

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: P291885

Luminaire Tested: **22GR-LD5-28-F1-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291885
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-LD5-28-F1-UNV-L92765-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2378.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

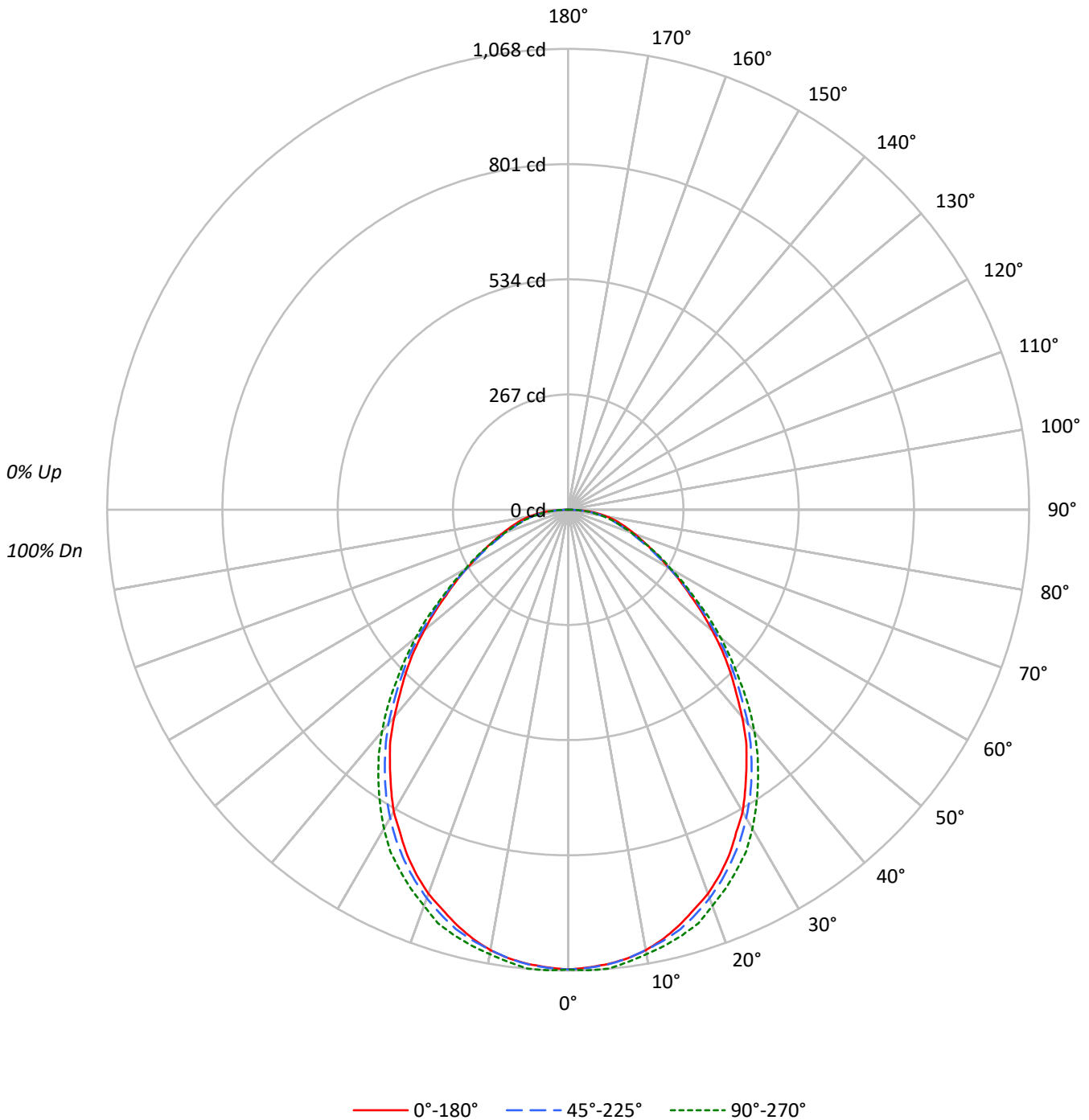
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2868	2868	2868
5°	2855	2858	2884
10°	2833	2831	2858
15°	2776	2803	2844
20°	2712	2743	2797
25°	2622	2665	2739
30°	2512	2563	2653
35°	2365	2433	2519
40°	2201	2276	2358
45°	2020	2079	2143
50°	1822	1868	1927
55°	1617	1655	1684
60°	1449	1452	1482
65°	1335	1290	1335
70°	1290	1194	1229
75°	1312	1170	1193
80°	1413	1227	1227
85°	1568	1300	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	4.2
10°-20°	283.5	11.9
20°-30°	413.8	17.4
30°-40°	463.3	19.5
40°-50°	421.6	17.7
50°-60°	317.4	13.3
60°-70°	207.1	8.7
70°-80°	124.2	5.2
80°-90°	46.6	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°	797.8	33.6
0°-40°	1261.1	53.0
0°-60°	2000.1	84.1
0°-90°	2378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2378.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1057	1055	1058	1062	1068	100
15°	996	997	1006	1014	1021	281
25°	883	886	897	914	922	405
35°	720	726	741	758	767	450
45°	531	536	546	558	563	409
55°	345	350	353	358	359	311
65°	210	208	203	206	210	210
75°	126	122	112	113	115	134
85°	51	49	42	40	42	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1065.6	1065.6	1065.6	1065.6	1065.6
2.5°	1061.8	1061.3	1062.9	1065.6	1068.4
5°	1056.9	1055.3	1058.0	1061.8	1067.8
7.5°	1049.2	1049.2	1049.2	1056.3	1057.4
10°	1036.7	1037.8	1036.1	1043.2	1046.0
12.5°	1018.7	1019.2	1022.5	1029.6	1034.5
15°	996.3	997.4	1006.1	1014.3	1020.8
17.5°	971.1	975.0	983.2	996.3	1004.5
20°	947.1	951.5	958.0	972.2	976.6
22.5°	916.5	921.4	929.6	942.2	951.5
25°	883.2	885.9	897.4	913.8	922.5
27.5°	843.3	849.3	863.5	880.5	892.5
30°	808.4	811.7	824.8	844.4	853.7
32.5°	764.1	774.0	784.9	802.4	811.1
35°	719.9	726.4	740.6	758.1	766.9
37.5°	677.3	681.1	695.3	710.1	721.0
40°	626.5	633.6	647.8	663.6	671.3
42.5°	575.7	586.1	595.4	611.2	619.4
45°	530.9	536.4	546.2	557.7	563.1
47.5°	483.9	486.7	498.1	505.2	511.2
50°	435.3	438.6	446.2	453.3	460.4
52.5°	390.5	393.3	398.2	404.7	411.8
55°	344.7	349.6	352.8	357.8	358.9
57.5°	307.5	307.0	309.1	313.0	316.8
60°	269.3	270.4	269.8	273.6	275.3
62.5°	237.6	237.1	233.8	239.2	243.6
65°	209.7	207.6	202.6	205.9	209.7
67.5°	184.1	183.0	174.8	177.5	180.8
70°	163.9	160.0	151.8	153.5	156.2
72.5°	144.2	139.8	131.6	132.2	133.8
75°	126.2	121.8	112.5	113.1	114.7
77.5°	109.2	103.8	95.6	94.5	95.6
80°	91.2	86.3	79.2	75.9	79.2
82.5°	72.6	69.9	61.7	58.4	59.5
85°	50.8	49.2	42.1	39.9	41.5
87.5°	23.5	25.1	21.3	19.7	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)