

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: P291768

Luminaire Tested: **22GR-LD5-20-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291768
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-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: 1908.0 lumens
Efficiency: N/A
Efficacy: 123.6 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

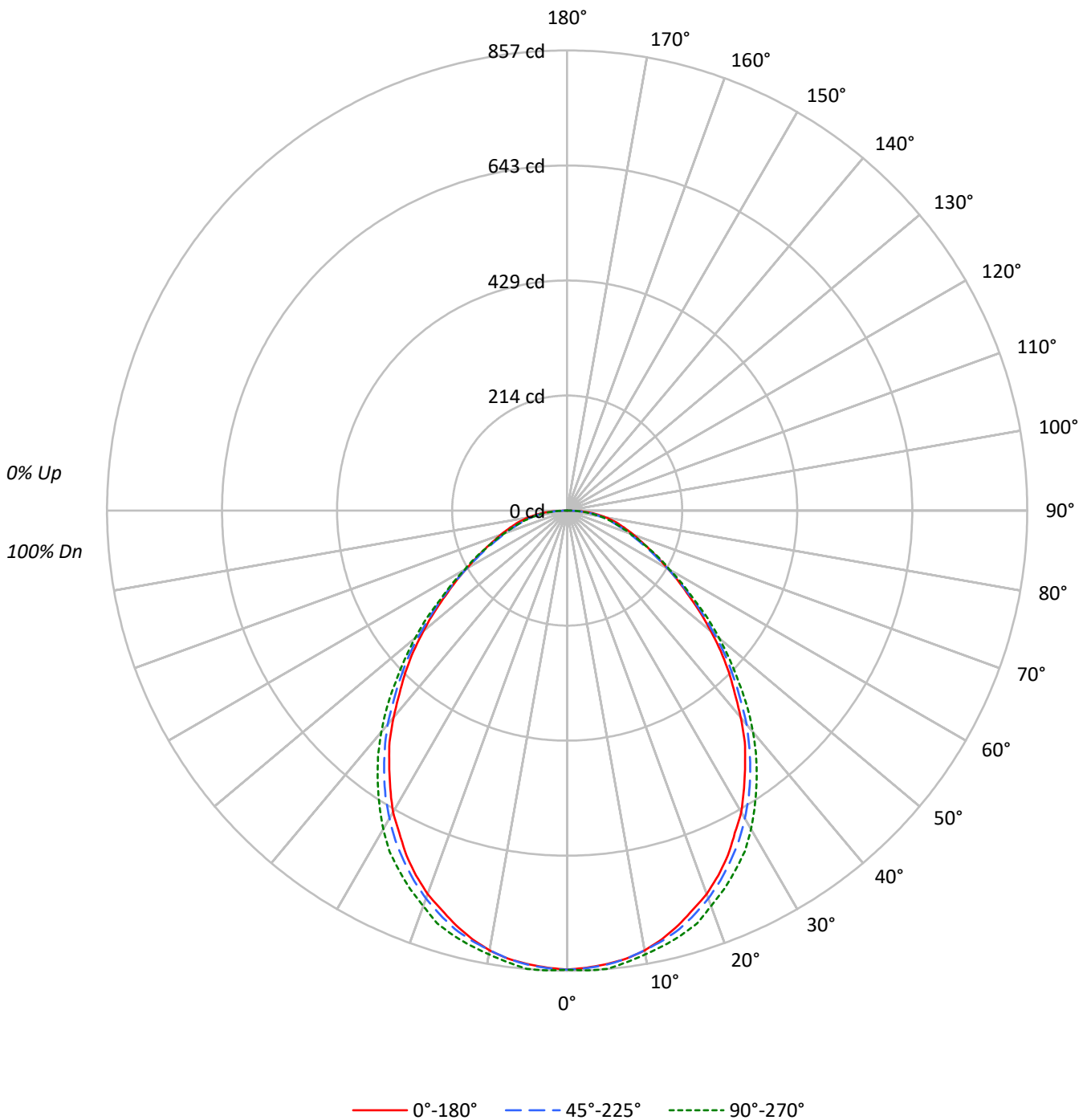
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2301	2301	2301
5°	2291	2293	2314
10°	2273	2272	2293
15°	2227	2249	2282
20°	2176	2201	2244
25°	2104	2138	2198
30°	2015	2056	2128
35°	1897	1952	2021
40°	1766	1826	1892
45°	1621	1668	1719
50°	1462	1499	1546
55°	1297	1328	1351
60°	1163	1165	1189
65°	1072	1035	1072
70°	1035	958	986
75°	1052	939	957
80°	1134	984	984
85°	1260	1041	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.7	4.2
10°-20°	227.5	11.9
20°-30°	332.0	17.4
30°-40°	371.7	19.5
40°-50°	338.3	17.7
50°-60°	254.6	13.3
60°-70°	166.2	8.7
70°-80°	99.6	5.2
80°-90°	37.4	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°	640.2	33.6
0°-40°	1011.9	53.0
0°-60°	1604.8	84.1
0°-90°	1908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	848	847	849	852	857	80
15°	799	800	807	814	819	225
25°	709	711	720	733	740	325
35°	578	583	594	608	615	361
45°	426	430	438	447	452	328
55°	276	280	283	287	288	250
65°	168	166	163	165	168	168
75°	101	98	90	91	92	107
85°	41	39	34	32	33	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	855.0	855.0	855.0	855.0	855.0
2.5°	851.9	851.5	852.8	855.0	857.2
5°	848.0	846.7	848.9	851.9	856.8
7.5°	841.9	841.9	841.9	847.6	848.4
10°	831.8	832.7	831.4	837.0	839.2
12.5°	817.3	817.8	820.4	826.1	830.0
15°	799.4	800.2	807.2	813.8	819.1
17.5°	779.2	782.3	788.8	799.4	805.9
20°	759.9	763.4	768.7	780.1	783.6
22.5°	735.4	739.3	745.9	756.0	763.4
25°	708.6	710.8	720.0	733.2	740.2
27.5°	676.7	681.5	692.9	706.5	716.1
30°	648.6	651.2	661.7	677.5	685.0
32.5°	613.1	621.0	629.8	643.8	650.8
35°	577.6	582.9	594.3	608.3	615.3
37.5°	543.4	546.5	557.9	569.7	578.5
40°	502.7	508.4	519.8	532.5	538.6
42.5°	461.9	470.2	477.7	490.4	497.0
45°	426.0	430.4	438.2	447.4	451.8
47.5°	388.3	390.5	399.7	405.4	410.2
50°	349.3	351.9	358.0	363.7	369.4
52.5°	313.3	315.5	319.5	324.7	330.4
55°	276.5	280.5	283.1	287.1	287.9
57.5°	246.7	246.3	248.0	251.1	254.2
60°	216.1	216.9	216.5	219.6	220.9
62.5°	190.6	190.2	187.6	192.0	195.5
65°	168.3	166.5	162.6	165.2	168.3
67.5°	147.7	146.8	140.2	142.4	145.1
70°	131.5	128.4	121.8	123.1	125.3
72.5°	115.7	112.2	105.6	106.1	107.4
75°	101.2	97.7	90.3	90.7	92.0
77.5°	87.6	83.3	76.7	75.8	76.7
80°	73.2	69.2	63.5	60.9	63.5
82.5°	58.3	56.1	49.5	46.9	47.8
85°	40.8	39.4	33.7	32.0	33.3
87.5°	18.8	20.2	17.1	15.8	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)