

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: P291787

Luminaire Tested: **22GR-LD5-28-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291787
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-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2755.0 lumens
Efficiency: N/A
Efficacy: 126.1 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

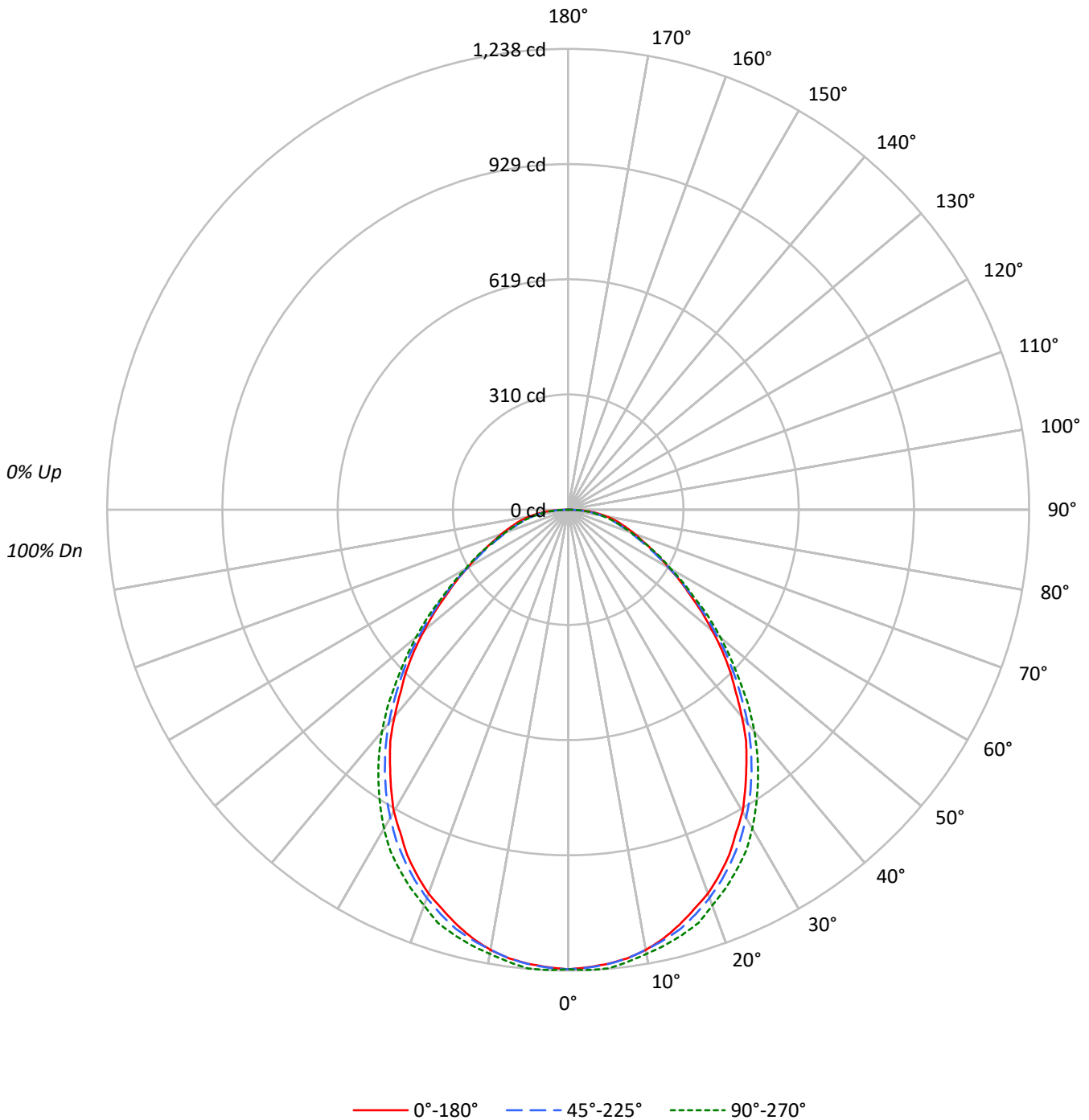
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3322	3322	3322
5°	3308	3311	3342
10°	3282	3280	3311
15°	3215	3247	3295
20°	3142	3178	3240
25°	3038	3087	3173
30°	2910	2969	3073
35°	2740	2819	2918
40°	2550	2636	2732
45°	2341	2408	2483
50°	2111	2164	2233
55°	1873	1918	1950
60°	1679	1682	1716
65°	1547	1495	1547
70°	1493	1384	1424
75°	1520	1356	1382
80°	1638	1423	1423
85°	1815	1504	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	4.2
10°-20°	328.5	11.9
20°-30°	479.4	17.4
30°-40°	536.7	19.5
40°-50°	488.5	17.7
50°-60°	367.7	13.3
60°-70°	239.9	8.7
70°-80°	143.9	5.2
80°-90°	54.0	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°	924.3	33.6
0°-40°	1461.1	53.0
0°-60°	2317.2	84.1
0°-90°	2755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1224	1223	1226	1230	1237	116
15°	1154	1156	1166	1175	1183	325
25°	1023	1026	1040	1059	1069	470
35°	834	842	858	878	888	521
45°	615	621	633	646	652	474
55°	399	405	409	414	416	361
65°	243	240	235	239	243	243
75°	146	141	130	131	133	155
85°	59	57	49	46	48	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.6	1234.6	1234.6	1234.6	1234.6
2.5°	1230.1	1229.5	1231.4	1234.6	1237.7
5°	1224.5	1222.6	1225.7	1230.1	1237.1
7.5°	1215.6	1215.6	1215.6	1223.8	1225.1
10°	1201.0	1202.3	1200.4	1208.6	1211.8
12.5°	1180.2	1180.8	1184.6	1192.8	1198.5
15°	1154.2	1155.5	1165.6	1175.1	1182.7
17.5°	1125.1	1129.5	1139.0	1154.2	1163.7
20°	1097.3	1102.3	1109.9	1126.4	1131.4
22.5°	1061.8	1067.5	1077.0	1091.6	1102.3
25°	1023.2	1026.4	1039.7	1058.7	1068.8
27.5°	977.0	984.0	1000.4	1020.1	1034.0
30°	936.5	940.3	955.5	978.3	989.1
32.5°	885.3	896.7	909.3	929.6	939.7
35°	834.0	841.6	858.1	878.3	888.4
37.5°	784.7	789.1	805.5	822.6	835.3
40°	725.8	734.0	750.5	768.8	777.7
42.5°	667.0	679.0	689.7	708.1	717.6
45°	615.1	621.4	632.8	646.1	652.4
47.5°	560.7	563.8	577.1	585.3	592.3
50°	504.3	508.1	517.0	525.2	533.4
52.5°	452.4	455.6	461.3	468.9	477.1
55°	399.3	405.0	408.8	414.5	415.7
57.5°	356.3	355.6	358.2	362.6	367.0
60°	312.0	313.2	312.6	317.0	318.9
62.5°	275.3	274.6	270.8	277.2	282.2
65°	243.0	240.5	234.8	238.6	243.0
67.5°	213.3	212.0	202.5	205.7	209.5
70°	189.8	185.4	175.9	177.8	181.0
72.5°	167.1	162.0	152.5	153.1	155.0
75°	146.2	141.1	130.4	131.0	132.9
77.5°	126.6	120.2	110.7	109.5	110.7
80°	105.7	100.0	91.8	88.0	91.8
82.5°	84.2	81.0	71.5	67.7	69.0
85°	58.8	57.0	48.7	46.2	48.1
87.5°	27.2	29.1	24.7	22.8	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)