°	173.3	172.3	164.6	167.1	170.2
70°	154.3	150.7	143.0	144.5	147.1
72.5°	135.8	131.7	123.9	124.5	126.0
75°	118.8	114.7	105.9	106.5	108.0
77.5°	102.9	97.7	90.0	89.0	90.0
80°	85.9	81.3	74.6	71.5	74.6
82.5°	68.4	65.8	58.1	55.0	56.1
85°	47.8	46.3	39.6	37.5	39.1
87.5°	22.1	23.7	20.1	18.5	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)