

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: P291873

Luminaire Tested: **22GR-LD5-20-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291873
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-LD5-20-F1-UNV-L92765-W2A1-U-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1960.0 lumens
Efficiency: N/A
Efficacy: 123.2 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

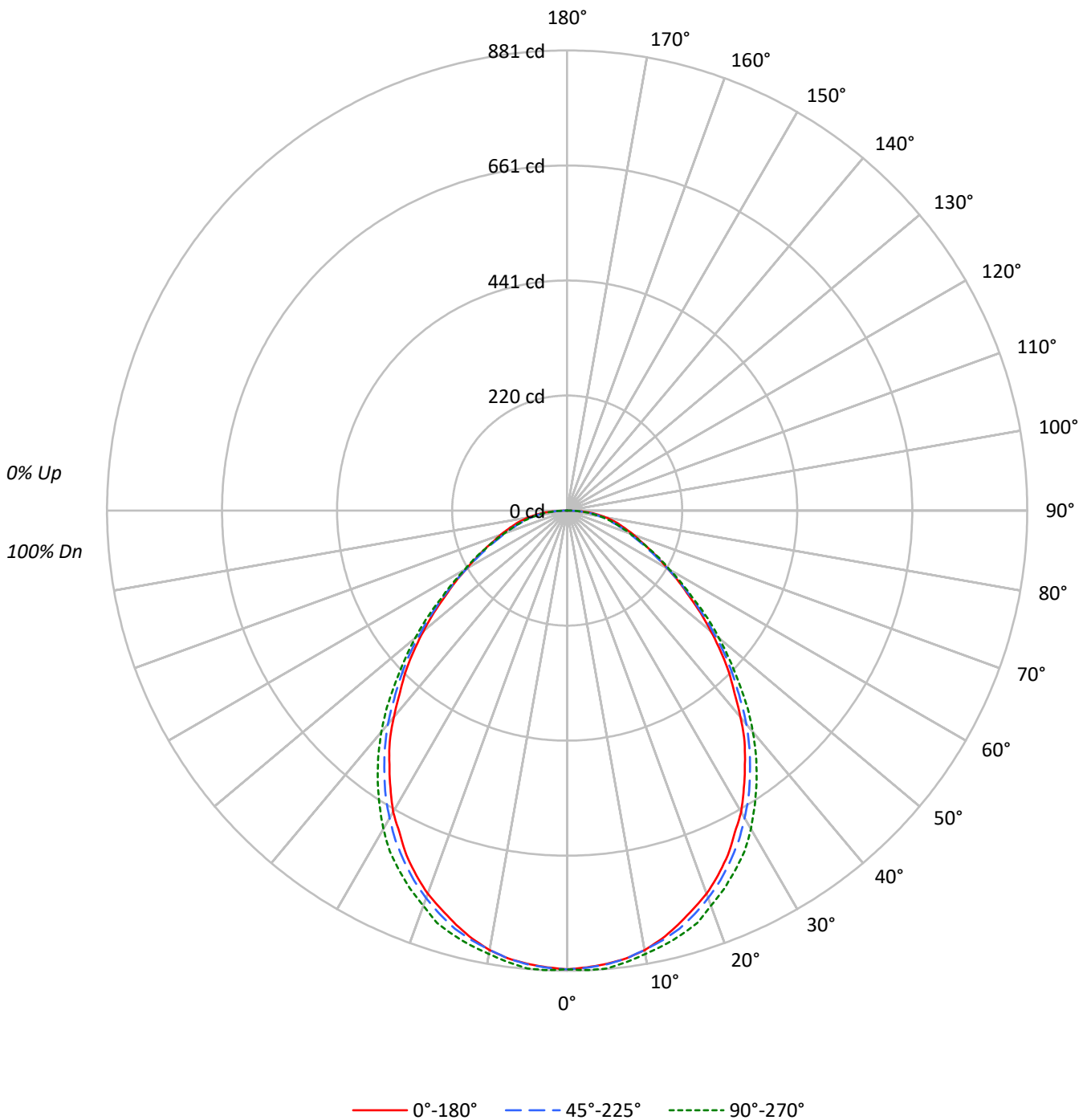
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2363	2363	2363
5°	2353	2355	2377
10°	2335	2334	2356
15°	2288	2310	2344
20°	2235	2261	2305
25°	2162	2196	2258
30°	2070	2112	2186
35°	1949	2006	2076
40°	1814	1875	1944
45°	1665	1713	1766
50°	1502	1540	1589
55°	1333	1364	1388
60°	1194	1197	1221
65°	1101	1063	1101
70°	1063	985	1013
75°	1081	964	983
80°	1165	1012	1012
85°	1294	1071	1056



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	4.2
10°-20°	233.7	11.9
20°-30°	341.1	17.4
30°-40°	381.8	19.5
40°-50°	347.5	17.7
50°-60°	261.6	13.3
60°-70°	170.7	8.7
70°-80°	102.4	5.2
80°-90°	38.4	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°	657.6	33.6
0°-40°	1039.5	53.0
0°-60°	1648.5	84.1
0°-90°	1960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	871	870	872	875	880	83
15°	821	822	829	836	841	231
25°	728	730	740	753	760	334
35°	593	599	610	625	632	371
45°	438	442	450	460	464	337
55°	284	288	291	295	296	257
65°	173	171	167	170	173	173
75°	104	100	93	93	94	110
85°	42	40	35	33	34	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	878.3	878.3	878.3	878.3	878.3
2.5°	875.2	874.7	876.1	878.3	880.6
5°	871.1	869.8	872.0	875.2	880.1
7.5°	864.8	864.8	864.8	870.7	871.6
10°	854.5	855.4	854.0	859.9	862.1
12.5°	839.6	840.1	842.8	848.6	852.7
15°	821.1	822.0	829.2	836.0	841.4
17.5°	800.4	803.6	810.3	821.1	827.9
20°	780.6	784.2	789.6	801.3	804.9
22.5°	755.4	759.5	766.2	776.6	784.2
25°	728.0	730.2	739.7	753.2	760.4
27.5°	695.1	700.0	711.7	725.7	735.6
30°	666.3	669.0	679.8	696.0	703.6
32.5°	629.8	637.9	646.9	661.3	668.5
35°	593.3	598.8	610.5	624.9	632.1
37.5°	558.2	561.4	573.1	585.2	594.2
40°	516.4	522.2	533.9	547.0	553.3
42.5°	474.5	483.1	490.7	503.8	510.5
45°	437.6	442.1	450.2	459.6	464.1
47.5°	398.9	401.1	410.6	416.4	421.4
50°	358.8	361.5	367.8	373.7	379.5
52.5°	321.9	324.1	328.2	333.6	339.4
55°	284.1	288.1	290.8	294.9	295.8
57.5°	253.5	253.0	254.8	258.0	261.1
60°	221.9	222.8	222.4	225.5	226.9
62.5°	195.8	195.4	192.7	197.2	200.8
65°	172.9	171.1	167.0	169.7	172.9
67.5°	151.7	150.8	144.1	146.3	149.0
70°	135.1	131.9	125.2	126.5	128.8
72.5°	118.8	115.2	108.5	108.9	110.3
75°	104.0	100.4	92.7	93.2	94.5
77.5°	90.0	85.5	78.8	77.9	78.8
80°	75.2	71.1	65.3	62.6	65.3
82.5°	59.9	57.6	50.9	48.2	49.1
85°	41.9	40.5	34.7	32.9	34.2
87.5°	19.4	20.7	17.6	16.2	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)