

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: P291786

Luminaire Tested: **22GR-LD5-28-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291786
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-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: 2678.0 lumens
Efficiency: N/A
Efficacy: 121.5 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

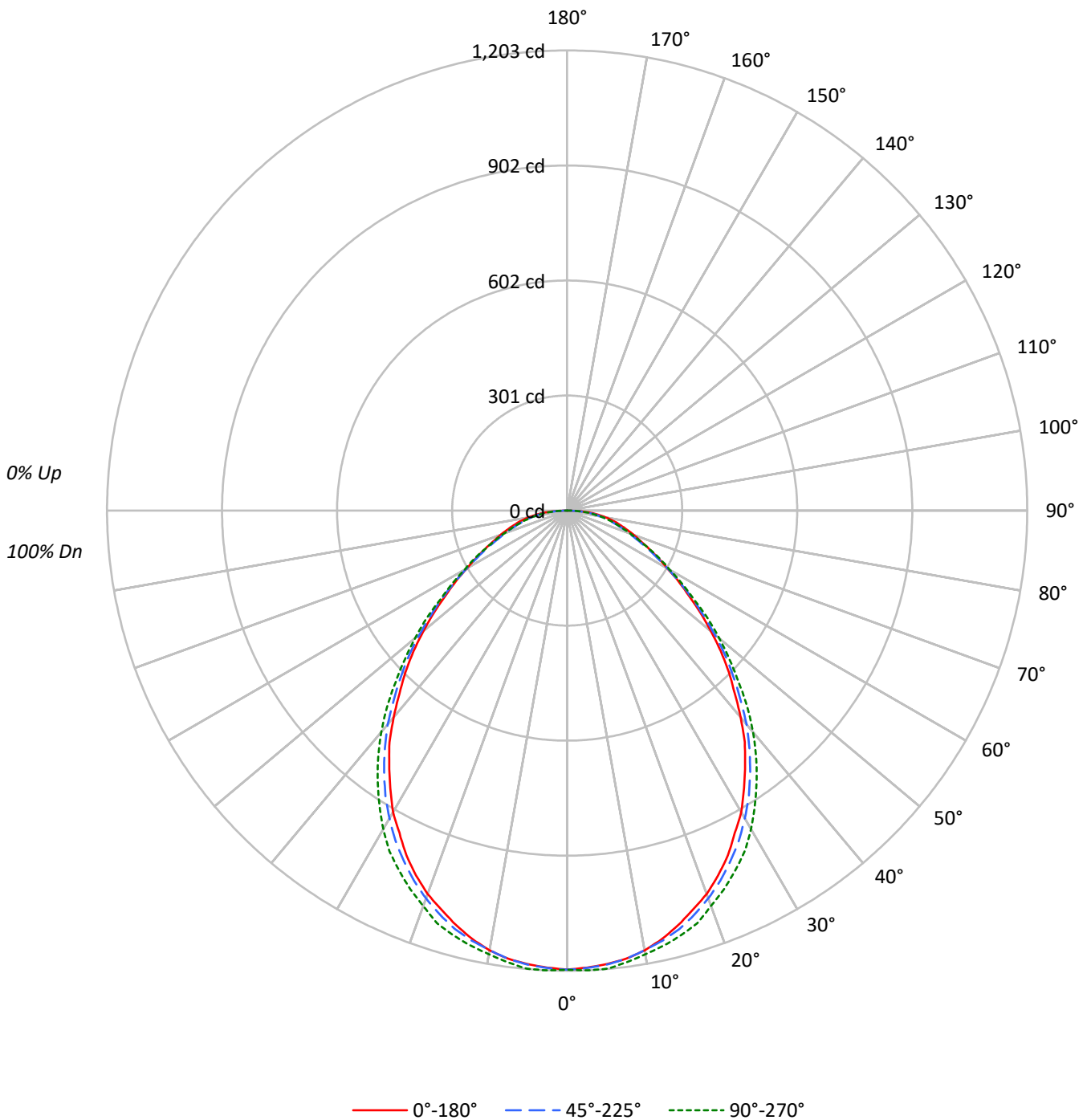
Input Watts (W): 22.041
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3229	3229	3229
5°	3215	3219	3248
10°	3190	3189	3219
15°	3126	3156	3203
20°	3054	3090	3149
25°	2953	3001	3085
30°	2829	2886	2987
35°	2663	2740	2837
40°	2478	2563	2656
45°	2275	2341	2414
50°	2052	2104	2171
55°	1821	1864	1896
60°	1632	1636	1668
65°	1504	1453	1504
70°	1452	1345	1384
75°	1477	1317	1343
80°	1592	1382	1382
85°	1766	1463	1442



