

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: P292136

Luminaire Tested: **22GR-LD5-28-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2909.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

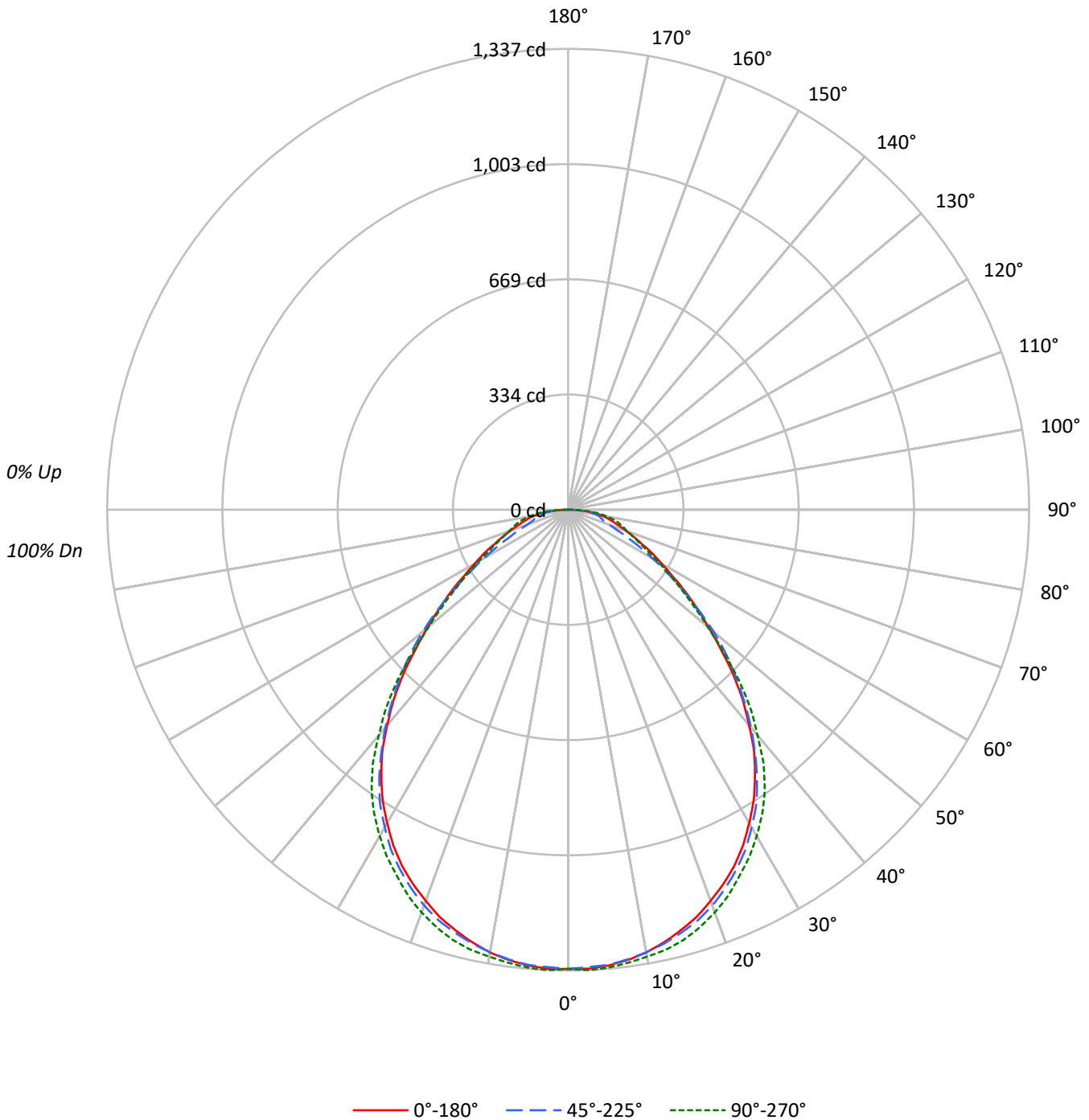
Input Watts (W): 22.041
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3585	3585	3585
5°	3586	3580	3602
10°	3565	3563	3598
15°	3519	3538	3600
20°	3458	3499	3561
25°	3385	3423	3485
30°	3262	3306	3397
35°	3102	3138	3264
40°	2868	2899	3001
45°	2576	2622	2664
50°	2228	2307	2205
55°	1944	1893	1867
60°	1683	1516	1618
65°	1505	1189	1452
70°	1396	985	1433
75°	1393	1042	1591
80°	1542	1311	1795
85°	1609	1420	2029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.1	4.3
10°-20°	359.1	12.3
20°-30°	531.0	18.3
30°-40°	599.3	20.6
40°-50°	528.3	18.2
50°-60°	362.4	12.5
60°-70°	213.8	7.4
70°-80°	133.4	4.6
80°-90°	55.6	1.9
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°	1016.2	34.9
0°-40°	1615.4	55.5
0°-60°	2506.1	86.1
0°-90°	2909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1328	1325	1325	1330	1334	126
15°	1263	1264	1270	1286	1292	356
25°	1140	1144	1153	1168	1174	524
35°	944	952	955	978	994	588
45°	677	680	689	693	700	520
55°	414	404	404	390	398	372
65°	236	208	187	216	228	238
75°	134	120	100	140	153	144
85°	52	49	46	60	66	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1332.2	1332.2	1332.2	1332.2	1332.2
2.5°	1332.9	1329.5	1328.2	1333.6	1337.0
5°	1327.5	1324.8	1325.4	1330.2	1333.6
7.5°	1318.0	1316.0	1316.0	1322.7	1326.1
10°	1304.5	1303.8	1303.8	1311.9	1316.6
12.5°	1285.5	1286.2	1288.9	1299.7	1307.8
15°	1263.2	1264.5	1269.9	1285.5	1292.3
17.5°	1238.8	1238.8	1249.6	1261.8	1269.9
20°	1207.7	1209.7	1221.9	1235.4	1243.5
22.5°	1175.8	1179.2	1189.4	1205.0	1212.4
25°	1140.0	1144.0	1152.8	1167.7	1173.8
27.5°	1098.0	1103.4	1112.9	1123.7	1136.6
30°	1049.9	1058.1	1064.1	1079.0	1093.3
32.5°	1001.2	1008.6	1015.4	1031.0	1047.2
35°	944.3	952.5	955.2	978.2	993.7
37.5°	886.1	889.5	890.9	913.9	930.8
40°	816.4	823.2	825.2	843.5	854.3
42.5°	749.4	752.1	756.1	769.7	782.5
45°	676.9	680.3	689.1	693.2	700.0
47.5°	601.1	611.3	621.4	608.6	609.2
50°	532.1	540.2	551.0	526.7	526.7
52.5°	470.5	474.5	475.2	454.9	459.0
55°	414.3	404.1	403.5	389.9	398.0
57.5°	358.1	344.6	339.8	335.8	345.2
60°	312.7	288.4	281.6	287.7	300.6
62.5°	275.5	244.4	231.5	247.1	258.6
65°	236.3	207.8	186.8	215.9	228.1
67.5°	205.8	178.7	151.6	192.9	201.7
70°	177.4	156.4	125.2	175.3	182.1
72.5°	154.3	138.1	108.3	158.4	166.5
75°	134.0	120.5	100.2	140.1	153.0
77.5°	117.8	102.9	93.4	121.2	136.7
80°	99.5	84.6	84.6	101.5	115.8
82.5°	78.5	66.3	68.4	82.6	92.7
85°	52.1	48.7	46.0	60.2	65.7
87.5°	26.4	27.1	24.4	31.1	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)