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	4.2
10°-20°	319.3	11.9
20°-30°	466.0	17.4
30°-40°	521.7	19.5
40°-50°	474.8	17.7
50°-60°	357.4	13.3
60°-70°	233.2	8.7
70°-80°	139.9	5.2
80°-90°	52.5	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°	898.5	33.6
0°-40°	1420.2	53.0
0°-60°	2252.5	84.1
0°-90°	2678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1190	1188	1192	1196	1202	113
15°	1122	1123	1133	1142	1150	316
25°	995	998	1011	1029	1039	457
35°	811	818	834	854	864	507
45°	598	604	615	628	634	460
55°	388	394	397	403	404	351
65°	236	234	228	232	236	236
75°	142	137	127	127	129	151
85°	57	55	47	45	47	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.1	1200.1	1200.1	1200.1	1200.1
2.5°	1195.8	1195.1	1197.0	1200.1	1203.1
5°	1190.2	1188.4	1191.5	1195.8	1202.5
7.5°	1181.6	1181.6	1181.6	1189.6	1190.8
10°	1167.5	1168.7	1166.9	1174.9	1177.9
12.5°	1147.2	1147.8	1151.5	1159.5	1165.0
15°	1122.0	1123.2	1133.0	1142.2	1149.6
17.5°	1093.7	1098.0	1107.2	1122.0	1131.2
20°	1066.6	1071.5	1078.9	1094.9	1099.8
22.5°	1032.1	1037.7	1046.9	1061.1	1071.5
25°	994.6	997.7	1010.6	1029.1	1038.9
27.5°	949.7	956.5	972.5	991.5	1005.1
30°	910.4	914.0	928.8	951.0	961.4
32.5°	860.5	871.6	883.9	903.6	913.4
35°	810.7	818.1	834.1	853.8	863.6
37.5°	762.7	767.0	783.0	799.6	811.9
40°	705.5	713.5	729.5	747.4	756.0
42.5°	648.3	660.0	670.5	688.3	697.5
45°	597.9	604.0	615.1	628.0	634.2
47.5°	545.0	548.1	561.0	569.0	575.7
50°	490.2	493.9	502.5	510.5	518.5
52.5°	439.8	442.9	448.4	455.8	463.8
55°	388.1	393.7	397.4	402.9	404.1
57.5°	346.3	345.7	348.1	352.5	356.8
60°	303.2	304.5	303.9	308.2	310.0
62.5°	267.6	267.0	263.3	269.4	274.3
65°	236.2	233.7	228.2	231.9	236.2
67.5°	207.3	206.1	196.8	199.9	203.6
70°	184.5	180.2	171.0	172.8	175.9
72.5°	162.4	157.5	148.2	148.9	150.7
75°	142.1	137.2	126.7	127.3	129.2
77.5°	123.0	116.9	107.6	106.4	107.6
80°	102.7	97.2	89.2	85.5	89.2
82.5°	81.8	78.7	69.5	65.8	67.0
85°	57.2	55.4	47.4	44.9	46.7
87.5°	26.4	28.3	24.0	22.1	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)